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FINAL REMEDIAL INVESTIGATION REPORT

Remedial Investigation and Remedial Action Selection Evaluations

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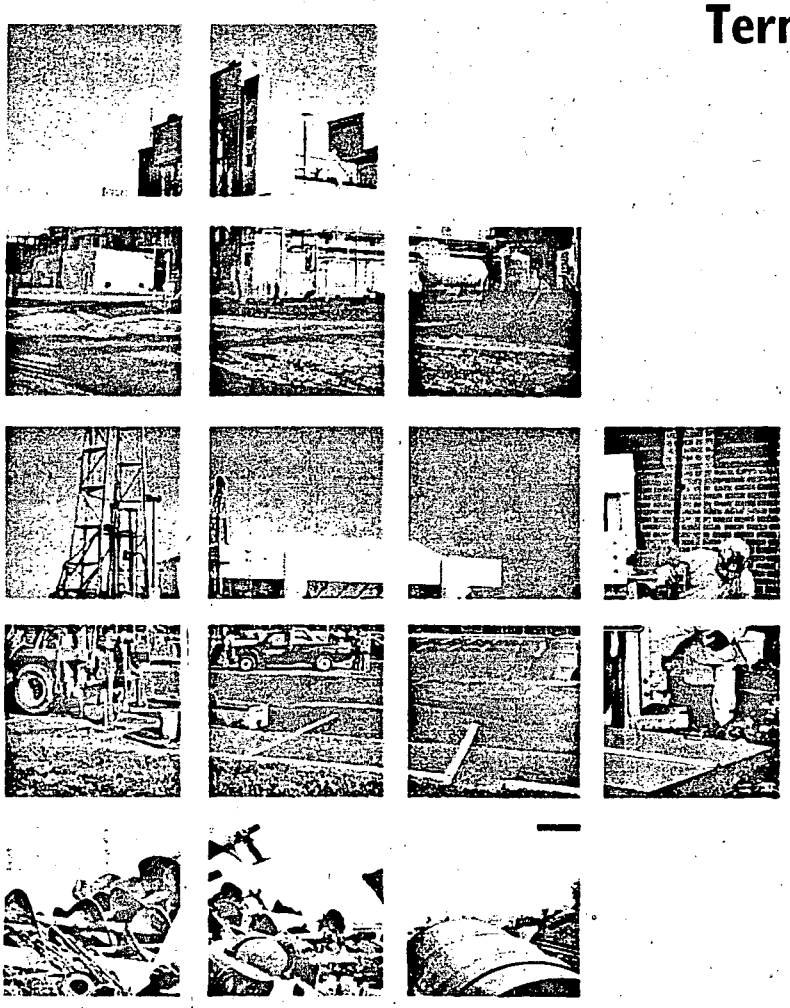

Matteo Iron and Metal

West Deptford, New Jersey

Submitted to:

STATE OF NEW JERSEY

Department of Environmental Protection

401 East State Street,

Trenton, New Jersey

Submitted by:

The Louis Berger Group, Inc.

30 Vreeland Road

Florham Park, New Jersey 07932

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TABLE OF CONTENTS

TABLE OF CONTENTS

1.0 INTRODUCTION 1-1

2.0 BACKGROUND 2-1
2.1 SITE HISTORY 2-1
2.2 PREVIOUS INVESTIGATIONS/REMEDIAL ACTIONS 2-2
2.2.1 Responsible Party Investigations 2-2
2.2.2 NJDEP Investigations 2-2
2.2.3 USEPA Investigations 2-3
2.2.4 Remedial Investigation 2-3

3.0 PHYSICAL SETTING 3-1
3.1 TOPOGRAPHY 3-1
3.2 CLIMATE 3-1
3.3 SOIL 3-1
3.4 GEOLOGY 3-2
3.5 HYDROGEOLOGY 3-3
3.6 SURFACE WATER AND WETLANDS HABITIATS 3-4

4.0 TECHNICAL OVERVIEW 4-1
4.1 SITE SURVEY AND MAPPING 4-1
4.2 SOIL INVESTIGATIONS 4-2
4.2.1 PCB Delineation in Surface Soil 4-2
4.2.2 Junkyard/Lead Sweating Area 4-5
4.2.3 Shallow and Deep Monitoring Well Borings 4-6
4.2.4 Test Pit Investigation 4-7
4.2.5 Soil Characterization Sampling 4-8
4.3 STREAM GAUGE INSTALLATION 4-8
4.4 MONITORING WELL INSTALLATION 4-9
4.4.1 Shallow Monitoring Well Installation 4-9
4.4.2 Deep Monitoring Well Installation 4-9
4.4.3 Monitoring Well Development 4-10
4.5 GROUNDWATER ELEVATION MEASUREMENTS/TIDAL STUDY 4-10
4.5.1 Groundwater Elevation Measurements 4-10
4.5.2 Tidal Study 4-10
4.6 GROUNDWATER SAMPLING 4-11
4.6.1 Monitoring Wells: Round 1 4-11
4.6.2 Monitoring Wells: Round 2 4-11
4.6.3 Monitoring Wells: Round 3 4-12
4.6.4 Potable Wells: Round 1 and 2 4-12
4.6.5 Potable Well PW-3 4-12
4.7 HYDRAULIC CONDUCTIVITY TESTING 4-13
4.8 SEDIMENT AND SURFACE WATER SAMPLING 4-13
4.8.1 Sediment Sampling 4-13
4.8.2 Surface Water Sampling 4-15

4.9 NATURAL RESOURCES INVESTIGATION 4-15
4.10 MANAGEMENT OF INVESTIGATION DERIVED WASTE 4-16
4.11 POTENTIAL RECEPTOR EVALUATION 4-16

5.0 FINDINGS 5-1
5.1 SOIL 5-1
5.1.1 PCB Delineation in Surface Soil 5-1
5.1.2 Junkyard/Lead Sweating Area 5-2
5.1.3 Soil Borings 5-5
5.1.4 Test Pits 5-5
5.1.5 Sitewide Surface Soil Sampling 5-7
5.1.6 Soil Characterization Sampling 5-7
5.2 GROUNDWATER 5-8
5.2.1 Groundwater Flow Direction 5-8
5.2.2 Tidal Influence 5-9
5.2.3 Hydraulic Conductivity 5-9
5.2.4 Groundwater Quality 5-10
5.3 SEEPS 5-11
5.4 SEDIMENT 5-12
5.4.1 Lead 5-12
5.4.2 PCBs 5-13
5.5 SURFACE WATER 5-13
5.6 NATURAL RESOURCES 5-14
5.6.1 Vegetative Communities 5-14
5.6.2 Uplands 5-14
5.6.3 Wetlands and Open Water Areas 5-14
5.6.4 Wildlife 5-16
5.6.5 Fish 5-16
5.6.6 Threatened and Endangered Species 5-16
5.7 WELL SEARCH 5-17

6.0 CONCLUSIONS AND RECOMMENDATIONS 6-1
6.1 SOURCES 6-1
6.2 PATHWAYS 6-2
6.2.1 Lead 6-2
6.2.2 PCBs 6-2
6.2.3 Chlorinated Solvents 6-3
6.2.4 Other Metals 6-3
6.3 RECEPTORS 6-3
6.3.1 Lead and PCBs 6-4
6.3.2 Chlorinated Solvents 6-4
6.4 RECOMMENDATIONS 6-5

7.0 REFERENCES 7-1

TABLES

Table 4-1 Soil Sample Summary Table
Table 4-2 Groundwater Elevation Measurements
Table 4-3 Water Sample Summary Table
Table 4-4 Sediment Sample Summary Table

Table 5-1 PCB Exceedances in Shallow Soil Samples
Table 5-2 Surface Soil Sample Results (0-2 ft) from the Scrapyard – Residential
Table 5-3 Surface Soil Sample Results (0-2 ft) from the Scrapyard – Non-Residential
Table 5-4 Surface Soil Sample Results (0-2 ft) from the Scrapyard – Impact to Groundwater
Table 5-5 Intermediate Soil Sample Results (2-4 ft) from the Scrapyard – Residential
Table 5-6 Intermediate Soil Sample Results (2-4 ft) from the Scrapyard – Non-Residential
Table 5-7 Deep Soil Sample Results (10-12 ft) from the Scrapyard – Residential
Table 5-8 Deep Soil Sample Results (10-12 ft) from the Scrapyard – Non-Residential
Table 5-9 Soil Boring Sample Analytical Results
Table 5-10 Soil Boring Sample TOC Results
Table 5-11 Test Pit/Surface Soil Sample Results (TPH/Lead/pH)
Table 5-12 Test Pit Soil Sample Results - Residential
Table 5-13 Test Pit Soil Sample Results - Non-Residential
Table 5-14 Test Pit Soil Sample Results - Impact to Groundwater
Table 5-15 Surface Soil Sample Results (TCL/TAL/pH)
Table 5-16 Soil Characteristics Sample Results
Table 5-17 Hydraulic Conductivity Test Results
Table 5-18 Groundwater Monitoring Well Sample Results: Round 1 - Unfiltered
Table 5-19 Groundwater Monitoring Well Sample Results: Round 1 - Filtered
Table 5-20 Potable Well Sample Results: Round 1
Table 5-21 Groundwater Monitoring Well Sample Results: Round 2
Table 5-22 Groundwater Potable Well Sample Results: Round 2
Table 5-23 Groundwater Monitoring Well Sample Results: Round 3
Table 5-24 Potable Well Sample Results from PW-3
Table 5-25 Seep Sample Results
Table 5-26 Sediment Sample Results: Lead
Table 5-27 Sediment Sample Results: PCB
Table 5-28 Sediment Sample Results: TCL/TAL (Lowest Effects Level)
Table 5-29 Sediment Sample Results: TCL/TAL (Severe Effects Level)
Table 5-30 Sediment Sample Results: PCB and TAL Metals (Lowest Effects Level)
Table 5-31 Sediment Sample Results: PCB and TAL Metals (Severe Effects Level)
Table 5-32 Surface Water Sample Results
Table 5-33 Observed Vegetation
Table 5-34 Observed Birds
Table 5-35 Potential Breeding Birds
Table 5-36 Potential Wetland Dependent Bird Species
Table 5-37 Fish Species of Woodbury Creek and Hessian Run
Table 5-38 Well Search Results

FIGURES

Figure 1-1 Site Location Map

Figure 2-1 Site Plan

Figure 3-1 Soils Map
Figure 3-2 Geologic Map
Figure 3-3 Geological Cross Section (A-A')
Figure 3-4 Geological Cross Section (B-B')

Figure 4-1 Soil – Extent of PCB Contamination (0-6")
Figure 4-2 Soil – Extent of PCB Contamination (12-18")
Figure 4-3 Soil – Extent of PCB Contamination (24-30")
Figure 4-4 Soil – Extent of PCB Contamination (36-42")
Figure 4-5 Surface Soil Sample Results in Scrapyard (0 ft – 2 ft)
Figure 4-6 Intermediate Soil Sample Results in Scrapyard (2 ft – 4 ft)
Figure 4-7 Deep Soil Sample Results in Scrapyard (~10 – 12 ft)
Figure 4-8 Sitewide Soil Sample Results
Figure 4-9 Surface Water Sample Results
Figure 4-10 Shallow Groundwater Elevation Contours - 12/4/00
Figure 4-11 Deep Groundwater Elevation Contours - 12/4/00
Figure 4-12 Groundwater Exceedances (Round 1: 12/4/00)
Figure 4-13 Groundwater Exceedances (Round 2: 1/26/01)
Figure 4-14 Groundwater Exceedances (Round 3: 4/9/2002)
Figure 4-15 Sediment – Extent of Lead Contamination (0-6")
Figure 4-16 Sediment – Extent of Lead Contamination (12-24")
Figure 4-17 Sediment – Extent of Lead Contamination (24-36")
Figure 4-18 Sediment – Extent of PCB Aroclor 1254 Contamination (0-6")
Figure 4-19 Sediment – Extent of PCB Aroclor 1254 Contamination (12-24")
Figure 4-20 Sediment – Extent of PCB Aroclor 1254 Contamination (24-36")

Figure 5-1 Extent of Waste Observed in Test Pits
Figure 5-2 Cross Sections of Fill Observed in Test Pits
Figure 5-3 Tidal Study Results
Figure 5-4 Wetland Delineation and Vegetative Community Map
Figure 5-5 NJDEP Wetlands
Figure 5-6 NWI Wetlands
Figure 5-7 Well Search Map

APPENDICES

Appendix A Historical Aerial Photographs
Appendix B Drilling & Excavation Logs, Well Forms A & B, Well Records/Permits
Appendix C Grain Size Data
Appendix D Tidal Study Data and NOAA Tidal Data
Appendix E Purge Logs from Round 1, Round 2, and Round 3
Appendix F Hydraulic Conductivity Data
Appendix G Surface Soil Sample Descriptions
Appendix H Well Search Data

1.0 INTRODUCTION

1.0 INTRODUCTION

The Louis Berger Group, Inc. (Berger) has prepared this Final Remedial Investigation Report (RIR) on behalf of the New Jersey Department of Environmental Protection (NJDEP) to document the findings of a Remedial Investigation (RI) conducted at the Matteo Iron and Metal facility (Matteo) located in the Township of West Deptford, Gloucester County (Figure 1-1). The Matteo RI was completed by Berger as part of a state-wide contract with the NJDEP to perform site specific Remedial Investigations and Remedial Action Selection Evaluations (RI/RASE) at multiple sites throughout the state.

The Matteo RI was initiated in response to the observed disposal of crushed automotive battery casings in an area of wetlands adjacent to the Site by NJDEP personnel. The disposal of battery casings was reportedly performed in conjunction with a former lead melting operation that was performed at the Site from 1971 until 1985. As part of the RI program for the Matteo Site, Berger initially prepared the *Site Sampling and Investigation Plan* (SSIP) (Berger, September 1999). Based on the results of a document review and site visit, several data gaps from previous site investigations were identified in the SSIP, and recommendations for further remedial investigation(s) were presented. The RI was implemented in accordance with the SSIP to provide the data needed to fulfill the following primary objectives:

- Define the nature and extent of the crushed battery casings disposed of along Woodbury Creek and Hessian Run.
- Delineate the extent of previously identified PCB soil contamination.
- Determine the impact of the Site conditions on adjacent surface waters and sediments.
- Determine the Site-specific subsurface stratigraphy.
- Determine the flow direction and quality of the shallow and deep groundwater regimes beneath the Site.
- Determine whether potable wells adjacent to the Site have been impacted by Site conditions.
- Establish topographic and boundary surveys for the Site.
- Determine the boundaries and extents of all wetlands on, and adjacent to the Site.

This report provides a background summary of the Site's history including previous investigations, a discussion of the investigative activities which were performed under the SSIP and the Additional Soil Delineation and Groundwater Sampling Plan (SGSP) (Berger, February 2002) and any deviations from these plans, a presentation of the findings from those investigative activities, and conclusions and recommendations based on those findings.

2.0 BACKGROUND

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The Matteo Iron and Metal Site had historically been a farm, and is currently used as a scrap metal recycling facility. The southeastern portion of the Site (approximately 5-acres) is largely paved with asphalt, and contains several buildings which support the scrap metal recycling business. The remainder of the Site (approximately 75-acres) is comprised predominantly of heavily vegetated undeveloped land which borders Woodbury Creek to the west, Hessian Run to the north, and a residential trailer park to the south. Additionally, two utility lines (Colonial Oil and PSE&G) are located on the Northwestern portion of the property. A Site Plan showing these features is attached as Figure 2-1.

2.1 SITE HISTORY

Matteo Iron and Metal is located on an 80-acre site at 1708 U.S. Highway 130 in West Deptford, Gloucester County. According to public records, between 1907 and 1947, the Site was owned by Samuel and Bertha Wilkins who used a portion of the property for farming activities, while the remainder of the Site remained covered by woodlands. The Matteo family acquired the property in 1947. According to available records, the Matteo Family, under various names (James Matteo and Sons, Inc., Matteo Trucking Company, Thorofare Trucking and Trash Company, and Matteo Iron and Metal) has operated an unregistered landfill and junkyard, and a metals recycling facility at the Site since 1961. In 1968 the NJDEP identified an inactive incinerator at the Site. In 1971, the NJDEP approved Matteo's request to operate the incinerator to burn copper wire and Matteo submitted a plan to operate a "sweating fire box" to melt lead battery terminals for lead reclamation. This lead melting operation continued until 1985. In 1972, the NJDEP observed landfilling of crushed battery casings in an area of wetlands adjacent to Hessian Run. This operation was apparently performed in conjunction with the lead melting operation, as there were several reports of battery casing incineration and subsequent on-site ash disposal. In addition to the incineration and landfilling operations, drums of waste had also been identified as scattered throughout the property. In January of 1984, the NJDEP issued an Administrative Consent Order (ACO) to Matteo Iron and Metal for solid waste violations and required Matteo to cease waste disposal at the Site. The Matteo Property, which is mostly wooded, is currently comprised of a metals recycling operation, a junkyard, and an inactive landfill.

Historical aerial photographs for the years 1940, 1944, 1951, 1959, 1965, and 1975 were reviewed and are presented in Appendix A. The 1940 and 1944 aerial photographs show the property use to be primarily farmland. The 1951 aerial photograph shows a junkyard operation (scrap vehicles and associated structures) at the northeastern portion of the property, while the remaining property appears to still be farmland with associated farm buildings. The 1959 aerial photograph shows the junkyard operation ongoing in the northeastern area (including a large pile of dark debris, possibly the battery casings), and the remainder of the property as farmland with associated structures. A small pond is observed in the north central portion of the Site, and some material that appears to be soil has been deposited into Hessian Run north of the farm buildings. The 1965 aerial photograph shows the junkyard operation ongoing in the northeastern area (including the large pile of dark debris) and the farmland and associated farm buildings on the remainder of the property. A large landfill area is observed in the north-central portion of the

property, extending into Hessian Run. Dark debris is observed in Hessian Run north of the farm buildings where the apparent soil material was observed in the 1959 photo. In the 1975 aerial photograph, the junkyard operation has changed in appearance. There are very few scrap vehicles present and a structure, that may be the incinerator, is observed with an area of light colored material adjacent to it. The piles of dark debris are no longer visible, but the shoreline has extended into Hessian Run along the northern boundary of the property. The farm fields are still present, with the exception of the large field in the northwestern portion of the Site, which appears as an active disturbed area with light and dark (possibly stained) soil present.

2.2 PREVIOUS INVESTIGATIONS / REMEDIAL ACTIONS

Matteo, NJDEP, and the United States Environmental Protection Agency (USEPA) had all conducted limited investigations at the Site. The scopes of these investigations are discussed below. Lead had been found to be the primary contaminant of concern in the surface soils, surface waters, sediments, and groundwater at the Site. PCB contamination had also been identified in some of the surface soils and sediments. Additionally, a geophysical survey was conducted and test pits were excavated to investigate the nature and extent of the landfilled waste materials. Environmental investigations performed prior to this RI had been limited in scope, with no remedial action(s) either being proposed or implemented.

2.2.1 Responsible Party Investigations

Matteo, under the oversight of the NJDEP, conducted some limited sampling events including sampling of drums and other wastes at the Site, a geophysical investigation in the landfill area, excavating test pits, and collection of soil and aqueous samples from the test pits. Hazardous wastes were contained in a small number of the crushed drums and a widespread yellow substance that was observed, which was identified as having a high petroleum hydrocarbon content. Additionally, the wastes associated with the crushed battery casings exhibited hazardous levels of lead contamination, while Site soils exhibited widespread contamination with levels of petroleum and lead exceeding 1% of total volume.

2.2.2 NJDEP Investigations

Inspections of the Matteo Site by NJDEP documented the following actions:

- A "lead sweating operation".
- Landfilling of crushed automobile battery casings along the banks of Hessian Run.
- Unauthorized use of an incinerator for lead smelting operations.
- Ash from lead smelting operations hauled to on-site landfill.
- Two fires at the landfill.
- Discovery of abandoned drums of unknown waste.
- Discovery of a yellow waste dispersed across the Site.

These inspections led to several focused investigations of various media at the Site. These investigations revealed that, the on-site potable well had a concentration of lead exceeding the New Jersey Safe Drinking Water Act standard, elevated levels of lead and cadmium in soil

across the junkyard, and lead and cadmium exceeding NJDEP groundwater standards on a site-wide basis.

Additionally, in 1996 NJDEP Division of Publicly Funded Site Remediation performed a Preliminary Assessment/Site Investigation (PA/SI) for the Site (NJDEP, December 1996). The PA/SI was a comprehensive document that discussed past owners and Site operations; local soils and hydrogeology; sensitive environments; results of past sampling events for soil, groundwater, surface water and sediment; and historical remedial/enforcement actions.

2.2.3 USEPA Investigations

In June 1997 the USEPA conducted an Extent of Contamination (EOC) investigation which was limited to the "battery disposal area", in the vicinity of MW-5. The EOC consisted of the following activities:

- A ground-penetrating radar/electro-magnetic (GPR/EM) Survey to estimate quantity of battery casings along Hessian Run.
- Test pits to confirm the GPR/EM survey as well as collect soil samples for lead.
- Sediment samples in the marsh adjacent to the battery casing disposal area, in Hessian Run, and two drainage ditches that carried run-off from the Site to Hessian Run.
- Water samples from seeps, the battery casing disposal area and the adjacent marsh.
- Samples of the battery casings.

The results of these activities were:

- The volume of battery casings was estimated to be approximately 235,000 ft^3.
- Overall lead concentrations in soil throughout the battery casing disposal area are on the order of 1,000 mg/kg.
- Sediment samples in the marsh areas had lead concentrations that ranged from the 1,000's mg/kg 10 feet from the shore line to the 100's mg/kg 50 feet from the shoreline.
- Sediment samples in Hessian Run had concentrations of lead that ranged from non-detect to 810 ppm.
- All seep water samples contained lead. (Weston, October 1997).

2.2.4 Remedial Investigation

No other remedial investigations or actions were conducted at the Matteo Site prior to this RI. Based on the information provided by the previously mentioned investigations, Berger conducted the field investigations associated with this RI between September 5, 2000 and October 23, 2002. The RI addressed the lead and PCB contamination identified during previous NJDEP investigations.

3.0 PHYSICAL SETTING

3.0 PHYSICAL SETTING

The Matteo Site is located at 1708 U.S. Highway 130 in West Deptford, Gloucester County, New Jersey. The Site occupies two tax parcels (Lot 2, Block 128 and Lot 2, Block 325) as identified on the West Deptford Township Tax Map. The property parcel consists of 80-acres of land located between the confluence of Woodbury Creek and Hessian Run to the west, Belmont Avenue to the east, and U.S. Highway 130 to the south. Figure 1-1 is an annotated USGS 7.5-minute quadrangle (Woodbury, NJ) showing the Site location, local topography, drainage and cultural features.

3.1 TOPOGRAPHY

The Matteo Site is located within the Coastal Plain Physiographic Province of NJ. This region is typically relatively flat, with an average elevation of approximately 10-feet above mean sea level (AMSL). The majority of the Site is unpaved, and heavily wooded, with a slight slope toward the west/northwest in the direction of Woodbury Creek and Hessian Run.

3.2 CLIMATE

A moderate range of temperatures characterizes the Matteo Site and surrounding areas. Average monthly temperatures range from a daily average in January of 26° F to a daily average in July of 76° F. The average annual precipitation is 44 inches, with most of the precipitation falling as rain. The highest monthly rainfall totals are typically recorded in July and August due to frequent thunderstorm acitivity. The prevailing wind direction during the winter months is from the northwest, whereas southwest winds prevail during the summer months (USDA, 1962).

3.3 SOIL

Within the Site there are five (5) soil mapping units as shown in the *Gloucester County Soil Survey* map (Figure 3-1). They include Downer loamy sand (DoB); Fallsington loam (Fd); Sassafrass (SsE); Tidal Marsh (Tm); and Woodstown and Klej loamy sands (WtB). Brief descriptions of the soils found on the Site are presented below:

Downer Loamy Sand, 0-5 percent slopes - (DoB)

These moderately deep nearly level soils slope mildly and may range from 0 to 5 percent slopes in some areas. They have formed on sandy marine or stream sediments and are most common on the terraces of the Delaware River and in parts of the eastern half of the county. The ground water is normally well below a depth of 30 inches, however, in some areas it is higher during the winter months.

Fallsington loam - (Fd)

This soil type is found scattered through out the county and is formed in circular depressions and on flats adjacent to streams. The Fallsington soil is poorly drained and is usually wet almost to

the surface during the winter and spring. Surface soils are a dark-gray to very dark grayish color, and overlay a grayish brown to yellowish brown subsoil that is mottled. In most areas permeability is moderate to a depth of 30 inches. Permeability below a depth of 30 inches ranges from moderately rapid to slow.

Sassafras soils, 15-40 percent slopes - (SsE)

This well drained, soil unit is formed from sandy sediments that contain little or no glauconite. Sassafras soils are usually found in sandy flats along the Delaware River or within the gravelly soils on the higher divides. The slope ranges from steep to very steep, and on the steepest slopes there may be little or no soil development. Sassafras soils, which formed on steep slopes, are weakly developed and mainly consist of sand with little subsoil. In places where the soil is less sloping, the soils are strongly developed and have profiles closely resembling the normal Sassafras series.

Tidal Marsh - (Tm)

This mapped unit is near sea level and is inundated daily by tides. It occurs mainly along the Delaware River, but extends inland along tributaries. The upper three to ten feet is usually a mix of organic matter and mineral particles of mostly silt. The content of organic matter in the surface horizon ranges from high to very high, and in some places the material is peat. The soil is extremely acidic.

Woodstown and Klej - (WtB)

Woodstown soils are extensive and occur throughout most of the county. They are formed in areas that are nearly level and occur in the circular depressions that are common throughout the county. This soil consists of undifferentiated areas of Woodstown loamy sand and Klej loamy sand. During the winter, groundwater rises into the subsoil to about 2 feet from the surface and drops to a depth of about 4 feet in the summer. Permeability is moderate to a depth of 30 inches. Below 30 inches it ranges from slow to moderately rapid.

3.4 GEOLOGY

The regional geology is composed of Cretaceous and Quaternary age unconsolidated sediments. The Cretaceous sediments form a gently south-southeast dipping wedge of strata. The sediments are more than 2,500 feet thick along the coast and pinch to a thin horizon along the Fall Line. The Fall Line is a northwest-southeast trending contact where the coastal plain sediments unconformably onlap the Southern Piedmont Physiographic Province and Newark Basin. Generally, the coastal plain sediments strike northeast-southwest and dip to the south-southeast from 10 to 60 feet per mile. Overlying the Cretaceous sediments in some locations are mantles of Quaternary age deposits.

The Matteo Site is covered by a mantle of Quaternary age (Pleistocene) deposits of the Cape May formation (ref). Some Quaternary age (Holocene) alluvium may be present near the local streams. The Cape May Formation typically consists of yellow or brown medium to coarse

quartzose sand with some gravel and trace clay. The Cape May Formation is usually about 30 feet thick in the region.

Beneath this mantle of Quaternary deposits, the Site is underlain by the Upper Cretaceous age Merchantville and Magothy formations. According to the Geologic Map of New Jersey, Central Sheet (Owens, et al, 1995), the contact between the Merchantville and Magothy Formations runs through the Site (Figure 3-2). The southern and eastern portions of the Site are underlain by the Merchantville Formation and the northwestern portion of the Site is underlain by the Magothy Formation. In the region, the Merchantville Formation is composed of a black to green-black, glaucontic, micaceous clay, silty clay and sandy clay, and is typically 45 to 70 feet thick. Underlying the Merchantville, the Magothy Formation is of both continental and marine origin, and consists primarily of light colored, fine to coarse-grained beach sand with local beds of dark colored lignitic clay. The Magothy Formation, in the region, ranges in thickness between 150 and 500 feet. Underlying the Magothy, is the Raritan Formation that regionally ranges from 150 to over 500 feet thick. The Raritan consists chiefly of light colored sand and clay rich in hydrous aluminum silicates.

Based on subsurface information collected during this RI, two site-specific Geological Cross Sections were created (Figures 3-3 and 3-4). The Cape May Formation, which is generally observed at the Site as a brownish yellow sand, is approximately 15 feet thick at the eastern side of the Site and approximately 40 feet thick on the western side. There appears to have been historic erosion of the Upper Creataceous surface in the direction of the Woodbury Creek and Hessian Run confluence. What is interpreted as alluvium is encountered near Hessian Run and is observed as a layer of peat and organic sediments underlain by approximately 15 feet of grayish green sand. In the eastern and southern portions of the Site, the Merchantville Formation is encountered beneath the Cape May formation and is generally observed as very dark gray clays and silts. The Merchantville is approximately 20 thick at the eastern and southern boundaries of the Site but is not present in the northwestern quarter of the property.

The Magothy formation underlies the above formations and extends at least to the full depth of the exploration of this RI (approximately 100 feet bgs). The Magothy Formation at the Site is generally observed as light gray sand with clay and silt lenses.

3.5 HYDROGEOLOGY

The main aquifer in the area consists primarily of the Upper Cretaceous Magothy and Raritan Formations of the Potomac-Raritan-Magothy aquifer. The Potomac-Raritan-Magothy aquifer system is described as a single hydrologic unit because over large areas they are indistinguishable and interconnected. The upper aquifer system of the Potomac-Raritan-Magothy system is reported to be at least 100 feet thick in the area of the Matteo Site. Regional groundwater data indicates groundwater flow to the southeast (NJDEP, December 1996).

The aquifer system in the vicinity of the Site is pumped heavily, especially in the summer months when groundwater is used for the irrigation of farms in the region. In addition to irrigation, heavy industrial and commercial demands are placed on the groundwater systems. As a result of continued pumping, water levels in the area have declined approximately 50 feet since

the mid-1960's. According to the USGS (USGS, 1995) groundwater levels have declined as much as 12 feet in the Gloucester County area between 1983 and 1988. During this same period a large, extensive cone-of-depression in the upper aquifers of the Potomac-Raritan-Magothy became apparent. The depression cone is centered in Camden and western Burlington Counties and extends throughout most of Gloucester County. According to Zepecza (1989), extreme pumping in this area has reversed the natural regional ground water flow. As a result, regional groundwater no longer discharges into the Delaware River; the river currently recharges the aquifer system.

The groundwater table was encountered at approximately 10 ft bgs across the Matteo Site. Consistent with the regional observations, the groundwater data collected during this RI indicates primary flow to the southeast. In addition to this horizontal gradient, a vertically downward gradient was also measured. These observations are consistent with the expected influence of inland pumping centers. The West Deptford Township withdrawal point (~100,000 gpd) is located 0.6 miles to the southeast. In addition to the general groundwater flow at the Site, a perched water table condition is observed on the Merchantville formation. The extent of this perched water table mirrors the extent of the Merchantville at the Site, which is primarily in the eastern and southern portions. In the extreme eastern portion of the Site, the perched water is observed to flow north to the Hessian Run. The remainder of the perched water flows towards the center of the Site where the Merchantville is not present and a direct connection between the sands of the Cape May formation and the sands of the Magothy formation is observed.

Tidal fluctuations were observed in the shallow (non-perched) and deep monitoring wells during this RI. In addition, the elevation of the Woodbury Creek was always observed higher than the groundwater in these shallow and deep wells, documenting not only the connection between the aquifer and the creek, but also the flow potential from the creek into the aquifer.

3.6 SURFACE WATER AND WETLANDS HABITATS

The Site is situated at the confluence of Woodbury Creek and Hessian Run, which are tidally influenced at this location. Tidal fluctuations range from approximately 6 feet at spring tides to approximately 5.4 feet at neap tide. Although the literature indicates that tidal currents are strong in the vicinity of Woodbury Creek and Hessian Run, there is no data reported on tidal current velocities (Trip Report, 1997). Both Woodbury Creek and Hessian Run are classified as (FW-2NT/SE2), waterways in which there may be a fresh water/salt water interface, as determined by salinity measurements at mean high tide (N.J.A.C. 7:9B-1.15(b) 6.x (1993)). RI average salinity measurements for the Woodbury Creek and Hessian Run during high and low tide are 0.01 (indicates fresh water). Hessian Run has a flow rate of 10 ft^3/sec, while Woodbury Creek has a flow rate of 60 ft^3/sec. Both waterways are used for fishing and recreation. The Delaware River is located 1.2 miles from the Site and has a flow rate of 2,000 ft^3/sec.

The Site is situated in the Woodbury-Hessian Run marshes, which are fresh water tidal marshlands. The tidal marshes are flat and are regularly flooded by slightly brackish tides. They provide habitants for muskrat, ducks, and geese. These areas have been identified by the Atlantic Coast Ecological Inventory as part of the Delaware River Estuary. The sensitive

environments within one mile of the Site include Riverine Emergent, Palustrine Scrub-Shrub Emergent Deciduous, Palustrine Emergent Tidal and Palustrine Scrub-Shrub.

Also, the Atlantic Coast Ecological Inventory documents this area as part of the Delaware River Estuary, which contains game fish such as the American Shad and the Striped Bass (NJDEP, December 1996).

4.0 TECHNICAL OVERVIEW

4.0 TECHNICAL OVERVIEW

The following sections provide descriptions of the various field activities performed during this RI to address the data gaps identified and presented in the SSIP. Based on the results of initial field investigations from the SSIP, additional supplemental investigations were required to complete delineation of contaminants in soil, groundwater, and buried waste. The supplemental investigations were performed based on the SGSP and as otherwise directed by NJDEP. These activities included the investigations of the following media: soils; groundwater; sediments; surface water; and various waste and fill materials. Additionally, natural resource, baseline ecological, and receptor evaluations were conducted.

All on-site sampling and investigation activities were performed in accordance with the New Jersey Technical Requirements For Site Remediation, (NJDEP, July 1997), the New Jersey Field Sampling Procedures Manual (NJDEP, May 1992) and, where applicable, other relevant or appropriate USEPA regulation and guidance for conducting investigations at uncontrolled hazardous contamination sites. All field investigative procedures, unless otherwise noted, were conducted as detailed in the Programmatic QAPP (Berger, November 1998) and specified in the SSIP and SGSP. Additionally, all field activities were performed in accordance to procedures set forth in the Programmatic HASP (Berger, August 1998) and the Site Specific Health and Safety Plan (SSHASP)(Berger, January 1999).

The following subsections will describe the implementation of the investigative activities presented in the SSIP and the SGSP, and will note and explain any deviations from the planned SSIP and SGSP procedures.

4.1 SITE SURVEY AND MAPPING

As described in the SSIP, a detailed site map was created for the Matteo property showing Site topography and all pertinent existing Site features (Figure 2-1). Prior to initiation of sampling activities, the Site and adjacent areas were aerially photographed and a boundary survey was conducted. Data from the aerial photos and boundary survey were used to generate the topographic site plan used to guide the RI field investigation, and used as the geographic basis for many of the subsequent analyses, reporting and figures contained within this RIR.

At the conclusion of field investigation activities, the horizontal and vertical locations of all new RI related monitoring wells, test pits, deep soil borings, Geoprobe borings and stream guages were surveyed and included in the comprehensive site plan. Additionally, the locations of all surface soil and sediment samples collected during the RI field investigations were surveyed using a Global Positioning System (GPS) unit. All horizontal data were surveyed and plotted in the New Jersey State Plane Coordinate System (NAD83), and vertical elevation data were recorded in the North American Vertical Datum (NAVD88). The resulting topographic site plan with surveyed monitoring well data and sample locations will be included with this Final RIR as a supplemental electronic deliverable in AutoCAD file format.

4.2 SOIL INVESTIGATIONS

Four main types of soil investigations were conducted at the Site:

- PCB Delineation In Surface Soils
- Shallow and Deep Monitoring Well Borings
- Junkyard/Lead Sweating Area Geoprobe Borings
- Test Pit Investigation

Each of these investigative activities is discussed in the following subsections.

4.2.1 PCB Delineation in Surface Soils

As part of this RI, surface soil sampling was conducted to assess and delineate the extent of previously identified PCB contamination, as well as screen other discrete areas sitewide that have not been previously investigated for PCBs. Descriptions of field activities for PCB delineation of surface soils are presented below. Refer to Table 4-1, Soil Sample Summary, for a complete listing of PCB samples collected, sample depths, locations, types of analysis, sampling method and dates. Refer to Figures 4-1 through 4-4 for sample locations at each of the four depth intervals sampled: 0-6", 12-18", 24-30" and 36-42".

As planned in the SSIP, it was anticipated that a combined maximum number of samples screened and/or analyzed for surface soil PCB delineation from both the previously identified PCB areas and the unsampled sitewide areas would total 257: 174 immunoassay screened; and 83 laboratory tested. However, due to the greatly expanded delineation effort needed at the previously known contamination area, a total of 457 soil samples were collected for sitewide PCB surface soil delineation: 260 samples screened with immunoassay kits; and an additional 187 samples (plus 10 duplicates) analyzed at the laboratory. Based on the unanticipated widespread distribution and extent of PCB contaminated soil, the total number of samples collected, screened and/or analyzed was nearly double the amount originally planned for this task.

Delineation of Previously Identified PCB Contamination

As shown in Figure 5 of the SSIP, soil samples from a previous NJDEP investigation in 1997 yielded detections of PCBs above NJDEP Soil Cleanup Criteria (SCC) at seven locations distributed mainly in the northwestern quadrant of the Site, and at one off-site location near the adjacent trailer park to the south. Thirty-two other sampling locations from that investigation failed to produce PCB concentration exceeding criteria; these clean samples were distributed primarily along the southern edge of the Site bordering the trailer park and in the far northwestern Site corner. Several other clean samples were also collected in the southeastern quadrant and central Site areas.

The SSIP originally called for additional surface soil sampling around each of the eight locations previously identified with PCB exceedances for horizontal and vertical delineation. However,

upon the Department's direction, the off-site trailer park location was deleted from further sampling; delineation sampling was, therefore, conducted only at the seven remaining previously identified on-site locations.

As planned in the SSIP, a maximum of eight new hand augered borings would be centered around each of these seven previously identified SCC exceedance areas to delineate PCB contamination (planned total of 56 borings). It was estimated that samples from two vertical intervals (0-6 inches and 12-18 inches) per boring would be necessary to complete vertical and horizontal delineation at each area. Therefore, a total of 112 samples (16 samples per sampling area) were scheduled to be collected and field screened for PCBs with immunoassay kits to determine horizontal and vertical delineation at these seven areas. From these 112 field screened samples, approximately 70 samples (including QA/QC samples) were to have been sent to an analytical laboratory for further PCB analysis to confirm the results of the immunoassay kit field screening.

Per the SSIP, two samples were initially collected from each of eight borings augered at 10-foot horizontal intervals distributed radially (north, south, east and west) centered on each of the seven previously identified exceedance locations. All samples were field screened with immunoassay kits to direct the surface soil investigation and determine which samples would be sent to the lab for confirmatory analysis. All samples that were below 0.50 ppm and used to delineate both a horizontal and vertical clean zone were sent to the laboratory for confirmatory analysis. An additional 10% of all samples with PCB concentrations above 0.50 ppm were also sent for confirmatory analysis.

Based on the immunoassay screening and analytical results indicating that PCB concentrations greater than the SCC of 0.49 mg/kg were present in many of the initial 112 samples collected at the seven targeted exceedance areas, neither horizontal nor vertical PCB delineation was achieved. These initial results indicated that both the horizontal and vertical extents of PCB contamination were more widespread than originally estimated. Instead of seven discrete, separate areas of contamination, the sample results indicated that extent of contamination at each area overlapped adjacent areas; thus, forming a large single contiguous area of contaminated shallow surface soils (0-6") in which all seven initial target locations were imbedded. Based on these preliminary results and as directed by the Department, the surface soil delineation investigation at these areas was expanded beyond the original SSIP scope of work.

The expanded delineation effort consisted of a much larger sampling area (roughly 800-feet long by 400-feet wide), wider sample distribution, and greater numbers of samples collected, screened and analyzed than originally anticipated. From each initial area (i.e. SS22) of investigation, additional borings were augered at 20-30 foot intervals outward in an effort to delineate the extent of shallow soil contamination. At each additional boring, a shallow (0-6 inch) sample was collected and immunoassay field screened for PCBs. If screening indicated that the shallow sample was below criteria, then it was determined that horizontal delineation had been achieved in that direction, and that sample was sent to the laboratory for confirmatory analysis. If, however, screening indicated that the shallow sample was above criteria, then it was determined that horizontal delineation had not been achieved, and an additional boring was augered, sampled

and screened at 20-30 foot intervals outward until horizontal delineation was achieved in that direction.

Once horizontal delineation was achieved in the shallow soils (0-6 inch) via this outwardly stepped process, samples were collected at deeper intervals (12-18, 24-30, 36-42, or 48-54 inches) as needed at the previously sampled boring locations in an effort to vertically delineate PCB contamination. Vertical delineation was determined typically at 60 ft. increments starting from the last detected exceedance in the surface soils in a specific direction (i.e. north) back to the origin (i.e. SS22). At each vertical delineation boring, if screening indicated that the sample was above criteria, then it was determined that vertical delineation had not been achieved, and an additional sample was collected and screened at a deeper interval as previously indicated above. However, if screening indicated that the sample at a given depth was below criteria then it was determined that vertical delineation had been achieved at that location, and that sample was sent to the laboratory for confirmatory analysis.

This expanded delineation investigation resulted in the total number of sampling locations and samples collected for immunoassay screening and laboratory analysis to greatly exceed the originally planned amounts described in the SSIP.

Site-Wide Screening of PCB Contamination

In order to fill data gaps in the known extent of surface soil PCB contamination, this phase of the delineation effort was focused on screening those areas of the Site that were not included in the July 1997 sampling event. Per the SSIP, 20 separate locations sitewide were planned for PCB screening and analysis. From these 20 areas, it was anticipated that approximately 30 samples would be collected and screened via immunoassay kits, and an additional 28 samples would be laboratory tested for results confirmation.

As directed by the Department during this RI field investigation, however, only 15 of these locations were actually sampled to investigate the presence of PCB contamination in previously unsampled shallow surface soils. A sample was collected from the 0-6 inch interval at each location via hand auger and screened using the immunoassay kit as previously discussed. If the PCB concentration was below 0.50 ppm, then delineation at that location was determined to be complete and no further sampling was needed. However, if the PCB concentration was greater than 0.50 ppm, then the same, outwardly radial patterned vertical and horizontal delineation sampling process as conducted at the previously identified locations was implemented as needed to delineate the extent of contamination.

Unlike the delineation effort at the previously identified contamination areas, initial immunoasssay screening and laboratory results did not indicate the need for an expanded delineation program at these areas, therefore, the total numbers of sampling locations and samples collected did not exceed the originally planned amounts described in the SSIP.

4.2.2 Junkyard/Lead Sweating Area

According to the previous PA/SI for the Site (NJDEP, December 1996), surface soil samples showed uniform lead contamination throughout the Junkyard/Lead Sweating Area with elevated concentrations of cadmium, arsenic, copper and PCBs. The PA/SI, however, left data gaps in soil at depth that needed to be filled as part of this RI. Therefore as planned and described in the SSIP, ten (10) geoprobe borings were advanced on September 11, 2000 to investigate the area's soil from the surface to water table depths (approximately 10-12 feet) and to identify potential impact from past operations. Based on the findings of the September investigation and as planned in the SGSP, 35 additional soil borings were advanced in October 2001 and April 2002 to better define and delineate the horizontal and vertical extents of PCBs and Metals identified in during the September, 2000 investigation. The locations of these borings were biased toward areas of visible surficial staining or historically active areas. Refer to Figures 4-5 through 4-7 for the locations of the soil borings in this area. Refer to Table 4-1, Soil Sample Summary, for a complete listing of samples collected at these borings, sample depths, types of analysis, sampling methods and dates. Appendix B provides soil boring logs for the Geoprobe and hand auger borings.

Per the SSIP, the initial ten soil borings were advanced and continuously sampled to the water table (approximately 11.5-feet). Two (2) samples were collected from each boring for chemical analysis: one surface soil sample from the 0-6 inch bgs interval; and one sample from the 6-inch interval immediately above the high water table. The shallow surface soil sample from each boring was analyzed for TAL Metals, TCL Pesticides/PCBs, and pH. The deeper sample just above the water sample from each boring was analyzed for a full TCL/TAL suite of parameters and pH. One (1) additional soil sample for every 20 samples for each analytical method was collected as a blind duplicate for QA/QC purposes.

Based on the September, 2000 investigation, PCBs and Metals were identified as the predominant contaminants distributed ubiquitously throughout the Scrapyard Area at the shallow and localized areas at the water table. An additional 35 soil borings were advanced to better define the horizontal and vertical extents of contamination. Twenty-two soil borings were advanced via a geoprobe rig and continuously sampled to the water table (approximately 11.5-feet) and 13 soil borings were advanced via hand auger techniques to a maximum depth of four feet. Samples were collected from each boring for chemical analysis to determine horizontal and vertical extents of contamination as summarized below for the surface soil (0-2 ft), intermediate interval (2-4 ft) and deep interval (10-12 ft). Based on the location of the boring and previous sample results, samples were analyzed for PCBs and/or TAL Metals to fill the data gaps. One (1) additional soil sample for every 20 samples for each analytical method was collected as a blind duplicate for QA/QC purposes.

<u>Surface Soil Sampling (0-2 ft):</u> As shown on Figure 4-5 and summarized in Table 4-1, a total of 47 additional samples were collected and analyzed from this surface soil interval as part of the SGSP. Thirty-one (31) samples were collected from geoprobe borings labeled GP-5, GP-7 and GP-12 through GP-33; and 16 samples from hand augered borings HA-1 through HA-13A. All 47 samples were analyzed for PCBs. However, based on the expectation that full horizontal delineation for Metals in shallow surface soil could not be achieved for the northern portion of

Scrapyard Area, only 23 samples from selected locations were analyzed for Metals as per the SGSP. A total of 57 samples were collected from the surface soils.

Intermediate Soil Sampling (2-4 ft): As shown on Figure 4-6 and summarized in Table 4-1, a total of 28 additional samples were collected and analyzed from this interval. Twenty-five (25) samples were collected from geoprobe borings labeled GP-7 through GP-31; and three (3) samples from hand augered borings HA-1 through HA-3. Twenty-six (26) samples were analyzed for PCBs. Based on the results from the previous interval for two (2) samples (GP-7D and GP-30E), PCB analysis was not required for vertical delineation. However, based on the surface soil results (i.e. below criteria) and per the SGSP, only 16 samples from selected locations were analyzed for Metals.

Deep Soil Delineation (10-12 ft): As shown on Figure 4-7 and summarized in Table 4-1, a total of 19 additional samples were collected and analyzed from this interval. Nineteen (19) samples were collected from geoprobe borings labeled GP-12 through GP-34. All 19 samples were analyzed for PCBs. However, based on the surface and intermediate soil results (i.e. below criteria) and per the SGSP, only nine (9) samples from selected locations were analyzed for Metals.

4.2.3 Shallow and Deep Monitoring Well Borings

As per the SSIP and the SGSP, a total of 20 exploratory soil borings were drilled to document the subsurface soil conditions, and to help identify the optimum depths at which deep well screens would be installed. One boring was drilled at each well or well couplet installation location. See Figure 2-1 Site Plan, for locations of these monitoring well related borings. Refer to Table 4-1 Soil Sample Summary, for a complete listing of samples collected at these borings, sample depths, types of analysis, sampling methods and dates. Appendix B provides drilling logs for all borings. The results of select sample grain size analysis are presented in Appendix C.

Twelve (12) of the shallow borings (labeled MW1 through MW12) were drilled in preparation for shallow well installation. The shallow soil borings were continuously split-spoon sampled until such a depth was reached to allow for a sufficient length of the well screen to bridge the water table. At each of the shallow well borings, one soil sample was collected from the well-screened interval. Each of these soil samples was collected for geotechnical analysis (grain size, total organic carbon (TOC), and pH). After logging and sampling, each of these 12 borings was completed as a shallow monitoring well screened across the water table.

Six (6) deep borings (labeled B13 through B18) were drilled at proposed deep and shallow well couplet locations. These deep borings were used as preliminary, exploratory pilot holes drilled prior to well installation for the purpose of lithological logging and to identify the appropriate depth interval for deep well screens. The pilot borings were sampled continuously and logged to a depth of 20-feet; deeper samples were then collected at 5-foot intervals until the completion of the boring (approximately 100-feet). Although all of the deep pilot borings were originally scheduled to be drilled to 100-feet bgs, three of the pilot borings (B16, B17 and B18) were terminated prior to reaching the planned depth due to geological characteristics of the borings (loss of drilling fluid due to a very porous media). At each of the six deep borings, five

geotechnical samples (grain size, TOC, and pH) were collected from each lithology encountered, as well as one sample from each of the anticipated screen intervals for the deep wells. Two (2) additional borings were advanced at MW-10 and MW-11 for installation of two (2) new deep monitoring wells (MW-10D and MW-11D) that were required based on the initial two (2) rounds of groundwater sampling as described in Section 5.2. Upon completion of the deep pilot borings, the boreholes were grouted to the surface, and deep and shallow well couplets were installed nearby at each boring location.

In addition to collecting geotechnical soil samples, environmental samples were collected at selected deep and/or shallow borings based upon the following criteria:

- Two (2) soil samples were collected for chemical analysis at each of three well boring locations where contamination/waste material was encountered (MW-1, B16, B18).
- The first soil sample was collected from the interval exhibiting either the highest PID reading or most visible zone of contamination or directly below the deepest zone of waste material.
- The second sample was collected from the six-inch interval above the high water table.

A total of six (6) such samples were analyzed for TCL/TAL and pH. See Table 4-1 for a listing of samples collected for chemical analysis.

4.2.4 Test Pit Investigation

As planned in the SSIP, 62 test pits (TP-1 through TP-56) were excavated to determine the extent and depth of battery casings and other buried wastes along the banks of Hessian Run, and to investigate other cleared areas suspected of containing waste. Piles of surface debris (metal, tires, and gas cylinders) were encountered north of the active junkyard. These piles and the area around, them were not investigated due to the presence of the gas cylinders. Based on observations and sample results from the initial investigation an additional 28 test pits (TP-60 through 88) were dug sitewide to better delineate the horizontal and vertical extents of buried fill material, better define the nature of the fill, and to search for evidence of active or previous sources of soil and/or groundwater contamination. Using a trackhoe excavator, the 90 test pits were dug on average 20-feet long, 4-feet wide, and a to a maximum depth of 15-feet. The test pits were logged for lithology and for the presence or absence of battery casings and other waste material. Additionally, soil and waste samples were collected for chemical analysis. See Figure 4-8 for test pit locations, and refer to Excavation Logs in Appendix B for details of test pit dimensions and materials encountered. See Table 4-1 for a complete listing of test pit samples collected for analysis.

All excavated soil was visually inspected for evidence of contamination and field screened for volatiles with a PID. A soil sample was collected directly below the waste material, if encountered, and directly above the water table in each test pit; in several cases, the water table was encountered within the buried waste material. From the test pits, a total of 62 soil samples were analyzed for TAL Lead, pH and TPH. If elevated PID readings, visible staining, noticeable odor, or unusual waste material were encountered, additional analyses were conducted. In these instances of apparent contamination, 37 samples were analyzed for TCL Volatiles, TCL Semi-Volatiles, TCL Pesticides/PCBs, TAL Metals, plus pH (TCL/TAL and pH). One (1) additional

soil sample for every 20 samples for each analytical method was collected as a blind duplicate for QC purposes. All excavated soils were used, regardless of screening results, to backfill the excavations.

As a supplement to the test pit investigation, and as directed by the Department, 18 additional surface soil sampling locations (not originally planned in the SSIP) were hand augered along the southern Site boundary near the trailer park and in other selected locations suspected to potentially have impacted soil. From these 18 locations, 19 surface soil samples were collected for analysis. Seven (7) of these soil samples were analyzed for Lead, pH and TPH; 12 samples were analyzed for a full TCL/TAL and pH suite of parameters. All samples were collected with stainless steel spoons or hand auger. See Figure 4-8 for surface soil sample locations, and refer to Table 4-1 for a complete listing of samples collected for analysis.

4.2.5 Soil Characterization Sampling

As planned in the SGSP, a total of five (5) soil samples (sample locations labeled T-1 through T-5 on Figure 4-8) were collected from various site areas known to have contaminated soil. The general areas from which characterization samples were collected are as follows:

1. Scrapyard – from the area of metal contamination.
2. Household Trash – from along the banks of the Hessian Run.
3. Battery Casings – from along the banks of the Hessian Run.
4. Battery Disposal Area – battery casing from the battery disposal area.
5. Open Field – from the PCB contaminated soil.

These five (5) samples were analyzed for Toxicity Characteristic Leaching Procedure (TCLP) for the purposes of disposal classification. Characterization sample analyses, locations and sample depths are summarized in Table 4-1. The boring logs for each location are provided in Appendix B. The results of the TCLP characterizations will be used to determine disposal methods and estimate costs for the Remedial Action Selection Evaluation.

4.3 STREAM GAUGE INSTALLATION

A total of four stream gauges were installed in the surface water bodies that bound the Site (Woodbury Creek and Hessian Run) to monitor surface water elevation and the fluctuations of the tides. Two (2) stream gauges were installed in the Woodbury Creek (SG-1 and SG-2) and two in the Hessian Run (SG-3 and SG-4). The four (4) stream gauge locations are shown in Figure 4-9. Following installation, each stream gauge was surveyed for horizontal location and elevation. The four (4) stream gauges, in conjunction with National Oceanic and Atmospheric (NOAA) tidal prediction data for Woodbury Creek, were used in the groundwater monitoring/tidal study and to determine appropriate surface water/sediment sampling activity times. See Appendix D for NOAA tidal data.

4.4 MONITORING WELL INSTALLATION

As planned in the SSIP, a total of 24 monitoring wells were initially installed at the Site to assess the flow patterns and water quality of both the shallow and deep groundwater regimes at the Site: 18 shallow wells and 6 deep wells. As planned in the SGSP, two (2) additional deep monitoring wells (MW-10D and MW-11D) were installed to fill data gaps from the initial investigation regarding the quality of upgradient groundwater entering the Site from the west and northwest. See Figure 2-1 for the locations of all 26 installed RI related monitoring wells. Refer to Appendix B for all drilling logs, well construction diagrams, well records and permits, and Forms A and B.

4.4.1 Shallow Monitoring Well Installation

The 18 shallow wells labeled MW1 through MW18 (with screens bridging the water table) were installed to document the horizontal flow pattern of the water table at the Site. These wells provide the data necessary to document site-wide groundwater discharge patterns and identify the location of the water table divide on the peninsula on which the Site is situated.

The two wells that were installed nearest to the Site's eastern edge (MW1 and MW14) were designed to provide background data to assist in establishment of groundwater flow patterns. A line of wells was installed within the identified landfilled area along Hessian Run to document the direct impact of the waste on groundwater quality (MW4, MW5 and MW13). The locations of these wells were selected within the landfilled area, but above the high water line. Two additional lines of wells were installed upgradient of the identified landfilled bank, within the property and biased towards potential areas of concern such as the location of the former "lead sweating" operation. A line of wells was also installed along the southern property boundary. The wells were located along these lines to obtain groundwater information to properly contour the groundwater flow. Six (6) of these shallow wells were paired with the deep wells (MW13 through MW18). All shallow wells were installed via hollow stem auger and were constructed in accordance with *NJDEP Monitor Well Requirements for Unconsolidated Aquifers* (March 1992) and Section 4.8.1 of the Programmatic QAPP. These wells were constructed using 10 feet of 4-inch diameter, 0.020-inch slotted PVC well screen which bridges the water table.

4.4.2 Deep Monitoring Well Installation

After completion of the deep borings discussed in Section 4.2.3, the resultant boring logs were evaluated and the deep well screen elevation was selected. The eight (8) deep monitoring wells (MW10D, MW11D, MW13D through MW18D) were located adjacent to the deep borings and were screened at approximately 55 to 65-feet BMSL. This interval was selected assuming that the medium to fine sand with fine gravel encountered would be an effective water-producing zone. The uniform deep screen elevation enables the horizontal gradient in the deep groundwater regime to be identified free of distortion by the anticipated vertical gradient. All deep wells were paired with a shallow well to investigate the anticipated vertical gradient. In all cases, the separation between the bottom of the shallow well screen and the top of the deep well screen is greater than 40-feet; this separation provides adequate measurement of the vertical gradient.

4.4.3 Monitoring Well Development

All new monitoring wells were developed according to the procedures described in the SSIP. Well development procedures began after completion of well installation. Development of both shallow and deep monitoring wells included continued groundwater pumping and surging until well water was as free of sediment as practical. In all cases, a minimum of three well volumes of water were removed. Based on field screening with a PID and visual observations, no evidence of gross contamination or free product was encountered, therefore all purge water derived from well development was discharged to the ground.

4.5 GROUNDWATER ELEVATION MEASUREMENTS/TIDAL STUDY

Prior to and following each round of synoptic groundwater elevation measurements, a reading from each staff gauge visible from the Site was taken to evaluate the tidal influence on groundwater elevation. At least one staff gauge was read for each round of water levels.

4.5.1 Groundwater Elevation Measurements

The December 4, 2000 round of groundwater sampling (Round 1) provided the initial round of synoptic groundwater measurements. The January 10, 2001 start of the tidal study provided a subsequent round of groundwater measurements. The January 25, 2001 round of groundwater sampling (Round 2) provided two rounds of groundwater elevations (high and low tide). Each round of water levels was collected over approximately a two hour time period. These water level readings were subsequently subtracted from the surveyed well elevations to establish a water level elevation at each location. Staff gauge readings were recorded during each round of water levels. Refer to Table 4-2 for recorded groundwater and surface water elevations. See Figures 4-10 and 4-11 for locations of recorded elevations used for shallow and deep groundwater contouring.

4.5.2 Tidal Study

Between January 10 and January 25, 2001, a tidal study was performed to establish tidal influence, to determine lag times and mixing zones on the Site, and to evaluate the effects of Hessian Run and Woodbury Creek on the Site's groundwater system.

The tidal study consisted of installing remote down-hole data loggers (Solinst Dataloggers) in seven (7) of the on-site wells, one (1) atmospheric, and one (1) adjacent to the stream gauge located in Woodbury Creek west of NJ Route 295. The on-site data-loggers were installed in shallow monitoring wells MW09, MW10, MW11, and MW12, and in deep monitoring wells MW14D, MW15D, and MW18D. Temperature and changes in head levels were recorded every 10 minutes during the 2-week test cycle.

4.6 GROUNDWATER SAMPLING

As planned in the SSIP, two comprehensive groundwater sampling events were executed at the Matteo Site, Round 1 (December 4 through December 8, 2000), Round 2 (January 25 through February 2, 2001), Round 3 (April 9 and 10, 2002). Round 1 and 2 included the 24 newly installed monitoring wells plus two on-site and neighboring potable wells. Round 3 included six deep monitoring wells. Additionally, an adjacent potable well was sampled twice on October 25 and November 8, 2001. See Figures 4-12 and 4-13 for the sampled well locations for each round, and refer to Table 4-3 for a complete listing of groundwater samples collected for analysis.

4.6.1 Monitoring Wells: Round 1

Following collection of water level measurements, dedicated Teflon lined polyethylene discharge tubing was installed in each well. A Grundfos Redi-flo® 2-inch stainless steel submersible pump was then used to evacuate (purge) groundwater prior to sampling. Round 1 sampling was conducted using traditional purging and sampling techniques. The parameters monitored during purging were turbidity, pH, dissolved oxygen, specific conductivity, temperature, and groundwater elevation. See Appendix E for detailed sample purge logs.

After well purging and water stabilization requirements were met, groundwater samples were collected using a disposable Teflon hand bailer. The samples were analyzed for TCL/TAL (filtered and unfiltered metals). One (1) additional groundwater sample for every 20 samples for each analytical method was collected as a blind duplicate for QA/QC purposes. Additionally, one (1) field blank sample was collected for each day on Site for each analytical method, and one (1) trip blank supplied for each sample cooler containing volatile organic samples.

4.6.2 Monitoring Wells: Round 2

Round 2 of groundwater sampling was conducted 48 days after Round 1. This sampling event was conducted using a low-flow technique. The samples collected were analyzed for the same parameters as specified in the first sampling event. Because low-flow purging and sampling techniques were used for this sampling round, filtered metal samples were not required. The low-flow method of purging and sampling was conducted in accordance with the U.S. Environmental Protection Agency's (USEPA) *Ground Water Sampling Procedure: Low Stress (Low-Flow) Purging and Sampling* (USEPA, March 1998). The parameters monitored during purging were turbidity, pH, dissolved oxygen, specific conductivity, Eh, temperature and groundwater elevation. See Appendix E for detailed sample purge logs.

After well purging and water stabilization requirements were achieved, groundwater samples were collected directly from the pump effluent. The samples were analyzed for a full TCL/TAL suite of parameters. One (1) field blank sample was collected for each day on Site for each analytical method, and one (1) trip blank per sample cooler containing volatiles organic samples.

4.6.3 Monitoring Wells: Round 3

Following collection of water level measurements, a Grundfos Redi-flo® 2-inch stainless steel submersible pump was then used to evacuate (purge) groundwater prior to sampling. Round 3 sampling was conducted using traditional purging and sampling techniques. The parameters monitored during purging were turbidity, pH, dissolved oxygen, specific conductivity, temperature, and groundwater elevation. See Appendix E for detailed sample purge logs.

After well purging and water stabilization requirements were met, groundwater samples were collected using a disposable Teflon hand bailer. The samples were analyzed for TCL Volatiles and unfiltered TAL Metals. One (1) additional groundwater sample for every 20 samples for each analytical method was collected as a blind duplicate for QA/QC purposes. Additionally, one (1) field blank sample was collected for each day on Site for each analytical method, and one (1) trip blank supplied for each sample cooler containing volatile organic samples.

4.6.4 Potable Wells: Rounds 1 and 2

Due to the analytical results of the August 1994 potable well sampling, the unknown extent of the on-site contamination, and the heavy usage of the aquifers in the area for potable water supply, samples were collected from two (2) nearby potable wells during round 1 and 2 of groundwater sampling events: one on-site well designated as the PW-2 (Matteo Well); and one neighboring off-site well at the adjacent residence north of the scrap yard area designated as the PW-1 (House Well). For each sampling round, the two potable wells were purged for fifteen minutes prior to sampling. The samples were analyzed for the following suite of parameters using analytical methods specifically chosen to comply with potable water testing standards: volatile organics (USEPA Method 524.2, Version 4.0), semi-volatiles (USEPA Method 525.2), TAL Metals (40 CFR141/143), and pesticides/PCBs (USEPA Method 505).

No treatment system was encountered at the on-site Matteo Well and, therefore, the well was purged and sampled from an outside spigot behind the scale house. During purging and sampling of the Matteo Well, a strong rotten egg odor was emitted from the purge water.

The adjacent House Well was observed to have a treatment system consisting of: a 5-micron filter and a three-stage charcoal and salt filter were located in the basement of the house. Therefore, the sampling point was selected at a valve located prior to the treatment system within the well box and just above the wellhead. At both potable well locations, field personnel were unable to access the wells to determine their total depths or the elevation of the water table.

4.6.5 Potable Well PW-3

Based on the findings from the well search, presented in Section 5.7, a potable well (PW-3) was found to be located adjacent to the site at Billy-O-Tire (Lot 8, Block 325). As directed by NJDEP, two (2) rounds of water samples were collected from PW-3 on October 25 and November 8, 2001 by purging the potable well for fifteen minutes prior to sampling. The samples were analyzed for the following suite of parameters using analytical methods

specifically chosen to comply with potable water testing standards: volatile organics (USEPA Method 524.2, Version 4.0) and TAL Metals (40 CFR141/143).

No treatment system was encountered at the Billy-O-Tire well and, therefore, the well was purged and sampled from an inside spigot located at the back of the garage. Field personnel were unable to access the potable well to determine the total depth or the elevation of the water table.

4.7 HYDRAULIC CONDUCTIVITY TESTING

Rising head tests were conducted to estimate horizontal hydraulic conductivity to be used in estimations of groundwater seepage velocity. Many of the shallow wells are screened in perched groundwater. The primary path for offsite migration via groundwater is in the deep zone. The rising head tests were performed on three (3) deep wells (MW14D, MW16D, and MW17D). The rising head test consisted of recording the recovery rate of the water level after drawdown from the volume of water removed during the well development process. See Figure 2-1 for the locations of these tested wells. Refer to Appendix F for the hydraulic conductivity data set collected.

The hydraulic conductivity testing was conducted by placing a transducer in each well at a depth above the development pump. During all tests, one transducer was placed in another well (above the water table) located away from the testing area to record atmospheric pressure changes. A constant pumping rate was maintained during the development process (approximately 10 gpm). After the development process was completed, the pump was turned off and the transducer recorded the recovery of groundwater levels. Water level measurements were recorded every three (3) seconds to verify recovery within 90% of the initial pre-development water level. After the water level stabilized the transducer was removed from the well. The test data was analyzed using the Bouwer and Rice Method (Bouwer, H. and R. C. Rice, 1976). The transducer in MW14D did not record the full recovery of the well.

4.8 SEDIMENT AND SURFACE WATER SAMPLING

Elevated concentrations of lead and PCBs were detected in sediment and surface water samples collected from Hessian Run in August 1996 adjacent to the Matteo Site. As a result of the tidal conditions of surface water near the Site, contaminants originating from the Matteo Site have the potential to be transported in the surface water and deposited in the sediments of Woodbury Creek, Hessian Run, and the intertidal flats. As per the SSIP, sediment and surface water samples were collected from both Woodbury Creek and Hessian Run and across three inter-tidal flats adjacent to the Site. The locations of these samples were accessed using an amphibious vehicle. Prior to initiation of sediment and surface water sampling activities, stream (staff) gauges were installed in Hessian Run and Woodbury Creek to monitor surface water elevation during sampling activities.

4.8.1 Sediment Sampling

A total of 416 sediment samples were collected from 145 separate locations along transects and at discrete locations. Refer to Table 4-4 for a complete listing of sediment samples collected for

analysis. See Figures 4-15 through 4-20 for all sample locations. The results of the grain size analyses are presented in Appendix C. A total of 28 transects were sampled across the two tidally influenced channels. Three of these transects served to document background conditions in two upgradient branches of Hessian Run and the upgradient branch of Woodbury Creek (T1, T25, and T30). Fourteen (14) other discrete sample locations (S1 through S14) were located within the inter-tidal flat areas. All samples were collected and analyzed as described in the SSIP, except as otherwise noted below.

Several deviations from the SSIP occurred based on observed field situations and as directed by the Department. Sediment samples were originally planned to be collected from 30 transects, however, modifications were made during the field activities to eliminate two (2) of these transects (T10 and T12) based on their proximity to the adjacent transects T9 and T11. Additionally, for five (5) transects (T4 through T8) the Department recommended collecting the samples from only the three (3) sample locations closest to the Site. The other sample locations for those transects were dependent on the laboratory results. Samples were only collected from the 0-6 inch interval for seven (7) discrete locations (S1 through S6 and S14). Due to unanticipated field conditions (poor recovery and auger refusal), field personnel experienced difficulty collecting individual samples from discrete depth intervals at five (5) locations from transects T21, T23 and T25 in the Woodbury Creek. Therefore, composite samples were collected at these five (5) locations (T21-B, T21-C, T23-D, T25-B, and T25-C), and indicated as "(comp)" samples on Figures 4-12 through 4-20.

As planned and unless otherwise noted above, each of the 28 transects sampled consisted of five (5) sample locations where a 3-foot deep sediment core was collected. One (1) sample location was in the deepest part of the channel, the thalweg. Two (2) sample locations along each transect were on the upper portions of the channel margin flats at opposite banks, collected as far as the tide stage at the time of sampling permits. The remaining two (2) sample locations were mid-way between the channel margin sample location and the thalweg sample location. The discrete sediment sample locations (S1 through S14) were situated near tributary tidal channels. These locations were selected to gather sufficient data to characterize the movement of contaminants through the sedimentary system. The intertidal flat sample locations were selected to characterize areas where humans are known to come in contact with sediment and that also serve as important natural habitats.

Sample collection was accomplished with a sediment sampler equipped with a 3-foot long core barrel with an auger or butterfly valve tip. The sampler had a handle to facilitate driving or twisting the core barrel, and a check valve to prevent wash out during retrieval through the overlying water layer. Where practical, three samples per core were obtained at discrete depths of 0-6 inches, 12-24 inches, and 24-36 inches for the samples taken at both transect and discrete individual locations. Each sample was analyzed for Lead, PCBs, TOC, pH and grain size. At each transect, the 0-6 inch interval sample closest to the Site was analyzed for a full TCL/TAL suite of parameters instead of just Lead and PCBs.

A GPS (Global Positioning System) unit was used to determine the location of each sediment sample location either along a transect or at a discrete location. Detailed field notes were taken which include time of day and condition of the tide (flood or ebb) at the time of sampling, a tide

gauge reading from the nearest tide gauge if visible, and observations regarding battery casings and other evidence of contamination.

4.8.2 Surface Water Sampling

A total of 24 surface water samples were collected from six transect locations in Hessian Run and Woodbury Creek: four (4) surface water samples per transect. Samples were collected from the mid-channel and the quarter channel nearest the Site at each of three background transects (T1, T25, and T30), and three other selected transects (T3, T12, and T18) that were located upstream, mid-stream and downstream of the Site along Hessian Run. Each location was sampled twice: at both high and low tides. In addition to surface water sampling, ten (10) seeps were sampled: eight (8) along Hessian Run and two (2) along Woodbury Creek. All seep samples were collected during an ebb tide. See Figure 4-9 for the locations of these surface water samples, and Figure 4-12 for seep sample locations. Table 4-3 provides a complete listing of samples collected for analysis.

At each mid and quarter channel surface water sample location, in-situ water quality parameters (pH, conductivity, DO, turbidity, temperature, and salinity) were measured. All water samples collected both from the channel and the seeps were analyzed for Lead (filtered and unfiltered), and hardness as $CaCO_3$. Detailed field notes were taken which included time of day and condition of the tide at the time of all sampling and elevation measurements if visible. GPS was used to determine the location of each surface water and seep collected.

4.9 NATURAL RESOURCES INVESTIGATION

As specified in the SSIP, a natural resource inventory of the 120-acre study area (comprised of the 80-acre Site and adjacent estuary and wetlands) was conducted through a review of available background information and on-site field surveys in November and December of 2000. The wetland delineation was conduced to identify the upland-wetland boundary and the relative acreage of uplands and wetland habitats. An inventory of flora and fauna species likely to occur on the Site was also conducted, as well as an assessment of existing plant communities and habitats located on and adjoining the Site.

Prior to the field investigation, existing documentation was reviewed to assess the project Site. Resources reviewed included U.S. Geological Survey (USGS) topographic maps, the U.S. Fish and Wildlife Service (USFWS)-National Wetland Inventory (NWI) Mapping, the NJDEP Freshwater Wetlands Mapping, and the Natural Resource Conservation Service (NRCS)-Soil Survey for Gloucester County, New Jersey.

As part of the natural resource investigation, a wetland delineation Baseline Ecological Evaluation (BEE) were performed to establish the boundaries of any federal or state jurisdictional wetlands within the project Site and to determine the presence of potential ecological receptors to Site contaminants. Wetland boundaries were delineated in accordance with the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (Federal Interagency Committee on Wetland Delineation, 1989) and the 1987 *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987). Both methods employ a three-

parameter approach (hydrophytic vegetation, hydric soils, and hydrology) for identifying and delineating wetlands. Upland and wetland habitats were classified in accordance with a Preliminary Natural Community Classification for New Jersey (Breden 1989), and inventoried for dominant plant species. Wetlands were also classified in accordance with Cowardin (1979).

The wetland/upland boundaries were identified and delineated in the field by the placement of sequentially numbered flags on vegetation. At representative points, transects were laid out perpendicular to the wetland/upland boundary and vegetation, soil, and hydrologic components were evaluated at two plots (wetland, upland) along each transect. The wetland flags were surveyed to submeter accuracy using a Trimble GPS Pathfinder Pro XR/XRS with Asset Surveyor global positioning system (GPS) unit and plotted on an aerial photograph.

Field surveys also included an inventory and assessment of existing habitats within the study area. During the field surveys, observations of wildlife and signs of their presence were recorded. The type and quality of habitats present, especially wetlands, were evaluated for the type of wildlife species they are likely to support. Existing literature was consulted to address bird and aquatic species likely to utilize the Site and adjoining wetlands and waters. Both the USFWS and the NJDEP Natural Heritage Program were consulted for information regarding threatened and endangered species.

4.10 MANAGEMENT OF INVESTIGATION DERIVED WASTE

Based on the results of field screening and visual observations of drill cuttings and well purge water generated during field investigations, no investigative derived waste (IDW) generated was determined to be hazardous. Based on these screening results, it was not deemed necessary to containerize any of the soil, water or personal protection equipment (PPE) IDW. All soil and water IDW, therefore, was disposed of on-site at the respective drilling, purging or sampling location; all PPE was disposed appropriately as non-hazardous trash.

4.11 POTENTIAL RECEPTOR EVALUATION

A well search was conducted to determine the potential receptors of the impacted groundwater in the area of the Site. The Gloucester County Department of Health and Human Services was contacted via phone and fax to identify any wells acting as potential receptors of groundwater contamination from the Site. A well search was performed at the NJDEP Bureau of Water Allocation pertaining to the following information: any monitoring and domestic wells within a one-half mile radius of the Site and any industrial, public supply wells, irrigation, and wells with water allocation permits within a five-mile radius of the Site.

5.0 FINDINGS

5.0 FINDINGS

This RI has been completed at the Matteo Iron and Metal Site in West Deptford, NJ in accordance with the approved SSIP as detailed in Chapter 4. The following is a discussion of the findings based on the data generated. The full analytical packages for all samples were submitted directly to the NJDEP by the laboratory.

5.1 SOIL

In Chapter 4, four general types of soil sampling and analysis were described in accordance with the SSIP:

- PCB Delineation In Surface Soils
- Shallow and Deep Monitoring Well Borings
- Junkyard/Lead Sweating Area Geoprobe Borings
- Test Pit Investigation

Due in part to field modifications described in Chapter 4, the results of these activities are more clearly presented in this Chapter in the following five general categories:

- PCB Delineation in Surface Soil - to determine extent of PCB contamination in surface soil
- Sitewide Surface Soil Sampling – to characterize the quality of the surface soil at debris areas sitewide
- Test Pit – to delineate the nature and extent of buried waste and to determine impact of waste disposal on underlying soil
- Geoprobe – to determine impact of scrapyard operations on surface and subsurface soil
- Soil Boring – to document Site stratigraphy and contaminant impact (if observed)

The results of each of these are discussed in the following subsections.

5.1.1 PCB Delineation in Surface Soil

Field screening via an immunoassay kit was conducted on 260 surface soil samples. To check the accuracy of the immunoassay analysis, 118 immunoassay samples were sent to the laboratory for confirmatory analysis. Only 11 of the 118 samples had contradictory results, providing a 91% confidence level. An additional 69 soil samples that were not subject to immunoassay analysis were submitted directly for laboratory analysis (for a total of 187 laboratory analytical samples). See Appendix G for surface soil sample descriptions.

The results of the PCB analysis of these surface soil samples are summarized in Table 5-1. Only Aroclors 1254, 1260, and 1248 were detected, with 1254 predominant. Comparison of total PCB concentration of each sample to the NJDEP Soil Cleanup Criteria shows that, of the 187 laboratory analytical samples, 42 exceed the Residential Direct Contact Soil Cleanup Criteria

RDCSCC) (0.49 mg/kg) and 29 exceed the Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) (2 mg/kg). Only nine of the 187 samples had PCB concentrations that were above 10 mg/kg, with the highest being 49 mg/kg.

The immunoassay and laboratory analytical sample locations and results are illustrated on Figures 4-1 through 4-4, which depict four different depth intervals (0-12", 12-18", 24-30", and 36-42"). Most of the samples are concentrated in the western portion of the Site. The initial sampling was distributed throughout the Site, but the western portion is the area where detections above criteria were encountered that required additional horizontal and vertical delineation.

The area exceeding the RDCSCC is indicated by shading on these figures. The highest concentrations were detected in the northwestern portion of the affected area. This area is consistent with the locations of roadways that supported the land-disturbing operations observed in the 1975 aerial photograph (Appendix A). The horizontal extent of contamination to the north was not fully delineated, as the buried waste along Hessian Run was encountered. The sequence of figures demonstrates that, vertically, the majority of contamination is limited to the top 2 feet of soil, while smaller pockets extend to more than 3 feet. Based on the measurements presented on these figures the estimated quantity of PCB-contaminated soil (exceeding RDCSCC; non-hazardous) is approximately 19,200 cubic yards in the top 2 feet and an additional 4,000 cubic yards below 2 feet.

5.1.2 Junkyard/Lead Sweating Area

Soil investigations were conducted within the Scrapyard Area consisting of a total of 45 soil borings with 158 soil samples. The locations of these soil borings (geoprobe and hand auger) are shown on Figures 4-5 through 4-7. Samples were collected from each boring for chemical analysis as detailed in Section 4.2.2 in accordance with the SSIP or the SGSP to delineate the horizontal and vertical extent of contamination for the surface soil (0-2 ft), intermediate interval (2-4 ft) and deep interval (10-12 ft). The results of the analyses are summarized and compared to the NJDEP soil cleanup criteria (Residential, Non-Residential, and Impact to Groundwater) in Tables 5-2 through 5-8. The intermediate and the deep intervals did not exceed NJDEP soil cleanup criteria for Impact to Groundwater. The analytes exceeding the NJDEP RDCSCC (metals and PCBs) are shown on Figure 4-5. Clean lines based on PCB and/or Metal concentrations below RDCSCC have been drawn for each depth interval to show the known horizontal extent of contamination at that depth. Discussions of the results for each soil depth interval are provided below. Drilling logs for all geoprobe and hand augered borings are provided in Appendix B.

<u>Surface Soil Delineation (0-2ft):</u> Refer to Tables 5-2 through 5-4 for the sample results compared to RDCSCC, NRDCSCC and Impact to Groundwater Soil Cleanup Criteria (IGWSCC) for this depth interval. See Figure 4-5 for the sample locations, RDCSCC exceedances and extent of PCB and/or Metals contamination exceeding RDCSCC.

Of the 57 surface soil samples collected during the RI, samples at 26 locations exceeded RDCSCC for total PCBs, 30 sample results were below criteria, and one sample was not analyzed for PCBs.

From the 33 samples analyzed for Metals, 19 samples indicated exceedances above RDCSCC for at least one of the following Metals: antimony, arsenic, barium, copper, lead, mercury, nickel, thallium, and zinc. The remaining 15 samples analyzed for Metals showed no RDCSCC exceedances. Of the Metals exceeding RDCSCC, lead was the predominant contaminant with 18 exceedances, antimony was the next leading contaminant with 12 exceedances. The number of remaining exceedances was: arsenic (4), barium (4), copper (8), mercury (1), nickel (2), thallium (1), and zinc (9).

Based on the results, a clean line connecting surface soil sample locations at which neither PCBs nor Metals exceeded criteria was able to be drawn around 3/4 of a roughly 6.3 acre area in the central portion of the scrapyard. This clean line represents the known horizontal extent of these contaminants in this 0-2 foot depth interval. The clean line and contamination extents are indicated on Figure 4-5.

As shown, a nearly continuous clean line could be drawn from the northwest corner of the area southward to the middle of the eastern boundary with only one small gap at location HA-10B along the southeast border. This single location produced a small PCB exceedance (0.58 mg/kg) slightly above RDCSCC. A single PCB exceedance and two lead exceedances at Locations GP-25 and GP-26 cause a break in the clean line in the northwest corner of the area. PCB and exceedances of several Metals - mainly lead - at locations HA-3, GP-23 and GP-31 produce a break in the clean line along the northeast edge of the scrapyard adjacent to known battery casing fill area along the Hessian Run creek. Due to current site conditions in and near the scrapyard (scrap metal piles, buried debris, battery disposal area, and Hessian Run), it was determined to be unlikely that full horizontal delineation for Metals in shallow surface soil could be achieved for the northern portions of this area. Based on these conditions and the expectation that continued surface soil PCB and/or Metals contamination was likely to be encountered northward toward the known battery casing areas and Hessian Run, it was determined by NJDEP that no further sampling was needed to attempt to fill the gaps in the clean line along the northwest and northeast borders of the scrapyard.

The area shown as the extent of contamination equals approximately 275,000 square feet, or roughly 6.3 acres. In the interval between 0-2 feet bgs, this area contains approximately 20,500 cubic yards of potentially PCB and/or Metals contaminated soil.

Intermediate Soil Delineation (2-4 ft): Refer to Tables 5-5 and 5-6 for the sample results compared to RDCSCC and NRDCSCC criteria for this depth interval. Since there were no sample results which exceeded IGWSCC criteria in this interval, a results table for that criteria was not generated. As indicated in the SSIP, no samples were collected at this depth interval during the initial investigation; therefore all results presented are solely from the October 2001 and April 2002 sampling events. See Figure 4-6 for the sample locations, RDCSCC exceedances and extent of PCB and/or Metals contamination exceeding RDCSCC (GP-23).

Of the 28 intermediate soil samples collected, only one location exceeded RDCSCC for total PCBs, 25 sample results were below criteria, and two samples were not analyzed for PCBs.

From the 16 samples analyzed for Metals, only one sample, GP-23, resulted in exceedances above RDCSCC for the following Metals: antimony, barium, lead, and zinc. The remaining 15 samples analyzed for Metals showed no RDCSCC exceedances.

Utilizing the sampling results for this interval, a clean line connecting intermediate soil sample locations at which neither PCBs nor Metals exceeded criteria was able to be drawn around 3/4 of an approximate 1.6 acre area in the northern half of the scrapyard. This clean line represents the known horizontal extent of these contaminants in this 2-4 foot depth interval. The clean line and contamination extents are indicated on Figure 4-6.

As shown, an unbroken clean line could be drawn clockwise from sample location GP-31 in the northeast corner of the area to sample location HA-3 toward the north. Only exceedances of PCBs and Metals at a single location, GP-23, prevented the full closure of this clean line. Exceedances of PCBs and several Metals - antimony, barium, lead and zinc - at this location produce a break in the clean line along the northeast edge of the scrapyard adjacent to known battery casing fill area along the Hessian Run creek. Due to current site conditions in and near the scrapyard (scrap metal piles, buried debris, battery disposal area, and Hessian Run), it was determined to be unlikely that full horizontal delineation for PCBs and/or Metals in intermediate soil could be achieved for the northern portion of this area. Based on these conditions and the expectation that continued PCB and/or Metals contamination was likely to be encountered northward toward the battery casing areas and Hessian Run, NJDEP determined that no further sampling was needed to attempt to fill the gap in the clean line along the northeast border of the scrapyard at this depth interval.

The area shown as the extent of intermediate contamination equals approximately 67,700 square feet, or roughly 1.6 acres. In the interval between 2-6 feet bgs, this area contains approximately 10,500 cubic yards of potentially PCB and/or Metals contaminated soil.

Deep Soil Delineation (10-12 ft): Refer to Tables 5-7 and 5-8 for the sample results compared to RDCSCC and NRDCSCC criteria for this depth interval. Since there were no sample results which exceeded IGWSCC in this interval, a results table for that criteria was not generated. See Figure 4-7 for the sample locations, RDCSCC exceedances and extent of PCB and/or Metals contamination exceeding RDCSCC.

Of the 30 soil samples collected, 27 samples were collected just above the groundwater interface between 10-12 feet bgs; the other 3 samples were collected from the 5-8 foot bgs range. Four samples indicated exceedances of PCBs or Metals (antimony, copper, and lead). A fully closed clean line connecting deep soil sample locations at which neither PCBs nor Metals exceeded criteria was able to be drawn for this interval. Approximate one (1) acre area in the northern half of the scrapyard is potentially contaminated with PCBs or Metals. This clean line represents the known horizontal extent of these contaminants in this deep soil interval. Since the extent of known contamination at this interval has been fully delineated with a closed clean line, it was determined that no further sampling was needed in this area. The clean line and contamination extents are indicated on Figure 4-7.

Although PCBs and Metals were detected above RDCSCC at location GP-2 (sample GP-2B) during the initial investigation, confirmatory samples were collected (GP-34) at the same location and depth indicated that PCBs and Metals were below RDCSCC. Based on this confirmatory sample result, a non detect from the intermediate soil sample, and the results of other clean samples in the immediate vicinity, no exceedances are believed to be located at 10-12 foot range at that location. It was determined, therefore, that no further sampling was needed in the GP-2 vicinity at this depth.

The area shown as the extent of deep soil contamination equals approximately 46,400 square feet, or slightly over 1 acre. In the interval ranging between 6-12 feet bgs, this area contains approximately 10,500 cubic yards of potentially PCB and/or Metals contaminated soil.

5.1.3 Soil Borings

Twenty soil borings (8 deep and 12 shallow) were advanced in association with the installation of the 26 monitoring wells at the Site. As the borings were advanced, split-spoon soil samples were collected. Soil descriptions recorded for each sample are presented on the drilling logs in Appendix B. Based on subsurface information collected, two site-specific Geological Cross Sections were created (Figures 3-3 and 3-4). The Cape May Formation, which is generally observed at the Site as a brownish yellow sand, is approximately 15 feet thick at the eastern side of the Site and approximately 40 feet thick on the western side. There appears to have been historic erosion of the Upper Creataceous surface in the direction of the Woodbury Creek and Hessian Run confluence. What is interpreted as alluvium is encountered near Hessian Run and is observed as a layer of peat and organic sediments underlain by approximately 15 feet of grayish green sand. In the eastern and southern portions of the Site, the Merchantville Formation is encountered beneath the Cape May formation and is generally observed as very dark gray clays and silts. The Merchantville is approximately 20 thick at the eastern and southern boundaries of the Site but is not present in the northwestern quarter of the property. The Magothy formation underlies the above formations and extends at least to the full depth of the exploration of this RI (approximately 100 feet bgs). The Magothy Formation at the Site is generally observed as light gray sand with clay and silt lenses.

Apparent evidence of contamination identified in the field (PID, visual, or olfactory) prompted the collection of samples for laboratory analysis at three (3) boring locations (MW01, B16, and B18). Two samples were collected within the top 11 feet at each boring location and analyzed for TCL/TAL parameters, TOC and pH. The results of the TCL/TAL analyses are summarized and compared to the NJDEP soil cleanup criteria in Table 5-9; TOC and pH results are presented in Table 5-10. Exceedances of the criteria are shown on Figure 4-8. The only exceedance of the criteria was detected in the 2 to 2.5 feet bgs interval at B16. Five PAHs, PCBs, lead, and zinc are detected above the RDCSCC. The detections of lead, zinc, and benzo (a) pyrene were also above the NRDCSCC.

5.1.4 Test Pits

Ninety (90) test pits were excavated to characterize the nature and extent of buried waste at the Site. The majority of the investigation was conducted along Hessian Run. In addition, test pits

were excavated in other areas throughout the Site to address additional areas of potential concern. Three general areas of potential concern were noted; the area along Hessian Run, the area of dark staining seen in the 1975 aerial photograph, and the area of the former pond as seen in the 1959 aerial photograph (Appendix A). The locations of the test pits are shown on Figure 5-1. The test pit excavation logs are presented in Appendix B.

Delineation of Buried Waste

Various types of wastes were encountered during the excavations (Figure 4-8, Appendix B). The waste material was classified as battery casings (Fill-B), a mix of battery casings and general waste (Fill-M), and general waste (Fill-W) as indicated on the test pit excavation logs. The horizontal extent of the disposal area, with each of the three waste types identified, is presented on Figure 5-1. The vertical extent of the various wastes is depicted on a series of cross sections presented as Figure 5-2. The maximum depth of the waste is approximately seven (7) feet bgs. Based on the measurements presented on these figures, there is approximately 80,000 cubic yards of buried waste identified at the Site during this RI: 23,000 cubic yards of battery casings; 22,000 cubic yards of battery casings mixed with general waste; and 35,000 cubic yards of general waste.

Sample Analysis

Selected sample locations and analytical parameters were selected based on field observation of subsurface conditions. A total of 99 samples were collected. Twelve of the samples were collected from the waste material itself while the other 87 samples were collected from below the waste to document the impact on the underlying soil. Thirty-eight (38) samples were analyzed for full TCL/TAL analysis and pH. The other 61 samples were analyzed for TPH, lead, and pH. The results of the analyses are summarized and compared to the NJDEP soil cleanup criteria in Tables 5-12 through 5-14. In addition, exceedances of the RDCSCC are shown on Figure 4-8.

In the samples collected from the waste along Hessian Run, the predominant exceedance is lead, with concentrations ranging from 750 mg/kg (TP-27A) to 31,300 mg/kg (TP-3A). Lead is also detected above the criteria in the soil samples collected below the waste along Hessian Run, with concentrations ranging from 933 mg/kg (TP-9A) to 11,500 mg/kg (TP-35). Lead was not detected above RDCSCC in soil samples collected from below the waste at TP-2A, TP-27, and TP-28. Arsenic (21 mg/kg) was the only exceedance of RDCSCC (20 mg/kg) in the sample collected from the yellow material (TP-28C).

In the samples collected from test pits in the area of dark staining seen in the 1975 aerial photograph (TP6B, TP45, and TP74), lead, antimony, zinc, PCBs, as well as benzene and total xylene (in the pink material), were detected above the RDCSCC. In addition, ethyl benzene, chloroform, and 2,4-dimethylphenol were also detected above IGWSCC. The analytical results of soil samples collected below the waste in this area did not show any exceedance of criteria.

In the area of the former pond as seen in the 1959 aerial photograph, one large test pit (TP44) was excavated. Approximately two feet of a mix of battery casings and general waste was

encountered. The analytical results from the soil samples collected below this waste did not show any exceedance of criteria.

The supplemental test pits excavated along the western property line encountered general waste material. The sample results indicated exceedances of IGWSCC at TP-81 (TP-81C) and TP-86 (TP-86A). The TP-81 sample was observed to contain an unidentified pale blue/green clayey material with a PID reading of 472 ppm and a laboratory result of 280 mg/kg for xylene and 520 mg/kg for lead. However, laboratory results for two samples (TP-81B and TP-81C) collected from the native soils beneath the drum indicated all analytes below criteria. The TP-86 sample was observed to contain remnants of four drums. A sample was collected from the native soils and laboratory results indicated that Aroclor 1260 was detected at 460 mg/kg. No additional samples were collected in the vicinity of TP-86 due to limited signs of contamination observed from the excavation and hence the extent of contamination shall be determined during the remedial action.

The sample results show noncontiguous spots of contamination in soil - mainly Metals - spread ubiquitously throughout the site. These predominantly lead and antimony contaminated spots appear to be associated with the areas of observed battery and household waste fill materials buried around the site, as well as current metal recycling and storage operations in the active Scrapyard Area in the northeastern portion of the site. Although one samples along the western edge of the site produced the only VOC exceedance, xylene, this compound is usually associated with gasoline contamination and, as such, would not typically be attributable for the vinyl chloride contamination previously detected in downgradient groundwater.

5.1.5 Sitewide Surface Soil Sampling

Nineteen (19) surface soil samples were collected at eighteen (18) locations throughout the Site, as shown on Figure 4-8. The locations and analytical parameters were selected based on field observation of surface debris. Twelve of the samples were analyzed for full TCL/TAL analysis and pH. The other seven (7) samples were analyzed for TPH, lead, and pH. The results of the analyses are summarized and compared to the NJDEP soil cleanup criteria in Table 5-15. In addition, exceedances of the RDCSCC are shown on Figure 4-8. Lead exceeds in four samples ranging from 1,660 mg/kg to 14,500 mg/kg. These samples are in the central and southern portion of the Site along trails between the junkyard and the trailer park. The highest concentration was detected at the center of the southern Site boundary (TPSS-C1), adjacent to the trailer park. PCBs were detected at two locations: one on the north-central portion of the Site along Hessian Run (TPSS-L1 at 15.2 mg/kg) exceeding RDCSCC and NRDCSCC; and one on the center of the west boundary (FULL2 at 0.53 mg/kg) above the RDCSCC.

5.1.6 Soil Characterization Sampling

A total of five (5) soil samples collected from various site areas known to have contaminated soil and analyzed for Toxicity Characteristic Leaching Procedure (TCLP) for the purposes of disposal classification. See Figure 4-8 for locations of all characterization samples, Table 5-16 for analytical results, and Appendix A for boring logs.

Of these five samples, only two indicated exceedances of RCRA standards. These exceedances were reported at the T2 household trash location in the north central portion of the site, and at the T4 battery disposal area in the area just north of the active scrapyard; both samples produced RCRA exceedances for lead only. No other exceedances of RCRA standards were reported from the other sitewide samples.

5.2 GROUNDWATER

As described in Chapter 4, a total 26 monitoring wells were installed to characterize the groundwater at the Site; 18 shallow (bridging the water table) and eight (8) deep (approximately 55 to 65 feet bmsl). The results of the RI activities to address groundwater flow direction, tidal influence, hydraulic conductivity, and groundwater quality are discussed in the following subsections.

5.2.1 Groundwater Flow Direction

Six rounds of groundwater elevation measurements were recorded from the 26 monitoring wells at the Site: one on December 4, 2000; one on January 10, 2000; two on January 25, 2001; April 9, 2002, and September 23, 2002 (Table 4-2). It should be noted that only two rounds of groundwater measurements were recorded for MW-10D and MW-11D since they were installed in January 2002. Analysis of the results of the six rounds of data indicates little variability between events (the flow patterns observed in one round remain essentially unchanged in the others). Therefore, only one round (December 4, 2000) is graphically presented and discussed in this report. Based on the groundwater elevations recorded on December 4, 2000, two groundwater elevation contour maps were prepared; one for the measurements recorded from the shallow monitoring wells (Figure 4-10), and one for the measurements recorded from the deep monitoring wells (Figure 4-11). The discussion of each is presented below.

Shallow Monitoring Wells

The groundwater elevation contour map for the shallow monitoring wells indicates the presence of both a perched water table and the regional water table at the Site. The perched water table is observed on the eastern and southern portions of the Site. The area of this perched water table is consistent with the area of the Site underlain by the silts and clays of the Mechantville formation. In addition, perched water may also exist on the peat and organic soils (interpreted as alluvium) in the area of MW-16S and 16D near Hessian Run. The perched groundwater is at a higher elevation than the adjacent surface water, therefore, it is interpreted to discharge to these waters. Perched groundwater, by its nature, has a strong downward flow potential, so there may also be some seepage of the perched groundwater through the clays and silts of the Merchantville. The downward vertical gradient between MW-14S and MW-14D is approximately 0.37 ft/ft. The horizontal gradient in this same area is only about 0.005 ft/ft. The perched groundwater on the eastern portion of the Site flows towards Hessian Run. The remainder of the perched water flows to the regional water table, which is exposed in the northwestern portion of the Site. The regional water table is at a lower elevation than the surrounding surface waters, therefore, the surface waters are also interpreted to discharge to the regional groundwater.

Deep Monitoring Wells

The groundwater elevation contour map for the deep groundwater presents a simpler picture. This figure represents the groundwater elevation contours in the sands of the Magothy formation between elevation 55 and 65 bmsl. These contours indicate a horizontal flow in that zone towards the southeast under a horizontal gradient of approximately 0.003 ft/ft. This flow direction is consistent with regional data. As discussed earlier, this flow direction is attributable to inland pumping centers. The nearest influence is likely to be a West Deptford supply, located approximately 0.6 mile to the southeast. There is also a slight downward vertical gradient in the regional groundwater of approximately 0.005 ft/ft as documented between MW-18S (regional water table) and MW-18D (deep zone).

5.2.2 Tidal Influence

The tidal study was performed to determine the influence of tidal fluctuation of the surface water on the groundwater. The study included measurements recorded over a two week period from transducers placed at eight (8) locations; one (1) steam gauge in Woodbury Creek (SG-1), four (4) shallow monitoring wells (MW-9S, MW-10S, MW-11S, and MW-12S) and three (3) deep wells (MW-18D, MW-15D, and MW-14D). The numerical data from the transducers is presented in Appendix D. A graphical representation of the data is presented on Figure 5-3. The figure depicts a tidal range in Woodbury Creek of up to 8 feet between high and low tide, and demonstrates that the elevation of the Woodbury Creek is always higher than the regional groundwater, regardless of the tidal cycle. The influence of the tides on the groundwater is minimal. Even in the well with the most pronounced response (MW-18D), the 8-foot tidal range in the creek translates to only about 0.5-foot tidal range in the well. Fluctuations are observed in the well farthest from the surface water (MW-14D), but it is unclear as to whether this is related to the tides or to some other influence, such as pumping of supply wells.

5.2.3 Hydraulic Conductivity

As described in Chapter 4, rising head pump tests were performed on three (3) deep monitoring wells (MW-14D, MW-16D, and MW-17D). The test data and analyses are presented in Appendix F and the results are summarized in Table 5-17. The average horizontal hydraulic conductivity for the three tests is 13.6 ft./day, which is consistent with that expected for a medium to fine sand (Todd, 1980). Monitoring well MW-17D (11.9 ft/day) is screened in a combination of gravel, clay, and sand, while MW-16D (6.4 ft/day) and MW-14D (22.7 ft/day) are screened in a combination of fine and coarse to fine sand. Using the average horizontal hydraulic conductivity of 13.6 ft/day, the average horizontal gradient of 0.003 ft/ft (see 5.2.1 above), and an assumed effective porosity of 25 percent, the average horizontal seepage velocity of the groundwater in the 55 to 65 ft bmsl interval is approximately 0.16 feet/day or approximately 58 feet/year. Using the high and low horizontal hydraulic conductivity values recorded, the range of horizontal seepage velocity would be from approximately 29 ft/year to approximately 99 ft/year.

5.2.4 Groundwater Quality

Three rounds of groundwater sampling and analysis (Round 1: December 2000; Round 2: January 2001; and Round 3: April 2002) were performed to characterize the quality of the groundwater at the Site. The results of the Round 1 sampling event are summarized on Tables 5-18 through 5-20. The results of the Round 2 sampling event are summarized on Tables 5-21 and 5-22. The results of the Round 3 sampling event are summarized on Table 5-23. Additionally, two rounds of potable well samples were collected from PW-3 and are presented on Table 5-24. The analytical results were compared to the NJDEP Ground Water Quality Criteria N.J.A.C. 7:9-6 (GWQC) and New Jersey Drinking Water Standards (NJDWS). Exceedances of criteria are noted on the tables and illustrated on Figures 4-12 through 4-14. The first two rounds, groundwater from 26 wells were sampled and analyzed: 18 shallow monitoring wells; six (6) deep monitoring wells; and two (2) domestic potable wells. Based on previous sample information, the third round was limited to six deep monitoring wells (MW-10D, MW-11D, MW-14D, MW-15D, MW-16D, and MW-18D) and one potable well (PW-3), which was sampled twice. The results for each of these three groups of wells are discussed below.

Shallow Monitoring Wells

Inorganics (primarily aluminum, arsenic, iron, and manganese) were detected above GWQC in shallow monitoring wells throughout the Site. These detections are believed to be attributable to suspended sediments in the samples. Many of these detections were in unfiltered samples from conventional purge sampling conducted in the first event. These inorganics were greatly reduced in concentration, or not detected, in filtered samples from the same event. Low-flow purge was conducted at the second event and the inorganics results in the shallow monitoring wells throughout the Site showed primarily exceedances of groundwater quality standards (GWQS) for aluminum and iron. No samples were collected from the shallow monitoring wells during the third round of sampling.

However, there were several detections in the shallow groundwater wells that appear attributable to Site activities. The most significantly impacted is MW-5, a shallow monitoring well in the perched groundwater located in the northeastern portion of the Site, near Hessian Run. This well is very near buried waste and surface disposal areas. Elevated concentrations of lead are detected in unfiltered (6,050 ug/l), filtered (3,290 ug/l), and low-flow purge (1,320 ug/l) samples. MW-13S, located about 300 feet east of MW-5, had a small exeedence of cadmium in both the unfiltered (4.4J ug/l) and filtered (5.3 ug/l) samples from the first event, but this metal was not detected in the low-flow purge sample collected in the second event. Unusual results were observed for the low-flow purge sample collected during the second event from shallow monitoring well MW-8. Chromium (164 ug/l), lead (14.5 ug/l), and nickel (174 ug/l) were all detected above GWQS in this sample, but all were non-detect in both the unfiltered and filtered samples collected from the conventional purge of the first event. MW-8 is located in the center of the Site and is screened across the regional water table. This well could be affected by all surrounding areas of the Site. The regional water table flows towards it from the west, and perched water flows towards it from the south, east, and north. Additional data will be required to determine if these most recent results are anomalous.

Deep Monitoring Wells

As with the shallow monitoring wells, inorganics (primarily aluminum, arsenic, iron, and manganese) were detected above GWQC in the deep monitoring wells throughout the Site. As discussed above, these detections are interpreted to be unrelated to the Site activities. Unlike the shallow monitoring wells, however, vinyl chloride was detected above GWQC in three of the deep monitoring wells located in the central to southeastern portions of the Site in both events. vinyl chloride was detected in MW-14D (Round 1: 13 ug/l, Round 2: 17 ug/l, Round 3:15 ug/l), MW-15D (Round 1: 8J ug/l, Round 2: 11 ug/l, Round 3: 7J ug/l), and MW-16D (Round 1: 6J ug/l, Round 2: 8J ug/l, Round 3: below criteria). In addition, bis (2-ethylhexyl phthalate) was detected in MW-15D (35 ug/l) in Round 1. Additionally, the two new deep upgradient monitoring wells (MW-10D and MW-11D) in the western part of the Site did not indicate the presence of vinyl chloride. The reduction in VOC levels may indicate a naturally attenuated degradation of these compounds over time, or possibly indicate that the dissolved VOCs have migrated eastward with groundwater flow.

Potable Wells

During this RI, two (2) rounds of sampling and analysis were performed for two (2) potable wells: the residential house well (PW-1), and the onsite Matteo well (PW-2), which supplied the Matteo office and garage buildings. The results are summarized on Tables 5-20 and 5-22, and are illustrated on Figures 4-12 and 4-13. In PW-1 only iron (680 ug/l and 1,700 ug/l, respectively) was detected above NJDWS. In PW-2, iron (27,400 ug/l and 26,900 ug/l, respectively) and manganese (270 ug/l and 260 ug/l, respectively) were detected above NJDWS. Historical data for the Matteo residential well (PW-2) contained an exceedance of lead in August 1994.

Based on the results of the well search, the adjacent Billy-O-Tire garage (PW-3) was sampled twice for VOCs and Metals. The results are summarized in Table 5-24. Both samples collected from the private off-site potable well (PW-3) indicated concentrations of vinyl chloride (3.5 ug/l and 4.8 ug/l), slightly above NJDWS (2 ug/l). Additionally, In PW-3, iron (18,200 ug/l and 18,500 ug/l, respectively) and manganese (170 ug/l and 170 ug/l, respectively) were detected above NJDWS, which is consistent with historical results from April 1998.

5.3 SEEPS

Samples of groundwater seeping from the shoreline were collected at ten (10) locations along Hessian Run and Woodbury Creek and analyzed for lead (unfiltered and filtered) and hardness. The locations of the ten samples are shown on Figure 4-12 and the results of the analyses are summarized on Table 5-25. The results of the lead analysis were compared to the GWQS (10 ug/l) as well as the NJDEP Surface Water Quality Standards N.J.A.C. 7:9B (SWQS; 2.5 ug/l ecological, and 5 ug/l human).

The results of all unfiltered samples exceeded the GWQS, with concentrations ranging from 29.1 ug/l (SP-2U) to 2,370 ug/l (SP-5U). Only three of the filtered samples exceeded the GWQS (SP-8F, SP-9F, and SP-10F), however, these were not from the same location as the three unfiltered

samples with the highest lead concentrations (SP-5, SP-6, and SP-3). The three filtered samples with concentrations of lead exceeding the GWQS are from areas filled with battery casings only (Figure 5-1).

With regard to the SWQS, all unfiltered samples are in exceedance of both the human and ecological criteria. Five filtered samples exceed both the human and ecological criteria, the three that exceed the GWQS (SP-8F, SP-9F, and SP-10F) as well as SP-3F and SP-6F.

5.4 SEDIMENT

As discussed in the previous Chapter, 416 sediment samples were collected from the Hessian Run and Woodbury Creek estuary surrounding the Site. The samples were collected at 145 locations distributed over 28 transects and 14 discrete locations from depths of 0-6 inches, 12-24 inches, and 24 to 36 inches. The samples were analyzed for lead and PCBs, as well as TOC, pH, and grain size. The lead and PCB results were compared to both the low effects level (LEL) and severe effects level (SEL) criteria presented in the NJDEP Guidance for Sediment Quality Evaluations (GSQE); the results are summarized on Tables 5-26 and 5-27.

Samples collected from the 0-6 inch interval at 29 of these locations (closest to the Site) were also analyzed for full TCL/TAL analysis; the results are summarized on Tables 5-28 and 5-29. In addition, samples collected from the 0-6 inch interval from 11 locations were analyzed for TCL PCBs and TAL metals. The results were compared to both the low effects level (LEL) and severe effects level (SEL) criteria presented in the NJDEP Guidance for Sediment Quality Evaluations (GSQE); the results are summarized on Tables 5-30 and 5-31. No volatile organic compounds or pesticides were detected above the LEL or SEL. One semi-volatile organic compound was detected only above the LEL (benzo (k) fluoranthene at 0.25J mg/kg in T15-EA). Seven metals (in addition to lead) were detected above the LEL (arsenic, cadmium, copper, mercury, nickel, silver, and zinc). Of these, only arsenic, copper, and zinc were detected above the SEL.
The lead and PCB results for sediments are discussed in the following subsections.

5.4.1 Lead

The results of the lead analysis of the sediment samples are summarized in Table 5-26 and illustrated for each of the three depth intervals on Figures 4-15 through 4-17. The detected concentrations of lead exceeded the LEL criteria (31 mg/kg) at all three depths throughout the study area in the estuary. The SEL criteria (250 mg/kg) was also exceeded in all three depth intervals but, with the exception of one sample (S8-A at 269 mg/kg), the SEL exceedances are limited to the Hessian Run estuary. The highest concentrations of lead are detected along the central portion of the north shoreline of the Site. Concentrations over 15,000 mg/kg are detected in all three depth intervals, with the highest observed in the 12 to 24 inch depth interval (35,200 mg/kg at T13-EB and 25,200 mg/kg at T9-EB). These results are apparently attributable to the battery casings buried along this shoreline. In addition, exceedances of the SEL criteria are observed at all three depth intervals along the opposite shore of Hessian Run, north of the Site. The highest concentrations there are approximately two orders of magnitude lower than those observed along the Site shoreline. These results may be attributable to migration and re-deposition of the contamination from the Site via tidal flow. However, the possibility of

additional source(s) also exists. The historical aerial photos (Appendix A) show disturbance/landfilling on several properties, other than Matteo, surrounding the estuary study area.

5.4.2 PCBs

The results of the PCB analysis of the sediment samples are summarized in Table 5-27. Aroclors 1254, 1260, and 1248 were detected. The LEL and SEL criteria for PCBs is Aroclor-specific. Aroclor 1254 is the most prevalent and is, therefore, selected to show the extent of PCB contamination. The Aroclor 1254 analytical results are illustrated for each of the three depth intervals on Figures 4-18 through 4-20. The detected concentrations of Aroclor 1254 exceed the LEL criteria (0.06 mg/kg) at all three depths. The majority of the Hessian Run estuary is affected, with the exception of the central channel portions. In the Hessian Run estuary, the extent of LEL exceedance is greater in the top two feet of sediment than in the 24 to 36 inch interval. The converse is true in the Woodbury Creek estuary. Here the greatest extent of LEL exceedance is in the 24 to 36 inch interval. The SEL criteria (varies for each sample based on the TOC concentration) are only exceeded at three locations. Two of these locations, T9-EA (4.3 mg/kg) and T11-EA (3.2 mg/kg) are located along the central portion of the north shoreline of the Site. These are the highest concentrations of PCBs detected in the study area and are apparently attributable to past activities at the Site. The other SEL exceedance is located on the opposite shore of Hessian Run (T13-AA at 0.57 mg/kg), north of the Site. These results may be attributable to migration and re-deposition of the contamination from the Site via tidal flow. However, the possibility of additional source(s) also exists. The historical aerial photos (Appendix A) show disturbance/landfilling on several properties, other than Matteo, surrounding the estuary study area.

5.5 SURFACE WATER

Surface water samples were collected at 12 locations in Hessian Run and Woodbury Creek. The twelve locations are shown on Figure 4-9. At each location, two sampling events were conducted on the same day; one at high tide and one at low tide. At each of these events, both an unfiltered and a filtered sample were collected, for a total of 24 unfiltered samples and 24 filtered samples. The samples were analyzed for lead, hardness (excluding the filtered samples), salinity, pH, and dissolved oxygen. The results of the analyses are summarized on Table 5-32.

All lead results were compared to the NJDEP Surface Water Quality Standards N.J.A.C. 7:9B (SWQS; 2.5 ug/l ecological and 5 ug/l human). Most of the unfiltered samples exceed the SWQS ecological criteria (20 of 24 samples) and many (16 of 24 samples) exceed the SWQS human criteria with the highest concentration (87.4 ug/l) observed in the low tide sample at T-18D. In general, the unfiltered samples collected at low tide have higher concentrations than those collected at the same location at high tide (9 of 12 locations). Only two exceedances of the SWQS were observed in the 24 filtered samples. The ecological criteria is exceeded in the low tide sample at T-18C (2.6J ug/l) and both the ecological and human criteria are exceeded in the high tide sample at T-1C (6.1 ug/l).

5.6 NATURAL RESOURCES

The Site study area is a rectangular parcel of land, approximately 120 acres in size (Figure 1-1). The study area is comprised of forest and meadow habitats, extensive freshwater tidal wetlands, a metal recycling operation, a junkyard and an inactive landfill. The Site is bordered to the north by Hessian Run, to the west by Woodbury Creek and to the southeast by Route 130 and a residential area. Hessian Run and Woodbury Creek are tidally influenced freshwater rivers with associated tidal flats that flow to the Delaware River.

5.6.1 Vegetative Communities

Upland and wetland vegetative communities on the Site were classified in accordance with the Preliminary Natural Community Classification for New Jersey (Breden 1989). Wetland communities were also classified in accordance with Cowardin (1979). The upland and wetland communities are described more fully below. Table 5-33 presents a listing of the plant species observed at the Site and their respective indicator status (wetland-upland). Figure 5-4 shows the location of the different vegetative communities.

5.6.2 Uplands

The upland areas consisted of approximately 55 acres of forest, scrub/shrub and open fields within the Site. These areas dominated the majority of the Matteo Iron and Metal property. Prior land use includes agriculture, forest, landfills and commercial uses. Each of the communities exhibited evidence of past disturbance, including activities such as excavation, filling, and agriculture. Detailed descriptions of the upland vegetative communities on the Site are provided below and locations are shown on Figure 5-4.

Mesic Coastal Plain Mixed Oak Forest

This forest habitat type is found throughout the Site. Stand age varies with older growth, approximately 50-80 years, along the border of the Site where disturbance has been minimal. Younger stands composed of trees of 20 to 30 years old occupy areas of more recent disturbance and succession. Dominant vegetation in the forested areas included red oak, post oak, white oak and black cherry in the canopy. Multi-flora rose, blackberry and black birch dominate the shrub layer. A small area of mesic mixed oak forest with scrub pine was also identified.

Open Meadow, Prior Agricultural

The herbaceous (open meadow) habitat is found in the central portion of the Site and can be linked to the former agricultural practices on the Site. Dominant vegetation found in the herbaceous habitats included small white aster, grasses and mugwort.

5.6.3 Wetlands and Open Water Areas

Existing mapping was reviewed to determine the extent and classification of wetland areas prior to the field visit. The NJDEP Freshwater Wetland map (Figure 5-5) identifies four (4) wetland

cover types on the Site; palustrine emergent (PEM1), palustrine scrub shrub broad-leaved deciduous (PSS1), palustrine forested broad-leaved deciduous (PFO1) and palustrine open water (ROW). The NJDEP freshwater wetland maps typically do not map tidal wetland areas. The NWI Mapping (Figure 5-6) identifies three (3) wetland habitats in the study area: Riverine Tidal Emergent (R1EM), Riverine Tidal Open Water (R1OW) and Palustrine Scrub/Shrub Broad-leaved Deciduous Emergent (PSS1/EM).

Four (4) types of wetland habitat were observed and delineated within the Site during the field delineation. The wetland areas include riverine tidal emergent wetlands (R1EM), palustrine emergent, persistent wetlands (PEM1), palustrine forested broad-leaved deciduous wetlands (PFO1) and riverine tidal open water (R1OW) (see Figure 5-4, Wetland Delineation and Vegetative Community Map). A description of each wetland type is provided below along with the community classification per Breden (1989).

Riverine Tidal Emergent Wetlands (R1EM) / Freshwater Tidal Marsh Complex, Midtidal Zone

The Woodbury Creek –Hessian Run waterbodies are associated with extensive freshwater tidal marshes. The tidal marshes are relatively flat and are regularly flooded by daily tides. These areas have been identified by the Atlantic Coast Ecological Inventory a part of the Delaware River Estuary. Dominant vegetation consists of nonpersistent plants including arrow arum, pickerelweed, and arrow-head. Portions of this area include mud flats and small channels that drain surface water at low tides. The substrate ranges from organic clays to silt loam.

Palustrine Emergent, Persistent, Wetlands (PEM1)/ Freshwater Tidal Marsh Complex

A portion of the delineated wetlands consists of persistent emergent vegetation that occupies a transition area between the uplands and/or forested wetlands and the broad freshwater tidal marshes of Hessian Run and the Woodbury Creek. Dominant vegetation consists of common reed, tussock sedge, and broad-leafed cattail. Red osier dogwood, Japanese honeysuckle, multiflora rose and northern arrowwood are present along the margins.
The substrate in the wetland ranged from organic clays to silt loam, having low chromas, gleying and mottling. The hydrology varied from saturated soils to flowing and ponded water. Other hydrologic indicators observed include drainage patterns, water marks on vegetation and water-stained vegetation.

Palustrine Forested Wetland (PFO1)/ Forested/Nontidal Communities

The southwestern portion of the Site contains a forested wetland that adjoins palustrine emergent wetlands outside the study area limits. Dominant vegetation consists of red maple, slippery elm, and nannyberry within the canopy and shrub layers. In addition, reed canary grass and tussock sedge occurs in a narrow transition area between the emergent wetland and the forested wetland. The soils in the wetland ranged from clay loam to silt loams, having low chromas and mottling. The observed wetland hydrology varied from saturated soils to surface inundation of several

inches. Other hydrologic indicators included drainage patterns, water marks on vegetation and water-stained vegetation.

Riverine Tidal Open Water (ROW)

Woodbury Creek and Hessian Run form the final wetland type of riverine open water. These wetlands occur on the edges of the Site areas where the freshwater tidal emergent wetlands transition into the creeks. Narrow mud flats exposed at low tide are included in this area.

5.6.4 Wildlife

The project Site likely provides habitat for a variety of wildlife species due to the diversity of habitat types and the sites location adjacent to an extensive freshwater tidal marsh. The most notable limiting factor was the amount of human activity on and surrounding the Site, including the junkyard, abandoned landfill and residential housing.

During the field survey, the most readily apparent wildlife consisted of birds utilizing the ecotone between the different vegetation types. Bird species observed on the Site are listed in Table 5-34. In addition to the species observed during the site visit, several additional avian species may utilize the Site as a potential breeding habitat and are listed in Table 5-35. Mammalian species observed during the field survey were eastern gray squirrel (*Sciurus carolinensis),* white-tail deer (*Odocoileus virginianus),* muskrat (*Ondotra zibethicus)* and cottontail rabbit (*Sylvilagus floridanus).* It is likely, however, that various other mammals common to New Jersey also utilize the Site.

Birds that were not seen on Site at the time of investigation, but would likely use the creeks and associated tidal flats and marsh include shorebirds, waterfowl and wading birds. Several wetland dependent bird species would utilize the wetland habitat during breeding season, but a greater number and diversity will most likely utilize the tidal marsh complex during migration periods for resting and feeding. Table 5-36 presents a list of potential bird species that could utilize the tidal marsh complex associated with Woodbury Creek and Hessian Run.

5.6.5 Fish

The Site is situated along tidally influenced Woodbury Creek and Hessian Run that support various freshwater and anadromous species. Hastings and Good (1977) reported information for a population analysis of fish within Woodbury Creek and Hessian Run. This study identified 17 species of fish (Table 5-37) at 12 sampling points within the creeks. The majority, 13 are primarily freshwater species, with the remainder being marine or anadromous species. Of these, five (5) species are game fish, including pumpkinseed, brown bullhead catfish, white perch, carp and black crappie.

5.6.6 Threatened and Endangered Species

No threatened or endangered species were observed during field investigations. NJDEP's Natural Heritage Program and the USFWS were contacted regarding documented occurrences of

threatened or endangered species on or within the vicinity of the Site. No documented occurrences of threatened or endangered species have been reported within the study area. Except for transient individuals, no threatened or endangered species are expected to utilize the Site.

5.7 WELL SEARCH

Data was obtained from the NJDEP and the Gloucester County Health Department regarding potential well locations in Site investigation area. Copies of well records, supplied by the NJDEP are included in Appendix H. A summary of potential residential potable well receptors within 1/2 mile of the Site, and municipal supply wells within one (1) mile is summarized on Table 5-38 and their locations are shown on Figure 5-7.

The well search performed at the NJDEP Bureau of Water Allocation did not identify two of the domestic wells sampled and analyzed during the RI. Berger contacted William Atkinson from the Gloucester County Health Department to obtain well information pertaining to Block 128, Lots 2 and 2.01, which were designated as PW-2 and PW-1 respectively, and sampled twice during the RI. The Gloucester County Health Department had no records of potable wells at those locations.

The well search did reveal a domestic well downgradient and adjacent to the Site, at the Billy-O-Tire Garage (Block 325, Lot 8). This well was designated as PW-3 and was also sampled twice during the RI. According to records, this well was installed in 1998 and is screened from 93 to 103 feet below ground surface (bgs).

Approximately 0.6 miles downgradient of the Site is the closest public supply well. Records show that this West Deptford supply well was installed in 1973 and is 356 feet deep, with a screened interval from approximately 346 to 356 feet bgs; this supply well screen depth is approximately 250 feet deeper than the deepest monitoring wells installed and sampled during the Matteo site RI.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.0 CONCLUSIONS AND RECOMMENDATIONS

This Section presents conclusions and recommendations based on the findings discussed in the previous chapter. The conclusions focus on the sources of contamination, interpreted contaminant migration pathways, and potential off-site receptors. These conclusions are supported by the data generated and evaluated during the RI, as well as information obtained in the background review. Based on these conclusions, several recommendations for remedial alternatives are presented.

6.1 SOURCES

The two primary contaminants identified at the Site are lead and PCBs. In addition, low levels of chlorinated solvents and arsenic above GWQS were detected in the groundwater, as well as other metals in soil and groundwater.

The lead contamination observed at the Site is believed to originate with automotive batteries. It is believed that these batteries were brought to the Site and stripped of their lead contents for a smelting operation. The empty casings were buried onsite. While lead may have been released to the environment during the past operations, it is the residual lead in these battery casings that is interpreted to be the ongoing source of the lead contamination observed at the Site. The lead contamination observed in the adjacent tidally influenced estuary, however, may not be solely attributable to the Site. The historical aerial photographs (Appendix A) show disturbance/landfilling on several properties, other than the Site, surrounding the estuary study area.

The source of the PCB contamination is less clear. There may have been a widespread application of a PCB-containing agent for dust and weed control on the unpaved roadways and lots that supported the scrapyard and past waste disposal operations. A PCB-containing material may also have been mixed in with the waste that was buried at the Site. The PCB concentration distribution does not point to a specific source area; at least some portions of the scrapyard and waste disposal areas seem to be affected. As with the lead contamination, it should be noted that the PCB contamination observed in the adjacent tidally influenced estuary, may not be solely attributable to the Site. As mentioned above, the historical aerial photographs (Appendix A) show disturbance/landfilling on several properties, other than the Site, surrounding the estuary study area, as well as the presence of a nearby petroleum refinery located along an upstream tributary of the Hessian Run.

The source of the chlorinated solvent contamination observed in the deep monitoring wells was not identified. Based on the locations where it was observed, and the measured horizontal flow direction of groundwater, the source may have entered the ground in the area of land disturbance seen on the 1975 aerial photograph (Appendix A), however no evidence of an ongoing, active on-site source of VOCs contributing to groundwater contamination was found during the extensive soil sampling and excavation investigations.

Site activities are expected to be a minor source, particularly in the Scrapyard Area, of other metals, such as aluminum, antimony, arsenic, beryllium, copper, manganese, and zinc, observed above criteria in the soils and.or groundwater. However, the majority of the metals are believed to be from a naturally occurring source associated with the geologic formations below the Site. Arsenic, which has been raised as a potential concern by the NJDEP, is known to naturally occur at relatively high levels in glauconitic geologic formations of the type present at Matteo (Dooley, 2001). There may also be an input of metals related to off-site activities.

6.2 PATHWAYS

The interpreted migration pathways for the lead, PCB, chlorinated solvent, and other metals contamination identified at the Site are discussed in the following subsections.

6.2.1 Lead

The lead contamination was introduced to the Site through the surface and subsurface disposal of lead-containing material, such as the automotive battery casings discussed above. The lead has migrated from these sources into natural media that is in direct contact with it. Along Hessian Run, the buried waste has affected soil, perched groundwater, sediment and surface water. The soil directly in contact with the waste is affected, but this condition does not extend very far out or down in the soil column. The perched water table is also in contact with the waste along Hessian Run, and has been impacted by lead. This affected perched water does not appear to have migrated downward. This affected groundwater has, however, discharged to the adjacent estuary. Migration of the lead contamination into the estuary has likely occurred in both a dissolved and suspended state in water through: subsurface discharge of perched groundwater; surface discharge of perched groundwater (seeps); and overland precipitation runoff. In addition, some of the waste is actually in the estuary, in direct contact with the sediments and, at high tide, the surface waters of Hessian Run. Through the movements of the tidally influenced surface waters of Hessian Run, the lead contamination is distributed in the estuary.

6.2.2 PCBs

PCB contamination is observed ubiquitously in the soil at the Site. However, the extent of PCB contamination at the site was not fully determined due to the presence of waste material located along the northern and western portions of the property, as well as the presence of several small data gaps in soil delineation in the central part of the Site. PCBs, by their nature, tend to stay bound to soil particles. The compounds have a high organic partitioning coefficient which means they have an affinity to bond with material of high organic content. PCBs do not tend to dissolve in water, and therefore were not detected in any of the groundwater or surface water samples collected during the RI. The PCBs were detected, however, in the sediments of the estuary. The PCBs likely migrated into the estuary bound to soil particles that were transported primarily by overland precipitation runoff. In addition, it is possible that some of the PCBs were introduced directly to the sediments of the estuary. Through the movements of the tidally influenced surface waters of Hessian Run, the PCB contamination, bound to suspended sediments, is distributed in the estuary.

6.2.3 Chlorinated Solvents

Chlorinated solvents, primarily vinyl chloride, were detected in three of the deep monitoring wells at the Site (MW-14D, MW-15D, and MW-16D). Based on the deep groundwater results, it appears that the source of VOCs in groundwater was likely to have been located in the triangular area bordered by MW-10D on the west, MW-16D on the northeast and MW-15D on the southeast. Through precipitation infiltration, dissolved solvent likely migrated to the water table. The regional (as opposed to perched) water table appears to be the first water encountered in this area. The hydraulic gradients in this area are horizontally to the southeast (0.003 ft/ft) and vertically downward (0.005 ft/ft as measured between MW-18S and MW-18D). Under these gradients, the dissolved solvent likely migrated to the southeast and downward with the flow of the groundwater. Based on the low concentrations observed, it is unlikely that free-phase solvent (dense non-aqueous phase liquid [DNAPL]) is (or was) present. Based on the calculated average horizontal seepage velocity of approximately 58 feet/year (Subsection 5.2.3), it would take approximately 33 years for the groundwater at MW-10D to travel to the location of MW-14D (approximately 1,900 feet). Using the horizontal seepage velocities calculated from the high and low horizontal hydraulic conductivities recorded a the Site, it would take a range of 19 to 68 years for the groundwater to cover the 1,900 feet. Based on the knowledge of the Site history, as supported by the historical aerial photographs, it appears that the average horizontal seepage velocity of 58 feet/year is fairly accurate, as it places the time of solvent release around 1967. Of course, this assumes the dissolved solvent just reached MW-14D in 2000. In addition, this transport estimate is based only on groundwater seepage velocity, and does not consider other contaminant transport factors. However, the estimates drawn from the data collected support the likelihood that the dissolved solvents observed in the deep groundwater could have been released to the Site in the areas of land disturbance/landfilling that occurred during the 1960's and 1970's.

6.2.4 Other Metals

The various metal contamination may have been introduced to the Site through the surface and subsurface disposal of metal-containing material along Hessian Run or the collection of automobiles related to the junkyard that are visible in the historical aerial photographs, or from scrap metal activities that are still active. The metals may have migrated from these sources into natural media (soils and shallow groundwater) via direct contact or precipitation. Similar to the lead contamination but to a lesser extent, the degree of metals contamination within the soils seems limited to the upper five (5) feet bgs. The shallow water table is in contact with the contaminates, but does not appear to have migrated downward. Migration of the lead contamination into the estuary has likely occurred in both a dissolved and suspended state in water through: subsurface discharge of perched groundwater; surface discharge of perched groundwater (seeps); and overland precipitation runoff.

6.3 RECEPTORS

Exposure pathways to both humans and ecological receptors are present for the lead and PCB waste/soil contamination on-site and the sediments in the adjacent estuary. The dissolved

chlorinated solvents in the deep groundwater and other metals in soil and groundwater contamination are primarily a potential threat only to human receptors.

6.3.1 PCBs, Lead, and Other Metals

The site, zoned as Light Industrial (I-1) is undeveloped, with the exception of the metals recycling business (under the name "Matteo Iron and Metals") in the Scrapyard Area. However, there is no fence limiting access to the site, with the exception of a partial fence at the Scrapyard Area. Thus, humans on site, as trespassers that frequent the site from the residential area to the south, workers, or otherwise, have the potential of coming in contact with waste/soil contaminated with lead and PCBs above the NJDEP RDCSCC. Direct handling of the waste/soil, or inhalation/ingestion of dust would increase the potential exposure. The greatest potential for human exposure will likely occur during active remediation of the waste materials and contaminated soil, should such activity be implemented. In this case, proper health and safety procedures would be employed. In addition to exposures on site, there are also potential exposures associated with lead and PCB contamination in Hessian Run, which is classified as a freshwater, non-trout (FW-2 NT) waterway. With designated uses including both fishing and recreation, there may also be human health risks associated with ingestion of fish and direct contact with surface water if sediments are left unremediated.

With regard to ecological receptors, upland habitats within the study area include mesic coastal plain mixed oak forest, open meadow, and industrial/commercial land. Four (4) wetland habitat types and open water areas were identified, delineated and surveyed within the project Site, including: palustrine emergent wetlands (PEM1), palustrine forested wetlands (PFO1), riverine tidal emergent wetlands (R1EM) and riverine tidal open water wetlands (R1OW). The existing habitats provide diverse cover that supports a variety of bird and mammal species. Except for transient individuals, no threatened or endangered species are expected to utilize the Site

The extensive freshwater tidal marsh associated with the adjacent Woodbury Creek and Hessian Run provides an important breeding and feeding area for wetland dependent bird species. Shorebird and waterfowl use of this tidal marsh complex is anticipated to be high during periods of migration. The aquatic system also supports a diverse fishery, including several game fish species. The value of these habitats is affected by the apparent contamination of the sediments from the past landfill activities. Shorebirds, waterfowl and certain fish species have the potential for exposure to contaminants within the marsh sediments through ingestion of aquatic organisms and sediments while feeding.

6.3.2 Chlorinated Solvents

The potential receptors of the dissolved chlorinated solvents in the deep groundwater are the domestic and public water supply wells located downgradient of the identified contamination. Three domestic wells are located near the site (Block 128, Lots 2 & 2.01, and Block 325, Lot 8) and these have been sampled and analyzed twice during this RI. The chlorinated solvents were detected above NJDWS at PW-3. The records show that PW-3 was installed in 1998 and is screened from 93 to 103 feet bgs. Approximately 0.6 miles downgradient of the Site is the closest public supply well. Records show that this West Deptford supply well was installed in

1973 and is 356 feet deep, with a screened interval from approximately 346 to 356 feet bgs; this supply well screen depth is approximately 250 feet deeper than the deepest monitoring wells installed and sampled during the Matteo site RI. This municipal well has no treatment for volatile organic compounds (VOCs), and no VOCs of concern have ever been detected in distribution system samples collected at the wellhouse.

6.4 RECOMMENDATIONS

As stated above, the primary contaminants of concern identified at the Site are lead and PCBs in soil and dissolved chlorinated solvents in deep groundwater; lead and PCBs have also dispersed into the sediments of the adjacent estuary. Based on historical aerial photographs, previous activities on other properties, as well as current and past industrial operations within the vicinity may have also contributed to the contamination identified in the estuary during this RI.

Based on our understanding if the nature, sources, and distribution of Site related contamination, it is recommended that further evaluation be conducted on viable remedial actions to eliminate or mitigate the negative impacts of apparent contaminant sources on Site media and potential human and ecological receptors. This evaluation of remedial actions should address, at a minimum, the PCB-contaminated soil located in the surface soils (approximately 23,200 cubic yards), PCB and metal-contaminated soil located in the scrapyard (approximately 41,500 cubic yards), and the buried waste located along the shorelines (approximately 80,000 cubic yards). If excavation and/or capping of contaminated soil and/or buried waste are selected as future remedial actions, then the RI sample results can be utilized as post excavation samples during removal/capping activities, however, additional post excavation samples may be required to fill data gaps at various locations where delineation was not completed or as required by the NJDEP technical regulations. If removal of the waste buried along Hessian Run and the western property line is selected as a remedial action, the previous shoreline (see 1940 aerial photographs in Appendix A and shown on Figure 5-1) could be restored to its original extents. Prior to implementation of remedial actions, however, further evaluation could be conducted on the aquatic biota in the estuary to determine the actual effects of the observed contamination on ecological receptors, and possibly determine the existence of sources other than those at the Site. Based on the results of this supplemental biota study, more appropriate remedial alternatives for the estuary and the impacts of Site contamination on its aquatic ecosystems could be developed and evaluated.

The Site is believed to be the source of the dissolved chlorinated solvents detected in the deep groundwater, however, since the downgradient extent of VOC contamination has not yet been determined, therefore additional downgradient delineation and groundwater monitoring is recommended in support of establishment of a Classification Exception Area/Well Restriction Area (CEA/WEA) for the Site. As such, four (4) additional monitoring wells are recommended to delineate the downgradient extent of the VOC plume. In addition to re-sampling and analysis of the three domestic potable wells and selected on-site monitoring wells, the newly installed four (4) proposed off-site monitoring wells should also be sampled. Based on the low VOC concentrations detected in the deep groundwater, and the size of the area where a potential release may have occurred, additional RI efforts to identify the release area(s) (which may no

longer show exceedance) are not recommended. It is possible that the removal of buried waste will serve this purpose.

7.0 REFERENCES

7.0 REFERENCES

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TABLES

Table 4-1
Matteo Iron and Metal
Soil Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
PCB SURFACE SOIL SAMPLES						
SS22	SS22B	E78043-11	1-1.5	PCBs, Immunoassays	HAND AUGER	10/2/2000
SS22	SS22C		2-2.5	Immunoassay	HAND AUGER	10/10/2000
SS22	SS22D	E78671-1	3-3.5	PCBs, Immunoassays	HAND AUGER	10/11/2000
22NE12	22NE12A		0-0.5	Immunoassay	HAND AUGER	10/6/2000
22NE12	22NE12B	E79272-9	1-1.5	PCBs	HAND AUGER	10/24/2000
22NE6	22NE6B	E79272-11	1-1.5	PCBs	HAND AUGER	10/24/2000
22NW12	22NW12A		0-0.5	Immunoassay	HAND AUGER	10/6/2000
22NW12	22NW12B	E79272-19	1-1.5	PCBs	HAND AUGER	10/24/2000
22NW18	22NW18A	E78373-8	0-0.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
22SE12	22SE12A	E78372-4	0-0.5	PCBs, Immunoassays	HAND AUGER	10/6/2000
22SE12	22SE12B	E78964-18	1-1.5	PCBs	HAND AUGER	10/19/2000
22SE12	22SE12C	E78964-19	2-2.5	PCBs	HAND AUGER	10/19/2000
22SE18	22SE18A	E78373-9	0-0.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
22SW12	22SW12A		0-0.5	Immunoassay	HAND AUGER	10/6/2000
22SW12	22SW12B	E78964-20	1-1.5	PCBs	HAND AUGER	10/19/2000
22SW12	22SW12C	E78964-21	2-2.5	PCBs	HAND AUGER	10/19/2000
S22S6C	PCBDUP9	E79140-10	2-2.5	PCBs	HAND AUGER	10/20/2000
S22S30	S22530A	E78373-17	0-0.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
S22E1	S22E1A		0-0.5	Immunoassay	HAND AUGER	9/14/2000
S22E3	S22E3A		0-0.5	Immunoassay	HAND AUGER	9/29/2000
S22N12	S22N12A		0-0.5	Immunoassay	HAND AUGER	10/4/2000
S22N12	S22N12B	E79272-5	1-1.5	PCBs	HAND AUGER	10/24/2000
S22N15	S22N15A	E78266-8	0-0.5	PCBs, Immunoassays	HAND AUGER	10/5/2000
S22N18	S22N18A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S22N18	S22N18D	E79272-3	3-3.5	PCBs	HAND AUGER	10/24/2000
S22N1	S22N1A		0-0.5	Immunoassay	HAND AUGER	9/14/2000
S22N21	S22N21A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S22N24	S22N24A		0-0.5	Immunoassay	HAND AUGER	10/6/2000
S22N24	S22N24B		1-1.5	Immunoassay	HAND AUGER	10/12/2000
S22N24	S22N24C	E79272-1	2-2.5	PCBs	HAND AUGER	10/24/2000
S22N3	S22N3A		0-0.5	Immunoassay	HAND AUGER	9/29/2000
S22N6	S22N6A		0-0.5	Immunoassay	HAND AUGER	10/2/2000
S22N6	S22N6B	E79272-7	1-1.5	PCBs	HAND AUGER	10/24/2000
S22N9	S22N9A		0-0.5	Immunoassay	HAND AUGER	10/2/2000
S22NE6	S22NE6A	E78265-12	0-0.5	PCBs, Immunoassays	HAND AUGER	10/5/2000
S22NW6	S22NW6A	E78265-11	0-0.5	PCBs, Immunoassays	HAND AUGER	10/5/2000
S22S12A	S22S12A	E78266-3	0-0.5	PCBs, Immunoassays	HAND AUGER	10/4/2000
S22S12	S22S12B	E79140-6	1-1.5	PCBs	HAND AUGER	10/20/2000
S22S12	S22S12C	E79140-7	2-2.5	PCBs	HAND AUGER	10/20/2000
S22S15	S22S15A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S22S18	S22S18A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S22S18	S22S18B	E79140-4	1-1.5	PCBs	HAND AUGER	10/19/2000
S22S18	S22S18C	E79140-5	2-2.5	PCBs	HAND AUGER	10/19/2000
S22S1	S22S1A		0-0.5	Immunoassay	HAND AUGER	9/14/2000
S22S21	S22S21A	E78265-10	0-0.5	PCBs, Immunoassays	HAND AUGER	10/5/2000
S22S3	S22S3A		0-0.5	Immunoassay	HAND AUGER	9/29/2000
S22S6	S22S6A		0-0.5	Immunoassay	HAND AUGER	10/2/2000
S22S6	S22S6B	E79140-8	1-1.5	PCBs	HAND AUGER	10/20/2000

Table 4-1
Matteo Iron and Metal
Soil Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
PCB SURFACE SOIL SAMPLES						
S22S6	S22S6C	E79140-9	2-2.5	PCBs	HAND AUGER	10/20/2000
S22S9	S22S9A		0-0.5	Immunoassay	HAND AUGER	10/2/2000
S22SE6	S22SE6A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S22SE6	S22SE6B	E79140-2	1-1.5	PCBs	HAND AUGER	10/19/2000
S22SE6	S22SE6C	E79140-3	2-2.5	PCBs	HAND AUGER	10/19/2000
S22SW6	S22SW6A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S22SW6	S22SW6B	E78964-22	1-1.5	PCBs	HAND AUGER	10/19/2000
S22SW6	S22SW6C	E79140-1	2-2.5	PCBs	HAND AUGER	10/19/2000
S22W12	S22W12A		0-0.5	Immunoassay	HAND AUGER	10/4/2000
S22W15	S22W15A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S22W15	S22W15B		0-0.5	Immunoassay	HAND AUGER	10/12/2000
S22W15	S22W15C	E78964-12	2-2.5	PCBs	HAND AUGER	10/19/2000
S22W15	S22W15D	E78964-13	3-3.5	PCBs	HAND AUGER	10/19/2000
S22W18	S22W18A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S22W1	S22W1A	E76840-1	0-0.5	PCBs, Immunoassays	HAND AUGER	9/14/2000
S22W21	S22W21A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S22W21	S22W21B	E78671-6	1-1.5	PCBs, Immunoassays	HAND AUGER	10/11/2000
S22W3	S22W3A		0-0.5	Immunoassay	HAND AUGER	9/29/2000
S22W3	S22W3B	E78964-16	1-1.5	PCBs	HAND AUGER	10/19/2000
S22W3	S22W3C	E78964-17	2-2.5	PCBs	HAND AUGER	10/19/2000
S22W6	S22W6A		0-0.5	Immunoassay	HAND AUGER	10/2/2000
S22W9	S22W9A		0-0.5	Immunoassay	HAND AUGER	10/2/2000
S22W9	S22W9B	E78964-14	1-1.5	PCBs	HAND AUGER	10/19/2000
S22W9	S22W9C	E78964-15	2-2.5	PCBs	HAND AUGER	10/19/2000
S22W1	PCBDUP3	E76840-4	0-0.5	PCBs	HAND AUGER	9/14/2000
SS25	SS25B		1-1.5	Immunoassay	HAND AUGER	9/7/2000
SS25	SS25C	E76418-1	2-2.5	PCBs, Immunoassays	HAND AUGER	9/7/2000
S25E1	S25E1A		0-0.5	Immunoassay	HAND AUGER	9/7/2000
S25E3	S25E3A		0-0.5	Immunoassay	HAND AUGER	9/7/2000
S25E5	S25E5A		0-0.5	Immunoassay	HAND AUGER	9/8/2000
S25E7	S25E7A	E76418-5	0-0.5	PCBs, Immunoassays	HAND AUGER	9/8/2000
S25N1	S25N1A		0-0.5	Immunoassay	HAND AUGER	9/7/2000
S25N3	S25N3A	E76419-20	0-0.5	PCBs, Immunoassays	HAND AUGER	9/7/2000
S25N7	S25N7A		0-0.5	Immunoassay	HAND AUGER	10/4/2000
S25N7	S25N7A	E78671-9	1-1.5	PCBs, Immunoassays	HAND AUGER	10/11/2000
S25N9	S25N9A	E78266-5	0-0.5	PCBs, Immunoassays	HAND AUGER	10/5/2000
S25NE6	S25NE6A		0-0.5	Immunoassay	HAND AUGER	10/4/2000
S25NE6	S25NE6B		1-1.5	Immunoassay	HAND AUGER	10/11/2000
S25NE6	S25NE6C		2-2.5	Immunoassay	HAND AUGER	10/12/2000
S25NE6	S25NE6D	E79272-13	3-3.5	PCBs	HAND AUGER	10/24/2000
S25NE8	S25NE8A	E78266-6	0-0.5	PCBs, Immunoassays	HAND AUGER	10/5/2000
S25S10	S25S10A	E78266-10	0-0.5	PCBs, Immunoassays	HAND AUGER	10/5/2000
S25S1	S25S1A		0-0.5	Immunoassay	HAND AUGER	9/7/2000
S25S3	S25S3A	E76419-21	0-0.5	PCBs, Immunoassays	HAND AUGER	9/7/2000
S25S8	S25S8A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S25S8	S25S8B	E78671-15	1-1.5	PCBs, Immunoassays	HAND AUGER	10/12/2000
S25SE0	S25SE0A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S25SE0	S25SE0B		1-1.5	Immunoassay	HAND AUGER	10/12/2000

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Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
PCB SURFACE SOIL SAMPLES						
S25SE6	S25SE6A		0-0.5	Immunoassay	HAND AUGER	10/4/2000
S25SE6	S25SE6B		1-1.5	Immunoassay	HAND AUGER	10/12/2000
S25SE6	S25SE6C	E79140-19	2-2.5	PCBs	HAND AUGER	10/20/2000
S25SE6	S25SE6D	E79140-20	3-3.5	PCBs	HAND AUGER	10/20/2000
S25W1	S25W1A		0-0.5	Immunoassay	HAND AUGER	9/7/2000
S25W4	S25W4A		0-0.5	Immunoassay	HAND AUGER	9/7/2000
S26NE6	PCBDUP8	E78671-10	1-1.5	PCBs	HAND AUGER	10/11/2000
S26E1	S26E1A	E76235-3	0-0.5	PCBs, Immunoassays	HAND AUGER	9/5/2000
S26E5	S26E5A	E76418-7	0-0.5	PCBs, Immunoassays	HAND AUGER	9/8/2000
S26E7	S26E7A	E76418-9	0-0.5	PCBs, Immunoassays	HAND AUGER	9/8/2000
S26N11	S26N11A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S26N13	S26N13A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S26N1	S26N1A	E76234-7	0-0.5	PCBs, Immunoassays	HAND AUGER	9/5/2000
S26N1	S26N1B		1-1.5	Immunoassay	HAND AUGER	9/6/2000
S26N1	S26N1C	E76419-22	2-2.5	PCBs, Immunoassays	HAND AUGER	9/7/2000
S26N2	S26N2A		0-0.5	Immunoassay	HAND AUGER	9/6/2000
S26N2	S26N2B		1-1.5	Immunoassay	HAND AUGER	9/7/2000
S26N3	S26N3A	E76234-1	0-0.5	PCBs, Immunoassays	HAND AUGER	9/6/2000
S26NE0	S26NE0A		0-0.5	Immunoassay	HAND AUGER	10/4/2000
S26NE2	S26NE2A		0-0.5	Immunoassay	HAND AUGER	9/6/2000
S26NE4	S26NE4A		0-0.5	Immunoassay	HAND AUGER	9/8/2000
S26NE6	S26NE6A		0-0.5	Immunoassay	HAND AUGER	9/8/2000
S26NE6	S26NE6B	E78671-8	1-1.5	PCBs, Immunoassays	HAND AUGER	10/11/2000
S26NE9	S26NE9A	E78043-7	0-0.5	PCBs, Immunoassays	HAND AUGER	10/2/2000
S26NW2	S26NW2A		0-0.5	Immunoassay	HAND AUGER	9/6/2000
S26NW4	S26NW4A		0-0.5	Immunoassay	HAND AUGER	9/8/2000
S26NW4	S26NW4B		1-1.5	Immunoassay	HAND AUGER	10/11/2000
S26NW4	S26NW4C	E78671-12	2-2.5	PCBs, Immunoassays	HAND AUGER	10/12/2000
S26NW6	S26NW6A	E76418-13	0-0.5	PCBs, Immunoassays	HAND AUGER	9/8/2000
26NW11	26NW11A	E78265-7	0-0.5	PCBs, Immunoassays	HAND AUGER	10/5/2000
S26S1	S26S1A	E76235-2	0-0.5	PCBs, Immunoassays	HAND AUGER	9/5/2000
S26W1	S26W1A		0-0.5	Immunoassay	HAND AUGER	9/5/2000
S26W1	S26W1B		1-1.5	Immunoassay	HAND AUGER	9/6/2000
S26W2	S26W2A	E76235-1	0-0.5	PCBs, Immunoassays	HAND AUGER	9/6/2000
SS27	SS27C	E76235-7	2-2.5	PCBs, Immunoassays	HAND AUGER	9/6/2000
S27E1	S27E1A	E76234-8	0-0.5	PCBs, Immunoassays	HAND AUGER	9/5/2000
S27E1	S27E1B	E76235-4	1-1.5	PCBs, Immunoassays	HAND AUGER	9/6/2000
S27E2	S27E2A	E76235-6	0-0.5	PCBs, Immunoassays	HAND AUGER	9/6/2000
S27N1	S27N1A		0-0.5	Immunoassay	HAND AUGER	9/5/2000
S27N1	S27N1B		1-1.5	Immunoassay	HAND AUGER	9/6/2000
S27N1	S27N1C	E76235-8	2-2.5	PCBs, Immunoassays	HAND AUGER	9/6/2000
S27N2	S27N2A		0-0.5	Immunoassay	HAND AUGER	9/6/2000
S27N2	S27N2B	E76418-4	1-1.5	PCBs, Immunoassays	HAND AUGER	9/7/2000
S27N2	PCBDUP2	E76418-2	1-1.5	PCBs	HAND AUGER	9/7/2000
S27N2	S27N2C		2-2.5	Immunoassay	HAND AUGER	9/8/2000
S27NE2	S27NE2A		0-0.5	Immunoassay	HAND AUGER	9/6/2000
S27NW2	S27NW2A		0-0.5	Immunoassay	HAND AUGER	9/6/2000
S27S0	S27S0A		0-0.5	Immunoassay	HAND AUGER	10/4/2000

Table 4-1
Matteo Iron and Metal
Soil Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
PCB SURFACE SOIL SAMPLES						
S27S12	S27S12A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S27S14	S27S14A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S27S14	S27S14B	E78671-5	1-1.5	PCBs, Immunoassays	HAND AUGER	10/11/2000
S27S16	S27S16A	E78266-11	0-0.5	PCBs, Immunoassays	HAND AUGER	10/5/2000
S27S1	S27S1A		0-0.5	Immunoassay	HAND AUGER	9/5/2000
S27S1	S27S1B		1-1.5	Immunoassay	HAND AUGER	9/6/2000
S27S1	S27S1C	E76235-9	2-2.5	PCBs, Immunoassays	HAND AUGER	9/6/2000
S27S2	S27S2A	E76235-5	0-0.5	PCBs, Immunoassays	HAND AUGER	9/6/2000
S27S5	S27S5A	E76418-11	0-0.5	PCBs, Immunoassays	HAND AUGER	9/8/2000
S27S7	S27S7A		0-0.5	Immunoassay	HAND AUGER	9/8/2000
S27S7	S27S7B	E78671-11	1-1.5	PCBs, Immunoassays	HAND AUGER	10/12/2000
S27SE3	S27SE3A		0-0.5	Immunoassay	HAND AUGER	9/7/2000
S27SE5	S27SE5A	E76418-12	0-0.5	PCBs, Immunoassays	HAND AUGER	9/8/2000
27SE5	27SE5B	E79140-17	1-1.5	PCBs	HAND AUGER	10/20/2000
27SE5	27SE5C	E79140-18	2-2.5	PCBs	HAND AUGER	10/20/2000
S27SE7	S27SE7A	E76418-10	0-0.5	PCBs, Immunoassays	HAND AUGER	9/8/2000
S27SW2	S27SW2A		0-0.5	Immunoassay	HAND AUGER	9/6/2000
S27SW4	S27SW4A		0-0.5	Immunoassay	HAND AUGER	9/8/2000
S27SW6	S27SW6A		0-0.5	Immunoassay	HAND AUGER	9/8/2000
27SW6	27SW6B	E79140-15	1-1.5	PCBs	HAND AUGER	10/20/2000
27SW6	27SW6C	E79140-16	2-2.5	PCBs	HAND AUGER	10/20/2000
S27W1	S27W1A		0-0.5	Immunoassay	HAND AUGER	9/5/2000
S27W1	S27W1B		1-1.5	Immunoassay	HAND AUGER	9/6/2000
S27W1	S27W1C	E76235-10	2-2.5	PCBs, Immunoassays	HAND AUGER	9/6/2000
S27W2	S27W2A		0-0.5	Immunoassay	HAND AUGER	9/6/2000
S27W2	S27W2B	E76235-11	1-1.5	PCBs, Immunoassays	HAND AUGER	9/6/2000
S27W3	S27W3A		0-0.5	Immunoassay	HAND AUGER	9/6/2000
SS28	SS28B		1-1.5	Immunoassay	HAND AUGER	9/7/2000
SS28	SS28C		2-2.5	Immunoassay	HAND AUGER	9/7/2000
S28E1	S28E1A	E76418-3	0-0.5	PCBs, Immunoassays	HAND AUGER	9/7/2000
S28E2	S28E2A		0-0.5	Immunoassay	HAND AUGER	9/7/2000
S28E2	S28E2B	E79272-17	1-1.5	PCBs	HAND AUGER	10/24/2000
S28N1	S28N1A		0-0.5	Immunoassay	HAND AUGER	9/7/2000
S28N3	S28N3A	E76419-19	0-0.5	PCBs, Immunoassays	HAND AUGER	9/7/2000
S28N8	S28N8A	E78373-7	0-0.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
S28NW4	S28NW4A		0-0.5	Immunoassay	HAND AUGER	9/8/2000
S28NW4	S28NW4B	E78671-7	1-1.5	PCBs, Immunoassays	HAND AUGER	10/11/2000
S28NW6	S28NW6A	E76418-6	0-0.5	PCBs, Immunoassays	HAND AUGER	9/8/2000
S28S0	S28S0A		0-0.5	Immunoassay	HAND AUGER	10/4/2000
S28S12	S28S12A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S28S14	S28S14A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S28S14	S28S14B	E78671-4	1-1.5	PCBs, Immunoassays	HAND AUGER	10/11/2000
S28S16	S28S16A	E78265-5	0-0.5	PCBs, Immunoassays	HAND AUGER	9/5/2000
S28S1	S28S1A		0-0.5	Immunoassay	HAND AUGER	9/7/2000
S28S2	S28S2D		3-3.5	Immunoassay	HAND AUGER	9/8/2000
S28S3	S28S3A		0-0.5	Immunoassay	HAND AUGER	9/7/2000
S28S5	S28S5A		0-0.5	Immunoassay	HAND AUGER	9/8/2000
S28S7	S28S7A		0-0.5	Immunoassay	HAND AUGER	9/8/2000

Table 4-1
Matteo Iron and Metal
Soil Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
PCB SURFACE SOIL SAMPLES						
S28S7	S28S7B		1-1.5	Immunoassay	HAND AUGER	10/12/2000
S28S7	S28S7C	E79140-13	2-2.5	PCBs	HAND AUGER	10/20/2000
S28S7	S28S7D	E79140-14	3-3.5	PCBs	HAND AUGER	10/20/2000
S28SW0	S28SW0A		0-0.5	Immunoassay	HAND AUGER	10/4/2000
S28SW5	S28SW5A		0-0.5	Immunoassay	HAND AUGER	9/8/2000
S28SW7	S28SW7A		0-0.5	Immunoassay	HAND AUGER	9/8/2000
S28SW7	S28SW7B		1-1.5	Immunoassay	HAND AUGER	10/12/2000
S28SW7	S28SW7C	E79140-11	2-2.5	PCBs	HAND AUGER	10/20/2000
S28SW7	S28SW7D	E79140-12	3-3.5	PCBs	HAND AUGER	10/20/2000
28SW12	28SW12A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
28SW12	28SW12B	E78671-3	1-1.5	PCBs, Immunoassays	HAND AUGER	10/11/2000
28SW12	28SW12C		2-2.5	Immunoassay	HAND AUGER	10/12/2000
28SW12	28SW12D	E79273-14	3-3.5	PCBs	HAND AUGER	10/24/2000
28SW14	28SW14A	E78266-9	0-0.5	PCBs, Immunoassays	HAND AUGER	10/5/2000
28SW16	28SW16A	E78265-6	0-0.5	PCBs, Immunoassays	HAND AUGER	10/5/2000
S28W1	S28W1A		0-0.5	Immunoassay	HAND AUGER	9/7/2000
S28W3	S28W3A		0-0.5	Immunoassay	HAND AUGER	9/7/2000
S28W5	S28W5A		0-0.5	Immunoassay	HAND AUGER	9/8/2000
S28W5	S28W5B	E79272-15	1-1.5	PCBs	HAND AUGER	10/24/2000
S28W7	S28W7A	E76418-8	0-0.5	PCBs, Immunoassays	HAND AUGER	9/8/2000
SS34	SS34B		1-1.5	Immunoassay	HAND AUGER	10/2/2000
SS34	SS34C	E78510-7	2-2.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
S34E12	S34E12A		0-0.5	Immunoassay	HAND AUGER	10/6/2000
S34E12	S34E12B	E79274-1	1-1.5	PCBs	HAND AUGER	10/23/2000
S34E1	S34E1A		0-0.5	Immunoassay	HAND AUGER	9/14/2000
S34E3	S34E3A		0-0.5	Immunoassay	HAND AUGER	9/29/2000
S34E6	S34E6A		0-0.5	Immunoassay	HAND AUGER	9/29/2000
S34E6	S34E6B	E79274-3	1-1.5	PCBs	HAND AUGER	10/23/2000
S34E9	S34E9A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
S34N1	S34N1A		0-0.5	Immunoassay	HAND AUGER	9/14/2000
S34N3	S34N3A		0-0.5	Immunoassay	HAND AUGER	9/29/2000
S34N3	S34N3B	E79274-7	1-1.5	PCBs	HAND AUGER	10/23/2000
S34N6	S34N6A	E78372-1	0-0.5	PCBs, Immunoassays	HAND AUGER	10/6/2000
S34NE6	S34NE6A		0-0.5	Immunoassay	HAND AUGER	10/6/2000
S34NE6	S34NE6B	E79274-5	1-1.5	PCBs	HAND AUGER	10/23/2000
S34S1	S34S1A	E76840-3	0-0.5	PCBs, Immunoassays	HAND AUGER	9/14/2000
S34S6	S34S6A	E78510-3	0-0.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
S34SE15	S34SE15A	E78510-2	0-0.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
S34SE6	S34SE6A	E78372-2	0-0.5	PCBs, Immunoassays	HAND AUGER	10/6/2000
S34SE6	PCBDUP7	E78372-5	0-0.5	PCBs	HAND AUGER	10/6/2000
34SE12	34SE12A		0-0.5	Immunoassay	HAND AUGER	10/10/2000
34SE12	34SE12B	E79274-9	1-1.5	PCBs	HAND AUGER	10/23/2000
S34W1	S34W1A	E76840-2	0-0.5	PCBs, Immunoassays	HAND AUGER	9/14/2000
SS35	SS35B		1-1.5	Immunoassay	HAND AUGER	10/2/2000
SS35	SS35C	E78510-8	2-2.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
S35E1	S35E1A		0-0.5	Immunoassay	HAND AUGER	9/14/2000
S35E1	S35E1B	E79273-4	1-1.5	PCBs	HAND AUGER	10/23/2000
S35E3	S35E3A	E77892-7	0-0.5	PCBs, Immunoassays	HAND AUGER	9/29/2000

Table 4-1
Matteo Iron and Metal
Soil Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
PCB SURFACE SOIL SAMPLES						
S35N1	S35N1A		0-0.5	Immunoassay	HAND AUGER	9/14/2000
S35N1	S35N1B	E79274-11	1-1.5	PCBs	HAND AUGER	10/23/2000
S35N1	S35N1C	E79273-1	2-2.5	PCBs	HAND AUGER	10/23/2000
S35N3	S35N3A	E77892-5	0-0.5	PCBs, Immunoassays	HAND AUGER	9/29/2000
S35S1	S35S1A		0-0.5	Immunoassay	HAND AUGER	9/14/2000
S35S1	S35S1B	E79273-2	1-1.5	PCBs	HAND AUGER	10/23/2000
S35S3	S35S3A	E77892-6	0-0.5	PCBs, Immunoassays	HAND AUGER	9/29/2000
S35SW1	S35SW1B	E79273-6	1-1.5	PCBs	HAND AUGER	10/23/2000
S35W1	S35W1A		0-0.5	Immunoassay	HAND AUGER	9/14/2000
S35W1	S35W1C	E79273-7	2-2.5	PCBs	HAND AUGER	10/23/2000
S35W3	S35W3A	E77892-4	0-0.5	PCBs, Immunoassays	HAND AUGER	9/29/2000
PCB 1	PCB 1A	E77893-2	0-0.5	PCBs, Immunoassays	HAND AUGER	9/28/2000
PCB 2	PCB 2A	E77893-5	0-0.5	PCBs, Immunoassays	HAND AUGER	9/28/2000
PCB 3	PCB 3A	E77893-4	0-0.5	PCBs, Immunoassays	HAND AUGER	9/28/2000
PCB 4	PCB 4A	E77893-3	0-0.5	PCBs, Immunoassays	HAND AUGER	9/28/2000
PCB 5	PCB 5A	E77893-6	0-0.5	PCBs, Immunoassays	HAND AUGER	9/28/2000
PCB 6	PCB 6A	E77893-9	0-0.5	PCBs, Immunoassays	HAND AUGER	9/28/2000
PCB 6	PCB DUP4	E77893-11	0-0.5	PCBs	HAND AUGER	9/28/2000
PCB 7	PCB 7A	E77893-10	0-0.5	PCBs, Immunoassays	HAND AUGER	9/28/2000
PCB8	PCB8A	E77892-3	0-0.5	PCBs, Immunoassays	HAND AUGER	10/29/2000
PCB 9	PCB 9A	E77893-7	0-0.5	PCBs, Immunoassays	HAND AUGER	9/28/2000
PCB 10	PCB 10A	E77893-1	0-0.5	PCBs, Immunoassays	HAND AUGER	9/28/2000
PCB11	PCB11A		0-0.5	Immunoassay	HAND AUGER	9/28/2000
PCB11	PCB11B		1-1.5	Immunoassay	HAND AUGER	10/2/2000
PCB11	PCB11C		2-2.5	Immunoassay	HAND AUGER	10/10/2000
PCB11	PCB11D	E78671-2	3-3.5	PCBs, Immunoassays	HAND AUGER	10/11/2000
P11NW3	P11NW3A	E78372-3	0-0.5	PCBs, Immunoassays	HAND AUGER	10/6/2000
PB11E1	PB11E1A		0-0.5	Immunoassay	HAND AUGER	9/29/2000
PB11E1	PB11E1B	E79273-9	1-1.5	PCBs	HAND AUGER	10/24/2000
PB11E3	PB11E3A	E78043-5	0-0.5	PCBs, Immunoassays	HAND AUGER	10/2/2000
PB11N1	PB11N1A		0-0.5	Immunoassay	HAND AUGER	9/29/2000
PB11N1	PB11N1C	E79273-11	2-2.5	PCBs	HAND AUGER	10/24/2000
PB11S1	PB11S1A	E77893-15	0-0.5	PCBs, Immunoassays	HAND AUGER	9/29/2000
PB11S3	PB11S3A	E78043-4	0-0.5	PCBs, Immunoassays	HAND AUGER	10/2/2000
PB11W1	PB11W1A	E77893-17	0-0.5	PCBs, Immunoassays	HAND AUGER	9/29/2000
PB11W1	PB11W1B	E79273-10	1-1.5	PCBs	HAND AUGER	10/24/2000
PB11W3	PB11W3A	E78266-7	0-0.5	PCBs, Immunoassays	HAND AUGER	10/5/2000
P12NW6	P12NW6A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
P12SE2	P12SE2A		0-0.5	Immunoassay	HAND AUGER	10/6/2000
P12SW6	P12SW6A		0-0.5	Immunoassay	HAND AUGER	10/5/2000
P12SW9	P12SW9A		0-0.5	Immunoassay	HAND AUGER	10/6/2000
PB12E1	PB12E1A		0-0.5	Immunoassay	HAND AUGER	9/29/2000
PB12E3	PB12E3A	E78043-3	0-0.5	PCBs, Immunoassays	HAND AUGER	10/2/2000
PB12N1	PB12N1A	E77892-9	0-0.5	PCBs, Immunoassays	HAND AUGER	9/29/2000
PB12N3	PB12N3A		0-0.5	Immunoassay	HAND AUGER	10/2/2000
PB12S1	PB12S1A		0-0.5	Immunoassay	HAND AUGER	9/29/2000
PB12S3	PB12S3A	E78043-10	0-0.5	PCBs, Immunoassays	HAND AUGER	10/2/2000
PB12S6	PB12S6A	E78043-6	0-0.5	PCBs, Immunoassays	HAND AUGER	10/2/2000

Table 4-1
Matteo Iron and Metal
Soil Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
PCB SURFACE SOIL SAMPLES						
PB12W1	PB12W1A		0-0.5	Immunoassay	HAND AUGER	9/29/2000
PB12W3	PB12W3A		0-0.5	Immunoassay	HAND AUGER	10/2/2000
PB12W6	PB12W6A	E78043-9	0-0.5	PCBs, Immunoassays	HAND AUGER	10/2/2000
PB12W9	PB12W9A	E78266-2	0-0.5	PCBs, Immunoassays	HAND AUGER	10/4/2000
PB12W9	PCBDUP6	E78266-4	0-0.5	PCBs	HAND AUGER	10/4/2000
PB12N1	PCBDUP5	E77892-8	0-0.5	PCBs	HAND AUGER	9/29/2000
PCB12	PCB12A	E77893-8	0-0.5	PCBs, Immunoassays	HAND AUGER	9/28/2000
PCB12	PCB12B		1-1.5	Immunoassay	HAND AUGER	10/2/2000
PCB12	PCB12B		1-1.5	Immunoassay	HAND AUGER	10/2/2000
PCB12	PCB12C	E78510-6	2-2.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
PCB12	PCB12D		3-3.5	Immunoassay	HAND AUGER	10/11/2000
PCB12	PCB12E		4-4.5	Immunoassay	HAND AUGER	10/12/2000
P13N3	P13N3B	E78510-4	1-1.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
P13N9	PCBDUP1	E76234-2	0-0.5	PCBs	HAND AUGER	9/6/2000
P13NE4	P13NE4A	E78265-8	0-0.5	PCBs, Immunoassays	HAND AUGER	10/5/2000
P13NW6	P13NW6A	E78265-9	0-0.5	PCBs, Immunoassays	HAND AUGER	10/5/2000
PB13E1	PB13E1A	E77893-12	0-0.5	PCBs, Immunoassays	HAND AUGER	9/28/2000
PB13N1	PB13N1A	E77892-10	0-0.5	PCBs, Immunoassays	HAND AUGER	9/29/2000
PB13N3	PB13N3A		0-0.5	Immunoassay	HAND AUGER	10/2/2000
PB13N6	PB13N6A	E78043-8	0-0.5	PCBs, Immunoassays	HAND AUGER	10/2/2000
PB13S1	PB13S1A	E77893-14	0-0.5	PCBs, Immunoassays	HAND AUGER	9/29/2000
PB13W1	PB13W1A	E77893-13	0-0.5	PCBs, Immunoassays	HAND AUGER	9/29/2000
PCB13	PCB13A		0-0.5	Immunoassay	HAND AUGER	9/28/2000
PCB13	PCB13C	E78510-5	2-2.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
PCB 14	PCB 14A	E77893-16	0-0.5	PCBs, Immunoassays	HAND AUGER	9/29/2000
PCB15	PCB15A	E78266-1	0-0.5	PCBs, Immunoassays	HAND AUGER	10/4/2000
PCB16	PCB16A		0-0.5	Immunoassay	HAND AUGER	10/10/2000
P16SE3	P16SE3A	E78510-1	0-0.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
PCB17	PCB17A	E78373-10	0-0.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
PCB18	PCB18A		0-0.5	Immunoassay	HAND AUGER	10/10/2000
P18SW3	P18SW3A	E78373-16	0-0.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
PCB19	PCB19A	E78373-11	0-0.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
PCB20	PCB20A	E78373-12	0-0.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
PCB21	PCB21A	E78373-15	0-0.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
PCB22	PCB22A	E78373-13	0-0.5	PCBs, Immunoassays	HAND AUGER	10/10/2000
PCB23	PCB23A	E78373-14	0-0.5	PCBs, Immunoassays	HAND AUGER	10/10/2000

Table 4-1
Matteo Iron and Metal
Soil Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
WELL BORING SAMPLES						
MW1	MW-1A	E77442-5	1.0-1.5	VOC, SVOC, PPCBs, Metals	SPLIT SPOON	9/25/2000
MW1	MW-1B	E77442-6	10-10.5	VOC, SVOC, PPCBs, Metals	SPLIT SPOON	9/25/2000
MW1	MW1C	E77442-7	14-16	TOC, pH	SPLIT SPOON	9/25/2000
MW2	MW-2A	E77159-15	12-14	TOC, pH, Grain Size	SPLIT SPOON	9/18/2000
MW3	MW-3A	E77159-16	10-12	TOC, pH, Grain Size	SPLIT SPOON	9/18/2000
MW4	MW-4A	E76949-15	8-9.5	TOC, pH, Grain Size	SPLIT SPOON	9/19/2000
MW5	MW-5A	E77159-17	12-14	TOC, pH, Grain Size	SPLIT SPOON	9/19/2000
MW6	MW-6DUP	E76949-17	8-10	TOC, pH, Grain Size	SPLIT SPOON	9/20/2000
MW6	MW-6A	E76949-16	8-10	TOC, pH, Grain Size	SPLIT SPOON	9/20/2000
MW7	MW-7A	E76949-18	8.5-10	TOC, pH, Grain Size	SPLIT SPOON	9/21/2000
MW8	MW8A	E77442-3	14-16	TOC, pH	SPLIT SPOON	9/25/2000
MW8	MW8B	E77442-4	16-18	TOC, pH	SPLIT SPOON	9/25/2000
MW9	MW-9A	E77442-1	10-12	TOC, pH, Grain Size	SPLIT SPOON	9/22/2000
MW10	MW-10A	E77442-2	10-12	TOC, pH, Grain Size	SPLIT SPOON	9/22/2000
MW11	MW-11A	E76949-19	6-8	TOC, pH, Grain Size	SPLIT SPOON	9/21/2000
MW12	MW-12A	E76949-20	6-8.5	TOC, pH, Grain Size	SPLIT SPOON	9/21/2000
B13	MW13A	E78510-17	6-7	TOC, pH, Grain Size	SPLIT SPOON	10/10/2000
B13	MW13B	E78510-18	12-13	TOC, pH, Grain Size	SPLIT SPOON	10/10/2000
B13	MW-13C	E78671-13	30-36.5	TOC, pH, Grain Size	SPLIT SPOON	10/13/2000
B13	MW-13D	E78671-14	55-60.5	TOC, pH, Grain Size	SPLIT SPOON	10/13/2000
B13	DUPTOC	E78963-10	85-86	TOC, pH	SPLIT SPOON	10/16/2000
B14	MW14-A	E77892-1	6-8	TOC, pH, Grain Size	SPLIT SPOON	9/29/2000
B14	MW14-B	E77892-2	18-20	TOC, pH, Grain Size	SPLIT SPOON	9/29/2000
B14	MW14-C	E78043-1	45-47	TOC, pH, Grain Size	SPLIT SPOON	10/2/2000
B14	MW14-D	E78043-2	75-77	TOC, pH, Grain Size	SPLIT SPOON	10/2/2000
B15	MW-15A	E78043-12	2-8	TOC, pH, Grain Size	SPLIT SPOON	10/3/2000
B15	MW-15B	E78043-13	8-12	TOC, pH, Grain Size	SPLIT SPOON	10/3/2000
B15	MW-15C	E78043-14	25-32	TOC, pH, Grain Size	SPLIT SPOON	10/3/2000
B15	MW-15E	E78043-15	45-52	TOC, pH, Grain Size	SPLIT SPOON	10/3/2000
B15	MW15-E	E78265-1	80-87	TOC, pH, Grain Size	SPLIT SPOON	10/5/2000
B16	MW16C	E78265-4	10-11.5	TOC, pH, Grain Size	SPLIT SPOON	10/5/2000
B16	MW16D	E78266-12	45-46	TOC, pH, Grain Size	SPLIT SPOON	10/6/2000
B16	MW16E	E78266-13	50-51	TOC, pH, Grain Size	SPLIT SPOON	10/6/2000
B16	MW16F	E78266-14	60-61	TOC, pH, Grain Size	SPLIT SPOON	10/6/2000
B16	MW16G	E78510-9	85-86	TOC, pH	SPLIT SPOON	10/9/2000
B16	MW16H	E78510-10	90-91	TOC, pH	SPLIT SPOON	10/9/2000
B17	MW17D-A	E76840-5	4-5.5	TOC, pH, Grain Size	SPLIT SPOON	9/14/2000
B17	MW17D-B	E76840-6	9-10.5	TOC, pH, Grain Size	SPLIT SPOON	9/14/2000
B17	MW17D-C	E76840-7	18-19	TOC, pH, Grain Size	SPLIT SPOON	9/14/2000
B17	MW17D-D	E76840-8	45-46	TOC, pH, Grain Size	SPLIT SPOON	9/14/2000
B17	MW17D-E	E76840-9	65-66	TOC, pH, Grain Size	SPLIT SPOON	9/14/2000
B17	MW17D-F	E76840-10	75-76	TOC, pH, Grain Size	SPLIT SPOON	9/14/2000
B17	MW17D-G	E76949-2	85-86	TOC, pH, Grain Size	SPLIT SPOON	9/15/2000
B18	MW18C	E78510-13	6-7	TOC, pH, Grain Size	SPLIT SPOON	10/10/2000
B18	MW18D	E78510-14	16-17	TOC, pH, Grain Size	SPLIT SPOON	10/10/2000
B18	MW18E	E78510-15	25-26	TOC, pH, Grain Size	SPLIT SPOON	10/10/2000
B18	MW18F	E78510-16	50-51	TOC, pH, Grain Size	SPLIT SPOON	10/10/2000
B16	MW16A	E78265-2	2-2.5	VOC, SVOC, PPCBs, Metals	SPLIT SPOON	10/5/2000
B16	MW16B	E78265-2	6.5-7	VOC, SVOC, PPCBs, Metals	SPLIT SPOON	10/5/2000
B18	MW-18A	E78510-11	3-4	VOC, SVOC, PPCBs, Metals	SPLIT SPOON	10/10/2000
B18	MW-18B	E78510-12	5-6	VOC, SVOC, PPCBs, Metals	SPLIT SPOON	10/10/2000

Table 4-1
Matteo Iron and Metal
Soil Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
SCRAPYARD AREA GEOPROBE/HAND AUGER BORING SAMPLES (0 - 2 ft.)						
HA-1	HA-1A	N1314-12	0 - 0.5	PEST and PCB	HAND AUGER	10/23/2001
HA-1	GPDUP2	N1313-11	0 - 0.5	PEST and PCB	HAND AUGER	10/23/2001
HA-2	HA-2A	N1529-1	0 - 0.5	PEST, PCB, and Metals	HAND AUGER	10/26/2001
HA-3	HA-3A	N1529-3	0 - 0.5	PEST, PCB, and Metals	HAND AUGER	10/26/2001
HA-4A	HA 4A	N12323-1	0 - 0.5	PCB	HAND AUGER	4/11/2002
HA-5A	HA 5A	N12323-3	0 - 0.5	PCB	HAND AUGER	4/11/2002
HA-6A	HA 6A	N12323-5	0 - 0.5	PCB	HAND AUGER	4/11/2002
HA-7A	HA 7A	N12323-7	0 - 0.5	PCB	HAND AUGER	4/11/2002
HA-8A	HA 8A	N12323-9	0 - 0.5	PCB	HAND AUGER	4/11/2002
HA-8B	HA 8B	N16274-9	0 - 0.5	PCB	HAND AUGER	6/14/2002
HA-9A	HA 9A	N12323-11	0 - 0.5	PCB	GEOPROBE	4/11/2002
HA-10A	HA 10A	N12323-13	0 - 0.5	PCB	HAND AUGER	4/11/2002
HA-10B	HA 10B	N16274-7	0 - 0.5	PCB	HAND AUGER	6/14/2002
HA-11A	HA 11A	N12323-15	0 - 0.5	PCB	HAND AUGER	4/11/2002
HA-12A	HA 12A	N12323-17	0 - 0.5	PCB	HAND AUGER	4/11/2002
HA-12B	HA 12B	N16274-7	0 - 0.5	PCB	HAND AUGER	6/14/2002
HA-13A	HA 13A	N12323-19	0 - 0.5	PCB	HAND AUGER	4/11/2002
GP-1	GP-01A	E76579-1	0 - 0.5	PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-2	GP-02A	E76579-3	0 - 0.5	PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-3	GP-03A	E76579-5	0 - 0.5	PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-4	GP-04A	E76579-7	0 - 0.5	PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-5	GP-05A	E76579-9	0 - 0.5	PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-6	GP-06A	E76579-12	0 - 0.5	PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-7	GP-07A	E76579-13	0 - 0.5	PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-8	GP-08A	E76579-16	0 - 0.5	PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-9	GP-09A	E76579-17	0 - 0.5	PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-10	GP-10A	E76579-19	0 - 0.5	PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-13	GP-13A	N1314-5	0 - 0.5	PEST and PCB	GEOPROBE	10/23/2001
GP-18	GP-18A	N1315-9	0 - 0.5	PEST and PCB	GEOPROBE	10/23/2001
GP-21	GP-21A	N1313-7	0 - 0.5	PEST and PCB	GEOPROBE	10/23/2001
GP-22	GP-22A	N1314-14	0 - 0.5	PEST, PCB, and Metals	GEOPROBE	10/23/2001
GP-27	GP-27A	N1405-13	0 - 0.5	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-28	GP-28A	N1405-15	0 - 0.5	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-30	GP-30A	N1409-1	0 - 0.5	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-12	GP-12A	N1314-2	0 - 1	PEST and PCB	GEOPROBE	10/23/2001
GP-12	GPDUP1	N1313-10	0 - 1	PEST and PCB	GEOPROBE	10/23/2001
GP-14	GP-14A	N1314-8	0.3 - 0.8	PEST and PCB	GEOPROBE	10/23/2001
GP-15	GP-15A	N1314-11	0.3 - 0.8	PEST and PCB	GEOPROBE	10/23/2001
GP-16	GP-16A	N1315-3	0.3 - 0.8	PEST and PCB	GEOPROBE	10/23/2001
GP-23	GP-23A	N1405-1	0.3 - 0.8	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-31	GP-31A	N1409-4	0.3 - 0.8	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-31	GP-DUP4	N1409-8	0.3 - 0.8	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-17	GP-17A	N1315-6	0.5 - 1	PEST and PCB	GEOPROBE	10/23/2001
GP-19	GP-19A	N1313-1	0.5 - 1	PEST and PCB	GEOPROBE	10/23/2001
GP-20	GP-20A	N1313-4	0.5 - 1	PEST and PCB	GEOPROBE	10/23/2001
GP-24	GP-24A	N1405-4	0.5 - 1	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-25	GP-25A	N1405-7	0.5 - 1	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-32	GP 32A	N12323-24	0.5 - 1	PCB and Metals	GEOPROBE	4/11/2002
GP-33	GP 33A	N12323-26	0.5 - 1	PCB and Metals	GEOPROBE	4/11/2002
GP-5	GP 5C	N12323-21	1.5 - 2	PCB, and Metals	GEOPROBE	4/11/2002
GP-7	GP-7C	N12322-6	1.5 - 2	PCB, and Metals	GEOPROBE	4/11/2002

Table 4-1
Matteo Iron and Metal
Soil Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
SCRAPYARD AREA GEOPROBE/HAND AUGER BORING SAMPLES (0 - 2 ft.)						
GP-7	DUPE 02	N12323-30	1.5 - 2	PCB, and Metals	GEOPROBE	4/11/2002
GP-12	GP 12D	N12322-8	1.5 - 2	PCB and Metals	GEOPROBE	4/11/2002
GP-14	GP 14D	N12322-10	1.5 - 2	PCB and Metals	GEOPROBE	4/11/2002
GP-24	GP 24D	N12322-12	1.5 - 2	PCB and Metals	GEOPROBE	4/11/2002
GP-25	GP 25D	N12322-14	1.5 - 2	PCB and Metals	GEOPROBE	4/11/2002
GP-29	GP-29A	N1405-18	1 - 1.5	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-29	GP-DUP3	N1409-7	1 - 1.5	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-30	GP 30D	N12322-16	1.5 - 2	PCB and Metals	GEOPROBE	4/11/2002
GP-32	GP 32B	N16274-6	1.5 - 2	Metals	HAND AUGER	6/14/2002
GP-32	DUPE 01	N12323-29	1.5 - 2	PCB and Metals	GEOPROBE	4/11/2002
GP-33	GP 33B	N16274-3	1.5 - 2	PCB and Metals	HAND AUGER	6/14/2002
GP-26	GP-26A	N1405-10	1.5 - 2	PEST, PCB, and Metals	HAND AUGER	10/24/2001
SCRAPYARD AREA GEOPROBE/HAND AUGER BORING SAMPLES (2 - 4 ft.)						
GP-7	GP-7D	N16274-4	2.5 - 3	Metals	HAND AUGER	6/14/2002
GP-12	GP 12E	N16274-2	2.5 - 3	PCB and Metals	HAND AUGER	6/14/2002
GP-12	DUP	N16274-10	2.5 - 3	PCB and Metals	HAND AUGER	6/14/2002
GP-14	GP 14E	N16274-1	2.5 - 3	PCB and Metals	HAND AUGER	6/14/2002
GP-30	GP 30E	N16274-5	2.5 - 3	PCB and Metals	HAND AUGER	6/14/2002
HA-1	HA-1B	N1314-13	3.5 - 4	PEST and PCB	HAND AUGER	10/23/2001
HA-2	HA-2B	N1529-2	3.5 - 4	PEST, PCB, and Metals	HAND AUGER	10/26/2001
HA-3	HA-3B	N1529-4	3.5 - 4	PEST, PCB, and Metals	HAND AUGER	10/26/2001
GP-11	GP-11B	N1314-1	3.5 - 4	PEST and PCB	GEOPROBE	10/23/2001
GP-12	GP-12B	N1314-3	3.5 - 4	PEST and PCB	GEOPROBE	10/23/2001
GP-13	GP-13B	N1314-6	3.5 - 4	PEST and PCB	GEOPROBE	10/23/2001
GP-14	GP-14B	N1314-9	3.5 - 4	PEST and PCB	GEOPROBE	10/23/2001
GP-15	GP-15B	N1315-1	3.5 - 4	PEST and PCB	GEOPROBE	10/23/2001
GP-16	GP-16B	N1315-4	3.5 - 4	PEST and PCB	GEOPROBE	10/23/2001
GP-17	GP-17B	N1315-7	3.5 - 4	PEST and PCB	GEOPROBE	10/23/2001
GP-18	GP-18B	N1315-10	3.5 - 4	PEST and PCB	GEOPROBE	10/23/2001
GP-19	GP-19B	N1313-2	3.5 - 4	PEST and PCB	GEOPROBE	10/23/2001
GP-20	GP-20B	N1313-5	3.5 - 4	PEST and PCB	GEOPROBE	10/23/2001
GP-21	GP-21B	N1313-8	3.5 - 4	PEST and PCB	GEOPROBE	10/23/2001
GP-22	GP-22B	N1314-15	3.5 - 4	PEST, PCB, and Metals	GEOPROBE	10/23/2001
GP-23	GP-23B	N1405-2	3.5 - 4	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-24	GP-24B	N1405-5	3.5 - 4	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-25	GP-25B	N1405-8	3.5 - 4	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-26	GP-26B	N1405-11	3.5 - 4	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-27	GP-27B	N1405-14	3.5 - 4	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-28	GP-28B	N1405-16	3.5 - 4	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-29	GP-29B	N1405-19	3.5 - 4	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-30	GP-30B	N1409-2	3.5 - 4	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-31	GP-31B	N1409-5	3.5 - 4	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-29	GP-29C	N1405-20	5.5 - 6	PEST, PCB, and Metals	GEOPROBE	10/24/2001

Table 4-1
Matteo Iron and Metal
Soil Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
SCRAPYARD AREA GEOPROBE/HAND AUGER BORING SAMPLES (~10 - 12 ft.)						
GP-25	GP-25C	N1405-9	5 - 5.5	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-28	GP-28C	N1405-17	7.5 - 8	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-24	GP-24C	N1405-6	9.5 - 10	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-26	GP-26C	N1405-12	10 - 10.5	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-1	GP-01B	E70304-13	11 - 11.5	VOC, SVOC, PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-2	GP-02B	E76579-4	11 - 11.5	VOC, SVOC, PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-3	GP-03B	E76579-5	11 - 11.5	VOC, SVOC, PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-4	GP-04B	E76579-8	11 - 11.5	VOC, SVOC, PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-5	GP-05B	E76579-9	11 - 11.5	VOC, SVOC, PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-6	GP-06B	E76579-12	11 - 11.5	VOC, SVOC, PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-7	GP-07B	E76579-14	11 - 11.5	VOC, SVOC, PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-8	GP-08B	E76579-16	11 - 11.5	VOC, SVOC, PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-9	GP-09B	E76579-18	11 - 11.5	VOC, SVOC, PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-10	GP-10B	E76579-20	11 - 11.5	VOC, SVOC, PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-10	GP-11A	E76579-21	11 - 11.5	VOC, SVOC, PPCBs, Metals, pH	GEOPROBE	9/11/2000
GP-15	GP-15C	N1315-2	11 - 11.5	PEST and PCB	GEOPROBE	10/23/2001
GP-19	GP-19C	N1313-3	11 - 11.5	PEST and PCB	GEOPROBE	10/23/2001
GP-20	GP-20C	N1313-6	11 - 11.5	PEST and PCB	GEOPROBE	10/23/2001
GP-22	GP-22C	N1314-16	11 - 11.5	PEST, PCB, and Metals	GEOPROBE	10/23/2001
GP 34	GP-34	N12323-28	11 - 11.5	PCB and Metals	GEOPROBE	4/11/2002
GP-12	GP-12C	N1314-4	11.5 - 12	PEST and PCB	GEOPROBE	10/23/2001
GP-13	GP-13C	N1314-7	11.5 - 12	PEST and PCB	GEOPROBE	10/23/2001
GP-14	GP-14C	N1314-10	11.5 - 12	PEST and PCB	GEOPROBE	10/23/2001
GP-16	GP-16C	N1315-5	11.5 - 12	PEST and PCB	GEOPROBE	10/23/2001
GP-18	GP-18C	N1315-11	11.5 - 12	PEST and PCB	GEOPROBE	10/23/2001
GP-21	GP-21C	N1313-9	11.5 - 12	PEST and PCB	GEOPROBE	10/23/2001
GP-30	GP-30C	N1409-3	11.5 - 12	PEST, PCB, and Metals	GEOPROBE	10/24/2001
GP-17	GP-17C	N1315-8	12 - 12.5	PEST and PCB	GEOPROBE	10/23/2001
GP-23	GP-23C	N1405-3	12 - 12.5	PEST, PCB, and Metals	GEOPROBE	10/24/2001
TEST PIT SAMPLES						
TP1A	TP-1A	E76234-3	1.5-2	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/6/2000
TP1B	TP-1B	E76234-4	6-6.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/6/2000
TP1B	TP-1B/DUP1	E76234-6	6-6.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/6/2000
TP1C	TP-1C	E76234-5	2.5-3	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/6/2000
TP2A	TP-2A	E76419-11	3-3.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/7/2000
TP2A	TP-2B	E76419-12	3-3.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/7/2000
TP2A	TP-2C	E76419-13	7-7.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/7/2000
TP3A	TP-3A	E76419-14	1.5-2	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/7/2000
TP3B	TP-3B	E76419-15	4.5-5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/7/2000
TP4A	TP-4A	E76419-16	2-2.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/7/2000
TP4B	TP-4B	E76419-17	2-2.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/7/2000
TP4C	TP-4C	E76419-18	5.5-6	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/7/2000
TP4C	TP-4D	E76418-14	13-14	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/7/2000
TP5A	TP-5A	E76419-8	2.5-3	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/8/2000
TP5A	TP-5A/DUP2	E76419-9	2.5-3	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/8/2000
TP6A	TP-6A	E76419-6	6-6.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/8/2000
TP6A	TPDUP3	E76419-10	6-6.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/8/2000
TP6A	TP-6B	E76419-7	11-11.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/8/2000
TP6B	TP-6C	E76419-5	2-2.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/8/2000
TP6B	TP-6D	E76949-14	1-1.5	VOC, METALS	SS SPOON	9/15/2000

Table 4-1
Matteo Iron and Metal
Soil Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
TEST PIT SAMPLES						
TP7A	TP-7A	E76419-3	10-11	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/8/2000
TP7A	TP-7B	E76419-4	1.5-2	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/8/2000
TP8A	TP-8A	E76419-2	8-8.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/8/2000
TP9A	TP-9A	E76419-1	7.5-8	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/8/2000
TP10A	TP-10A	E76571-1	12-12.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/11/2000
TP11A	TP-11A	E76571-2	2-2.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/11/2000
TP13A	TP-13A	E76571-3	9.5-10	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/11/2000
TP14A	TP-14A	E76571-4	6.5-7	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/11/2000
TP15	TP-15A	E76571-5	9-9.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/11/2000
TP16	TP-16A	E76571-6	10.5-11	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/11/2000
TP17	TP-17A	E76571-7	6-6.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/11/2000
TP18	TP-18	E76651-1	8-8.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/12/2000
TP19	TP-19	E76651-2	6.5-7	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/12/2000
TP20	TP-20	E76651-3	8.5-9	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/12/2000
TP21	TP-21	E76651-4	11.5-12	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/12/2000
TP22	TP-22	E76651-5	13.5-14	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/12/2000
TP23	TP-23	E76651-6	13-13.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/12/2000
TP24	TP-24	E76651-7	8-8.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/12/2000
TP25	TP-25	E76651-8	2-2.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/12/2000
TP26	TP-26	E76651-9	8.5-9	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/12/2000
TP27	TP-27A	E76651-10	1.5-2	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/13/2000
TP27	TP-27B	E76651-11	3-3.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/13/2000
TP28	TP-28A	E76651-12	2-2.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/13/2000
TP28	TP-28B	E76651-13	3.5-4	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/13/2000
TP28	TP-28C	E76651-14	0-0.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/13/2000
TP29	TP-29	E76651-15	9.5-10	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/13/2000
TP30	TP-30	E76651-16	11.5-12	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/13/2000
TP31	TP-31	E76651-17	3-3.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/13/2000
TP32	TP-32	E76651-18	1.5-2	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/13/2000
TP34	TP-34	E76651-19	2-2.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/13/2000
TP35	TP-35	E76651-20	5-5.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/13/2000
TP35	TP-DUP4	E76839-1	5-5.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/14/2001
TP36	TP-36A	E76839-2	3-3.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/14/2000
TP36	TP-36B	E76839-3	12.5-13	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/14/2000
TP37	TP-37	E76839-4	12.5-13	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/14/2000
TP38	TP-38	E76839-5	4-4.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/14/2000
TP39	TP-39	E76839-6	9.8-10	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/14/2000
TP40	TP-40	E76839-7	9-9.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/14/2000
TP41	TP-41	E76839-8	6-6.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/14/2000
TP42	TP-42A	E76839-9	3-3.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/14/2000
TP42	TP-42B	E76839-10	8.5-9	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/14/2000
TP43	TP-43	E76839-11	12.5-13	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/14/2000
TP44	TP-44	E7689-12	2-2.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/14/2000
TP45	TP-45A	E76839-13	1.5-2	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/14/2000
TP45	TP-45B	E76839-14	2-2.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/14/2000
TP46	TP-46	E76949-3	14.5-15	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/15/2000
TP46	TP-46/DUP5	E76949-4	14.5-15	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/15/2000
TP47	TP-47	E76949-5	12.5-13	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/15/2000
TP48	TP-48A	E76949-6	1-1.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/15/2000
TP48	TP-48B	E76949-7	8.5-9	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/15/2000
TP49	TP-49	E76949-8	1-1.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/15/2000

Table 4-1
Matteo Iron and Metal
Soil Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
TEST PIT SAMPLES						
TP50	TP-50A	E76949-9	1-1.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/15/2000
TP50	TP-50B	E76949-10	13.5-14	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/15/2000
TP51	TP-51A	E77159-1	3-3.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/18/2000
TP51	TP-51B	E77159-3	12.5-13	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/18/2000
TP51	TP-51/DUP6	E77159-2	3-3.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/18/2000
TP52	TP-52	E77159-4	4-4.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/18/2000
TP53	TP-53	E77159-5	12.5-13	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/18/2000
TP54	TP-54	E77159-6	14.5-15	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/18/2000
TP55	TP-55	E77159-7	7.5-8	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/18/2000
TP56	TP-56A	E77159-8	2-2.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	9/18/2000
TP56	TP-56B	E77159-9	12-12.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	9/18/2000
TP-60	TP-60A	N1241-1	1.5 - 2	SVOC, PPCB, METALS, pH	SS SPOON	10/22/2001
TP-61	TP-61A	N1241-2	1 - 1.5	SVOC, PPCB, METALS, pH	SS SPOON	10/22/2001
TP-61	TP-61B	N1241-3	6 - 6.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	10/22/2001
TP-62	TP-62A	N1241-4	0.3 - 0.8	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	10/22/2001
TP-64	TP-64A	N1312-2	9 - 10	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	10/23/2001
TP-64	TP-64B	N1312-1	9 - 10	VOC, SVOC, PPCB, METALS, pH	SS SPOON	10/23/2001
TP-65	TP-65A	N1312-3	4 - 4.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	10/23/2001
TP-67	TP-67A	N1312-4	3 - 3.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	10/23/2001
TP-67	DUP-A	N1312-6	3 - 3.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	10/23/2001
TP-68	TP-68A	N1312-5	3 - 3.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	10/23/2001
TP-70	TP-70A	N1315-12	4.5 - 5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	10/24/2001
TP-71	TP-71A	N1315-13	6 - 6.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	10/24/2001
TP-71	DUP-2	N1315-17	6 - 6.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	10/24/2001
TP-72	TP-72A	N1315-14	4 - 4.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	10/24/2001
TP-73	TP-73A	N1315-15	8 - 8.5	Petroleum Hydrocarbons, Lead, Ph	SS SPOON	10/24/2001
TP-74	TP-74A	N1315-16	7 - 7.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	10/24/2001
TP-78	TP-78A	N1409-9	8 - 8.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	10/25/2001
TP-78	TP-78B	N1409-10	5 - 5.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	10/25/2001
TP-79	TP-79A	N1409-11	7 - 7.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	10/25/2001
TP-81	TP-81A	N1409-12	3 - 3.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	10/25/2001
TP-81	TP-81B	N1409-13	3.5 - 4	VOC, SVOC, PPCB, METALS, pH	SS SPOON	10/25/2001
TP-81	TP-81C	N1409-14	7 - 7.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	10/25/2001
TP-84	TP-84A	N1409-15	5 - 5.5	VOC, SVOC, PPCB, METALS, pH	SS SPOON	10/25/2001

Table 4-1
Matteo Iron and Metal
Soil Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
SURFACE SOIL SAMPLES						
TPSS-A1	TPSS-A1	E76949-11	0-0.5	Lead, TPHC, pH	SS SPOON	9/15/2000
TPSS-A2	TPSS-A2	E76949-1	3.5-4.5	Lead, TPHC, pH	SS SPOON	9/15/2000
TPSS-B1	TPSS-B1	E76949-12	0-0.5	Lead, TPHC, pH	SS SPOON	9/15/2000
TPSS-C1	TPSS-C1	E76949-13	0-0.5	Lead, TPHC, pH	SS SPOON	9/15/2000
TPSS-F	TPSS-F1	E77159-12	0-0.5	Lead, TPHC, pH	SS SPOON	9/19/2000
TPSS-G	TPSS-G1	E77159-13	0-0.5	Lead, TPHC, pH	SS SPOON	9/19/2000
TPSS-H	TPSS-H1	E77159-14	0-0.5	Lead, TPHC, pH	SS SPOON	9/19/2000
TPSS-D	TPSS-D1	E77159-10	0-0.5	VOC, SVOC, PPCBs, Metals, pH	SS SPOON	9/19/2000
TPSS-E	TPSS-E1	E77159-11	0-0.5	VOC, SVOC, PPCBs, Metals, pH	SS SPOON	9/19/2000
TPSS-I	TPSS-DUP	E78373-6	0.5-0.8	VOC, SVOC, PPCBs, Metals, pH	SS SPOON	10/6/2000
TPSS-I	TPSS-I1	E78373-1	0.5-0.8	VOC, SVOC, PPCBs, Metals, pH	SS SPOON	10/6/2000
TPSS-J	TPSS-J1	E78373-2	0.5-0.8	VOC, SVOC, PPCBs, Metals, pH	SS SPOON	10/6/2000
TPSS-K	TPSS-K1	E78373-3	0.5-0.8	VOC, SVOC, PPCBs, Metals, pH	SS SPOON	10/6/2000
TPSS-L	TPSS-L1	E78373-4	0.5-0.8	VOC, SVOC, PPCBs, Metals, pH	SS SPOON	10/6/2000
TPSS-M	TPSS-M1	E78373-5	0.5-0.8	VOC, SVOC, PPCBs, Metals, pH	SS SPOON	10/6/2000
FULL-1	FULL-1	E81503-2	0.5-0.8	VOC, SVOC, PPCBs, Metals, pH	SS SPOON	11/28/2000
FULL-2	FULL-2	E81503-3	0.5-0.8	VOC, SVOC, PPCBs, Metals, pH	SS SPOON	11/28/2000
FULL-3	FULL-3	E81503-4	1	VOC, SVOC, PPCBs, Metals, pH	SS SPOON	11/28/2000
FULL-3	FULL-DUP	E81503-7	1	VOC, SVOC, PPCBs, Metals, pH	SS SPOON	11/28/2000
FULL-4	FULL-4	E81503-5	0.5-1	VOC, SVOC, PPCBs, Metals, pH	SS SPOON	11/28/2000
FULL-5	FULL-5	E81503-6	0.5-1	VOC, SVOC, PPCBs, Metals, pH	SS SPOON	11/28/2000
SOIL CLASSIFICATION SAMPLES						
T-1	T-1	N12322-1	0 - 1	Full TCLP	SS SPOON	4/11/2002
T-2	T-2	N12322-2	0 - 1	Full TCLP	SS SPOON	4/11/2002
T-3	T-3	N12322-3	0 - 1	Full TCLP	SS SPOON	4/11/2002
T-4	T-4	N12322-4	0 - 1	Full TCLP	SS SPOON	4/11/2002
T-5	T-5	N12322-5	0 - 1	Full TCLP	SS SPOON	4/11/2002

TABLE

Matteo Iron Metal

Groundwater Elevation Measurements

Well Construction Data					December 4, 2000			January 10, 2000			January 25, 2001		
Well Number	Top of Casing Elevation	Ground Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (Below TOC)	PID (ppm)	Ground water Elevation	Depth to Water (Below TOC)	PID (ppm)	Ground water Elevation	Depth to Water (Below TOC)	PID (ppm)	Ground water Elevation
MW-01	19.96	20.86	12.86	2.86	11.41	0.0	8.55	11.54	N/S	8.42	11.30	N/S	8.66
MW-02	21.09	18.25	13.39	3.39	12.49	0.0	8.60	11.90	N/S	9.19	11.75	0	9.34
MW-03	18.67	16.14	11.97	1.97	12.17	0.0	6.50	11.64	N/S	7.03	11.53	0	7.14
MW-04	15.27	12.72	10.23	0.23	11.05	0.0	4.22	10.64	N/S	4.63	10.51	0.5	4.76
MW-05	14.57	11.73	7.77	-2.23	11.0	0.0	3.54	10.98	N/S	3.59	10.48	0.1	4.09
MW-06	7.92	5.68	2.96	-7.04	8.31	0.0	-0.39	8.02	N/S	-0.10	6.84	0.1	1.08
MW-07	12.63	10.35	5.88	-4.12	9.11	0.0	3.52	8.78	N/S	3.85	7.85	0.1	4.78
MW-08	9.63	6.72	-3.28	-13.28	19.4	0.0	-9.77	19.35	N/S	-9.72	19.24	0.2	-9.61
MW-09	6.57	4.05	-0.15	-10.15	13.24	0.0	-6.67	13.61	N/S	-7.04	13.45	0.2	-6.88
MW-10	5.80	3.40	-1.15	-11.15	12.28	0.0	-6.48	12.7	N/S	-6.90	12.45	0.2	-6.65
MW-10D*	6.01	3.42	-54.71	-64.71									
MW-11	6.13	3.43	1.18	-8.82	11.75	0.0	-5.62	12.06	N/S	-5.93	11.96	0.2	-5.83
MW-11D*	5.76	3.21	-52.95	-62.95									
MW-12	5.56	3.73	0.60	-9.40	11.27	0.1	-5.71	11.77	N/S	-6.21	11.51	0.2	-5.95
MW-13S	13.73	11.67	6.17	-3.83	9.61	0.0	4.12	9.53	N/S	4.20	9.06	0	4.67
MW-13D	14.23	11.83	-54.67	-64.67	25.15	0.0	-10.92	24.99	N/S	-10.76	24.79	0.2	-10.56
MW-14S	24.08	22.12	9.12	-0.88	14.47	0.1	9.61	14.4	N/S	9.68	14.30	0	9.78
MW-14D	24.19	22.11	-51.89	-61.89	37.17	0.1	-12.98	36.83	N/S	-12.64	36.67	0.2	-12.48
MW-15S	6.53	3.92	1.92	-8.08	10.15	0.0	-3.62	9.86	N/S	-3.33	9.12	0.2	-2.59
MW-15D	5.99	3.79	-54.21	-64.21	15.37	0.0	-9.38	15.39	N/S	-9.40	15.24	0.2	-9.25
MW-16S	6.93	4.47	2.47	-7.53	7.06	0.6	-0.13	7.07	N/S	-0.14	6.68	0.3	0.25
MW-16D	6.67	4.89	-55.11	-65.11	15.27	0.0	-8.60	15.33	N/S	-8.66	15.22	0.5	-8.55
MW-17S	7.04	4.14	-1.06	-11.06	6.45	0.0	0.59	7.23	N/S	-0.19	6.63	0.2	0.41
MW-17D	6.87	4.40	-55.60	-65.60	14.86	0.0	-7.99	14.96	N/S	-8.09	14.89	0.2	-8.02
MW-18S	5.79	3.33	1.33	-8.67	10.98	0.0	-5.19	11.32	N/S	-5.53	11.22	0.1	-5.43
MW-18D	5.73	3.44	-55.56	-65.56	11.23	0.1	-5.50	11.51	N/S	-5.78	11.38	0.2	-5.65

Notes:

All elevations are measured in feet according to mean sea

All depths to water are measured in feet below the top of well casing.

PID = Photoionization Detector

N/S = Not Screened

* = New Well construction - no previous data

TABLE

Matteo Iron Metal

Groundwater Elevation Measurements

Well Construction Data					January 25, 2001			April 9, 2002			October 23, 2002		
Well Number	Top of Casing Elevation	Ground Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Depth to Water (Below TOC)	PID (ppm)	Ground water Elevation	Depth to Water (Below TOC)	PID (ppm)	Ground water Elevation	Depth to Water (Below TOC)	PID (ppm)	Ground water Elevation
MW-01	19.96	20.86	12.86	2.86	11.30	N/S	8.66	12.92	<1	7.04	13.95	<1	6.01
MW-02	21.09	18.25	13.39	3.39	11.71	0	9.38	15.32	<1	5.77	16.77	0	4.32
MW-03	18.67	16.14	11.97	1.97	11.51	0	7.16	15.30	<1	3.37	16.11	0	2.56
MW-04	15.27	12.72	10.23	0.23	10.47	0.5	4.80	14.25	<1	1.02	14.91	0	0.36
MW-05	14.57	11.73	7.77	-2.23	10.31	0.1	4.26	12.50	<1	2.07	12.79	0	1.78
MW-06	7.92	5.68	2.96	-7.04	6.75	0.1	1.17	7.78	<1	0.14	7.41	0	0.51
MW-07	12.63	10.35	5.88	-4.12	7.82	0.1	4.81	11.83	<1	0.80	15.67	0	-3.04
MW-08	9.63	6.72	-3.28	-13.28	19.22	0.2	-9.59	20.06	<1	-10.43	20.45	0	-10.82
MW-09	6.57	4.05	-0.15	-10.15	13.31	0.2	-6.74	14.35	<1	-7.78	12.88	0	-6.31
MW-10	5.80	3.40	-1.15	-11.15	12.40	0.2	-6.60	13.41	<1	-7.61	12.02	0	-6.22
MW-10D*	6.01	3.42	-54.71	-64.71				13.81	<1	-7.80	12.82	0	-6.81
MW-11	6.13	3.43	1.18	-8.82	11.91	0.2	-5.78	12.81	<1	-6.68	10.89	0	-4.76
MW-11D*	5.76	3.21	-52.95	-62.95				13.36	<1	-7.60	12.45	0	-6.69
MW-12	5.56	3.73	0.60	-9.40	11.39	0.2	-5.83	12.35	<1	-6.79	9.90	0	-4.34
MW-13S	13.73	11.67	6.17	-3.83	9.05	0	4.68	10.82	<1	2.91	12.01	0	1.72
MW-13D	14.23	11.83	-54.67	-64.67	24.80	0.2	-10.57	25.77	<1	-11.54	26.63	0	-12.40
MW-14S	24.08	22.12	9.12	-0.88	14.30	0	9.78	18.20	<1	5.88	21.30	0	2.78
MW-14D	24.19	22.11	-51.89	-61.89	36.59	0.2	-12.40	37.58	<1	-13.39	38.54	0	-14.35
MW-15S	6.53	3.92	1.92	-8.08	9.11	0.2	-2.58	9.71	<1	-3.18	11.15	0	-4.62
MW-15D	5.99	3.79	-54.21	-64.21	15.18	0.2	-9.19	16.24	<1	-10.25	16.28	0	-10.29
MW-16S	6.93	4.47	2.47	-7.53	6.69	0.3	0.24	6.64	<1	0.29	6.63	0	0.30
MW-16D	6.67	4.89	-55.11	-65.11	15.25	0.5	-8.58	16.22	<1	-9.55	16.05	0	-9.38
MW-17S	7.04	4.14	-1.06	-11.06	6.68	0.2	0.36	6.67	<1	0.37	5.59	0	1.45
MW-17D	6.87	4.40	-55.60	-65.60	14.73	0.2	-7.86	15.78	<1	-8.91	15.30	0	-8.43
MW-18S	5.79	3.33	1.33	-8.67	11.11	0.1	-5.32	12.02	<1	-6.23	10.14	0	-4.35
MW-18D	5.73	3.44	-55.56	-65.56	11.31	0.2	-5.58	12.2	<1	-6.47	10.83	0	-5.10

Notes:

All elevations are measured in feet according to mean sea

All depths to water are measured in feet below the top of well casing.

PID = Photoionization Detector

N/S = Not Screened

* = New Well construction - no previous data

Table 4-3
Matteo Iron and Metal
Water Sample Summary Table

Location	Sample ID	Lab ID	Analytical Parameters	Sampling Method	Date
SEEP SAMPLES					
SEEP-1	SP-1F	E80831-9	Lead (Filtered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-1	SP-1U	E80831-8	Lead (Unfiltered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-2	SP-2F	E80831-11	Lead (Filtered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-2	SP-2U	E80831-10	Lead (Unfiltered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-3	SP-3F	E80831-13	Lead (Filtered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-3	SP-3U	E80831-12	Lead (Unfiltered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-4	SP-4F	E80831-15	Lead (Filtered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-4	SP-4U	E80831-14	Lead (Unfiltered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-5	SP-5F	E80831-17	Lead (Filtered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-5	SP-5U	E80831-16	Lead (Unfiltered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-6	SP-6F	E81101-11	Lead (Filtered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-6	SP-6U	E81101-10	Lead (Unfiltered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-7	SP-7F	E81101-13	Lead (Filtered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-7	SP-7U	E81101-12	Lead (Unfiltered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-8	SP-8F	E81101-15	Lead (Filtered), Hardness	GRAB SAMPLE	11/16/2000
SEEP-8	SP-8U	E81101-14	Lead (Unfiltered), Hardness	GRAB SAMPLE	11/17/2000
SEEP-9	SP-9F	E81101-17	Lead (Filtered), Hardness	GRAB SAMPLE	11/17/2000
SEEP-9	SP-9U	E81101-16	Lead (Unfiltered), Hardness	GRAB SAMPLE	11/17/2000
SEEP-9	SP-9U - SP DUP-1	E81101-1	Lead (Unfiltered), Hardness	GRAB SAMPLE	11/17/2000
SEEP-10	SP-10F	E81101-19	Lead (Filtered), Hardness	GRAB SAMPLE	11/17/2000
SEEP-10	SP-10U	E81101-18	Lead (Unfiltered), Hardness	GRAB SAMPLE	11/17/2000
SURFACE WATER SAMPLES					
T1-C	T1-CHF	E81101-7	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/17/2000
T1-C	T1-CHU	E81101-6	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/17/2000
T1-C	T1-CLF	E81101-9	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/17/2000
T1-C	T1-CLU	E81101-8	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/17/2000
T1-D	T1-DHF	E81101-5	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/17/2000
T1-D	T1-DHU	E81101-4	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/17/2000
T1-D	T1-DLF	E81101-3	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/17/2000
T1-D	T1-DLU	E81101-2	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/17/2000
T3-C	T3-CHF	E80831-1	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/17/2000
T3-C	T3-CHU	E80830-10	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/15/2000
T3-C	T3-CLF	E80830-7	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/15/2000
T3-C	T3-CLU	E80830-6	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/15/2000
T3-D	T3-DHF	E80831-3	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/15/2000
T3-D	T3-DHU	E80831-2	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/15/2000
T3-D	T3-DLF	E80830-9	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/15/2000
T3-D	T3-DLU	E80830-8	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/15/2000
T3-D	T3-DHU - SWDUP-3	E80831-4	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/15/2000
T9C	T9CHF	E80583-18	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/15/2000
T9C	T9CHU	E80583-19	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/10/2000
T9-C	T9-CLF	E80722-3	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/10/2000
T9-C	T9-CLU	E80722-4	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/13/2000
T9D	T9DHF	E80583-16	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/13/2000
T9D	T9DHU	E80583-17	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/10/2000
T9-D	T9-DLF	E80722-1	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/10/2000
T9-D	T9-DLU	E80722-2	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/13/2000
T18-C	T18-CHF	E80722-16	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/13/2000
T18-C	T18-CHU	E80722-15	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/14/2000
T18-C	T18-CLF	E80830-2	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/14/2000
T18-C	T18-CLU	E80830-1	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/15/2000
T18-C	T18-CLU - SWDUP-2	E80830-3	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/15/2000
T18-D	T18-DHF	E80722-14	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/15/2000
T18-D	T18-DHU	E80722-13	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/14/2000
T18-D	T18-DLF	E80830-5	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/14/2000
T18-D	T18-DLU	E80830-4	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/15/2000
T25C	T25CHF	E80583-4	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/15/2000
T25C	T25CHU	E80583-5	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000
T25C	T25CHH	E80583-6	Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000
T25C	T25CLF	E80583-10	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000

Table 4-3
Matteo Iron and Metal
Water Sample Summary Table

Location	Sample ID	Lab ID	Analytical Parameters	Sampling Method	Date
SURFACE WATER SAMPLES					
T25C	T25CLU	E80583-11	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000
T25C	T25CLH	E80583-12	Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000
T25C	T25CHF - TDUPF1	E80583-13	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000
T25C	T25CHH - TDUPH1	E80583-15	Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000
T25C	T25CHU - TDUPU1	E80583-14	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000
T25D	T25DHF	E80583-1	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000
T25D	T25DHU	E80583-2	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000
T25D	T25DHH	E80583-3	Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000
T25D	T25DLF	E80583-7	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000
T25D	T25DLU	E80583-8	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000
T25D	T25DLH	E80583-9	Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000
T30-B	T30-BHU	E80722-11	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/9/2000
T30-B	T30-BLF	E80722-8	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/13/2000
T30-B	T30-BLU	E80722-7	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/13/2000
T30-C	T30-CHF	E80722-9	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/13/2000
T30-C	T30-CHU	E80722-10	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/13/2000
T30-C	T30-CLF	E80722-6	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/13/2000
T30-C	T30-CLU	E80722-5	Lead (Unfiltered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/13/2000
T90-B	T90-BHF	E80722-12	Lead (Filtered), Hardness, Salinity, pH, DO	GRAB SAMPLE	11/13/2000
MONITORING WELL SAMPLES (Round 1)					
MW-1	MW-01	E82056-41	METALS (Filtered)	TEFLON BAILER	12/8/2000
MW-2	MW-02	E81966-17	METALS (Filtered)	TEFLON BAILER	12/5/2000
MW-3	MW-03	E82056-36	METALS (Filtered)	TEFLON BAILER	12/8/2000
MW-4	MW-04	E82056-38	METALS (Filtered)	TEFLON BAILER	12/8/2000
MW-5	MW-05	E82056-21	METALS (Filtered)	TEFLON BAILER	12/6/2000
MW-6	MW-06	E82056-24	METALS (Filtered)	TEFLON BAILER	12/6/2000
MW-7	MW-07	E81966-16	METALS (Filtered)	TEFLON BAILER	12/5/2000
MW-8	MW-08	E82056-23	METALS (Filtered)	TEFLON BAILER	12/6/2000
MW-9	MW-09	E82056-12	METALS (Filtered)	TEFLON BAILER	12/6/2000
MW-10	MW-10	E82056-11	METALS (Filtered)	TEFLON BAILER	12/6/2000
MW-11	MW-11	E82056-10	METALS (Filtered)	TEFLON BAILER	12/6/2000
MW-12	MW-12	E82056-13	METALS (Filtered)	TEFLON BAILER	12/6/2000
MW-13S	MW-13D	E82056-25	METALS (Filtered)	TEFLON BAILER	12/6/2000
MW-13D	MW-13S	E82056-26	METALS (Filtered)	TEFLON BAILER	12/6/2000
MW-14S	MW-14D	E81966-11	METALS (Filtered)	TEFLON BAILER	12/6/2000
MW-14D	MW-14S	E81966-12	METALS (Filtered)	TEFLON BAILER	12/4/2000
MW-15S	MW-15D	E82056-22	METALS (Filtered)	TEFLON BAILER	12/4/2000
MW-15D	MW-15S	E82056-21	METALS (Filtered)	TEFLON BAILER	12/6/2000
MW-16S	MW-16D	E82056-39	METALS (Filtered)	TEFLON BAILER	12/6/2000
MW-16D	MW-16S	E82056-40	METALS (Filtered)	TEFLON BAILER	12/8/2000
MW-17S	MW-17D	E81966-14	METALS (Filtered)	TEFLON BAILER	12/8/2000
MW-17D	MW-17S	E81966-13	METALS (Filtered)	TEFLON BAILER	12/5/2000
MW-18S	MW-18D	E82056-9	METALS (Filtered)	TEFLON BAILER	12/5/2000
MW-18D	MW-18S	E82056-8	METALS (Filtered)	TEFLON BAILER	12/6/2000
MW-1	MW-01	E82056-33	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/6/2000
MW-2	MW-02	E81966-17	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/8/2000
MW-3	MW-03	E82056-27	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/5/2000
MW-4	MW-04	E82056-30	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/8/2000
MW-5	MW-05	E82056-28	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/8/2000
MW-6	MW-06	E82056-17	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/8/2000
MW-7	MW-07	E81966-8	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/7/2000
MW-8	MW-08	E82056-16	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/5/2000
MW-9	MW-09	E82056-5	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/7/2000
MW-10	MW-10	E82056-4	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/6/2000
MW-11	MW-11	E82056-3	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/6/2000
MW-12	MW-12	E82056-6	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/6/2000
MW-13S	MW-13D	E82056-18	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/6/2000
MW-13D	MW-13S	E82056-19	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/6/2000
MW-14S	MW-14D	E81966-1	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/6/2000
MW-14D	MW-14S	E81966-2	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/4/2000
MW-15S	MW-15D	E82056-15	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/4/2000
MW-15D	MW-15S	E82056-14	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/7/2000
MW-16S	MW-16D	E82056-31	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/7/2000
MW-16D	MW-16S	E82056-32	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/8/2000
MW-17S	MW-17D	E81966-5	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/8/2000
MW-17D	MW-17S	E81966-4	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/5/2000
MW-18S	MW-18D	E82056-2	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/5/2000
MW-18D	MW-18S	E82056-1	VOC, SVOC, PPCB, METALS (Unfiltered), CN	TEFLON BAILER	12/6/2000
PW-1	HOUWELL	E81965-2	VOC, SVOC, PPCB, METALS (Unfiltered)	TEFLON BAILER	12/6/2000
PW-1	PWDUP-1	E81965-3	VOC, SVOC, PPCB, METALS (Unfiltered)	GRAB SAMPLE	12/5/2000
PW-2	MIMWELL	E81965-1	VOC, SVOC, PPCB, METALS (Unfiltered)	GRAB SAMPLE	12/5/2000
				GRAB SAMPLE	12/4/2000

Table 4-3
Matteo Iron and Metal
Water Sample Summary Table

Location	Sample ID	Lab ID	Analytical Parameters	Sampling Method	Date
MONITORING WELL SAMPLES (Round 2)					
MW-1	MW-01	E85211-11	VOC, SVOC, PPCB, METALS	TEFLON TUBING	2/1/2001
MW-2	MW-02	E84957-1	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/26/2001
MW-3	MW-03	E85211-3	VOC, SVOC, PPCB, METALS	TEFLON TUBING	2/1/2001
MW-4	MW-04	E85211-6	VOC, SVOC, PPCB, METALS	TEFLON TUBING	2/1/2001
MW-5	MW-05	E84958-12	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/31/2001
MW-6	MW-06	E84958-13	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/31/2001
MW-7	MW-07	E85211-5	VOC, SVOC, PPCB, METALS	TEFLON TUBING	2/1/2001
MW-8	MW-08	E85211-12	VOC, SVOC, PPCB, METALS	TEFLON TUBING	2/2/2001
MW-9	MW-09	E84957-5	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/26/2001
MW-10	MW-10	E84957-6	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/26/2001
MW-11	MW-11	E85211-8	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/31/2001
MW-12	MW-12	E85211-1	VOC, SVOC, PPCB, METALS	TEFLON TUBING	2/1/2001
MW-13S	MW-13S	E84958-5	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/29/2001
MW-13D	MW-13D	E84958-6	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/29/2001
MW-14S	MW-14S	E84958-8	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/29/2001
MW-14D	MW-14D	E84958-7	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/29/2001
MW-15S	MW-15S	E84958-15	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/31/2001
MW-15D	MW-15D	E84958-16	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/31/2001
MW-16S	MW-16S	E84958-9	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/30/2001
MW-16D	MW-16D	E85211-4	VOC, SVOC, PPCB, METALS	TEFLON TUBING	2/1/2001
MW-17S	MW-17S	E84958-17	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/31/2001
MW-17D	MW-17D	E84958-18	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/31/2001
MW-18S	MW-18S	E84958-3	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/26/2001
MW-18D	MW-18D	E84958-4	VOC, SVOC, PPCB, METALS	TEFLON TUBING	1/26/2001
PW-1	PW-1	E84958-1A	VOC, SVOC, PPCB, METALS	GRAB SAMPLE	1/26/2001
PW-1	PWDUP-1	E84957-4A	VOC, SVOC, PPCB, METALS	GRAB SAMPLE	1/26/2001
PW-2	PW-2	E84957-2A	VOC, SVOC, PPCB, METALS	GRAB SAMPLE	1/26/2001
MONITORING WELL SAMPLES (Round 3)					
MW-10D	MW-10D	N12137-4	VOC and Metals (unfiltered)	TEFLON BAILER	4/9/2002
MW-11D	MW-11D	N12137-6	VOC and Metals (unfiltered)	TEFLON BAILER	4/10/2002
MW-14D	MW-14D	N12137-1	VOC and Metals (unfiltered)	TEFLON BAILER	4/9/2002
MW-14D	GW DUPE	N12137-9	VOC and Metals (unfiltered)	TEFLON BAILER	4/9/2002
MW-15D	MW-15D	N12137-2	VOC and Metals (unfiltered)	TEFLON BAILER	4/9/2002
MW-16D	MW-16D	N12137-5	VOC and Metals (unfiltered)	TEFLON BAILER	4/10/2002
MW-18D	MW-18D	N12137-3	VOC and Metals (unfiltered)	TEFLON BAILER	4/9/2002
POTABLE WELL SAMPLES					
Location	**Sample ID**	**Lab ID**	**Analytical Parameters**	**Sampling Method**	**Date Collected**
PW-3	PW-3	N2393 - 1	VOC and Metals	SPIGOT	11/8/2001
PW-3	PW-3	N1485 - 1	VOC and Metals	SPIGOT	10/25/2001

Table 4-4

Matteo Iron and Metal

Sediment Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
SEDIMENT SAMPLES						
S6	S6	E80721-5	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/14/2000
S7	S7-B	E81170-20	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
S7	S7-C	E81104-17	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
S8	S8-B	E81170-17	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
S8	S8-C	E81170-18	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
S9	S9-B	E81170-14	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
S9	S9-C	E81170-15	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
S10	S10-B	E81170-11	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
S10	S10-C	E81170-12	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
S11	S11-B	E81170-8	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
S11	S11-C	E81170-9	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
S12	S12-B	E81170-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
S12	S12-C	E81170-6	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
S13	S13-B	E81170-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
S13	S13-C	E81170-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
T1-A	T1-AB	E81104-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
T1-A	T1-AC	E81104-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/16/2000
T1-B	T1-BB	E81104-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/16/2000
T1-B	T1-BC	E81104-6	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/16/2000
T1-C	T1-CB	E81104-12	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/16/2000
T1-C	T1-CC	E81104-13	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/16/2000
T1-D	T1-DB	E81104-8	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/16/2000
T1-D	T1-DC	E81104-9	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/16/2000
T1-E	T1-EB	E81104-15	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/16/2000
T2-A	T2-AB	E79744-14	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/16/2000
T2-A	T2-AC	E79744-15	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T2-B	T2-BC	E79744-12	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T2-C	T2-CB	E79745-8	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T2-D	T2-DB	E79745-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T2-E	T2-EB	E79745-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T2-E	T2-EC	E79745-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T3-A	T3-AB	E80832-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T3-A	T3-AC	E80832-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/15/2000
T3-B	T3-BB	E80832-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/15/2000
T3-B	T3-BC	E80832-6	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/15/2000
T3-C	T3-CB	E80833-9	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/15/2000
T3-D	T3-DB	E80831-6	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/15/2000
T3-D	T3-DC	E80831-7	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/15/2000
T3-E	T3-EB	E80832-8	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/15/2000
T3-E	T3-EC	E80832-9	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/15/2000
T4-C	T4-CB	E79744-17	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/15/2000
T4-D	T4-DB	E79744-21	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/30/2000
T4-D	T4-DC	E79744-22	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/30/2000
T4-E	T4-EB	E79744-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/30/2000
T4-E	T4-EC	E79744-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/30/2000
T5-C	T5-CB	E79743-9	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/30/2000
T5-C	T5-CC	E79743-10	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T5-D	T5-DB	E79743-6	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T5-D	T5-DC	E79743-7	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/30/2000
T5-E	T5-EB	E79743-3	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/30/2000
T5-E	T5-EC	E79743-4	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/30/2000
T6-C	T6-CB	E79744-11	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/30/2000

Table 4-4

Matteo Iron and Metal

Sediment Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
				SEDIMENT SAMPLES		
T6-C	T6-CC	E79743-1	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/30/2000
T6-D	T6-DB	E79744-8	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/30/2000
T6-E	T6-EB	E79744-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/30/2000
T6-E	T6-EC	E79744-6	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/30/2000
T7-C	T7-CB	E79745-14	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T7-C	T7-CC	E79745-15	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T7-D	T7-DB	E79745-17	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T7-D	T7-DC	E79745-18	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T7-E	T7-EB	E79743-12	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T8-C	T8-CB	E79743-21	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T8-C	T8-CC	E79743-22	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T8-D	T8-DB	E79743-18	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T8-D	T8-DC	E79743-19	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T8-E	T8-EB	E79743-15	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T9-A	T9-AA	E80555-7	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T9-A	TDUP-17	E80555-10	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/10/2000
T9-A	T9-AB	E80555-8	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/10/2000
T9-A	T9-AC	E80555-9	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/10/2000
T9-B	T9-BB	E80555-12	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/10/2000
T9-B	T9-BC	E80555-13	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/10/2000
T9-C	T9-CA	E80555-4	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/10/2000
T9-C	T9-CB	E80555-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/10/2000
T9-C	T9-CC	E80555-6	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/10/2000
T9-D	T9-DA	E80555-1	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/10/2000
T9-D	T9-DB	E80555-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/10/2000
T9-D	T9-DC	E80555-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/10/2000
T9-E	T9-EB	E80555-15	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/10/2000
T9-E	T9-EC	E80555-16	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/10/2000
T10-C	T10-CA	E79933-1	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/1/2000
T11-A	T11-AB	E79555-12	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/27/2000
T11-A	T11-AC	E79555-13	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/27/2000
T11-B	T11-BB	E79555-15	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/27/2000
T11-B	T11-BC	E79555-16	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/27/2000
T11-C	T11-CB	E79555-9	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/27/2000
T11-C	T11-CC	E79555-10	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/27/2000
T11-D	T11-DB	E79555-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/27/2000
T11-D	T11-DC	E79555-6	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/27/2000
T11-E	T11-EB	E79555-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/27/2000
T13-A	T13-AC	E79453-5	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/25/2000
T13-B	T13-BB	E79453-1	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/25/2000
T13-B	T13-BC	E79453-2	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/25/2000
T13-C	T13-CB	E79452-16	1-2	PCB, Lead, pH, TOC	SED SAMPLER	10/25/2000
T13-D	T13-DA	E79452-18	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	10/25/2000
T13-D	T13-DC	E79452-20	2-3	PCB, Lead, pH, TOC	SED SAMPLER	10/25/2000
T13-E	T13-EC	E79452-13	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T17-A	T17-AB	E79931-17	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T17-B	T17-BB	E79931-14	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T17-B	T17-BC	E79931-15	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T17-C	T17-CB	E79932-7	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T17-C	T17-CC	E79932-8	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T17-D	T17-DB	E79931-11	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/1/2000
T17-E	T17-EB	E79931-8	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/1/2000
T17-E	T17-EC	E79931-9	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/1/2000

Table 4-4
Matteo Iron and Metal
Sediment Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
SEDIMENT SAMPLES						
T18-A	T18-AB	E80833-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/15/2000
T18-A	T18-AC	E80833-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/15/2000
T18-B	T18-BB	E80833-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/15/2000
T18-C	T18-CA	E80720-12	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/13/2000
T18-C	T18-CB	E80720-13	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/13/2000
T18-C	T18-CC	E80720-14	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/13/2000
T18-D	T18-DB	E80721-10	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/14/2000
T18-D	T18-DC	E80720-11	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/13/2000
T18-E	T18-EB	E80721-7	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/14/2000
T18-E	T18-EC	E80721-8	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/14/2000
T19-A	T19-AB	E79931-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/1/2000
T19-A	T19-AC	E79931-6	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/1/2000
T19-B	T19-BC	E79931-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/1/2000
T19-C	T19-CB	E79933-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/1/2000
T19-C	T19-CC	E79933-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/1/2000
T19-D	T19-DB	E79933-9	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/1/2000
T19-E	T19-EB	E79933-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/1/2000
T19-E	T19-EC	E79933-6	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/1/2000
T20-A	T20-AB	E79932-1	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T20-A	T20-AC	E79932-2	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T20-B	T20-BB	E79932-4	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T20-B	T20-BC	E79932-5	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T20-C	T20-CC	E79932-19	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T20-D	T20-DB	E79932-15	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T20-D	T20-DC	E79932-16	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T20-E	T20-EB	E79932-12	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T20-E	T20-EC	E79932-13	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T21-A	T21-AB	E80047-15	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T21-A	T21-AC	E80047-16	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T21-C	T21-CB	E80047-17	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T21-D	T21-DB	E80047-12	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T21-D	T21-DC	E80047-13	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T21-E	T21-EB	E80048-8	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T21-E	T21-EC	E80048-9	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T22-A	T22-AC	E80554-11	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T22-B	T22-BB	E80554-13	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T22-C	T22-CC	E80721-4	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T22-D	T22-DB	E80554-16	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/14/2000
T22-D	T22-DC	E80554-17	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T22-E	T22-EB	E80556-7	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T22-E	T22-EC	E80556-8	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T23-A	T23-AB	E81102-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T23-A	T23-AB	E81103-4	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T23-A	T23-AC	E81102-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T23-B	T23-BB	E81102-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T23-B	T23-BC	E81102-6	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T23-C	T23-CA	E81102-8	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T23-C	T23-CB	E81102-9	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T23-D	T23-DB	E81103-1	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T23-D	T23-DC	E81103-2	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T24-A	T24-AB	E80318-8	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T24-A	T24-AC	E80318-9	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T24-B	T24-BB	E80318-11	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000

Table 4-4
Matteo Iron and Metal
Sediment Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
SEDIMENT SAMPLES						
T24-B	T24-BC	E80318-12	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T24-D	T24-DB	E80318-15	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T24-D	T24-DC	E80318-16	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T24-E	T24-EB	E80556-4	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T24-E	T24-EC	E80556-5	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T25-A	T25-AB	E80556-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T25-B	T25-BB	E80554-10	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T25-C	T25-CA	E80554-8	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T25-D	T25-DB	E80554-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T25-D	T25-DC	E80554-6	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T25-E	T25-EB	E80554-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T25-E	T25-EC	E80554-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T26-A	T26-AC	E80047-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T26-B	T26-BB	E80048-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T26-B	T26-BC	E80048-6	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T26-C	T26-CB	E80048-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T26-C	T26-CC	E80048-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T26-D	T26-DB	E80047-9	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T26-D	T26-DC	E80047-10	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T26-E	T26-EC	E80047-7	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T27-A	T27-AC	E81103-20	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T27-B	T27-BB	E81103-16	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T27-B	T27-BC	E81103-17	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T27-C	T27-CB	E81103-12	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T27-C	T27-CC	E81103-13	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T27-D	T27-DB	E81103-9	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T27-D	T27-DC	E81103-10	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T27-E	T27-EB	E81103-6	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T27-E	T27-EC	E81103-7	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T28-A	T28-AB	E80157-12	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T28-A	T28-AC	E80157-13	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/6/2000
T28-B	T28-BB	E80157-8	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/6/2000
T28-B	T28-BC	E80157-9	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/6/2000
T28-C	T28-CC	E80157-16	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/6/2000
T28-D	T28-DB	E80157-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/6/2000
T28-E	T28-EB	E80157-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/6/2000
T29-A	T29-AB	E80317-8	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/6/2000
T29-A	T29-AC	E80317-9	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T29-B	T29-BB	E80318-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T29-B	T29-BC	E80318-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T29-C	T29-CB	E80318-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T29-C	T29-CC	E80318-6	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T29-D	T29-DB	E80317-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T29-D	T29-DC	E80317-6	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T29-E	T29-EB	E80317-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T29-E	T29-EC	E80317-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T30-A	T30-AB	E80720-2	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T30-A	T30-AC	E80720-3	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/13/2000
T30-B	T30-BB	E80720-5	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/13/2000
T30-B	T30-BC	E80720-6	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/13/2000
T30-C	T30-CB	E80721-14	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/13/2000
T30-C	T30-CC	E80721-15	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/13/2000
T30-D	T30-DB	E80720-8	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/13/2000

Table 4-4

Matteo Iron and Metal

Sediment Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
SEDIMENT SAMPLES						
T30-D	T30-DC	E80720-9	2-3	PCB, Lead, pH, TOC	SED SAMPLER	11/13/2000
T30-E	T30-EB	E80721-11	1-2	PCB, Lead, pH, TOC	SED SAMPLER	11/13/2000
S1	S1	E80721-1	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/13/2000
S2	S2	E80721-20	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/13/2000
S3	S3	E80721-19	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/13/2000
S4	S4	E80721-17	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/13/2000
S5	S5	E80721-18	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/13/2000
S7	S7-A	E81170-19	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/20/2000
S7	SDUP-1	E81104-18	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/20/2000
S8	S8-A	E81170-16	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/20/2000
S9	S9-A	E81170-13	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/20/2000
S10	S10-A	E81170-10	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/20/2000
S11	S11-A	E81170-7	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/20/2000
S12	S12-A	E81170-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/20/2000
S13	S13-A	E81170-1	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/20/2000
T1-A	T1-AA	E81104-1	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/16/2000
T1-B	T1-BA	E81104-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/16/2000
T1-C	T1-CA	E81104-11	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/16/2000
T1-D	T1-DA	E81104-7	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/16/2000
T1-D	TDUP-21	E81104-10	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/16/2000
T1-E	T1-EC	E81104-16	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/16/2000
T2-A	T2-AA	E79744-13	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/31/2000
T2-B	T2-BA	E79745-10	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/31/2000
T2-B	T2-BB	E79745-11	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/31/2000
T2-C	T2-CA	E79745-7	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/31/2000
T2-C	T2-CC	E79745-9	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/31/2000
T2-D	T2-DA	E79745-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/31/2000
T2-D	T2-DC	E79745-6	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/31/2000
T3-A	T3-AA	E80832-1	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/15/2000
T3-B	T3-BA	E80832-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/15/2000
T3-C	T3-CA	E80833-8	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/15/2000
T3-C	T3-CC	E80833-10	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/15/2000
T3-D	T3-DA	E80831-5	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/15/2000
T4-C	T4-CA	E79744-16	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/30/2000
T4-C	TDUP5	E79744-19	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	10/30/2000
T4-C	T4-CC	E79744-18	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/30/2000
T4-D	T4-DA	E79744-20	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/30/2000
T5-C	T5-CA	E79743-8	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/31/2000
T5-D	T5-DA	E79743-5	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/30/2000
T6-C	T6-CA	E79744-10	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/30/2000
T6-D	T6-DA	E79744-7	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/30/2000
T6-D	T6-DC	E79744-9	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/30/2000
T7-C	T7-CA	E79745-13	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/31/2000
T7-D	T7-DA	E79745-16	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/31/2000
T7-E	T7-EC	E79743-13	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/31/2000
T8-C	T8-CA	E79743-20	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/31/2000
T8-C	TDUP6	E79745-12	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	10/31/2000
T8-D	T8-DA	E79743-17	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/31/2000
T8-E	T8-EC	E79743-16	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/31/2000
T9-B	T9-BA	E80555-11	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/10/2000
T11-A	T11-AA	E79555-11	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/27/2000
T11-B	T11-BA	E79555-14	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/27/2000
T11-C	T11-CA	E79555-8	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/27/2000

Table 4-4
Matteo Iron and Metal
Sediment Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
SEDIMENT SAMPLES						
T11-D	T11-DA	E79555-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/27/2000
T11-D	TDUP4	E79555-7	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	10/27/2000
T11-E	T11-EC	E79555-3	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/27/2000
T13-A	T13-AA	E79453-3	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/25/2000
T13-A	T13-AB	E79453-4	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/25/2000
T13-C	T13-CA	E79452-15	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/25/2000
T13-D	T13-DB	E79452-19	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/25/2000
T13-E	T13-EB	E79452-12	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/25/2000
T13-R	T13-RA	E79452-21	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/25/2000
T14-A	T14-AA	E78963-7	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T14-A	T14-AB	E78963-8	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T14-A	T14-AC	E78963-9	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T14-B	T14-BA	E78963-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T14-B	T14-BB	E78963-5	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T14-B	T14-BC	E78963-6	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T14-C	T14-CA	E78964-6	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T14-C	T14-CB	E78964-7	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T14-C	T14-CC	E78964-8	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T14-D	T14-DA	E78963-1	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T14-D	T14-DB	E78963-2	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T14-D	T14-DC	E78963-3	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T14-E	T14-EB	E78964-10	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T14-E	T14-EC	E78964-11	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T15-A	T15-AA	E78963-18	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/17/2000
T15-A	T15-AB	E78963-19	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/17/2000
T15-A	T15-AC	E78963-20	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/17/2000
T15-B	T15-BA	E78963-21	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/17/2000
T15-B	T15-BB	E78964-1	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/17/2000
T15-B	T15-BC	E78964-2	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/17/2000
T15-C	T15-CA	E78964-3	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T15-C	T15-CB	E78964-4	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T15-C	T15-CC	E78964-5	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/18/2000
T15-D	T15-DA	E78963-15	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/17/2000
T15-D	T15-DB	E78963-16	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/17/2000
T15-D	T15-DC	E78963-17	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/17/2000
T15-E	T15-EB	E78963-12	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/17/2000
T15-E	T15-EC	E78963-13	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/17/2000
T16-A	T16-AA	E79452-1	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T16-A	T16-AB	E79452-2	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T16-A	TDUP3	E79452-4	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T16-A	T16-AC	E79452-3	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T16-B	T16-BA	E79452-8	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T16-B	T16-BB	E79452-9	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T16-B	T16-BC	E79452-10	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T16-C	T16-CA	E79452-5	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T16-C	T16-CB	E79452-6	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T16-C	T16-CC	E79452-7	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T16-D	T16-DA	E79453-6	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T16-D	T16-DB	E79453-7	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T16-D	T16-DC	E79453-8	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T16-E	T16-EB	E79453-10	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T16-E	T16-EC	E79453-11	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	10/26/2000
T17-A	T17-AA	E79931-16	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/2/2000

Table 4-4

Matteo Iron and Metal

Sediment Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
SEDIMENT SAMPLES						
T17-A	T17-AC	E79931-18	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/2/2000
T17-B	T17-BA	E79931-13	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/2/2000
T17-C	T17-CA	E79932-6	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/2/2000
T17-D	T17-DA	E79932-9	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/2/2000
T17-D	TDUP-9	E79932-10	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T17-D	T17-DC	E79931-12	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/2/2000
T18-A	T18-AA	E80833-1	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/15/2000
T18-B	T18-BA	E80833-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/15/2000
T18-B	TDUP-19	E80833-7	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/15/2000
T18-B	T18-BC	E80833-6	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/15/2000
T18-D	T18-DA	E80721-9	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/14/2000
T19-A	T19-AA	E79931-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/1/2000
T19-B	T19-BA	E79931-1	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/1/2000
T19-B	T19-BB	E79931-2	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/1/2000
T19-D	T19-DA	E79933-8	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/1/2000
T19-D	T19-DC	E79933-10	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/1/2000
T20-A	T20-AA	E79931-10	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/2/2000
T20-B	T20-BA	E79932-3	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/2/2000
T20-C	T20-CA	E79932-17	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/2/2000
T20-C	TDUP-8	E79932-20	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/2/2000
T20-C	T20-CB	E79932-18	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/2/2000
T20-D	T20-DA	E79932-14	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/2/2000
T21-B	T21-BA	E80157-17	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/6/2000
T21-D	T21-DA	E80047-11	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/3/2000
T21-E	T21-EA	E80048-7	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/3/2000
T21-E	TDUP11	E80048-10	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T22-A	T22-AA	E80556-9	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/9/2000
T22-A	TDUP-16	E80554-19	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/9/2000
T22-A	T22-AB	E80556-10	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/9/2000
T22-B	T22-BA	E80554-12	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/9/2000
T22-B	T22-BC	E80554-14	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/9/2000
T22-C	T22-CA	E80721-2	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/14/2000
T22-D	T22-DA	E80554-15	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/9/2000
T23-A	T23-AA	E81102-1	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/17/2000
T23-B	T23-BA	E81102-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/17/2000
T23-B	TDUP-22	E81102-7	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T23-D	T23-DA	E81102-10	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/17/2000
T24-A	T24-AA	E80318-7	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/8/2000
T24-B	T24-BA	E80318-10	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/8/2000
T24-B	TDUP14	E80318-13	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T24-D	T24-DA	E80318-14	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/8/2000
T25-A	T25-AA	E80556-1	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/9/2000
T25-B	T25-BA	E80554-9	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/9/2000
T25-C	T25-CB	E80554-7	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/9/2000
T25-D	T25-DA	E80554-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/9/2000
T26-A	T26-AA	E80047-1	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/3/2000
T26-A	TDUP-10	E80047-4	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/3/2000
T26-A	T26-AB	E80047-2	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/3/2000
T26-B	T26-BA	E80048-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/3/2000
T26-C	T26-CA	E80048-1	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/3/2000
T26-D	T26-DA	E80047-8	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/3/2000
T26-E	T26-EB	E80047-6	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/3/2000
T27-A	T27-AA	E81103-18	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/17/2000

Table 4-4

Matteo Iron and Metal

Sediment Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
SEDIMENT SAMPLES						
T27-A	T27-AB	E81103-19	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/17/2000
T27-B	T27-BA	E81103-15	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/17/2000
T27-C	T27-CA	E81103-11	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/17/2000
T27-C	TDUP-23	E81103-14	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/17/2000
T27-D	T27-DA	E81103-8	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/17/2000
T28-A	T28-AA	E80157-11	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/6/2000
T28-B	T28-BA	E80157-7	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/6/2000
T28-B	TDUP12	E80157-10	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/6/2000
T28-C	T28-CA	E80157-14	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/6/2000
T28-C	T28-CB	E80157-15	1-2	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/6/2000
T28-D	T28-DA	E80157-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/6/2000
T28-D	T28-DC	E80157-6	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/6/2000
T28-E	T28-EC	E80157-3	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/6/2000
T29-A	T29-AA	E80317-7	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/8/2000
T29-A	TDUP13	E80317-10	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/8/2000
T29-B	T29-BA	E80318-1	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/8/2000
T29-C	T29-CA	E80318-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/8/2000
T29-D	T29-DA	E80317-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/8/2000
T30-B	T30-BA	E80720-4	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/13/2000
T30-B	TDUP-18	E80721-16	0-0.5	PCB, Lead, pH, TOC	SED SAMPLER	11/13/2000
T30-C	T30-CA	E80721-13	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/13/2000
T30-D	T30-DA	E80720-7	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/13/2000
T30-E	T30-EA	E80720-10	0-0.5	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/13/2000
T30-E	T30-EC	E80721-12	2-3	PCB, Lead, pH, TOC, Grain Size	SED SAMPLER	11/13/2000
T3-E	TDUP-20	E80832-10	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH	SED SAMPLER	11/15/2000
T13-E	TDUP2	E79452-14	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH	SED SAMPLER	10/25/2000
T19-E	TDUP-7	E79933-7	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH	SED SAMPLER	11/1/2000
T20-E	T20-EA	E79932-11	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH	SED SAMPLER	11/02/00
T25-E	TDUP-15	E80554-18	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH	SED SAMPLER	11/9/2000
S14	S14	E81503-1	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/28/00
T1-E	T1-EA	E81104-14	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/16/00
T2-E	T2-EA	E79745-1	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	10/31/2000
T3-E	T3-EA	E80832-7	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/15/2000
T4-E	T4-EA	E79744-1	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	10/30/2000
T5-E	T5-EA	E79743-2	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	10/30/2000
T6-E	T6-EA	E79744-4	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	10/30/2000
T7-E	T7-EA	E79743-11	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	10/31/2000
T8-E	T8-EA	E79743-14	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	10/31/2000
T9-E	T9-EA	E80555-14	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/10/2000
T11-E	T11-EA	E79555-1	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	10/27/00
T13-E	T13-EA	E79452-11	2.0-2.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	10/25/00
T14-E	T14-EA	E78964-9	1.0-1.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	10/18/00
T15-E	T15-EA	E78963-11	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	10/17/00
T15-E	TDUP-1	E78963-14	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	10/17/2000
T16-E	T16-EA	E79453-9	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	10/26/00
T17-E	T17-EA	E79931-7	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/01/00
T18-E	T18-EA	E80721-6	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/14/00
T19-E	T19-EA	E79933-4	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/01/00
T21-A	T21-AA	E80047-14	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/03/00
T22-E	T22-EA	E80556-6	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/09/00
T23-E	T23-EA	E81103-3	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/17/00
T24-E	T24-EA	E80556-3	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/09/00
T25-E	T25-EA	E80554-1	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/09/00

Table 4-4

Matteo Iron and Metal

Sediment Sample Summary Table

Location	Sample ID	Lab ID	Depth (ft. bgs)	Analytical Parameters	Sampling Method	Date
SEDIMENT SAMPLES						
T26-E	T26-EA	E80047-5	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/3/2000
T27-E	T27-EA	E81103-5	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/17/2000
T28-E	T28-EA	E80157-1	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/6/2000
T29-E	T29-EA	E80317-1	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/8/2000
T30-AA	T30-AA	E80720-1	0-0.5	VOC, SVOC, PPCB, METALS, TOC, pH, Grain Size	SED SAMPLER	11/13/2000

TABLE 5-1
Matteo Iron and Metal
PCB Exceedances in Shallow Soil

Sample Location	Sample ID	Lab ID	Date	Depth ft	Aroclor 1248 mg/kg	Aroclor 1254 mg/kg	Aroclor 1260 mg/kg	Total Aroclor mg/kg	Residential Criteria	Non Residential Criteria	Field Screening
New Jersey Soil Cleanup Criteria									0.49	2	> 0.5 ppm
SS22	SS22B	E78043-11	10/2/2000	1-1.5	0.035 U	**6**	0.035 U	**6**	**6**	**6**	Yes
	SS22C		10/10/2000	2-2.5							Yes
	SS22D	E78671-1	10/11/2000	3-3.5	0.036 U	**0.28**	0.036 U	**0.28**	**0.28**	**0.28**	No
S22N1	S22N1A		9/14/2000	0-0.5							Yes
S22N3	S22N3A		9/29/2000	0-0.5							Yes
S22N6	S22N6A		10/2/2000	0-0.5							Yes
	S22N6B	E79272-7	10/24/2000	1-1.5	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	
S22N9	S22N9A		10/2/2000	0-0.5							Yes
S22N12	S22N12A		10/4/2000	0-0.5							Yes
	S22N12B	E79272-5	10/24/2000	1-1.5	0.042 U	**1.200 J**	**0.260 J**	**1.46**	**1.46**	**1.46**	
	S22N12C	E85530-14	2/6/2001	2-2.5	0.037 U	**0.25**	0.037 U	**0.25**	**0.25**	**0.25**	
S22N15	S22N15A	E78266-8	10/5/2000	0-0.5	0.038 U	**21**	0.038 U	**21**	**21**	**21**	Yes
S22N18	S22N18A		10/5/2000	0-0.5							Yes
	S22N18B	E79272-3	10/24/2000	3-3.5	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	
S22N21	S22N21A		10/5/2000	0-0.5							Yes
S22N24	S22N24A		10/6/2000	0-0.5							Yes
	S22N24B		10/12/2000	1-1.5							Yes
	S22N24C	E79272-1	10/24/2000	2-2.5	0.040 U	0.040 U	**0.096**	**0.096**	**0.096**	**0.096**	
S22NE6	S22NE6A	E78265-12	10/5/2000	0-0.5	0.039 U	**3**	0.039 U	**3**	**3**	**3**	Yes
	22NE6B	E79272-11	10/24/2000	1-1.5	0.035 U	**0.39**	0.035 U	**0.39**	**0.39**	**0.39**	
22NE12	22NE12A		10/6/2000	0-0.5							Yes
	22NE12B	E79272-9	10/24/2000	1-1.5	0.042 U	**0.37**	**0.11**	**0.48**	**0.48**	**0.48**	
S22E1	S22E1A		9/14/2000	0-0.5							Yes
S22E3	S22E3A		9/29/2000	0-0.5							Yes
S22SE6	S22SE6A		10/5/2000	0-0.5							Yes
	S22SE6B	E79140-2	10/19/2000	1-1.5	0.038 U	**3.5**	**1.8**	**5.3**	**5.3**	**5.3**	
	S22SE6C	E79140-3	10/19/2000	2-2.5	0.040 U	**0.41**	**0.092**	**0.502**	**0.502**	**0.502**	
	S22SE6D	E85530-12	2/6/2001	3-3.5	0.039 U	**0.11**	0.039 U	**0.11**	**0.11**	**0.11**	
S22SE12	22SE12A	E78372-4	10/6/2000	0-0.5	0.040 U	**9.6**	0.040 U	**9.6**	**9.6**	**9.6**	Yes
	22SE12B	E78964-18	10/19/2000	1-1.5	0.036 U	**0.24**	**0.13**	**0.37**	**0.37**	**0.37**	
	22SE12C	E78964-19	10/19/2000	2-2.5	0.035 U	**0.24**	**0.063**	**0.303**	**0.303**	**0.303**	
22SE18	22SE18A	E78373-9	10/10/2000	0-0.5	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	No
S22S1	S22S1A		9/14/2000	0-0.5							Yes
S22S3	S22S3A		9/29/2000	0-0.5							Yes
S22S6	S22S6A		10/2/2000	0-0.5							Yes
	S2256B	E79140-8	10/20/2000	1-1.5	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	
	S22S6C	E79140-9	10/20/2000	2-2.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	
	PCBDUP9	E79140-10	10/20/2000	2-2.5	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	
S22S9	S22S9A		10/2/2000	0-0.5							Yes
S22S12	S22S12A	E78266-3	10/4/2000	0-0.5	0.037 U	**15**	0.037 U	**15**	**15**	**15**	Yes
	S22S12B	E79140-6	10/20/2000	1-1.5	0.035 U	**0.044**	0.035 U	**0.044**	**0.044**	**0.044**	
	S22S12C	E79140-7	10/20/2000	2-2.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	
S22S15	S22S15A		10/5/2000	0-0.5							Yes
S22S18	S22S18A		10/5/2000	0-0.5							Yes
	S22S18B	E79140-4	10/19/2000	1-1.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
	S22S18C	E79140-5	10/19/2000	2-2.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
S22S21	S22S21A	E78265-10	10/5/2000	0-0.5	0.035 U	**0.28**	**0.1**	**0.38**	**0.38**	**0.38**	No
S22S30	S22530A	E78373-17	10/10/2000	0-0.5	0.036 U	**0.072**	0.036 U	**0.072**	**0.072**	**0.072**	No
S22SW6	S22SW6A		10/5/2000	0-0.5							Yes
	S22SW6B	E78964-22	10/19/2000	1-1.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	
	S22SW6C	E79140-1	10/19/2000	2-2.5	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	
22SW12	22SW12A		10/6/2000	0-0.5							Yes
	22SW12B	E78964-20	10/19/2000	1-1.5	0.042 U	**0.066 J**	0.042 U	**0.066**	**0.066**	**0.066**	
	22SW12C	E78964-21	10/19/2000	2-2.5	0.038 U	**1.2**	**0.270 J**	**1.47**	**1.47**	**1.47**	
	22SW12D	E85530-13	06-FEB-01	3-3.5	0.052 U	**2.8**	**0.45 J**	**3.25**	**3.25**	**1.92**	
S22W1	S22W1A	E76840-1	9/14/2000	0-0.5	0.037 U	**4.8 J**	**0.63**	**5.43**	**5.43**	**5.43**	Yes
	PCBDUP3	E76840-4	9/14/2000	0-0.5	0.036 U	**4.4 J**	**0.71**	**5.11**	**5.11**	**5.11**	
S22W3	S22W3A		9/29/2000	0-0.5							Yes
	S22W3B	E78964-16	10/19/2000	1-1.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
	S22W3C	E78964-17	10/19/2000	2-2.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	
S22W6	S22W6A		10/2/2000	0-0.5							Yes
S22W9	S22W9A		10/2/2000	0-0.5							Yes
	S22W9B	E78964-14	10/19/2000	1-1.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
	S22W9C	E78964-15	10/19/2000	2-2.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
S22W12	S22W12A		10/4/2000	0-0.5							Yes
S22W15	S22W15A		10/5/2000	0-0.5							Yes
	S22W15B		10/12/2000	1-1.5							Yes
	S22W15C	E78964-12	10/19/2000	2-2.5	0.037 U	**0.12**	0.037 U	**0.12**	**0.12**	**0.12**	
	S22W15D	E78964-13	10/19/2000	3-3.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
S22W18	S22W18A		10/5/2000	0-0.5							Yes
S22W21	S22W21A		10/5/2000	0-0.5							Yes
	S22W21B	E78671-6	10/11/2000	1-1.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	No
S22NW6	S22NW6A	E78265-11	10/5/2000	0-0.5	0.035 U	**0.41 J**	**0.1 J**	**0.51**	**0.51**	**0.51**	No
22NW12	22NW12A		10/6/2000	0-0.5							Yes
	22NW12B	E79272-19	10/24/2000	1-1.5	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	
22NW18	22NW18A	E78373-8	10/10/2000	0-0.5	0.033 U	**0.096 J**	0.082	**0.178**	**0.178**	**0.178**	No
SS25	SS25B		9/7/2000	1-1.5							Yes
	SS25C	E76418-1	9/7/2000	2-2.5	0.034 U	**0.12**	0.034 U	**0.12**	**0.12**	**0.12**	No

TABLE 5-1
Matteo Iron and Metal
PCB Exceedances in Shallow Soil

Sample Location	Sample ID	Lab ID	Date	Depth ft	Aroclor 1248 mg/kg	Aroclor 1254 mg/kg	Aroclor 1260 mg/kg	Total Aroclor mg/kg	Residential Criteria	Non Residential Criteria	Field Screening
New Jersey Soil Cleanup Criteria									0.49	2	> 0.5 ppm
S25N1	S25N1A		9/7/2000	0-0.5							Yes
S25N3	S25N3A	E76419-20	9/7/2000	0-0.5	0.035 U	**0.054**	0.035 U	**0.054**	**0.054**	**0.054**	No
S25N6	S25N6A		10/4/2000	0-0.5							Yes
	S25N6B	E78671-9	10/11/2000	1-1.5	0.037 U	**0.086**	**0.038**	**0.124**	**0.124**	**0.124**	No
S25N9	S25N9A	E78266-5	10/5/2000	0-0.5	0.034 U	**0.089 J**	0.034 U	**0.089**	**0.089**	**0.089**	No
S25NE6	S25NE6A		10/4/2000	0-0.5							Yes
	S25NE6B		10/11/2000	1-1.5							Yes
	S25NE6C		10/12/2000	2-2.5							Yes
	S25NE6D	E79272-13	10/24/2000	3-3.5	0.035 U	**0.039**	0.035 U	**0.039**	**0.039**	**0.039**	
S25NE8	S25NE8A	E78266-6	10/5/2000	0-0.5	0.037 U	**0.11 J**	0.037 U	**0.11**	**0.11**	**0.11**	No
S25E1	S25E1A		9/7/2000	0-0.5							Yes
S25E3	S25E3A		9/7/2000	0-0.5							Yes
S25E5	S25E5A		9/8/2000	0-0.5							Yes
S25E7	S25E7A	E76418-5	9/8/2000	0-0.5	0.034 U	**0.16**	**0.056**	**0.216**	**0.216**	**0.216**	No
S25SE6	S25SE6A		10/4/2000	0-0.5							Yes
	S25SE6B		10/12/2000	1-1.5							Yes
	S25SE6C	E79140-19	10/20/2000	2-2.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	
	S25SE6D	E79140-20	10/20/2000	3-3.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	
S25SE0	S25SE0A		10/5/2000	0-0.5							Yes
	S25SE0B		10/12/2000	1-1.5							Yes
S25S1	S25S1A		9/7/2000	0-0.5							Yes
S25S3	S25S3A	E76419-21	9/7/2000	0-0.5	0.035 U	**0.2**	0.035 U	**0.2**	**0.2**	**0.2**	No
S25S8	S25S8A		10/5/2000	0-0.5							Yes
	S25S8B	E78671-15	10/12/2000	1-1.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	No
S25S10	S25S10A	E78266-10	10/5/2000	0-0.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	No
S25W1	S25W1A		9/7/2000	0-0.5							Yes
S25W4	S25W4A		9/7/2000	0-0.5							Yes
S26N1	S26N1A	E76234-7	9/5/2000	0-0.5	0.036 U	**2.1**	0.036 U	**2.1**	**2.1**	**2.1**	Yes
	S26N1B		9/6/2000	1-1.5							Yes
	S26N1C	E76419-22	9/7/2000	2-2.5	0.038 U	**2.6**	0.038 U	**2.6**	**2.6**	**2.6**	No
S26N2	S26N2A		9/6/2000	0-0.5							Yes
	S26N2B		9/7/2000	1-1.5							Yes
S26N3	S26N3A	E76234-1	9/6/2000	0-0.5	0.037 U	**0.11**	0.037 U	**0.11**	**0.11**	**0.11**	No
S26N11	S26N11A		10/5/2000	0-0.5							Yes
S26N13	S26N13A		10/5/2000	0-0.5							Yes
S26NE2	S26NE2A		9/6/2000	0-0.5							Yes
S26NE4	S26NE4A		9/8/2000	0-0.5							Yes
S26NE6	S26NE6A		9/8/2000	0-0.5							Yes
	S26NE6B	E78671-8	10/11/2000	1-1.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	No
	PCBDUP8	E78671-10	10/11/2000	1-1.5	0.050 U	0.050 U	**0.053**	**0.053**	**0.053**	**0.053**	
S26NE9	S26NE9A	E78043-7	10/2/2000	0-0.5	0.036 U	**0.08**	**0.064**	**0.144**	**0.144**	**0.144**	No
S26NE0	S26NE0A		10/4/2000	0-0.5							Yes
S26E1	S26E1A	E76235-3	9/5/2000	0-0.5	0.037 U	**0.12**	0.037 U	**0.12**	**0.12**	**0.12**	No
S26E5	S26E5A	E76418-7	9/8/2000	0-0.5	0.038 U	**0.2**	0.038 U	**0.2**	**0.2**	**0.2**	No
S26E7	S26E7A	E76418-9	9/8/2000	0-0.5	0.036 U	**0.15**	0.036 U	**0.15**	**0.15**	**0.15**	No
S26S1	S26S1A	E76235-2	9/5/2000	0-0.5	0.036 U	**0.7**	0.036 U	**0.7**	**0.7**	**0.7**	No
S26W1	S26W1A		9/5/2000	0-0.5							Yes
	S26W1B		9/6/2000	1-1.5							Yes
S26W2	S26W2A	E76235-1	9/6/2000	0-0.5	0.036 U	**0.18 J**	0.036 U	**0.18**	**0.18**	**0.18**	No
S26NW2	S26NW2A		9/6/2000	0-0.5							Yes
S26NW4	S26NW4A		9/8/2000	0-0.5							Yes
	S26NW4B		10/11/2000	1-1.5							Yes
	S26NW4C	E78671-12	10/12/2000	2-2.5	0.036 U	**7.7 D**	0.036 U	**7.7**	**7.7**	**7.7**	Yes
S26NW6	S26NW6A	E76418-13	9/8/2000	0-0.5	0.035 U	**0.059 J**	0.035 U	**0.059**	0.059	**0.059**	No
26NW11	26NW11A	E78265-7	10/5/2000	0-0.5	0.050 U	**2**	**0.65**	**2.65**	**2.65**	**2.65**	Yes
SS27	SS27C	E76235-7	9/6/2000	2-2.5	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U	No
	PCBDUP1	E76234-2	9/6/2000		0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	
S27N1	S27N1A		9/5/2000	0-0.5							Yes
	S27N1B		9/6/2000	1-1.5							Yes
	S27N1C	E76235-8	9/6/2000	2-2.5	0.034 U	**0.08**	0.034 U	**0.08**	**0.08**	**0.08**	No
S27N2	S27N2A		9/6/2000	0-0.5							Yes
	S27N2B	E76418-4	9/7/2000	1-1.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	Yes
	PCBDUP2	E76418-2	9/7/2000	1-1.5	0.035 U	**0.41**	0.035 U	**0.41**	**0.41**	**0.41**	
	S27N2C		9/8/2000	2-2.5							Yes
S27NE2	S27NE2A		9/6/2000	0-0.5							Yes
S27E1	S27E1A	E76234-8	9/5/2000	0-0.5	0.035 U	**1.1**	0.035 U	**1.1**	**1.1**	**1.1**	Yes
	S27E1B	E76235-4	9/6/2000	1-1.5	0.035 U	**0.092**	0.035 U	**0.092**	**0.092**	**0.092**	No
S27E2	S27E2A	E76235-6	9/6/2000	0-0.5	0.035 U	**0.22**	0.035 U	**0.22**	**0.22**	**0.22**	No
S27SE3	S27SE3A		9/7/2000	0-0.5							Yes
S27SE5	S27SE5A	E76418-12	9/8/2000	0-0.5	0.034 U	**0.12 J**	0.034 U	**0.12**	**0.12**	**0.12**	Yes
	27SE5B	E79140-17	10/20/2000	1-1.5	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	
	27SE5C	E79140-18	10/20/2000	2-2.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
S27SE7	S27SE7A	E76418-10	9/8/2000	0-0.5	0.034 U	**0.11 J**	0.034 U	**0.11**	**0.11**	**0.11**	No
S27S1	S27S1A		9/5/2000	0-0.5							Yes
	S27S1B		9/6/2000	1-1.5							Yes
	S27S1C	E76235-9	9/6/2000	2-2.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	No

TABLE 5-1
Matteo Iron and Metal
PCB Exceedances in Shallow Soil

Sample Location	Sample ID	Lab ID	Date	Depth ft	Aroclor 1248 mg/kg	Aroclor 1254 mg/kg	Aroclor 1260 mg/kg	Total Aroclor mg/kg	Residential Criteria	Non Residential Criteria	Field Screening
New Jersey Soil Cleanup Criteria									0.49	2	> 0.5 ppm
S27S2	S27S2A	E76235-5	9/6/2000	0-0.5	0.034 U	**0.12**	0.034 U	**0.12**	**0.12**	**0.12**	No
S27S5	S27S5A	E76418-11	9/8/2000	0-0.5	0.039 U	**0.41**	0.039 U	**0.41**	**0.41**	**0.41**	Yes
S27S7	S27S7A		9/8/2000	0-0.5							Yes
	S27S7B	E78671-11	10/12/2000	1-1.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	No
S27S0	S27S0A		10/4/2000	0-0.5							Yes
S27S12	S27S12A		10/5/2000	0-0.5							Yes
S27S14	S27S14A		10/5/2000	0-0.5							Yes
	S27S14B	E78671-5	10/11/2000	1-1.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	No
S27S16	S27S16A	E78266-11	10/5/2000	0-0.5	0.035 U	0.035 U	**0.081**	**0.081**	**0.081**	**0.081**	No
S27SW2	S27SW2A		9/6/2000	0-0.5							Yes
S27SW4	S27SW4A		9/8/2000	0-0.5							Yes
S27SW6	S27SW6A		9/8/2000	0-0.5							Yes
	27SW6B	E79140-15	10/20/2000	1-1.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	
	27SW6C	E79140-16	10/20/2000	2-2.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
S27W1	S27W1A		9/5/2000	0-0.5							Yes
	S27W1B		9/6/2000	1-1.5							Yes
	S27W1C	E76235-10	9/6/2000	2-2.5	0.035 U	**0.054 J**	0.035 U	**0.054**	**0.054**	**0.054**	No
S27W2	S27W2A		9/6/2000	0-0.5							Yes
	S27W2B	E76235-11	9/6/2000	1-1.5	0.034 U	**0.067 J**	0.034 U	**0.067**	**0.067**	**0.067**	No
S27W3	S27W3A		9/6/2000	0-0.5							Yes
S27NW2	S27NW2A		9/6/2000	0-0.5							Yes
SS28	SS28B		9/7/2000	1-1.5							Yes
	SS28C		9/7/2000	2-2.5							Yes
S28N1	S28N1A		9/7/2000	0-0.5							Yes
S28N3	S28N3A	E76419-19	9/7/2000	0-0.5	0.038 U	**0.11**	0.038 U	**0.11**	**0.11**	**0.11**	No
S28N8	S28N8A	E78373-7	10/10/2000	0-0.5	0.035 U	**0.16 J**	0.035 U	**0.16**	**0.16**	**0.16**	No
S28E1	S28E1A	E76418-3	9/7/2000	0-0.5	0.038 U	**13 DJ**	0.038 U	**13**	**13**	**13**	Yes
S28E2	S28E2A		9/7/2000	0-0.5							Yes
	S28E2B	E79272-17	10/24/2000	1-1.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	
S28S1	S28S1A		9/7/2000	0-0.5							Yes
S28S2	S28S2D		9/8/2000	3-3.5							Yes
S28S3	S28S3A		9/7/2000	0-0.5							Yes
S28S5	S28S5A		9/8/2000	0-0.5							Yes
S28S7	S28S7A		9/8/2000	0-0.5							Yes
	S28S7B		10/12/2000	1-1.5							Yes
	S2857C	E79140-13	10/20/2000	2-2.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
	S2857D	E79140-14	10/20/2000	3-3.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
S28S0	S28S0A		10/4/2000	0-0.5							Yes
S28S12	S28S12A		10/5/2000	0-0.5							Yes
S28S14	S28S14A		10/5/2000	0-0.5							Yes
	S28S14B	E78671-4	10/11/2000	1-1.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	No
S28S16	S28S16A	E78265-5	9/5/2000	0-0.5	0.036 U	**0.058 J**	**0.044**	**0.102**	**0.102**	**0.102**	No
S28SW5	S28SW5A		9/8/2000	0-0.5							Yes
S28SW7	S28SW7A		9/8/2000	0-0.5							Yes
	S28SW7B		10/12/2000	1-1.5							Yes
	S28SW7C	E79140-11	10/20/2000	2-2.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
	S28SW7D	E79140-12	10/20/2000	3-3.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
S28SW0	S28SW0A		10/4/2000	0-0.5							Yes
28SW12	28SW12A		10/5/2000	0-0.5							Yes
	28SW12B	E78671-3	10/11/2000	1-1.5	0.037 U	**1.4 D**	**1.6**	**3**	**3**	**3**	Yes
	28SW12C		10/12/2000	2-2.5							Yes
	28SW12D	E79273-14	10/24/2000	3-3.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	
28SW14	28SW14A	E78266-9	10/5/2000	0-0.5	0.037 U	**0.11 J**	**0.051**	**0.161**	**0.161**	**0.161**	No
28SW16	28SW16A	E78265-6	10/5/2000	0-0.5	0.035 U	**0.08**	**0.045**	**0.125**	**0.125**	**0.125**	No
S28W1	S28W1A		9/7/2000	0-0.5							Yes
S28W3	S28W3A		9/7/2000	0-0.5							Yes
S28W5	S28W5A		9/8/2000	0-0.5							Yes
	S28W5B	E79272-15	10/24/2000	1-1.5	0.044 U	**0.15**	0.044 U	**0.15**	**0.15**	**0.15**	
S28W7	S28W7A	E76418-8	9/8/2000	0-0.5	0.038 U	**0.23**	0.038 U	**0.23**	**0.23**	**0.23**	No
S28NW4	S28NW4A		9/8/2000	0-0.5							Yes
	S28NW4B	E78671-7	10/11/2000	1-1.5	0.040 U	**0.06**	0.040 U	**0.06**	**0.06**	**0.06**	No
S28NW6	S28NW6A	E76418-6	9/8/2000	0-0.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	No
SS34	SS34B		10/2/2000	1-1.5							Yes
	SS34C	E78510-7	10/10/2000	2-2.5	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U	No
S34N1	S34N1A		9/14/2000	0-0.5							Yes
S34N3	S34N3A		9/29/2000	0-0.5							Yes
	S34N3B	E79274-7	10/23/2000	1-1.5	0.037 U	**8.7 D**	**1.8 D**	**10.5**	**10.5**	**10.5**	
	S34N3C	E85530-9	2/6/2001	2-2.5	0.044 U	**1.8 D**	**0.98 D**	**2.78**	**2.78**	**2.78**	
S34N6	S34N6A	E78372-1	10/6/2000	0-0.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	No
S34NE6	S34NE6A		10/6/2000	0-0.5							Yes
	S34NE6B	E79274-5	10/23/2000	1-1.5	0.037 U	**6.2 D**	**1.5 D**	**7.7**	**7.7**	**7.7**	
	S34NE6C	E85530-10	2/6/2001	2-2.5	0.044 U	**24 D**	**8.2 D**	**32.2**	**32.2**	**32.2**	
S34E1	S34E1A		9/14/2000	0-0.5							Yes
S34E3	S34E3A		9/29/2000	0-0.5							Yes
S34E6	S34E6A		9/29/2000	0-0.5							Yes
	S34E6B	E79274-3	10/23/2000	1-1.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	
S34E9	S34E9A		10/5/2000	0-0.5							Yes

TABLE 5-1
Matteo Iron and Metal
PCB Exceedances in Shallow Soil

Sample Location	Sample ID	Lab ID	Date	Depth ft	Aroclor 1248 mg/kg	Aroclor 1254 mg/kg	Aroclor 1260 mg/kg	Total Aroclor mg/kg	Residential Criteria	Non Residential Criteria	Field Screening
New Jersey Soil Cleanup Criteria									0.49	2	> 0.5 ppm
S34E12	S34E12A		10/6/2000	0-0.5							Yes
	S34E12B	E79274-1	10/23/2000	1-1.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	
S34SE6	S34SE6A	E78372-2	10/6/2000	0-0.5	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	No
	PCBDUP7	E78372-5	10/6/2000	0-0.5	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	
34SE12	34SE12A		10/10/2000	0-0.5							Yes
	34SE12B	E79274-9	10/23/2000	1-1.5	0.037 U	0.65	0.98	1.63	1.63	1.63	
	34SE12C	E85530-8	2/6/2001	2-2.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
S34SE15	S34SE15A	E78510-2	10/10/2000	0-0.5	0.039 U	0.13	0.14	0.27	0.27	0.27	No
S34S1	S34S1A	E76840-3	9/14/2000	0-0.5	0.035 U	0.18	0.038	0.218	0.218	0.218	No
S34S6	S34S6A	E78510-3	10/10/2000	0-0.5	0.036 U	0.036 U	0.054	0.054	0.054	0.054	No
S34W1	S34W1A	E76840-2	9/14/2000	0-0.5	0.038 U	0.5 J	0.083	0.583	0.583	0.583	No
	S34W1B	E85530-7	2/6/2001	1-1.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
S34W3	S34W3A	E85530-6	2/6/2001	0-0.6	0.038 U	2.2 D	0.31 D	2.51	2.51	2.51	
SS35	SS35B		10/2/2000	1-1.5							Yes
	SS35C	E78510-8	10/10/2000	2-2.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	No
S35N1	S35N1A		9/14/2000	0-0.5							Yes
	S35N1B	E79274-11	10/23/2000	1-1.5	0.036 U	3.8 D	36 D	39.8	39.8	39.8	
	S35N1C	E79273-1	10/23/2000	2-2.5	0.034 U	0.034 U	3.8 D	3.8	3.8	3.8	
	S35N1D	E85530-3	2/6/2001	3-3.5	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	
S35N3	S35N3A	E77892-5	9/29/2000	0-0.5	0.042 U	2.1 DJ	0.85 D	2.95	2.95	2.95	No
	S35N3B	E85530-4	2/6/2001	1-1.5	0.039 U	0.043	0.041	0.084	0.084	0.084	
S35N6	S35N6A	E85530-5	2/6/2001	0-0.5	0.045 U	0.045 U	0.3	0.3	0.3	0.3	
S35E1	S35E1A		9/14/2000	0-0.5							Yes
	S35E1B	E79273-4	10/23/2000	1-1.5	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	
S35E3	S35E3A	E77892-7	9/29/2000	0-0.5	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	No
S35S1	S35S1A		9/14/2000	0-0.5							Yes
	S35S1B	E79273-2	10/23/2000	1-1.5	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	
S35S3	S35S3A	E77892-6	9/29/2000	0-0.5	0.038 U	0.2 J	0.066	0.266	0.266	0.266	No
S35W1	S35W1A		9/14/2000	0-0.5							Yes
	S35W1B	E79273-6	10/23/2000	1-1.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	
	S35W1C	E79273-7	10/23/2000	2-2.5	0.038 U	0.1	0.068	0.168	0.168	0.168	
S35W3	S35W3A	E77892-4	9/29/2000	0-0.5	0.038 U	0.54 J	0.18	0.72	0.72	0.72	No
PCB 1	PCB 1A	E77893-2	9/28/2000	0-0.5	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	No
PCB 2	PCB 2A	E77893-5	9/28/2000	0-0.5	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	No
PCB 3	PCB 3A	E77893-4	9/28/2000	0-0.5	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	No
PCB 4	PCB 4A	E77893-3	9/28/2000	0-0.5	0.038 U	0.15 J	0.091 J	0.241	0.241	0.241	No
PCB 5	PCB 5A	E77893-6	9/28/2000	0-0.5	0.039 U	0.14 J	0.14	0.28	0.28	0.28	No
PCB 6	PCB 6A	E77893-9	9/28/2000	0-0.5	0.038 U	0.093	0.06	0.153	0.153	0.153	No
	PCB DUP4	E77893-11	9/28/2000	0-0.5	0.039 U	0.12 J	0.1 J	0.22	0.22	0.22	
PCB 7	PCB 7A	E77893-10	9/28/2000	0-0.5	0.038 U	0.038 U	0.051	0.051	0.051	0.051	No
PCB 8	PCB8A	E77892-3	10/29/2000	0-0.5	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	No
PCB 9	PCB 9A	E77893-7	9/28/2000	0-0.5	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	No
PCB 10	PCB 10A	E77893-1	9/28/2000	0-0.5	0.038 U	0.071	0.057	0.128	0.128	0.128	No
PCB 11	PCB11A		9/28/2000	0-0.5							Yes
	PCB11B		10/2/2000	1-1.5							Yes
	PCB11C		10/10/2000	2-2.5							Yes
	PCB11D	E78671-2	10/11/2000	3-3.5	0.037 U	0.098	0.043 J	0.141	0.141	0.141	No
PB11N1	PB11N1A		9/29/2000	0-0.5							Yes
	PB11N1B	E85530-11	2/6/2001	1-1.5	0.044 U	20 D	4.1	24.1	24.1	24.1	
	PB11N1C	E79273-11	10/24/2000	2-2.5	0.040 U	0.054	0.040 U	0.054	0.054	0.054	
PB11E1	PB11E1A		9/29/2000	0-0.5							Yes
	PB11E1B	E79273-9	10/24/2000	1-1.5	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	
PB11E3	PB11E3A	E78043-5	10/2/2000	0-0.5	0.041 U	0.041 U	0.041 U	0.041 U	0.041 U	0.041 U	No
PB11S1	PB11S1A	E77893-15	9/29/2000	0-0.5	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	No
PB11S3	PB11S3A	E78043-4	10/2/2000	0-0.5	0.040 U	0.095 J	0.056	0.151	0.151	0.151	No
PB11W1	PB11W1A	E77893-17	9/29/2000	0-0.5	0.042 U	1	0.46	1.46	1.46	1.46	Yes
	PB11W1B	E79273-10	10/24/2000	1-1.5	0.039 U	0.01	0.074	0.174	0.174	0.174	
PB11W3	PB11W3A	E78266-7	10/5/2000	0-0.5	0.041 U	0.041 U	0.041 U	0.041 U	0.041 U	0.041 U	No
P11NW3	P11NW3A	E78372-3	10/6/2000	0-0.5	0.040 U	0.051 J	0.05	0.101	0.101	0.101	No
PCB12	PCB12A	E77893-8	9/28/2000	0-0.5	0.160 U	3.3	0.52	3.82	3.82	3.82	Yes
	PCB12B		10/2/2000	1-1.5							Yes
	PCB12C	E78510-6	10/10/2000	2-2.5	0.77 D	4.6 J	0.64	6.01	6.01	6.01	Yes
	PCB12D		10/11/2000	3-3.5							Yes
	PCB12E		10/12/2000	4-4.5							Yes
PB12N1	PB12N1A	E77892-9	9/29/2000	0-0.5	0.042 U	0.49	0.12	0.61	0.61	0.61	Yes
	PCBDUP5	E77892-8	9/29/2000	0-0.5	0.041 U	0.47	0.12	0.59	0.59	0.59	
PB12N3	PB12N3A		10/2/2000	0-0.5							Yes
PB12E1	PB12E1A		9/29/2000	0-0.5							Yes
PB12E3	PB12E3A	E78043-3	10/2/2000	0-0.5	0.040 U	0.056 J	0.045	0.101	0.101	0.101	No
P12SE2	P12SE2A		10/6/2000	0-0.5							Yes
PB12S1	PB12S1A		9/29/2000	0-0.5							Yes
PB12S3	PB12S3A	E78043-10	10/2/2000	0-0.5	0.053 U	30	0.053 U	30	30	30	Yes
PB12S6	PB12S6A	E78043-6	10/2/2000	0-0.5	0.039 U	0.087	0.11	0.197	0.197	0.197	No
P12SW6	P12SW6A		10/5/2000	0-0.5							Yes
P12SW9	P12SW9A		10/6/2000	0-0.5							Yes
PB12W1	PB12W1A		9/29/2000	0-0.5							Yes
PB12W3	PB12W3A		10/2/2000	0-0.5							Yes
PB12W6	PB12W6A	E78043-9	10/2/2000	0-0.5	0.050 U	33	16	49	49	49	Yes

TABLE 5-1
Matteo Iron and Metal
PCB Exceedances in Shallow Soil

Sample Location	Sample ID	Lab ID	Date	Depth ft	Aroclor 1248 mg/kg	Aroclor 1254 mg/kg	Aroclor 1260 mg/kg	Total Aroclor mg/kg	Residential Criteria	Non Residential Criteria	Field Screening
New Jersey Soil Cleanup Criteria									0.49	2	> 0.5 ppm
PB12W9	PB12W9A	E78266-2	10/4/2000	0-0.5	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	0.039 U	No
	PCBDUP6	E78266-4	10/4/2000	0-0.5	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	
P12NW6	P12NW6A		10/5/2000	0-0.5							Yes
PCB13	PCB13A		9/28/2000	0-0.5							Yes
	PCB12B		10/2/2000	1-1.5							Yes
	PCB13C	E78510-5	10/10/2000	2-2.5	0.037 U	**0.058 J**	**0.047**	**0.105**	**0.105**	**0.105**	No
PB13N1	PB13N1A	E77892-10	9/29/2000	0-0.5	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	Yes
PB13N3	PB13N3A		10/2/2000	0-0.5							Yes
	P13N3B	E78510-4	10/10/2000	1-1.5	0.037 U	**0.054 J**	**0.074**	**0.128**	**0.128**	**0.128**	No
PB13N6	PB13N6A	E78043-8	10/2/2000	0-0.5	0.036 U	**0.55**	**0.12**	**0.67**	**0.67**	**0.67**	No
	P13N6B	E85530-1	2/6/2001	1-1.5	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	
P13N9	P13N9A	E85530-2	2/6/2001	0-0.5	0.041 U	0.041 U	**0.058**	**0.058**	**0.058**	**0.058**	
	PCBDUP1	E85530-15	2/6/2001	0-0.5	0.040 U	**0.088 J**	**0.059**	**0.147**	**0.235**	**0.146**	
P13NE4	P13NE4A	E78265-8	10/5/2000	0-0.5	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	No
PB13E1	PB13E1A	E77893-12	9/28/2000	0-0.5	0.043 U	0.043 U	**0.046**	**0.046**	**0.046**	**0.046**	No
PB13S1	PB13S1A	E77893-14	9/29/2000	0-0.5	0.042 U	**0.12**	**0.082**	**0.202**	**0.202**	**0.202**	No
PB13W1	PB13W1A	E77893-13	9/29/2000	0-0.5	0.043 U	**0.081**	**0.071**	**0.152**	**0.152**	**0.152**	No
P13NW6	P13NW6A	E78265-9	10/5/2000	0-0.5	0.040 U	0.067	0.040 U	**0.067**	**0.067**	**0.067**	No
PCB14	PCB 14A	E77893-16	9/29/2000	0-0.5	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	No
PCB15	PCB15A	E78266-1	10/4/2000	0-0.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	No
PCB16	PCB16A		10/10/2000	0-0.5							Yes
P16SE3	P16SE3A	E78510-1	10/10/2000	0-0.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	No
PCB17	PCB17A	E78373-10	10/10/2000	0-0.5	0.042 U	**0.26**	**0.1**	**0.36**	**0.36**	**0.36**	No
PCB18	PCB18A		10/10/2000	0-0.5							Yes
P18SW3	P18SW3A	E78373-16	10/10/2000	0-0.5	0.036 U	**0.064 J**	0.036 U	**0.064**	**0.064**	**0.064**	No
PCB19	PCB19A	E78373-11	10/10/2000	0-0.5	0.038 U	**0.220 J**	**0.081**	**0.301**	**0.301**	**0.301**	No
PCB20	PCB20A	E78373-12	10/10/2000	0-0.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	No
PCB21	PCB21A	E78373-15	10/10/2000	0-0.5	0.048 U	**1.8**	**0.76**	**2.56**	**2.56**	**2.56**	Yes
PCB22	PCB22A	E78373-13	10/10/2000	0-0.5	0.040 U	**0.26**	**0.13**	**0.39**	**0.39**	**0.39**	No
PCB23	PCB23A	E78373-14	10/10/2000	0-0.5	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	No

Notes:

- Shaded total values meet or exceed N.J. Residential Soil Criteria, and/or Non-Residential Criteria as indicated.
- Bold values indicate concentrations above Method Detection Limit (MDL).
- All results in mg/kg.
- U = Not detected above the Contract Required Quantitation Limit (CRQL).
- J = Estimated concetration
- PCB Screenings with immunoassay kits result: Yes (>0.5 mg/kg);or No (<0.5 mg/kg)

TABLE 5-2

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Residential Criteria (RSCC)

SAMPLE LOCATION		GP-01	GP-02	GP-03	GP-04	GP-05	GP-05	GP-06	GP-07	GP-07	GP-07	GP-08	GP-09	GP-10
SAMPLE ID		GP-01A	GP-02A	GP-03A	GP-04A	GP-05A	GP 5C	GP-06A	GP-07A	GP 7C	DUPE 02	GP-08A	GP-09A	GP-10A
LAB ID		E76579-1	E76579-3	E76579-5	E76579-7	E76579-9	N12323-21	E76579-11	E76579-13	N12322-6	N12323-30	E72117-15	E76579-17	E76579-19
DATE		9/11/2000	9/11/2000	9/11/2000	9/11/2000	9/11/2000	9/11/2002	9/11/2000	9/11/2000	9/11/2002	9/11/2002	9/11/2000	9/11/2000	9/11/2000
SAMPLE INTERVAL (BGS)		0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	1.5 - 2	0-0.5	0-0.5	1.5 - 2	1.5 - 2	0-0.5	0-0.5	0-0.5
ANALYTE	*NJDEP*													
Pesticide & PCB	*Residential*	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q	Result Q	Result Q	Result Q D	Result Q	Result Q	Result Q
Dieldrin	0.042	0.0034 U	0.017 U	0.0035 U	0.019 U	0.0041 U	NA	0.0035 U	0.038 U	NA	NA	0.0036 U	0.018 U	0.019 U
Aroclor 1242	0.49	0.034 U	0.17 U	0.035 U	0.19 U	0.041 U	0.017 U 1	0.035 U	0.38 U	0.017 U	0.018 U 1	0.036 U	0.18 U	0.19 U
Aroclor 1248	0.49	0.034 U	0.17 U	0.035 U	0.19 U	0.041 U	0.017 U 1	0.035 U	1.3	0.017 U	0.018 U 1	0.036 U	0.18 U	1.4
Aroclor 1254	0.49	0.079	190 D	0.035 U	3	0.7	0.017 U 1	0.035 U	0.38 U	0.19	0.018 U 1	0.036 U	0.18 U	0.63
Aroclor 1260	0.49	0.034 U	26 DJ	0.035 U	0.6	0.18	0.017 U 1	0.035 U	0.38 U	0.017 U	0.018 U 1	0.07	0.18 U	0.19 U
Total Aroclor	0.49	0.079	216	0.035 U	3.6	0.88	0	0.035 U	1.3	0.19	0	0.07	0.18 U	2.03
Metals		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q	Result Q	Result Q	Result Q D	Result Q	Result Q	Result Q
Aluminum	NC	2,980	3,930	3,450	2,250	5,130	3290 1	901	8,040	3160	3170 1	4,550	2,630	8,000
Antimony	14	0.36	0.52 J	1.1 J	1.7 J	159	1.1 U 1	104	5.1 J	23.2	1.1 U 1	39.2	69	44.6
Arsenic	20	2 J	2 J	1.6 J	2.9	19.1	1.9 1	7.8	5.6	12.6	1.7 1	23.5	6.1	17.9
Barium	700	15.7 J	28.3 J	19.5 J	17.6 J	2,940	22 U 1	22.3 J	122	52.5	23 U 1	5,770	39.5 J	504
Beryllium	2	0.07 J	0.21 J	0.13 J	0.05 U	0.23 J	0.54 U 1	0.04 U	0.43 J	0.51 U	0.57 U 1	0.2 J	0.1 J	0.2 J
Cadmium	39	0.06 U	0.17 J	0.06 U	0.46 J	27.6	0.54 U 1	0.17 J	6.7	1.1	0.57 U 1	33.3	5.4	13.1
Copper	600	3.7 J	4.3 J	8.6	12.4	2,590	4.2 1	39.4	1,790	145	5.1 1	1,810	66.3	1,260
Iron	NC	6,090	5,800 J	4,600	4,500	72,800	5900 1	2,660	38,900	22900	5080 1	156,000	8,070	100,000
Lead	400	3.6	8.5	21.9	48.5	6,420	4.1 1	7.070	756	9310	9.7 1	2,950	3,950	3,080
Manganese	NC	33.3	154	54.3	18.3	572	41 1	737	359	110	35.8 1	711	99.4	584
Mercury	14	0.06 J	0.1	0.09 J	0.06 J	22.3	0.032 U 1	0.06 J	1.3	0.35	0.034 U 1	4.2	1.7	4.9
Nickel	250	3.2 J	14.6	3.4 J	3.2 J	249	4.3 U 1	0.86 J	249	13.7	4.6 U 1	294	8.5 J	110
Silver	110	0.15 U	0.15 U	0.15 U	0.16 U	1.9 J	1.1 U 1	0.28 J	2.2 J	1 U	1.1 U 1	1.4 J	0.26 J	2.4
Sodium	NC	18 U	37.4 J	42.1 J	19.9 U	172 J	540 U 1	32.3 J	402 J	510 U	570 U 1	753 J	63.4 J	695 J
Thallium	2	0.75 U	0.78 U	0.75 U	0.83 U	2.6	1.1 U 1	0.78 U	0.95 J	1 U	1.1 U 1	0.78 U	0.78 U	5.9
Zinc	1,500	15	71.7	16.6	150	16,200	22.4 1	22.6	924	331	13.2 1	7,550	176	4,080
Soil Characteristics		Result	Result	Result	Result	Result	Result Q D	Result	Result	Result Q	Result Q D	Result	Result	Result
pH	NC	7.7	7.8	5.9	7.4	7	NA 1	5.6	7.8	NA	NA 1	7.2	7.5	7.6
Cyanide (mg/kg)	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

- * NJDEP RSCC = New Jersey Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not exceed soil cleanup criteria in any sample.
- Shaded values exceed New Jersey Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-2

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Residential Criteria (RSCC)

SAMPLE LOCATION		GP-12		GP-12		GP-12		GP-13		GP-14		GP-14		GP-15		GP-16		GP-17		GP-18		GP-19		GP-20	
SAMPLE ID		GP-12A		GPDUP1		GP 12D		GP-13A		GP-14A		GP 14D		GP-15A		GP-16A		GP-17A		GP-18A		GP-19A		GP-20A	
LAB ID		N1314-2		N1313-10		N12322-8		N1314-5		N1314-8		N12322-10		N1314-11		N1315-3		N1315-6		N1315-9		N1313-1		N1313-4	
DATE		10/23/2001		10/23/2001		4/11/2002		10/23/2001		10/23/2001		4/11/2002		10/23/2001		10/23/2001		10/23/2001		10/23/2001		10/23/2001		10/23/2001	
SAMPLE INTERVAL (BGS)		0-1		0-1		1.5 - 2		0-0.5		0.3-0.8		1.5 - 2		0.3-0.8		0.3-0.8		0.5-1		0-0.5		0.5-1		0.5-1	
ANALYTE	NJDEP Residential	Result	Q D	Result	Q D	Result	Q D	Result	Q D	Result	Q	Result	Q D	Result	Q D	Result	Q D	Result	Q D	Result	Q D	Result	Q D	Result	Q D
Pesticide & PCB																									
Dieldrin	0.042	0.0039	U 1	0.0037	U 1	NA		0.0038	U 1	0.0038	U	NA		0.0039	U 1	0.0034	U 1	0.0035	U 1	0.0036	U 1	0.0040	U 1	0.0039	U 1
Aroclor 1242	0.49	0.039	U 1	0.037	U 1	0.017	U 1	0.038	U 1	0.038	U	0.017	U 1	0.039	U 1	0.034	U 1	0.035	U 1	0.036	U 1	0.04	U 1	0.039	U 1
Aroclor 1248	0.49	0.039	U 1	0.037	U 1	0.017	U 1	0.038	U 1	0.038	U	0.017	U 1	0.039	U 1	0.034	U 1	0.035	U 1	0.036	U 1	0.04	U 1	9.95	D 5
Aroclor 1254	0.49	3.7	D 10	3.3	D 10	2.08		2.1	D 10	0.038	U	0.017	U 1	5.2	DJ 20	3	DJ 10	0.18	J 1	0.86	J 1	3.4	D 10	0.039	U 1
Aroclor 1260 *	0.49	3.1	D 10	3.2	D 10	3.52		0.72	D 10	36	D	42.9	50	7.4	D 20	3	D 10	0.24	1	0.56	J 1	0.04	U 1	0.039	U 1
Total Aroclor	0.49	6.8		6.5		5.6		2.82		36		42.9		12.6		6		0.42		1.42		3.4		9.95	
Metals		Result	Q D	Result	Q D	Result	Q D	Result	Q D	Result	Q	Result	Q D	Result	Q D	Result	Q D	Result	Q D	Result	Q D	Result	Q D	Result	Q D
Aluminum	NC	NA		NA		3,940	1	NA		NA		3,670	1	NA		NA		NA		NA		NA		NA	
Antimony	14	NA		NA		4.3	1	NA		NA		1.3	1	NA		NA		NA		NA		NA		NA	
Arsenic	20	NA		NA		7.9	1	NA		NA		4.8	1	NA		NA		NA		NA		NA		NA	
Barium	700	NA		NA		144	1	NA		NA		125	1	NA		NA		NA		NA		NA		NA	
Beryllium	2	NA		NA		0.56	U 1	NA		NA		0.52	U 1	NA		NA		NA		NA		NA		NA	
Cadmium	39	NA		NA		9.2	1	NA		NA		1.9	1	NA		NA		NA		NA		NA		NA	
Copper	600	NA		NA		485	1	NA		NA		117	1	NA		NA		NA		NA		NA		NA	
Iron	NC	NA		NA		42500	1	NA		NA		21000	1	NA		NA		NA		NA		NA		NA	
Lead	400	NA		NA		644	1	NA		NA		471	1	NA		NA		NA		NA		NA		NA	
Manganese	NC	NA		NA		273	1	NA		NA		234	1	NA		NA		NA		NA		NA		NA	
Mercury	14	NA		NA		1.7	3	NA		NA		0.55	1	NA		NA		NA		NA		NA		NA	
Nickel	250	NA		NA		35.2	1	NA		NA		19.8	1	NA		NA		NA		NA		NA		NA	
Silver	110	NA		NA		1.1	U 1	NA		NA		1	U 1	NA		NA		NA		NA		NA		NA	
Sodium	NC	NA		NA		560	U 1	NA		NA		520	U 1	NA		NA		NA		NA		NA		NA	
Thallium	2	NA		NA		1.1	U 1	NA		NA		1	U 1	NA		NA		NA		NA		NA		NA	
Zinc	1,500	NA		NA		1080	1	NA		NA		375	1	NA		NA		NA		NA		NA		NA	
Soil Characteristics		Result	Q D	Result	Q D	Result	Q D	Result	Q D	Result	Q	Result	Q D	Result	Q D	Result	Q D	Result	Q D	Result	Q D	Result	Q D	Result	Q D
pH	NC	7.57	1	7.3	1	NA	1	7.6	1	7.56		NA	1	7.97	1	7.52	1	6.8	1	7.68	1	7.99	1	7.17	1
Cyanide (mg/kg)	NC	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	

Notes:

- * NJDEP RSCC = New Jersey Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not exceed soil cleanup criteria in any sample.
- Shaded values exceed New Jersey Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-2

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Residential Criteria (RSCC)

SAMPLE LOCATION		GP-21	GP-22	GP-23	GP-24	GP-24	GP-25	GP-25	GP-26	GP-27	GP-28	GP-29	GP-29	GP-30
SAMPLE ID		GP-21A	GP-22A	GP-23A	GP-24A	GP 24D	GP-25A	GP 25D	GP-26A	GP-27A	GP-28A	GP-29A	GP-DUP3	GP-30A
LAB ID		N1313-7	N1314-14	N1405-1	N1405-4	N12322-12	N1405-7	N12322-14	N1405-10	N1405-13	N1405-15	N1405-18	N1409-7	N1409-1
DATE		10/23/2001	10/23/2001	10/24/2001	10/24/2001	4/11/2002	10/24/2001	4/11/2002	10/24/2001	10/24/2001	10/24/2001	10/24/2001	10/24/2001	10/24/2001
SAMPLE INTERVAL (BGS)		0-0.5	0-0.5	0.3-0.8	0.5-1	1.5 - 2	0.5-1	1.5 - 2	2	0-0.5	0-0.5	1-1.5	1-1.5	0-0.5
ANALYTE	NJDEP													
Pesticide & PCB	Residential	Result Q D	Result Q D	Result Q D	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Dieldrin	0.042	0.0038 U 1	0.0038 U 1	0.0041 U 1	0.0039 U	NA	0.0042 U 1	NA	0.004 U 1	0.0038 U	0.0035 U 1	0.0037 U 1	0.0035 U 1	0.0035 U 1
Aroclor 1242	0.49	0.038 U 1	0.038 U 1	12 D 10	0.039 U	0.017 U	0.042 U 1	18 U 1	0.04 U 1	0.038 U	0.036 U 1	0.037 U 1	0.035 U 1	0.036 U 1
Aroclor 1248	0.49	3.76 DJ 20	0.038 U 1	0.041 U 1	0.87	0.017 U	0.042 U 1	18 U 1	0.04 U 1	0.038 U	0.036 U 1	0.037 U 1	0.035 U 1	0.036 U 1
Aroclor 1254	0.49	0.038 U 1	0.038 U 1	0.041 U 1	0.42 J	0.0493	0.042 U 1	18 U 1	0.32 1	0.038 U	0.036 U 1	0.037 U 1	0.035 U 1	2.6 DJ 10
Aroclor 1260	0.49	6 D 20	0.049 J 1	2.2 D 10	0.039 U	0.0444	2.1 U 50	0.0195 1	0.04 U 1	0.038 U	0.036 U 1	0.037 U 1	0.035 U 1	0.89 DJ 10
Total Aroclor	0.49	9.76	0.049	14.2	1.29	0.0937	0	0.0195	0.32	0	0	0	0	3.49
Metals		Result Q D	Result Q D	Result Q D	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Aluminum	NC	NA	2,100 1	25,700 1	14,200	3650	6,710 1	3050 1	4,430 1	2,620	3,440 1	3,610 1	2,380 1	4,520 1
Antimony	14	NA	1 J 1	42.3 1	55.7	1.1 U	26.4 1	1 U 1	5.2 J 1	0.45 U	0.45 U 1	1.4 J 1	0.93 J 1	.865 1
Arsenic	20	NA	2.6 1	20.4 1	10.7	4.6	15.2 1	1.4 1	14.5 1	1.7 J	3.4 1	3.1 1	2.7 1	155 1
Barium	700	NA	14.8 J 1	1,510 1	1,160	51.5	529 1	21 U 1	66.3 1	15.8 J	20.3 J 1	20.6 J 1	13.6 J 1	166 1
Beryllium	2	NA	0.09 J 1	0.12 J 1	0.13 J	0.53 U	0.21 J 1	0.52 U 1	0.21 J 1	0.06 J	0.14 J 1	0.17 J 1	0.1 J 1	0.09 J 1
Cadmium	39	NA	0.12 J 1	11.2 1	7.7	1	12.1 1	0.52 U 1	2.2 1	0.06 U	0.17 J 1	0.12 J 1	0.07 U 1	5.7 1
Copper	600	NA	5.1 J 1	2,870 1	887	42.6	725 1	3.7 1	121 1	4.3 J	4.9 J 1	3.4 J 1	3.2 J 1	1,350 1
Iron	NC	NA	4,030 1	100,000 1	54,600	12500	69,300 1	3710 1	13,400 1	3,660	5,480 1	5,060 1	4,540 1	55,500 1
Lead	400	NA	85.5 1	1,910 1	10,900	158	3,880 1	3.8 1	440 1	12.4	21.6 1	161 1	44.5 1	20,700 3
Manganese	NC	NA	38.6 1	724 1	511	134	397 1	27 1	205 1	13.9	41.9 1	42.8 1	28.3 1	374 1
Mercury	14	NA	0.06 J 1	5.1 5	1.8	0.23	3.7 5	0.034 U 1	0.66 1	0.04 U	0.04 J 1	0.04 U 1	0.03 U 1	2.5 2
Nickel	250	NA	2.7 J 1	502 1	66	20.9	138 1	4.5 1	14.9 1	2.2 J	3.8 J 1	3.5 J 1	2.4 J 1	173 1
Silver	110	NA	0.21 J 1	2.2 J 1	5.1	1.1 U	1.2 J 1	1 U 1	0.17 J 1	0.15 U	0.15 U 1	0.15 U 1	0.15 U 1	1.7 J 1
Sodium	NC	NA	20.5 U 1	963 J 1	34.5 J	530 U	56.5 J 1	520 U 1	51.5 J 1	59.5 J	32.4 J 1	20.8 U 1	71.2 J 1	21.1 J 1
Thallium	2	NA	NA	NA	NA	1.1 U	NA	1 U 1	NA	NA	NA	NA	NA	NA
Zinc	1,500	NA	18.8 1	4,800 1	2,120	175	2,540 1	175 1	318 1	10.2	78.8 1	32.9 1	18.5 1	1830 1
Soil Characteristics		Result Q D	Result Q D	Result Q D	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
pH	NC	7.18 1	6.11 1	7.73 1	12.32	NA	7.76 1	NA 1	5.93 1	4.95	6.15 1	5.78 1	5.59 1	8.15 1
Cyanide (mg/kg)	NC	NA	0.05 U 1	0.64 1	0.05 U	NA	0.38 J 1	NA	0.05 U 1	0.05 U	0.05 U 1	0.05 U 1	0.05 U 1	0.05 U 1

Notes:

- * NJDEP RSCC = New Jersey Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not exceed soil cleanup criteria in any sample.
- Shaded values exceed New Jersey Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-2

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Residential Criteria (RSCC)

SAMPLE LOCATION		GP-30	GP-31	GP-31	GP-32	GP-32	GP-32	GP-33	GP-33	HA-1	HA-1	HA-2	HA-3
SAMPLE ID		GP 30D	GP-31A	GP-DUP4	GP 32A	GP 32B	-DUPE 01	GP 33A	GP 33B	HA-1A	GPDUP2	HA-2A	HA-3A
LAB ID		N12322-16	N1409-4	N1409-8	N12323-24	N16274-6	N12323-29	N12323-26	N16274-3	N1314-12	N1313-11	N1529-1	N1529-3
DATE		4/11/2002	10/24/2001	10/24/2001	4/11/2002	6/14/2002	4/11/2002	4/11/2002	6/14/2002	10/23/2001	10/23/2001	10/26/2001	10/26/2001
SAMPLE INTERVAL (BGS)		1.5 - 2	0.3-0.8	0.3-0.8	0.5 - 1	1.5 - 2	1.5 - 2	0.5 - 1	1.5 - 2	0-0.5	0-0.5	0-0.5	0-0.5
ANALYTE	*NJDEP*												
Pesticide & PCB	*Residential*	Result Q D	Result Q D	Result Q	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Dieldrin	0.042	NA	0.0037 U 1	0.0036 U	NA	NA	NA	NA	NA	0.004 U 1	0.0036 U 1	0.0046 1	0.0037 U 1
Aroclor 1242	0.49	17 U 1	0.037 U 1	0.036 U	17 U 1	NA	17 U 1	0.018 U 1	35 U 1	0.04 U 1	0.036 U 1	0.035 U 1	0.037 U 1
Aroclor 1248	0.49	17 U 1	0.037 U 1	0.036 U	17 U 1	NA	17 U 1	0.018 U 1	35 U 1	0.04 U 1	0.036 U 1	0.035 U 1	0.037 U 1
Aroclor 1254	0.49	0.327 1	0.43 J 1	0.3 J	0.321 1	NA	17 U 1	1.06 2	35 U 1	4.4 D 10	1.7 DJ 2	0.035 U 1	0.037 U 1
Aroclor 1260	0.49	17 U 1	0.48 J 1	0.38	17 U 1	NA	17 U 1	1.32 2	35 U 1	3 D 10	2 D 2	0.035 U 1	0.38 DJ 5
Total Aroclor	0.49	0.327	0.91	0.68	0.321	NA	0	2.38	35 U 1	7.4	3.7	0	0.38
Metals		Result Q D	Result Q D	Result Q	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Aluminum	NC	4,020 1	4,040 1	3,540	3,500 1	1,920	3,200 1	7,670 1	1,960 1	NA	NA	2,320 1	2,400 2
Antimony	14	5.7 1	169 1	34	24.8 1	0.63 J	1.1 U 1	11.7 1	1.2 J 1	NA	NA	1 J 1	9.5 J 2
Arsenic	20	2.2 1	22.2 1	9.9	5.9 1	0.68 U	1.6 1	10.6 1	0.74 U 1	NA	NA	2.8 1	21.6 2
Barium	700	37 1	99.8 1	129	88.1 1	11.3 J	21 U 1	663 1	14.6 J 1	NA	NA	19 J 1	316 1
Beryllium	2	0.57 U 1	0.08 J 1	0.15 J	0.47 U 1	0.13 J	0.53 U 1	0.54 U 1	0.15 J 1	NA	NA	0.2 J 1	0.14 J 1
Cadmium	39	0.57 U 1	2.4 1	4.6	1.4 1	0.08 U	0.53 U 1	5.9 1	0.09 U 1	NA	NA	0.31 J 1	11.2 2
Copper	600	89.6 1	483 1	523	438 1	7.3	9.9 1	382 1	2 J 1	NA	NA	7 1	296 2
Iron	NC	5530 1	14,900 1	19,600	17600 1	3750	4870 1	47800 1	3240 1	NA	NA	4,400 1	224,000 2
Lead	400	594 1	7,860 1	2,440	3350 1	2.6	8.2 1	2490 1	2.3 1	NA	NA	64.1 1	852 2
Manganese	NC	72.1 1	82.3 1	208	134 1	13.3	20.6 1	378 1	22.3 1	NA	NA	63 1	1,140 1
Mercury	14	0.11 1	1.5 1	0.83	1.3 3	0.03 U	0.032 U 1	1.5 3	0.03 U 1	NA	NA	0.04 U 1	0.88 1
Nickel	250	5.8 1	32.1 1	64.6	13.1 1	1.8 J	4.3 U 1	61.3 1	2 J 1	NA	NA	3 J 1	113 1
Silver	110	1.1 U 1	0.7 J 1	0.15 U	0.94 U 1	0.14 U	1.1 U 1	2.7 1	0.15 U 1	NA	NA	0.18 U 1	0.21 U 1
Sodium	NC	570 U 1	71.1 J 1	21.1 U	470 U 1	95.1 J	530 U 1	540 U 1	104 J 1	NA	NA	123 J 1	191 J 2
Thallium	2	1.1 U 1	NA	NA	0.94 U 1	0.93 U	1.1 U 1	1.1 U 1	1 U 1	NA	NA	NA	NA
Zinc	1,500	248 1	562 1	1,320	317 1	6.7	110 1	1430 1	10.4 1	NA	NA	31.7 1	1,550 2
Soil Characteristics		Result Q D	Result Q D	Result Q	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
pH	NC	NA 1	5.15 1	6.2	NA 1	NA	NA 1	NA 1	7.71 1	7.7 1	7.18 1	4.55 1	6.27 1
Cyanide (mg/kg)	NC	NA	0.44 B 1	0.05	NA	0.05 U	NA	NA	0.05 U 1	NA	NA	0.05 U 1	0.25 BN 1

Notes:

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- Shaded values exceed New Jersey Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-2

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Residential Criteria (RSCC)

SAMPLE LOCATION		HA-4A	HA-5A	HA-6A	HA-7A	HA-8A	HA-8B	HA-9A	HA-10A	HA-10B	HA-11A	HA-12A	HA-12B	HA-13A
SAMPLE ID		HA 4A	HA 5A	HA 6A	HA 7A	HA 8A	HA 8B	HA 9A	HA 10A	HA 10B	HA 11A	HA 12A	HA 12B	HA 13A
LAB ID		N12323-1	N12323-3	N12323-5	N12323-7	N12323-9	N16274-9	N12323-11	N12323-13	N16274-7	N12323-15	N12323-17	N16274-7	N12323-19
DATE		4/11/2002	4/11/2002	4/11/2002	4/11/2002	4/11/2002	6/14/2002	4/11/2002	4/11/2002	6/14/2002	4/11/2002	4/11/2002	6/14/2002	4/11/2002
SAMPLE INTERVAL (BGS)		0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5
ANALYTE	*NJDEP*													
Pesticide & PCB	*Residential*	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D
Dieldrin	0.042	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	0.49	0.017 U 1	0.017 U 1	0.017 U	0.018 U 1	0.018 U 1	0.039 U 1	0.017 U 1	0.02 U 1	0.034 U	0.017 U	0.02 U 1	0.037 U 1	0.018 U 1
Aroclor 1248	0.49	0.017 U 1	0.017 U 1	0.017 U	0.018 U 1	0.018 U 1	0.039 U 1	0.017 U 1	0.02 U 1	0.034 U	0.017 U	0.02 U 1	0.037 U 1	0.018 U 1
Aroclor 1254	0.49	**0.086** 1	**0.16** 1	**0.252**	0.018 U 1	0.018 U 1	**0.11** 1	**0.071** 1	6.74 1	**0.44** J	0.017 U	3.15 5	**0.22** J 1	**0.0905** 1
Aroclor 1260	0.49	**0.039** 1	**0.0701** 1	0.017 U	0.018 U 1	2 5	**0.21** J 1	0.017 U 1	0.02 U 1	**0.14** J	0.017 U	0.02 U 1	**0.12** J 1	**0.076** 1
Total Aroclor	0.49	**0.125**	**0.2301**	**0.252**	0	2	**0.32**	**0.071**	6.74	0.58 J	0	3.15	**0.34**	**0.1665**
Metals		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D
Aluminum	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	250	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Soil Characteristics		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D
pH	NC	NA 1	NA 1	NA	NA 1	NA 1	6.98	NA 1	NA 1	6.78	NA	5.26 1	NA	NA 1
Cyanide (mg/kg)	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

- * NJDEP RSCC = New Jersey Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not exceed soil cleanup criteria in any sample.
- Shaded values exceed New Jersey Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-3

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Non-Residential Criteria (NRSCC)

SAMPLE LOCATION		GP-01	GP-02	GP-03	GP-04	GP-05	GP-05	GP-06	GP-07	GP-07	GP-07	GP-08	GP-09	GP-10
SAMPLE ID		GP-01A	GP-02A	GP-03A	GP-04A	GP-05A	GP 5C	GP-06A	GP-07A	GP 7C	DUPE 02	GP-08A	GP-09A	GP-10A
LAB ID		E76579-1	E76579-3	E76579-5	E76579-7	E76579-9	N12323-21	E76579-11	E76579-13	N12322-6	N12323-30	E72117-15	E76579-17	E76579-19
DATE		9/11/2000	9/11/2000	9/11/2000	9/11/2000	9/11/2000	4/11/2002	9/11/2000	9/11/2000	4/11/2002	4/11/2002	6/28/2000	9/11/2000	9/11/2000
SAMPLE INTERVAL (BGS)		0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	1.5 - 2	0-0.5	0-0.5	1.5 - 2	1.5 - 2	0-0.5	0-0.5	0-0.5
ANALYTE	*NJDEP Non-Residential*													
Pesticide & PCB		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q	Result Q	Result Q	Result Q D	Result Q	Result Q	Result Q
Dieldrin	0.18	0.0034 U	0.017 U	0.0035 U	0.019 U	0.0041 U	NA	0.0035 U	0.038 U	NA	NA	0.0036 U	0.018 U	0.019 U
Aroclor 1242	2	0.034 U	0.17 U	0.035 U	0.19 U	0.041 U	0.017 U I	0.035 U	0.38 U	0.017 U	0.018 U I	0.036 U	0.18 U	0.19 U
Aroclor 1248	2	0.034 U	0.17 U	0.035 U	0.19 U	0.041 U	0.017 U I	0.035 U	1	0.017 U	0.018 U I	0.036 U	0.18 U	1.4
Aroclor 1254	2	0.079	190 D	0.035 U	3	0.7	0.017 U I	0.035 U	0.38 U	0.19	0.018 U I	0.036 U	0.18 U	0.63
Aroclor 1260	2	0.034 U	26 DJ	0.035 U	0.6	0.18	0.017 U I	0.035 U	0.38 U	0.017 U	0.018 U I	0.07	0.18 U	0.19 U
Total Aroclor	2	0.079	216	0.035 U	3.6	0.88	0	0.035 U	1	0.19	0	0.07	0.18 U	2.03
Metals		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q	Result Q	Result Q	Result Q D	Result Q	Result Q	Result Q
Aluminum	NC	2,980	3,930	3,450	2,250	5,130	3,290 I	901	8,040	3160	3170 I	4,550	2,630	8,000
Antimony	340	0.36	0.52 J	1.1 J	1.7 J	159	1.1 U I	104	5.1 J	23.2	1.1 U I	39.2	69	44.6
Arsenic	20	2 J	2 J	1.6 J	2.9	19.1	1.9 I	7.8	5.6	12.6	1.7 I	23.5	6.1	17.9
Barium	47,000	15.7 J	28.3 J	19.5 J	17.6 J	2,940	22 U I	22.3 J	122	52.5	23 U I	771	39.5 J	504
Beryllium	2	0.07 J	0.21 J	0.13 J	0.05 U	0.23 J	0.54 U I	0.04 U	0.43 J	0.51 U	0.57 U I	0.2 J	0.1 J	0.2 J
Cadmium	100	0.06 U	0.17 J	0.06 U	0.46 J	27.6	0.54 U I	0.17 J	6.7	1.1	0.57 U I	33.3	5.4	13.1
Copper	600	3.7 J	4.3 J	8.6	12.4	2,590	4.2 I	39.4	1,790	145	5.1 I	1,810	66.3	1,260
Iron	NC	6,090	5,800 J	4,600	4,500	72,800	5900 I	2,660	38,900	22900	5080 I	156,000	8,070	100,000
Lead	600	3.6	8.5	21.9	48.5	6,420	4.1 I	7,070	756	9310	9.7 I	2,950	3,950	3,080
Manganese	NC	33.3	154	54.3	18.3	572	41 I	737	359	110	35.8 I	711	99.4	584
Mercury	270	0.06 J	0.1	0.09 J	0.06 J	22.3	0.032 U I	0.06 J	1.3	0.35	0.034 U I	4.2	1.7	4.9
Nickel	2,400	3.2 J	14.6	3.4 J	3.2 J	249	4.3 U I	0.86 J	249	13.7	4.6 U I	294	8.5 J	110
Silver	4,100	0.15 U	0.15 U	0.15 U	0.16 U	1.9 J	1.1 U I	0.28 J	2.2 J	1 U	1.1 U I	1.4 J	0.26 J	2.4
Sodium	NC	18 U	37.4 J	42.1 J	19.9 U	172 J	540 U I	32.3 J	402 J	510 U	570 U I	753 J	63.4 J	695 J
Thallium	2	0.75 U	0.78 U	0.75 U	0.83 U	2.6	1.1 U I	0.78 U	0.95 J	1 U	1.1 U I	0.78 U	0.78 U	5.9
Zinc	1,500	15	71.7	16.6	150	16,200	22.4 I	22.6	924	331	13.2 I	7,550	176	4,080
Soil Characteristics		Result	Result	Result	Result	Result	Result Q D	Result	Result	Result Q	Result Q D	Result	Result	Result
pH	NC	7.7	7.8	5.9	7.4	7	NA I	5.6	7.8	NA	NA I	7.2	7.5	7.6
Cyanide (mg/kg)	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

- * NJDEP NRSCC = New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not exceed soil cleanup criteria in any sample.
- Shaded values exceed New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-3

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Non-Residential Criteria (NRSCC)

SAMPLE LOCATION		GP-12			GP-12			GP-12			GP-13			GP-14			GP-14			GP-15			GP-16			GP-17			GP-18			GP-19			GP-20		
SAMPLE ID		GP-12A			GPDUP1			GP 12D			GP-13A			GP-14A			GP 14D			GP-15A			GP-16A			GP-17A			GP-18A			GP-19A			GP-20A		
LAB ID		N1314-2			N1313-10			N12322-8			N1314-5			N1314-8			N12322-10			N1314-11			N1315-3			N1315-6			N1315-9			N1313-1			N1313-4		
DATE		10/23/2001			10/23/2001			4/11/2002			10/23/2001			10/23/2001			4/11/2002			10/23/2001			10/23/2001			10/23/2001			10/23/2001			10/23/2001			10/23/2001		
SAMPLE INTERVAL (BGS)		0-1			0-1			1.5 - 2			0-0.5			0.3-0.8			1.5 - 2			0.3-0.8			0.3-0.8			0.5-1			0-0.5			0.5-1			0.5-1		
ANALYTE	*NJDEP Non-*																																				
Pesticide & PCB	*Residential*	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Dieldrin	0.18	0.0039	U	1	0.0037	U	1	NA			0.0038	U	1	0.0038	U		NA			0.0039	U	1	0.0034	U	1	0.0035	U	1	0.0036	U	1	0.0040	U	1	0.0039	U	1
Aroclor 1242	2	0.039	U	1	0.037	U	1	0.017	U	1	0.038	U	1	0.038	U		0.017	U	1	0.039	U	1	0.034	U	1	0.035	U	1	0.036	U	1	0.04	U	1	0.039	U	1
Aroclor 1248	2	0.039	U	1	0.037	U	1	0.017	U	1	0.038	U	1	0.038	U		0.017	U	1	0.039	U	1	0.034	U	1	0.035	U	1	0.036	U	1	0.04	U	1	9.95	D	5
Aroclor 1254	2	3.7	D	10	3.3	D	10	2.08		5	2.1	D	10	0.038	U		0.017	U	1	5.2	DJ	20	3	DJ	10	0.18	J	1	0.86	J	1	3.4	D	10	0.039	U	1
Aroclor 1260	2	3.1	D	10	3.2	D	10	3.52		5	0.72	D	10	36	D		42.9		50	7.4	D	20	3	D	10	0.24		1	0.56	J	1	0.04	U	1	0.039	U	1
Total Aroclor	2	6.8			6.5			5.6			2.82			36			42.9			12.6			6			0.42			1.42			3.4			9.95		
Metals		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Aluminum	NC	NA			NA			3,940		1	NA			NA			3,670		1	NA			NA			NA			NA			NA			NA		
Antimony	340	NA			NA			4.3		1	NA			NA			1.3		1	NA			NA			NA			NA			NA			NA		
Arsenic	20	NA			NA			7.9		1	NA			NA			4.8		1	NA			NA			NA			NA			NA			NA		
Barium	47,000	NA			NA			144		1	NA			NA			125		1	NA			NA			NA			NA			NA			NA		
Beryllium	2	NA			NA			0.56	U	1	NA			NA			0.52	U	1	NA			NA			NA			NA			NA			NA		
Cadmium	100	NA			NA			9.2		1	NA			NA			1.9		1	NA			NA			NA			NA			NA			NA		
Copper	600	NA			NA			485		1	NA			NA			117		1	NA			NA			NA			NA			NA			NA		
Iron	NC	NA			NA			42500		1	NA			NA			21000		1	NA			NA			NA			NA			NA			NA		
Lead	600	NA			NA			644		1	NA			NA			471		1	NA			NA			NA			NA			NA			NA		
Manganese	NC	NA			NA			273		1	NA			NA			234		1	NA			NA			NA			NA			NA			NA		
Mercury	270	NA			NA			1.7		3	NA			NA			0.55		1	NA			NA			NA			NA			NA			NA		
Nickel	2,400	NA			NA			35.2		1	NA			NA			19.8		1	NA			NA			NA			NA			NA			NA		
Silver	4,100	NA			NA			1.1	U	1	NA			NA			1	U	1	NA			NA			NA			NA			NA			NA		
Sodium	NC	NA			NA			560	U	1	NA			NA			520	U	1	NA			NA			NA			NA			NA			NA		
Thallium	2	NA			NA			1.1	U	1	NA			NA			1	U	1	NA			NA			NA			NA			NA			NA		
Zinc	1,500	NA			NA			1080		1	NA			NA			375		1	NA			NA			NA			NA			NA			NA		
Soil Characteristics		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
pH	NC	7.57		1	7.3		1	NA		1	7.6		1	7.56			NA		1	7.97		1	7.52		1	6.8		1	7.68		1	7.99		1	7.17		1
Cyanide (mg/kg)	NC	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		

Notes:

- * NJDEP NRSCC = New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not exceed soil cleanup criteria in any sample.
- Shaded values exceed New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-3

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Non-Residential Criteria (NRSCC)

SAMPLE LOCATION		GP-21	GP-22	GP-23	GP-24	GP-24	GP-25	GP-25	GP-26	GP-27	GP-28	GP-29	GP-29	GP-30
SAMPLE ID		GP-21A	GP-22A	GP-23A	GP-24A	GP 24D	GP-25A	GP 25D	GP-26A	GP-27A	GP-28A	GP-29A	GP-DUP3	GP-30A
LAB ID		N1313-7	N1314-14	N1405-1	N1405-4	N12322-12	N1405-7	N12322-14	N1405-10	N1405-13	N1405-15	N1405-18	N1409-7	N1409-1
DATE		10/23/2001	10/23/2001	10/24/2001	10/24/2001	4/11/2002	10/24/2001	4/11/2002	10/24/2001	10/24/2001	10/24/2001	10/24/2001	10/24/2001	10/24/2001
SAMPLE INTERVAL (BGS)		0-0.5	0-0.5	0.3-0.8	0.5-1	1.5 - 2	0.5-1	1.5 - 2	2	0-0.5	0-0.5	1-1.5	1-1.5	0-0.5
ANALYTE	NJDEP Non-Residential													
Pesticide & PCB	0.18	Result Q D	Result Q D	Result Q D	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Dieldrin	0.18	0.0038 U 1	0.0038 U 1	0.0041 U 1	0.0039 U	NA	0.0042 U 1	NA	0.004 U 1	0.0038 U	0.0035 U 1	0.0037 U 1	0.0035 U 1	0.0035 U 1
Aroclor 1242	2	0.038 U 1	0.038 U 1	12 D 10	0.039 U	0.017 U	0.042 U 1	18 U 1	0.04 U 1	0.038 U	0.036 U 1	0.037 U 1	0.035 U 1	0.036 U 1
Aroclor 1248	2	3.76 DJ 20	0.038 U 1	0.041 U 1	0.87	0.017 U	0.042 U 1	18 U 1	0.04 U 1	0.038 U	0.036 U 1	0.037 U 1	0.035 U 1	0.036 U 1
Aroclor 1254	2	0.038 U 1	0.038 U 1	0.041 U 1	0.42 J	0.0493	0.042 U 1	18 U 1	0.32 1	0.038 U	0.036 U 1	0.037 U 1	0.035 U 1	2.6 DJ 10
Aroclor 1260	2	6.3 D 20	0.049 J 1	2.2 D 10	0.039 U	0.0444	2.1 U 50	0.0195 1	0.04 U 1	0.038 U	0.036 U 1	0.037 U 1	0.035 U 1	0.89 DJ 10
Total Aroclor	2	9.76	0.049	14.2	1.29	0.0937	0	0.0195	0.32	0	0	0	0	3.49
Metals		Result Q D	Result Q D	Result Q D	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Aluminum	NC	NA	2,100 1	25,700 1	14,200	3650	6,710 1	3050 1	4,430 1	2,620	3,440 1	3,610 1	2,380 1	4,520 1
Antimony	340	NA	1 J 1	42.3 1	55.7	1.1 U	26.4 1	1 U 1	5.2 J 1	0.45 U	0.45 U 1	1.4 J 1	0.93 J 1	865 1
Arsenic	20	NA	2.6 1	20.4 1	10.7	4.6	15.2 1	1.4 1	14.5 1	1.7 J	3.4 1	3.1 1	2.7 1	55 1
Barium	47,000	NA	14.8 J 1	1,510 1	1,160	51.5	529 1	21 U 1	66.3 1	15.8 J	20.3 J 1	20.6 J 1	13.6 J 1	166 1
Beryllium	2	NA	0.09 J 1	0.12 J 1	0.13 J	0.53 U	0.21 J 1	0.52 U 1	0.21 J 1	0.06 J	0.14 J 1	0.17 J 1	0.1 J 1	0.09 J 1
Cadmium	100	NA	0.12 J 1	11.2 1	7.7	1	12.1 1	0.52 U 1	2.2 1	0.06 U	0.17 J 1	0.12 J 1	0.07 U 1	5.7 1
Copper	600	NA	5.1 J 1	2,870 1	887	42.6	725 1	3.7 1	121 1	4.3 J	4.9 J 1	3.4 J 1	3.2 J 1	1,350 1
Iron	NC	NA	4,030 1	100,000 1	54,600	12500	69,300 1	3710 1	13,400 1	3,660	5,480 1	5,060 1	4,540 1	55,500 1
Lead	600	NA	85.5 1	1,910 1	10,900	158	3,880 1	3.8 1	440 1	12.4	21.6 1	161 1	44.5 1	20,700 3
Manganese	NC	NA	38.6 1	724 1	511	134	397 1	27 1	205 1	13.9	41.9 1	42.8 1	28.3 1	374 1
Mercury	270	NA	0.06 J 1	5.1 5	1.8	0.23	3.7 5	0.034 U 1	0.66 1	0.04 U	0.04 J 1	0.04 U 1	0.03 U 1	2.5 2
Nickel	2,400	NA	2.7 J 1	502 1	66	20.9	138 1	4.5 1	14.9 1	2.2 J	3.8 J 1	3.5 J 1	2.4 J 1	173 1
Silver	4,100	NA	0.21 J 1	2.2 J 1	5.1	1.1 U	1.2 J 1	1 U 1	0.17 J 1	0.15 U	0.15 U 1	0.15 U 1	0.15 U 1	1.7 J 1
Sodium	NC	NA	20.5 U 1	963 J 1	34.5 J	530 U	56.5 J 1	520 U 1	51.5 J 1	59.5 J	32.4 J 1	20.8 U 1	71.2 J 1	21.1 J 1
Thallium	2	NA	NA	NA	NA	1.1 U	NA	1 U 1	NA	NA	NA	NA	NA	NA
Zinc	1,500	NA	18.8 1	4,800 1	2,120	175	2,540 1	175 1	318 1	10.2	78.8 1	32.9 1	18.5 1	1,830 1
Soil Characteristics		Result Q D	Result Q D	Result Q D	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
pH	NC	7.18 1	6.11 1	7.73 1	12.32	NA	7.76 1	NA 1	5.93 1	4.95	6.15 1	5.78 1	5.59 1	8.15 1
Cyanide (mg/kg)	NC	NA	0.05 U 1	0.64 1	0.05 U	NA	0.38 J 1	NA	0.05 U 1	0.05 U	0.05 U 1	0.05 U 1	0.05 U 1	0.05 U 1

Notes:

- * NJDEP NRSCC = New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not exceed soil cleanup criteria in any sample.
- Shaded values exceed New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
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- D = Sample diluted.
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TABLE 5-3

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Non-Residential Criteria (NRSCC)

SAMPLE LOCATION		GP-30	GP-31	GP-31	GP-32	GP-32	GP-32	GP-33	GP-33	HA-1	HA-1	HA-2	HA-3
SAMPLE ID		GP 30D	GP-31A	GP-DUP4	GP 32A	GP 32B	DUPE 01	GP 33A	GP 33B	HA-1A	GPDUP2	HA-2A	HA-3A
LAB ID		N12322-16	N1409-4	N1409-8	N12323-24	N16274-6	N12323-29	N12323-26	N16274-3	N1314-12	N1313-11	N1529-1	N1529-3
DATE		4/11/2002	10/24/2001	10/24/2001	4/11/2002	6/14/2002	4/11/2002	4/11/2002	6/14/2002	10/23/2001	10/23/2001	10/26/2001	10/26/2001
SAMPLE INTERVAL (BGS)		1.5 - 2	0.3-0.8	0.3-0.8	0.5 - 1	1.5 - 2	1.5 - 2	0.5 - 1	1.5 - 2	0-0.5	0-0.5	0-0.5	0-0.5
ANALYTE	*NJDEP Non-*												
Pesticide & PCB	*Residential*	Result Q D	Result Q D	Result Q	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Dieldrin	0.18	NA	0.0037 U 1	0.0036 U	NA	NA	NA	NA	NA	0.004 U 1	0.0036 U 1	**0.0046** 1	0.0037 U 1
Aroclor 1242	2	17 U 1	0.037 U 1	0.036 U	17 U 1	NA	17 U 1	0.018 U 1	35 U 1	0.04 U 1	0.036 U 1	0.035 U 1	0.037 U 1
Aroclor 1248	2	17 U 1	0.037 U 1	0.036 U	17 U 1	NA	17 U 1	0.018 U 1	35 U 1	0.04 U 1	0.036 U 1	0.035 U 1	0.037 U 1
Aroclor 1254	2	**0.327** 1	**0.43 J** 1	**0.3 J**	**0.321** 1	NA	17 U 1	**1.06** 2	35 U 1	**4.4 D** 10	**1.7 DJ** 2	0.035 U 1	0.037 U 1
Aroclor 1260	2	17 U 1	**0.48 J** 1	**0.38**	17 U 1	NA	17 U 1	**1.32** 2	35 U 1	**3 D** 10	**2 D** 2	0.035 U 1	**0.38 DJ** 5
Total Aroclor	2	**0.327**	**0.91**	**0.68**	**0.321**	NA	0	**2.38**	35 U 1	**7.4**	**3.7**	0	**0.38**
Metals		Result Q D	Result Q D	Result Q	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Aluminum	NC	**4,020** 1	**4,040** 1	**3,540**	**3,500** 1	**1,920**	**3,200** 1	**7,670** 1	**1,960** 1	NA	NA	**2,320** 1	**2,400** 2
Antimony	340	**5.7** 1	**169** 1	**34**	**24.8** 1	**0.63 J**	1.1 U 1	**11.7** 1	**1.2 J** 1	NA	NA	**1 J** 1	**9.5 J** 2
Arsenic	20	**2.2** 1	**22.2** 1	**9.9**	**5.9** 1	0.68 U	**1.6** 1	**10.6** 1	0.74 U 1	NA	NA	**2.8** 1	**21.6** 2
Barium	47,000	**37** 1	**99.8** 1	**129**	**88.1** 1	**11.3 J**	21 U 1	**663** 1	**14.6 J** 1	NA	NA	**19 J** 1	**316** 1
Beryllium	2	0.57 U 1	**0.08 J** 1	**0.15 J**	0.47 U 1	**0.13 J**	0.53 U 1	0.54 U 1	**0.15 J** 1	NA	NA	**0.2 J** 1	**0.14 J** 1
Cadmium	100	0.57 U 1	**2.4** 1	**4.6**	**1.4** 1	0.08 U	0.53 U 1	**5.9** 1	0.09 U 1	NA	NA	**0.31 J** 1	**11.2** 2
Copper	600	**89.6** 1	**483** 1	**523**	**438** 1	**7.3**	**9.9** 1	**382** 1	**2 J** 1	NA	NA	**7** 1	**296** 2
Iron	NC	**5530** 1	**14,900** 1	**19,600**	**17,600** 1	**3750**	**4,870** 1	**47,800** 1	**3,240** 1	NA	NA	**4,400** 1	**224,000** 2
Lead	600	**594** 1	**7,860** 1	**2,440** 1	**3,350** 1	**2.6**	**8.2** 1	**2,490** 1	**2.3** 1	NA	NA	**64.1** 1	**852** 2
Manganese	NC	**72.1** 1	**82.3** 1	**208**	**134** 1	**13.3**	**20.6** 1	**378** 1	**22.3** 1	NA	NA	**63** 1	**1,140** 1
Mercury	270	**0.11** 1	**1.5** 1	**0.83**	**1.3** 3	0.03 U	0.032 U 1	**1.5** 3	0.03 U 1	NA	NA	0.04 U 1	**0.88** 1
Nickel	2,400	**5.8** 1	**32.1** 1	**64.6**	**13.1** 1	**1.8 J**	4.3 U 1	**61.3** 1	**2 J** 1	NA	NA	**3 J** 1	**113** 1
Silver	4,100	1.1 U 1	**0.7 J** 1	0.15 U	0.94 U 1	0.14 U	1.1 U 1	**2.7** 1	0.15 U 1	NA	NA	0.18 U 1	0.21 U 1
Sodium	NC	570 U 1	**71.1 J** 1	21.1 U	470 U 1	**95.1 J**	530 U 1	540 U 1	**104 J** 1	NA	NA	**123 J** 1	**191 J** 2
Thallium	2	1.1 U 1	NA	NA	0.94 U 1	0.93 U	1.1 U 1	1.1 U 1	1 U 1	NA	NA	NA	NA
Zinc	1,500	**248** 1	**562** 1	**1,320**	**317** 1	**6.7**	**110** 1	**1430** 1	**10.4** 1	NA	NA	**31.7** 1	**1,550** 2
Soil Characteristics		Result Q D	Result Q D	Result Q	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
pH	NC	NA 1	5.15 1	6.2	NA 1	NA	NA 1	NA 1	7.71 1	7.7 1	7.18 1	4.55 1	6.27 1
Cyanide (mg/kg)	NC	NA	0.44 B 1	0.05	NA	0.05 U	NA	NA	0.05 U 1	NA	NA	0.05 U 1	0.253N 1

Notes:

- * NJDEP NRSCC = New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not exceed soil cleanup criteria in any sample.
- Shaded values exceed New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-3

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Non-Residential Criteria (NRSCC)

SAMPLE LOCATION		HA-4A	HA-5A	HA-6A	HA-7A	HA-8A	HA-8B	HA-9A	HA-10A	HA-10B	HA-11A	HA-12A	HA-12B	HA-13A
SAMPLE ID		HA 4A	HA 5A	HA 6A	HA 7A	HA 8A	HA 8B	HA 9A	HA 10A	HA 10B	HA 11A	HA 12A	HA 12B	HA 13A
LAB ID		N12323-1	N12323-3	N12323-5	N12323-7	N12323-9	N16274-9	N12323-11	N12323-13	N16274-7	N12323-15	N12323-17	N16274-7	N12323-19
DATE		4/11/2002	4/11/2002	4/11/2002	4/11/2002	4/11/2002	6/14/2002	4/11/2002	4/11/2002	6/14/2002	4/11/2002	4/11/2002	6/14/2002	4/11/2002
SAMPLE INTERVAL (BGS)		0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5
ANALYTE	*NJDEP Non-Residential*													
Pesticide & PCB		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D
Dieldrin	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	2	0.017 U 1	0.017 U 1	0.017 U	0.018 U 1	0.018 U 1	0.039 U 1	0.017 U 1	0.02 U 1	0.034 U	0.017 U	0.02 U 1	0.037 U 1	0.018 U 1
Aroclor 1248	2	0.017 U 1	0.017 U 1	0.017 U	0.018 U 1	0.018 U 1	0.039 U 1	0.017 U 1	0.02 U 1	0.034 U	0.017 U	0.02 U 1	0.037 U 1	0.018 U 1
Aroclor 1254	2	**0.086** 1	**0.16** 1	**0.252**	0.018 U 1	0.018 U 1	**0.11** 1	**0.071** 1	**6.74** 1	**0.44** J	0.017 U	**3.15** 5	**0.22** J 1	**0.0905** 1
Aroclor 1260	2	**0.039** 1	**0.0701** 1	0.017 U	0.018 U 1	2 5	**0.21** J 1	0.017 U 1	0.02 U 1	**0.14** J	0.017 U	0.02 U 1	**0.12** J 1	**0.076** 1
Total Aroclor	2	**0.125**	**0.2301**	**0.252**	**0**	**2**	**0.32**	**0.071**	**6.74**	**0.58** J	**0**	**3.15**	**0.34**	**0.1665**
Metals		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D
Aluminum	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	340	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	47,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	270	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	2,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	4,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Soil Characteristics		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D
pH	NC	NA 1	NA 1	NA	NA 1	NA 1	6.98	NA 1	NA 1	6.78	NA	5.26 1	NA	NA 1
Cyanide (mg/kg)	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

- * NJDEP NRSCC = New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not exceed soil cleanup criteria in any sample.
- Shaded values exceed New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-4

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Impact to Groundwater Criteria (IGW)

SAMPLE LOCATION		GP-01	GP-02	GP-03	GP-04	GP-05	GP-05	GP-06	GP-07	GP-07	GP-07	GP-08	GP-09	GP-10
SAMPLE ID		GP-01A	GP-02A	GP-03A	GP-04A	GP-05A	GP 5C	GP-06A	GP-07A	GP 7C	DUPE 02	GP-08A	GP-09A	GP-10A
LAB ID		E76579-1	E76579-3	E76579-5	E76579-7	E76579-9	N12323-21	E76579-11	E76579-13	N12322-6	N12323-30	E72117-15	E76579-17	E76579-19
DATE		9/11/2000	9/11/2000	9/11/2000	9/11/2000	9/11/2000	4/11/2002	9/11/2000	9/11/2000	4/11/2002	4/11/2002	6/28/2000	9/11/2000	9/11/2000
SAMPLE INTERVAL (BGS)		0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	1.5 - 2	0-0.5	0-0.5	1.5 - 2	1.5 - 2	0-0.5	0-0.5	0-0.5
ANALYTE	*NJDEP IGW*													
Pesticide & PCB		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q	Result Q	NA	Result Q D	Result Q	Result Q	Result Q
Dieldrin	50	0.0034 U	0.017 U	0.0035 U	0.019 U	0.0041 U	NA	0.0035 U	0.038 U	NA	NA	0.0036 U	0.018 U	0.019 U
Aroclor 1242	50	0.034 U	0.17 U	0.035 U	0.19 U	0.041 U	0.017 U 1	0.035 U	0.38 U	0.017 U	0.018 U 1	0.036 U	0.18 U	0.19 U
Aroclor 1248	50	0.034 U	0.17 U	0.035 U	0.19 U	0.041 U	0.017 U 1	0.035 U	1	0.017 U	0.018 U 1	0.036 U	0.18 U	1.4
Aroclor 1254	50	0.079	190 D	0.035 U	3	0.7	0.017 U 1	0.035 U	0.38 U	0.19	0.018 U 1	0.036 U	0.18 U	0.63
Aroclor 1260	50	0.034 U	26 DJ	0.035 U	0.6	0.18	0.017 U 1	0.035 U	0.38 U	0.017 U	0.018 U 1	0.07	0.18 U	0.19 U
Total Aroclor	50	0.079	216	0.035 U	3.6	0.88	0	0.035 U	1	0.19	0	0.07	0.18 U	2.03
Metals		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q	Result Q	Result Q	Result Q D	Result Q	Result Q	Result Q
Aluminum	NC	2,980	3,930	3,450	2,250	5,130	3,290 1	901	8,040	3160	3170 1	4,550	2,630	8,000
Antimony	(h)	0.36	0.52 J	1.1 J	1.7 J	159	1.1 U 1	104	5.1 J	23.2	1.1 U 1	39.2	69	44.6
Arsenic	(h)	2 J	2 J	1.6 J	2.9	19.1	1.9 1	7.8	5.6	12.6	1.7 1	23.5	6.1	17.9
Barium	(h)	15.7 J	28.3 J	19.5 J	17.6 J	2,940	22 U 1	22.3 J	122	52.5	23 U 1	771	39.5 J	504
Beryllium	(h)	0.07 J	0.21 J	0.13 J	0.05 U	0.23 J	0.54 U 1	0.04 U	0.43 J	0.51 U	0.57 U 1	0.2 J	0.1 J	0.2 J
Cadmium	(h)	0.06 U	0.17 J	0.06 U	0.46 J	27.6	0.54 U 1	0.17 J	6.7	1.1	0.57 U 1	33.3	5.4	13.1
Copper	(h)	3.7 J	4.3 J	8.6	12.4	2,590	4.2 1	39.4	1,790	145	5.1 1	1,810	66.3	1,260
Iron	NC	6,090	5,800 J	4,600	4,500	72,800	5900 1	2,660	38,900	22900	5080 1	156,000	8,070	100,000
Lead	(h)	3.6	8.5	21.9	48.5	6,420	4.1 1	7,070	756	9310	9.7 1	2,950	3,950	3,080
Manganese	NC	33.3	154	54.3	18.3	572	41 1	737	359	110	35.8 1	711	99.4	584
Mercury	(h)	0.06 J	0.1	0.09 J	0.06 J	22.3	0.032 U 1	0.06 J	1.3	0.35	0.034 U 1	4.2	1.7	4.9
Nickel	(h)	3.2 J	14.6	3.4 J	3.2 J	249	4.3 U 1	0.86 J	249	13.7	4.6 U 1	294	8.5 J	110
Silver	(h)	0.15 U	0.15 U	0.15 U	0.16 U	1.9 J	1.1 U 1	0.28 J	2.2 J	1 U	1.1 U 1	1.4 J	0.26 J	2.4
Sodium	NC	18 U	37.4 J	42.1 J	19.9 U	172 J	540 U 1	32.3 J	402 J	510 U	570 U 1	753 J	63.4 J	695 J
Thallium	(h)	0.75 U	0.78 U	0.75 U	0.83 U	2.6	1.1 U 1	0.78 U	0.95 J	1 U	1.1 U 1	0.78 U	0.78 U	5.9
Zinc	(h)	15	71.7	16.6	150	16,200	22.4 1	22.6	924	331	13.2 1	7,550	176	4,080
Soil Characteristics		Result	Result	Result	Result	Result	Result Q D	Result	Result	Result Q	Result Q D	Result	Result	Result
pH	NC	7.7	7.8	5.9	7.4	7	NA 1	5.6	7.8	NA	NA 1	7.2	7.5	7.6
Cyanide (mg/kg)	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

- * NJDEP IGW = New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not exceed soil cleanup criteria in any sample.
- Shaded values exceed New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-4

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Impact to Groundwater Criteria (IGW)

SAMPLE LOCATION		GP-12	GP-12	GP-12	GP-13	GP-14	GP-14	GP-15	GP-16	GP-17	GP-18	GP-19	GP-20
SAMPLE ID		GP-12A	GPDUP1	GP 12D	GP-13A	GP-14A	GP 14D	GP-15A	GP-16A	GP-17A	GP-18A	GP-19A	GP-20A
LAB ID		N1314-2	N1313-10	N12322-8	N1314-5	N1314-8	N12322-10	N1314-11	N1315-3	N1315-6	N1315-9	N1313-1	N1313-4
DATE		10/23/2001	10/23/2001	4/11/2002	10/23/2001	10/23/2001	4/11/2002	10/23/2001	10/23/2001	10/23/2001	10/23/2001	10/23/2001	10/23/2001
SAMPLE INTERVAL (BGS)		0-1	0-1	1.5 - 2	0-0.5	0.3-0.8	1.5 - 2	0.3-0.8	0.3-0.8	0.5-1	0-0.5	0.5-1	0.5-1
ANALYTE	NJDEP IGW												
Pesticide & PCB		Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Dieldrin	0.18	0.0039 U 1	0.0037 U 1	NA	0.0038 U 1	0.0038 U	NA	0.0039 U 1	0.0034 U 1	0.0035 U 1	0.0036 U 1	0.0040 U 1	0.0039 U 1
Aroclor 1242	2	0.039 U 1	0.037 U 1	0.017 U 1	0.038 U 1	0.038 U	0.017 U 1	0.039 U 1	0.034 U 1	0.035 U 1	0.036 U 1	0.04 U 1	0.039 U 1
Aroclor 1248	2	0.039 U 1	0.037 U 1	0.017 U 1	0.038 U 1	0.038 U	0.017 U 1	0.039 U 1	0.034 U 1	0.035 U 1	0.036 U 1	0.04 U 1	9.95 D 5
Aroclor 1254	2	3.7 D 10	3.3 D 10	2.08 5	2.1 D 10	0.038 U	0.017 U 1	5.2 DJ 20	3 DJ 10	0.18 J 1	0.86 J 1	3.4 D 10	0.039 U 1
Aroclor 1260	2	3.1 D 10	3.2 D 10	3.52 5	0.72 D 10	36 D	42.9 50	7.4 D 20	3 D 10	0.24 1	0.56 J 1	0.04 U 1	0.039 U 1
Total Aroclor	2	6.8	6.5	5.6	2.82	36	42.9	12.6	6	0.42	1.42	3.4	9.95
Metals		Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Aluminum	NC	NA	NA	3,940 1	NA	NA	3,670 1	NA	NA	NA	NA	NA	NA
Antimony	340	NA	NA	4.3 1	NA	NA	1.3 1	NA	NA	NA	NA	NA	NA
Arsenic	20	NA	NA	7.9 1	NA	NA	4.8 1	NA	NA	NA	NA	NA	NA
Barium	47,000	NA	NA	144 1	NA	NA	125 1	NA	NA	NA	NA	NA	NA
Beryllium	2	NA	NA	0.56 U 1	NA	NA	0.52 U 1	NA	NA	NA	NA	NA	NA
Cadmium	100	NA	NA	9.2 1	NA	NA	1.9 1	NA	NA	NA	NA	NA	NA
Copper	600	NA	NA	485 1	NA	NA	117 1	NA	NA	NA	NA	NA	NA
Iron	NC	NA	NA	42500 1	NA	NA	21000 1	NA	NA	NA	NA	NA	NA
Lead	600	NA	NA	644 1	NA	NA	471 1	NA	NA	NA	NA	NA	NA
Manganese	NC	NA	NA	273 1	NA	NA	234 1	NA	NA	NA	NA	NA	NA
Mercury	270	NA	NA	1.7 3	NA	NA	0.55 1	NA	NA	NA	NA	NA	NA
Nickel	2,400	NA	NA	35.2 1	NA	NA	19.8 1	NA	NA	NA	NA	NA	NA
Silver	4,100	NA	NA	1.1 U 1	NA	NA	1 U 1	NA	NA	NA	NA	NA	NA
Sodium	NC	NA	NA	560 U 1	NA	NA	520 U 1	NA	NA	NA	NA	NA	NA
Thallium	2	NA	NA	1.1 U 1	NA	NA	1 U 1	NA	NA	NA	NA	NA	NA
Zinc	1,500	NA	NA	1080 1	NA	NA	375 1	NA	NA	NA	NA	NA	NA
Soil Characteristics		Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
pH	NC	7.57 1	7.3 1	NA 1	7.6 1	7.56	NA 1	7.97 1	7.52 1	6.8 1	7.68 1	7.99 1	7.17 1
Cyanide (mg/kg)	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

- * NJDEP IGW = New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not exceed soil cleanup criteria in any sample.
- Shaded values exceed New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-4

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Impact to Groundwater Criteria (IGW)

SAMPLE LOCATION		GP-21	GP-22	GP-23	GP-24	GP-24	GP-25	GP-25	GP-26	GP-27	GP-28	GP-29	GP-29	GP-30
SAMPLE ID		GP-21A	GP-22A	GP-23A	GP-24A	GP 24D	GP-25A	GP 25D	GP-26A	GP-27A	GP-28A	GP-29A	GP-DUP3	GP-30A
LAB ID		N1313-7	N1314-14	N1405-1	N1405-4	N12322-12	N1405-7	N12322-14	N1405-10	N1405-13	N1405-15	N1405-18	N1409-7	N1409-1
DATE		10/23/2001	10/23/2001	10/24/2001	10/24/2001	4/11/2002	10/24/2001	4/11/2002	10/24/2001	10/24/2001	10/24/2001	10/24/2001	10/24/2001	10/24/2001
SAMPLE INTERVAL (BGS)		0-0.5	0-0.5	0.3-0.8	0.5-1	1.5 - 2	0.5-1	1.5 - 2	2	0-0.5	0-0.5	1-1.5	1-1.5	0-0.5
ANALYTE	*NJDEP IGW*													
Pesticide & PCB		Result Q D	Result Q D	Result Q D	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Dieldrin	0.18	0.0038 U 1	0.0038 U 1	0.0041 U 1	0.0039 U	NA	0.0042 U 1	NA	0.004 U 1	0.0038 U	0.0035 U 1	0.0037 U 1	0.0035 U 1	0.0035 U 1
Aroclor 1242	2	0.038 U 1	0.038 U 1	12 D 10	0.039 U	0.017 U	0.042 U 1	18 U 1	0.04 U 1	0.038 U	0.036 U 1	0.037 U 1	0.035 U 1	0.036 U 1
Aroclor 1248	2	3.76 DJ 20	0.038 U 1	0.041 U 1	0.87	0.017 U	0.042 U 1	18 U 1	0.04 U 1	0.038 U	0.036 U 1	0.037 U 1	0.035 U 1	0.036 U 1
Aroclor 1254	2	0.038 U 1	0.038 U 1	0.041 U 1	0.42 J	0.0493	0.042 U 1	18 U 1	0.32 1	0.038 U	0.036 U 1	0.037 U 1	0.035 U 1	2.6 DJ 10
Aroclor 1260	2	6 D 20	0.049 J 1	2.2 D 10	0.039 U	0.0444	2.1 U 50	0.0195 1	0.04 U 1	0.038 U	0.036 U 1	0.037 U 1	0.035 U 1	0.89 DJ 10
Total Aroclor	2	9.76	0.049	14.2	1.29	0.0937	0	0.0195	0.32	0	0	0	0	3.49
Metals		Result Q D	Result Q D	Result Q D	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Aluminum	NC	NA	2,100 1	25,700 1	14,200	3650	6,710 1	3050 1	4,430 1	2,620	3,440 1	3,610 1	2,380 1	4,520 1
Antimony	340	NA	1 J 1	42.3 1	55.7	1.1 U	26.4 1	1 U 1	5.2 J 1	0.45 U	0.45 U 1	1.4 J 1	0.93 J 1	865 1
Arsenic	20	NA	2.6 1	20.4 1	10.7	4.6	15.2 1	1.4 1	14.5 1	1.7 J	3.4 1	3.1 1	2.7 1	55 1
Barium	47,000	NA	14.8 J 1	1,510 1	1,160	51.5	529 1	21 U 1	66.3 1	15.8 J	20.3 J 1	20.6 J 1	13.6 J 1	166 1
Beryllium	2	NA	0.09 J 1	0.12 J 1	0.13 J	0.53 U	0.21 J 1	0.52 U 1	0.21 J 1	0.06 J	0.14 J 1	0.17 J 1	0.1 J 1	0.09 J 1
Cadmium	100	NA	0.12 J 1	11.2 1	7.7	1	12.1 1	0.52 U 1	2.2 1	0.06 U	0.17 J 1	0.12 J 1	0.07 U 1	5.7 1
Copper	600	NA	5.1 J 1	2,870 1	887	42.6	725 1	3.7 1	121 1	4.3 J	4.9 J 1	3.4 J 1	3.2 J 1	1,350 1
Iron	NC	NA	4,030 1	100,000 1	54,600	12500	69,300 1	3710 1	13,400 1	3,660	5,480 1	5,060 1	4,540 1	55,500 1
Lead	600	NA	85.5 1	1,910 1	10,900	158	3,880 1	3.8 1	440 1	12.4	21.6 1	161 1	44.5 1	20,700 3
Manganese	NC	NA	38.6 1	724 1	511	134	397 1	27 1	205 1	13.9	41.9 1	42.8 1	28.3 1	374 1
Mercury	270	NA	0.06 J 1	5.1 5	1.8	0.23	3.7 5	0.034 U 1	0.66 1	0.04 U	0.04 J 1	0.04 U 1	0.03 U 1	2.5 2
Nickel	2,400	NA	2.7 J 1	502 1	66	20.9	138 1	4.5 1	14.9 1	2.2 J	3.8 J 1	3.5 J 1	2.4 J 1	173 1
Silver	4,100	NA	0.21 J 1	2.2 J 1	5.1	1.1 U	1.2 J 1	1 U 1	0.17 J 1	0.15 U	0.15 U 1	0.15 U 1	0.15 U 1	1.7 J 1
Sodium	NC	NA	20.5 U 1	963 J 1	34.5 J	530 U	56.5 J 1	520 U 1	51.5 J 1	59.5 J	32.4 J 1	20.8 U 1	71.2 J 1	21.1 J 1
Thallium	2	NA	NA	NA	NA	1.1 U	NA	1 U 1	NA	NA	NA	NA	NA	NA
Zinc	1,500	NA	18.8 1	4,800 1	2,120	175	2,540 1	175 1	318 1	10.2	78.8 1	32.9 1	18.5 1	1,830 1
Soil Characteristics		Result Q D	Result Q D	Result Q D	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
pH	NC	7.18 1	6.11 1	7.73 1	12.32	NA	7.76 1	NA 1	5.93 1	4.95	6.15 1	5.78 1	5.59 1	8.15 1
Cyanide (mg/kg)	NC	NA	0.05 U 1	0.64 1	0.05 U	NA	0.38 J 1	NA	0.05 U 1	0.05 U	0.05 U 1	0.05 U 1	0.05 U 1	0.05 U 1

Notes:

- * NJDEP IGW = New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not exceed soil cleanup criteria in any sample.
- Shaded values exceed New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-4

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Impact to Groundwater Criteria (IGW)

SAMPLE LOCATION		GP-30	GP-31	GP-31	GP-32	GP-32	GP-32	GP-33	GP-33	HA-1	HA-1	HA-2	HA-3
SAMPLE ID		GP 30D	GP-31A	GP-DUP4	GP 32A	GP 32B	DUPE 01	GP 33A	GP 33B	HA-1A	GPDUP2	HA-2A	HA-3A
LAB ID		N12322-16	N1409-4	N1409-8	N12323-24	N16274-6	N12323-29	N12323-26	N16274-3	N1314-12	N1313-11	N1529-1	N1529-3
DATE		4/11/2002	10/24/2001	10/24/2001	4/11/2002	6/14/2002	4/11/2002	4/11/2002	6/14/2002	10/23/2001	10/23/2001	10/26/2001	10/26/2001
SAMPLE INTERVAL (BGS)		1.5 - 2	0.3-0.8	0.3-0.8	0.5 - 1	1.5 - 2	1.5 - 2	0.5 - 1	1.5 - 2	0-0.5	0-0.5	0-0.5	0-0.5
ANALYTE	*NJDEP IGW*												
Pesticide & PCB		Result Q D	Result Q D	Result Q	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Dieldrin	0.18	NA	0.0037 U 1	0.0036 U	NA	NA	NA	NA	NA	0.004 U 1	0.0036 U 1	**0.0046** 1	0.0037 U 1
Aroclor 1242	2	17 U 1	0.037 U 1	0.036 U	17 U 1	NA	17 U 1	0.018 U 1	35 U 1	0.04 U 1	0.036 U 1	0.035 U 1	0.037 U 1
Aroclor 1248	2	17 U 1	0.037 U 1	0.036 U	17 U 1	NA	17 U 1	0.018 U 1	35 U 1	0.04 U 1	0.036 U 1	0.035 U 1	0.037 U 1
Aroclor 1254	2	**0.327** 1	**0.43 J** 1	**0.3 J**	**0.321** 1	NA	17 U 1	**1.06** 2	35 U 1	**4.4 D** 10	**1.7 DJ** 2	0.035 U 1	0.037 U 1
Aroclor 1260	2	17 U 1	**0.48 J** 1	**0.38**	17 U 1	NA	17 U 1	**1.32** 2	35 U 1	**3 D** 10	**2 D** 2	0.035 U 1	**0.38 DJ** 5
Total Aroclor	2	**0.327**	**0.91**	**0.68**	**0.321**	NA	**0**	**2.38**	35 U 1	**7.4**	**3.7**	**0**	**0.38**
Metals		Result Q D	Result Q D	Result Q	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Aluminum	NC	**4,020** 1	**4,040** 1	**3,540**	**3,500** 1	**1,920**	**3,200** 1	**7,670** 1	**1,960** 1	NA	NA	**2,320** 1	**2,400** 2
Antimony	340	**5.7** 1	**169** 1	**34**	**24.8** 1	**0.63 J**	1.1 U 1	**11.7** 1	**1.2 J** 1	NA	NA	**1 J** 1	**9.5 J** 2
Arsenic	20	**2.2** 1	**22.2** 1	**9.9**	**5.9** 1	0.68 U	**1.6** 1	**10.6** 1	**0.74 U** 1	NA	NA	**2.8** 1	**21.6** 2
Barium	47,000	**37** 1	**99.8** 1	**129**	**88.1** 1	**11.3 J**	21 U 1	**663** 1	**14.6 J** 1	NA	NA	**19 J** 1	**316** 1
Beryllium	2	0.57 U 1	**0.08 J** 1	**0.15 J**	0.47 U 1	**0.13 J**	0.53 U 1	0.54 U 1	**0.15 J** 1	NA	NA	**0.2 J** 1	**0.14 J** 1
Cadmium	100	0.57 U 1	**2.4** 1	**4.6**	**1.4** 1	0.08 U	0.53 U 1	**5.9** 1	0.09 U 1	NA	NA	**0.31 J** 1	**11.2** 2
Copper	600	**89.6** 1	**483** 1	**523**	**438** 1	**7.3**	**9.9** 1	**382** 1	**2 J** 1	NA	NA	**7** 1	**296** 2
Iron	NC	**5530** 1	**14,900** 1	**19,600**	**17,600** 1	**3750**	**4,870** 1	**47,800** 1	**3,240** 1	NA	NA	**4,400** 1	**224,000** 2
Lead	600	**594** 1	**7,860** 1	**2,440**	**3,350** 1	**2.6**	**8.2** 1	**2,490** 1	**2.3** 1	NA	NA	**64.1** 1	**852** 2
Manganese	NC	**72.1** 1	**82.3** 1	**208**	**134** 1	**13.3**	**20.6** 1	**378** 1	**22.3** 1	NA	NA	**63** 1	**1,140** 1
Mercury	270	**0.11** 1	**1.5** 1	**0.83**	**1.3** 3	0.03 U	0.032 U 1	**1.5** 3	0.03 U 1	NA	NA	0.04 U 1	**0.88** 1
Nickel	2,400	**5.8** 1	**32.1** 1	**64.6**	**13.1** 1	**1.8 J**	4.3 U 1	**61.3** 1	**2 J** 1	NA	NA	**3 J** 1	**113** 1
Silver	4,100	1.1 U 1	**0.7 J** 1	0.15 U	0.94 U 1	0.14 U	1.1 U 1	**2.7** 1	0.15 U 1	NA	NA	0.18 U 1	0.21 U 1
Sodium	NC	570 U 1	**71.1 J** 1	21.1 U	470 U 1	**95.1 J**	530 U 1	540 U 1	**104 J** 1	NA	NA	**123 J** 1	**191 J** 2
Thallium	2	1.1 U 1	NA	NA	0.94 U 1	0.93 U	1.1 U 1	1.1 U 1	1 U 1	NA	NA	NA	NA
Zinc	1,500	**248** 1	**562** 1	**1,320**	**317** 1	**6.7**	**110** 1	**1430** 1	**10.4** 1	NA	NA	**31.7** 1	**1,550** 2
Soil Characteristics		Result Q D	Result Q D	Result Q	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
pH	NC	NA 1	5.15 1	6.2	NA 1	NA	NA 1	NA 1	7.71 1	7.7 1	7.18 1	4.55 1	6.27 1
Cyanide (mg/kg)	NC	NA	0.44 B 1	0.05	NA	0.05 U	NA	NA	0.05 U 1	NA	NA	0.05 U 1	0.253N 1

Notes:

- * NJDEP IGW = New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not exceed soil cleanup criteria in any sample.
- Shaded values exceed New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-4

Matteo Iron and Metal

Surface Soil Sample Results (0-2 ft) from the Scrapyard - Impact to Groundwater Criteria (IGW)

SAMPLE LOCATION		HA-4A	HA-5A	HA-6A	HA-7A	HA-8A	HA-8B	HA-9A	HA-10A	HA-10B	HA-11A	HA-12A	HA-12B	HA-13A
SAMPLE ID		HA 4A	HA 5A	HA 6A	HA 7A	HA 8A	HA 8B	HA 9A	HA 10A	HA 10B	HA 11A	HA 12A	HA 12B	HA 13A
LAB ID		N12323-1	N12323-3	N12323-5	N12323-7	N12323-9	N16274-9	N12323-11	N12323-13	N16274-7	N12323-15	N12323-17	N16274-7	N12323-19
DATE		4/11/2002	4/11/2002	4/11/2002	4/11/2002	4/11/2002	6/14/2002	4/11/2002	4/11/2002	6/14/2002	4/11/2002	4/11/2002	6/14/2002	4/11/2002
SAMPLE INTERVAL (BGS)		0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5
ANALYTE	*NJDEP IGW*													
Pesticide & PCB		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D
Dieldrin	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	2	0.017 U 1	0.017 U 1	0.017 U	0.018 U 1	0.018 U 1	0.039 U 1	0.017 U 1	0.02 U 1	0.034 U	0.017 U	0.02 U 1	0.037 U 1	0.018 U 1
Aroclor 1248	2	0.017 U 1	0.017 U 1	0.017 U	0.018 U 1	0.018 U 1	0.039 U 1	0.017 U 1	0.02 U 1	0.034 U	0.017 U	0.02 U 1	0.037 U 1	0.018 U 1
Aroclor 1254	2	**0.086** 1	**0.16** 1	**0.252**	0.018 U 1	0.018 U 1	**0.11** 1	**0.071** 1	**6.74** 1	**0.44** J	0.017 U	**3.15** 5	**0.22** J 1	**0.0905** 1
Aroclor 1260	2	**0.039** 1	**0.0701** 1	0.017 U	0.018 U 1	**2** 5	**0.21** J 1	0.017 U 1	0.02 U 1	**0.14** J	0.017 U	0.02 U 1	**0.12** J 1	**0.076** 1
Total Aroclor	2	**0.125**	**0.2301**	**0.252**	**0**	**2**	**0.32**	**0.071**	**6.74**	**0.58** J	**0**	**3.15**	**0.34**	**0.1665**
Metals		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D
Aluminum	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	340	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	47,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	270	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	2,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	4,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Soil Characteristics		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D
pH	NC	NA 1	NA 1	NA	NA 1	NA 1	6.98	NA 1	NA 1	6.78	NA	5.26 1	NA	NA 1
Cyanide (mg/kg)	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

- * NJDEP IGW = New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not exceed soil cleanup criteria in any sample.
- Shaded values exceed New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-5

Matteo Iron and Metal

Intermediate Soil Sample Results (2-4 ft) from the Scrapyard - Residential Criteria (RSCC)

SAMPLE LOCATION		GP-7			GP-11			GP-12			GP-12			GP-12			GP-13			GP-14			GP-14			GP-15			GP-16			GP-17		GP-18		GP-19	
SAMPLE ID		GP-7D			GP-11B			GP 12E			DUP			GP-12B			GP-13B			GP 14E			GP-14B			GP-15B			GP-16B			GP-17B		GP-18B		GP-19B	
LAB ID		N16274-4			N1314-1			N16274-2			N16274-10			N1314-3			N1314-6			N16274-1			N1314-9			N1315-1			N1315-4			N1315-7		N1315-10		N1313-2	
DATE		6/14/2002			10/23/2001			6/14/2002			6/14/2002			10/23/2001			10/23/2001			6/14/2002			10/23/2001			10/23/2001			10/23/2001			10/23/2001		10/23/2001		10/23/2001	
SAMPLE INTERVAL (BGS)		2.5-3			3.5-4			2.5 - 3			2.5 - 3			3.5-4			3.5-4			2.5 - 3			3.5-4			3.5-4			3.5-4			3.5-4		3.5-4		3.5-4	
ANALYTE	*NJDEP*																																			
Pesticide & PCB	*Residential*	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Dieldrin	0.042	NA			0.0037	U	1	NA			NA			0.0038	U		0.0037	U	1	NA			0.0038	U	1	0.0036	U	1	0.0034	U	1	0.0033	U	0.0034	U	1	0.0037	U	1
Aroclor 1242	0.49	NA			0.037	U	1	0.036	U	1	0.036	U	1	0.038	U		0.037	U	1	0.035	U	1	0.038	U	1	0.036	U	1	0.034	U	1	0.033	U	0.034	U	1	0.037	U	1
Aroclor 1248	0.49	NA			0.037	U	1	0.036	U	1	0.036	U	1	0.038	U		0.037	U	1	0.035	U	1	0.038	U	1	0.036	U	1	0.034	U	1	0.033	U	0.034	U	1	0.037	U	1
Aroclor 1254	0.49	NA			0.037	U	1	0.036	U	1	0.036	U	1	0.038	U		0.037	U	1	0.035	U	1	0.038	U	1	0.036	U	1	0.034	U	1	0.033	U	0.034	U	1	**0.0683**	J	1
Aroclor 1260	0.49	NA			0.037	U	1	**0.17**		1	0.036	U	1	0.038	U		0.037	U	1	**0.041**		1	**0.057**		1	0.036	U	1	0.034	U	1	0.033	U	0.034	U	1	0.037	U	1
Total Aroclor	0.49	NA			0			**0.17**			0			0			0			**0.041**			**0.057**			0			0			0		0			**0.0683**		
Metals Analysis		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Aluminum	NC	**1,980**		1	NA			**2,850**		1	**2,500**		1	NA			NA			**2,420**		1	NA			NA			NA			NA		NA			NA		
Antimony	14	**0.98**	J	1	NA			**0.94**	J	1	**0.92**	J	1	NA			NA			**0.92**	J	1	NA			NA			NA			NA		NA			NA		
Arsenic	20	**1.4**	J	1	NA			**2**	J	1	**1.7**	J	1	NA			NA			**2.3**		1	NA			NA			NA			NA		NA			NA		
Barium	700	**10**	J	1	NA			**13.4**	J	1	**13.7**	J	1	NA			NA			**19.9**	J	1	NA			NA			NA			NA		NA			NA		
Beryllium	2	**0.11**	J	1	NA			**0.13**	J	1	**0.13**	J	1	NA			NA			**0.14**	J	1	NA			NA			NA			NA		NA			NA		
Cadmium	39	0.09	U	1	NA			0.09	U	1	0.08	U	1	NA			NA			**0.23**	J	1	NA			NA			NA			NA		NA			NA		
Copper	600	**2**	J	1	NA			**2.4**	J	1	**2.1**	J	1	NA			NA			**1.9**	J	1	NA			NA			NA			NA		NA			NA		
Iron	NC	**4,100**		1	NA			**5,890**		1	**5,020**		1	NA			NA			**4,970**		1	NA			NA			NA			NA		NA			NA		
Lead	400	**1.7**		1	NA			**2.5**		1	**2.5**		1	NA			NA			**2.3**		1	NA			NA			NA			NA		NA			NA		
Manganese	NC	**22.4**		1	NA			**24.5**		1	**23.9**		1	NA			NA			**19.2**		1	NA			NA			NA			NA		NA			NA		
Mercury	14	0.04	U	1	NA			0.03	U	1	0.03	U	1	NA			NA			0.04	U	1	NA			NA			NA			NA		NA			NA		
Nickel	250	**2.5**	J	1	NA			**3.1**	J	1	**3.2**	J	1	NA			NA			**2.6**	J	1	NA			NA			NA			NA		NA			NA		
Silver	110	0.15	U	1	NA			0.15	U	1	0.15	U	1	NA			NA			0.15	U	1	NA			NA			NA			NA		NA			NA		
Sodium	NC	**103**	J	1	NA			**82**	J	1	**81.7**	J	1	NA			NA			**105**	J	1	NA			NA			NA			NA		NA			NA		
Thallium	2	0.97	U	1	NA			0.97	U	1	0.91	U	1	NA			NA			0.95	U	1	NA			NA			NA			NA		NA			NA		
Zinc	1500	**9.9**		1	NA			**14.6**		1	**12.7**		1	NA			NA			**22.9**		1	NA			NA			NA			NA		NA			NA		
General Chemistry		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
pH	NC	NA			7.83		1	7.32		1	7.32		1	7.85			7.38		1	7.26		1	4.92		1	7.38		1	5.29		1	5.63		7.23		1	6.84		1
Cyanide (mg/kg)	NC	0.05	U	1	NA			0.05	U	1	0.05	U	1	NA			NA			0.08	J	1	NA			NA			NA			NA		NA			NA		

Notes:

- * NJDEP RSCC = New Jersey Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.

D = Dilution Factor
Q = Qualifier
U = Non Detect
J = Estimated
NA = Not Available

TABLE 5-5

Matteo Iron and Metal

Intermediate Soil Sample Results (2-4 ft) from the Scrapyard - Residential Criteria (RSCC)

SAMPLE LOCATION		GP-20			GP-21		GP-22		GP-23			GP-24			GP-25		GP-26			GP-27			GP-28			GP-29		
SAMPLE ID		GP-20B			GP-21B		GP-22B		GP-23B			GP-24B			GP-25B		GP-26B			GP-27B			GP-28B			GP-29B		
LAB ID		N1313-5			N1313-8		N1314-15		N1405-2			N1405-5			N1405-8		N1405-11			N1405-14			N1405-16			N1405-19		
DATE		10/23/2001			10/23/2001		10/23/2001		10/24/2001			10/24/2001			10/24/2001		10/24/2001			10/24/2001			10/24/2001			10/24/2001		
SAMPLE INTERVAL (BGS)		3.5-4			3.5-4		3.5-4		3.5-4			3.5-4			3.5-4		3.5-4			3.5-4			3.5-4			3.5-4		
ANALYTE	*NJDEP*																											
Pesticide & PCB	*Residential*	Result	Q	D	Result	Q	Result	Q	Result	Q	D	Result	Q	D	Result	Q	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Dieldrin	0.042	0.0034	U	1	0.0036	U	0.0039	U	0.0041	U	1	0.0034	U	1	0.0037	U	0.0035	U	1	0.0037	U	1	0.0035	U	1	0.004	U	1
Aroclor 1242	0.49	0.034	U	1	0.036	U	0.039	U	0.041	U	1	0.034	U	1	0.037	U	0.035	U	1	0.037	U	1	0.035	U	1	0.04	U	1
Aroclor 1248	0.49	0.034	U	1	0.036	U	0.039	U	0.041	U	1	0.034	U	1	0.037	U	0.035	U	1	0.037	U	1	0.035	U	1	0.04	U	1
Aroclor 1254	0.49	0.034	U	1	0.036	U	0.039	U	2.8	DJ	10	0.034	U	1	0.037	U	0.035	U	1	0.037	U	1	0.035	U	1	0.04	U	1
Aroclor 1260	0.49	0.034	U	1	0.036	U	0.039	U	1.8	DJ	10	0.034	U	1	0.037	U	0.035	U	1	0.037	U	1	0.035	U	1	0.04	U	1
Total Aroclor	0.49	0			0		0		4.6			0			0		0			0			0			0		
Metals Analysis		Result	Q	D	Result	Q	Result	Q	Result	Q	D	Result	Q	D	Result	Q	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Aluminum	NC	NA			NA		3,580		5,290		1	3,620		1	3,440		3,560		1	2,190		1	7,430		1	8,800		1
Antimony	14	NA			NA		0.53	J	17.5		1	0.44	U	1	0.45	U	0.44	U	1	0.45	U	1	0.45	U	1	0.46	U	1
Arsenic	20	NA			NA		3.8		11.2		1	2.2		1	1.5	J	4.3		1	0.5	U	1	12.3		1	5.5		1
Barium	700	NA			NA		12.6	J	871		1	21.8	J	1	25.2	J	17.8	J	1	10.2	J	1	17.2	J	1	29.2	J	1
Beryllium	2	NA			NA		0.16	J	0.24	J	1	0.11	J	1	0.1	J	0.14	J	1	0.06	J	1	0.34	J	1	0.27	J	1
Cadmium	39	NA			NA		0.06	U	18.2		1	0.06	U	1	0.26	J	0.06	U	1	0.06	U	1	0.06	U	1	0.07	U	1
Copper	600	NA			NA		3	J	574		1	4.1	J	1	2.8	J	2.3	J	1	1.4	J	1	5.9		1	5.5		1
Iron	NC	NA			NA		7,830		41,500		1	6,440		1	3,600		4,460		1	1,810		1	16,700		1	15,300		1
Lead	400	NA			NA		3.1		4,240		1	6		1	5.5		2.9		1	3		1	5		1	10.6		1
Manganese	NC	NA			NA		37		472		1	37		1	29		35.7		1	9.9		1	65.5		1	68.9		1
Mercury	14	NA			NA		0.04	J	2.2		2	0.03	U	1	0.04	U	0.03	U	1	0.03	U	1	0.03	U	1	0.03	U	1
Nickel	250	NA			NA		4.3	J	94.7		1	4.4	J	1	9.1		2.8	J	1	1.9	J	1	7.2	J	1	7.3	J	1
Silver	110	NA			NA		0.15	U	0.75	J	1	0.15	U	1	0.15	U	0.15	U	1	0.15	U	1	0.15	U	1	0.18	B	1
Sodium	NC	NA			NA		20.3	U	45.2	U	2	34	J	1	29.4	J	30.7	J	1	40.6	J	1	20.8	U	1	21.2	U	1
Thallium	2	NA			NA		NA		NA			NA			NA		NA			NA			NA			NA		
Zinc	1500	NA			NA		11.8		17,400		25	18		1	292		31.8		1	7.3		1	21.4		1	22.7		1
General Chemistry		Result	Q	D	Result	Q	Result	Q	Result	Q	D	Result	Q	D	Result	Q	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
pH	NC	6.72		1	6.84		6.25		7.68		1	7.9		1	7.7		5.81		1	4.08		1	5.5		1	5.57		1
Cyanide (mg/kg)	NC	NA			NA		0.05	U	0.24	J	1	0.05	U	1	0.05	U	0.05	U	1	0.05	U	1	0.05	U	1	0.06	U	1

Notes:

- * NJDEP RSCC = New Jersey Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.

D = Dilution Factor
Q = Qualifier
U = Non Detect
J = Estimated
NA = Not Available

TABLE 5-5

Matteo Iron and Metal

Intermediate Soil Sample Results (2-4 ft) from the Scrapyard - Residential Criteria (RSCC)

SAMPLE LOCATION		GP-30			GP-30			GP-31			HA-1			HA-2			HA-3		
SAMPLE ID		GP 30E			GP-30B			GP-31B			HA-1B			HA-2B			HA-3B		
LAB ID		N16274-5			N1409-2			N1409-5			N1314-13			N1529-2			N1529-4		
DATE		6/14/2002			10/24/2001			10/24/2001			10/23/2001			10/26/2001			10/26/2001		
SAMPLE INTERVAL (BGS)		2.5 - 3			3.5-4			3.5-4			3.5-4			3.5-4			3.5-4		
ANALYTE	*NJDEP*																		
Pesticide & PCB	*Residential*	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Dieldrin	0.042	NA			0.0035	U	1	0.0036	U	1	0.0034	U	1	0.0034	U	1	0.0034	U	1
Aroclor 1242	0.49	NA			0.035	U	1	0.036	U	1	0.034	U	1	0.034	U	1	0.034	U	1
Aroclor 1248	0.49	NA			0.035	U	1	0.036	U	1	0.034	U	1	0.034	U	1	0.034	U	1
Aroclor 1254	0.49	NA			0.035	U	1	0.036	U	1	0.034	U	1	0.034	U	1	0.034	U	1
Aroclor 1260	0.49	NA			0.035	U	1	0.036	U	1	0.034	U	1	0.034	U	1	0.034	U	1
Total Aroclor	0.49	NA			0			0			0			0			0		
Metals Analysis		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Aluminum	NC	2980		1	2,470		1	2,790		1	NA			5,270		1	3,310		1
Antimony	14	0.64	J	1	2.2	J	1	0.66	J	1	NA			0.52	U	1	0.53	U	1
Arsenic	20	2.1		1	2.1	J	1	1.6	J	1	NA			3.3		1	1.5	J	1
Barium	700	12.5	J	1	14.7	J	1	11.7	J	1	NA			18.6	J	1	16.6	J	1
Beryllium	2	0.17	J	1	0.09	J	1	0.14	J	1	NA			0.25	J	1	0.15	J	1
Cadmium	39	0.32	J	1	0.16	J	1	1.1	J	1	NA			0.18	J	1	0.31	J	1
Copper	600	17.6		1	10.8		1	2.5	J	1	NA			5.4		1	6.5		1
Iron	NC	6130		1	5,440		1	5,100		1	NA			10,700		1	6370		1
Lead	400	2.7		1	9.6		1	3.3		1	NA			4.7		1	10.9		1
Manganese	NC	28.2		1	24.1		1	25.7		1	NA			80.5		1	35		1
Mercury	14	0.04	U	1	2.1	U	1	0.03	U	1	NA			0.04	U	1	0.03	U	1
Nickel	250	4.1	J	1	2.9	J	1	3.7	J	1	NA			6.4	J	1	4	J	1
Silver	110	0.15	U	1	0.15	U	1	0.15	U	1	NA			0.17	U	1	0.18	U	1
Sodium	NC	62.8	J	1	78.5	J	1	84.7	J	1	NA			105	J	1	121	J	1
Thallium	2	0.9	U	1	NA			NA			NA			NA			NA		
Zinc	1500	74.6		1	125		1	50.6		1	NA			16.6		1	18.4		1
General Chemistry		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
pH	NC	NA			6.8		1	7.03		1	6.95		1	5.46		1	6.43		1
Cyanide (mg/kg)	NC	0.05	U	1	0.05	U	1	0.05	U	1	NA			0.05	U	1	0.05	U	1

Notes:

- * NJDEP RSCC = New Jersey Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.

D = Dilution Factor
Q = Qualifier
U = Non Detect
J = Estimated
NA = Not Available

TABLE 5-6

Matteo Iron and Metal

Intermediate Soil Sample Results (2-4 ft) from the Scrapyard - Non-Residential Criteria (NRSCC)

SAMPLE LOCATION		GP-7			GP-11			GP-12			GP-12			GP-12			GP-13			GP-14			GP-14			GP-15			GP-16			GP-17			GP-18			GP-19		
SAMPLE ID		GP-7D			GP-11B			GP 12E			DUP			GP-12B			GP-13B			GP 14E			GP-14B			GP-15B			GP-16B			GP-17B			GP-18B			GP-19B		
LAB ID		N16274-4			N1314-1			N16274-2			N16274-10			N1314-3			N1314-6			N16274-1			N1314-9			N1315-1			N1315-4			N1315-7			N1315-10			N1313-2		
DATE		6/14/2002			10/23/2001			6/14/2002			6/14/2002			10/23/2001			10/23/2001			6/14/2002			10/23/2001			10/23/2001			10/23/2001			10/23/2001			10/23/2001			10/23/2001		
SAMPLE INTERVAL (BGS)		2.5-3			3.5-4			2.5 - 3			2.5 - 3			3.5-4			3.5-4			2.5 - 3			3.5-4			3.5-4			3.5-4			3.5-4			3.5-4			3.5-4		
ANALYTE	*NJDEP Non-Residential*																																								
Pesticide & PCB		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Dieldrin	0.18	NA			0.0037	U	1	NA			NA			0.0038	U	0.0037	U	1	NA			0.0038	U	1	0.0036	U	1	0.0034	U	1	0.0033	U	0.0034	U	1	0.0037	U	1			
Aroclor 1242	2	NA			0.037	U	1	0.036	U	1	0.036	U	1	0.038	U	0.037	U	1	0.035	U	1	0.038	U	1	0.036	U	1	0.034	U	1	0.033	U	0.034	U	1	0.037	U	1			
Aroclor 1248	2	NA			0.037	U	1	0.036	U	1	0.036	U	1	0.038	U	0.037	U	1	0.035	U	1	0.038	U	1	0.036	U	1	0.034	U	1	0.033	U	0.034	U	1	0.037	U	1			
Aroclor 1254	2	NA			0.037	U	1	0.036	U	1	0.036	U	1	0.038	U	0.037	U	1	0.035	U	1	0.038	U	1	0.036	U	1	0.034	U	1	0.033	U	0.034	U	1	**0.0683**	**J**	1			
Aroclor 1260	2	NA			0.037	U	1	**0.17**		1	0.036	U	1	0.038	U	0.037	U	1	**0.041**		1	**0.057**		1	0.036	U	1	0.034	U	1	0.033	U	0.034	U	1	0.037	U	1			
Total Aroclor	2	NA			0			**0.17**			0			0		0			**0.041**			0.057			0			0			0		0			**0.0683**					
Metals Analysis		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Aluminum	NC	**1,980**		1	NA			**2,850**		1	**2,500**		1	NA		NA			**2,420**		1	NA			NA			NA			NA			NA			NA					
Antimony	340	**0.98**	**J**	1	NA			**0.94**	**J**	1	**0.92**	**J**	1	NA		NA			**0.92**	**J**	1	NA			NA			NA			NA			NA			NA					
Arsenic	20	**1.4**	**J**	1	NA			**2**	**J**	1	**1.7**	**J**	1	NA		NA			**2.3**		1	NA			NA			NA			NA			NA			NA					
Barium	47,000	**10**	**J**	1	NA			**13.4**	**J**	1	**13.7**	**J**	1	NA		NA			**19.9**	**J**	1	NA			NA			NA			NA			NA			NA					
Beryllium	2	**0.11**	**J**	1	NA			**0.13**	**J**	1	**0.13**	**J**	1	NA		NA			**0.14**	**J**	1	NA			NA			NA			NA			NA			NA					
Cadmium	100	0.09	U	1	NA			0.09	U	1	0.08	U	1	NA		NA			**0.23**	**J**	1	NA			NA			NA			NA			NA			NA					
Copper	600	2	**J**	1	NA			**2.4**	**J**	1	**2.1**	**J**	1	NA		NA			1.9	**J**	1	NA			NA			NA			NA			NA			NA					
Iron	NC	**4,100**		1	NA			**5,890**		1	**5,020**		1	NA		NA			**4,970**		1	NA			NA			NA			NA			NA			NA					
Lead	600	**1.7**		1	NA			**2.5**		1	**2.5**		1	NA		NA			**2.3**		1	NA			NA			NA			NA			NA			NA					
Manganese	NC	**22.4**		1	NA			**24.5**		1	**23.9**		1	NA		NA			**19.2**		1	NA			NA			NA			NA			NA			NA					
Mercury	270	0.04	U	1	NA			0.03	U	1	0.03	U	1	NA		NA			0.04	U	1	NA			NA			NA			NA			NA			NA					
Nickel	2,400	**2.5**	**J**	1	NA			**3.1**	**J**	1	**3.2**	**J**	1	NA		NA			**2.6**	**J**	1	NA			NA			NA			NA			NA			NA					
Silver	110	0.15	U	1	NA			0.15	U	1	0.15	U	1	NA		NA			0.15	U	1	NA			NA			NA			NA			NA			NA					
Sodium	4,100	**103**	**J**	1	NA			**82**	**J**	1	**81.7**	**J**	1	NA		NA			**105**	**J**	1	NA			NA			NA			NA			NA			NA					
Thallium	2	0.97	U	1	NA			0.97	U	1	0.91	U	1	NA		NA			0.95	U	1	NA			NA			NA			NA			NA			NA					
Zinc	1,500	**9.9**		1	NA			**14.6**		1	**12.7**		1	NA		NA			**22.9**		1	NA			NA			NA			NA			NA			NA					
General Chemistry		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
pH	NC	NA			7.83		1	7.32		1	7.32		1	7.85		7.38		1	7.26		1	4.92		1	7.38		1	5.29		1	5.63		7.23		1	6.84		1			
Cyanide (mg/kg)	NC	0.05	U	1	NA			0.05	U	1	0.05	U	1	NA		NA			0.08	J	1	NA			NA			NA			NA			NA			NA					

Notes:

- * NJDEP NRSCC = New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.

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TABLE 5-6

Matteo Iron and Metal

Intermediate Soil Sample Results (2-4 ft) from the Scrapyard - Non-Residential Criteria (NRSCC)

SAMPLE LOCATION		GP-20			GP-21			GP-22			GP-23			GP-24			GP-25			GP-26			GP-27			GP-28			GP-29		
SAMPLE ID		GP-20B			GP-21B			GP-22B			GP-23B			GP-24B			GP-25B			GP-26B			GP-27B			GP-28B			GP-29B		
LAB ID		N1313-5			N1313-8			N1314-15			N1405-2			N1405-5			N1405-8			N1405-11			N1405-14			N1405-16			N1405-19		
DATE		10/23/2001			10/23/2001			10/23/2001			10/24/2001			10/24/2001			10/24/2001			10/24/2001			10/24/2001			10/24/2001			10/24/2001		
SAMPLE INTERVAL (BGS)		3.5-4			3.5-4			3.5-4			3.5-4			3.5-4			3.5-4			3.5-4			3.5-4			3.5-4			3.5-4		
ANALYTE	*NJDEP Non-Residential*	Result	Q	D	Result	Q		Result	Q		Result	Q	D	Result	Q	D	Result	Q		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Pesticide & PCB																															
Dieldrin	0.18	0.0034	U	1	0.0036	U		0.0039	U		0.0041	U	1	0.0034	U	1	0.0037	U		0.0035	U	1	0.0037	U	1	0.0035	U	1	0.004	U	1
Aroclor 1242	2	0.034	U	1	0.036	U		0.039	U		0.041	U	1	0.034	U	1	0.037	U		0.035	U	1	0.037	U	1	0.035	U	1	0.04	U	1
Aroclor 1248	2	0.034	U	1	0.036	U		0.039	U		0.041	U	1	0.034	U	1	0.037	U		0.035	U	1	0.037	U	1	0.035	U	1	0.04	U	1
Aroclor 1254	2	0.034	U	1	0.036	U		0.039	U		2.8	DJ	10	0.034	U	1	0.037	U		0.035	U	1	0.037	U	1	0.035	U	1	0.04	U	1
Aroclor 1260	2	0.034	U	1	0.036	U		0.039	U		1.8	DJ	10	0.034	U	1	0.037	U		0.035	U	1	0.037	U	1	0.035	U	1	0.04	U	1
Total Aroclor	2	0			0			0			4.6			0			0			0			0			0			0		
Metals Analysis		Result	Q	D	Result	Q		Result	Q		Result	Q	D	Result	Q	D	Result	Q		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Aluminum	NC	NA			NA			3,580			5,290		1	3,620		1	3,440			3,560		1	2,190		1	7,430		1	8,800		1
Antimony	340	NA			NA			0.53	J		17.5		1	0.44	U	1	0.45	U		0.44	U	1	0.45	U	1	0.45	U	1	0.46	U	1
Arsenic	20	NA			NA			3.8			11.2		1	2.2		1	1.5	J		4.3		1	0.5	U	1	12.3		1	5.5		1
Barium	47,000	NA			NA			12.6	J		871		1	21.8	J	1	25.2	J		17.8	J	1	10.2	J	1	17.2	J	1	29.2	J	1
Beryllium	2	NA			NA			0.16	J		0.24	J	1	0.11	J	1	0.1	J		0.14	J	1	0.06	J	1	0.34	J	1	0.27	J	1
Cadmium	100	NA			NA			0.06	U		18.2		1	0.06	U	1	0.26	J		0.06	U	1	0.06	U	1	0.06	U	1	0.07	U	1
Copper	600	NA			NA			3	J		574		1	4.1	J	1	2.8	J		2.3	J	1	1.4	J	1	5.9		1	5.5		1
Iron	NC	NA			NA			7,830			41,500		1	6,440		1	3,600			4,460		1	1,810		1	16,700		1	15,300		1
Lead	600	NA			NA			3.1			4,240		1	6		1	5.5			2.9		1	3		1	5		1	10.6		1
Manganese	NC	NA			NA			37			472		1	37		1	29			35.7		1	9.9		1	65.5		1	68.9		1
Mercury	270	NA			NA			0.04	J		2.2		2	0.03	U	1	0.04	U		0.03	U	1	0.03	U	1	0.03	U	1	0.03	U	1
Nickel	2,400	NA			NA			4.3	J		94.7		1	4.4	J	1	9.1			2.8	J	1	1.9	J	1	7.2	J	1	7.3	J	1
Silver	110	NA			NA			0.15	U		0.75	J	1	0.15	U	1	0.15	U		0.15	U	1	0.15	U	1	0.15	U	1	0.18	B	1
Sodium	4,100	NA			NA			20.3	U		45.2	U	2	34	J	1	29.4	J		30.7	J	1	40.6	J	1	20.8	U	1	21.2	U	1
Thallium	2	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Zinc	1,500	NA			NA			11.8			17,400		2	18		1	292			31.8		1	7.3		1	21.4		1	22.7		1
General Chemistry		Result	Q	D	Result	Q		Result	Q		Result	Q	D	Result	Q	D	Result	Q		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
pH	NC	6.72		1	6.84			6.25			7.68		1	7.9		1	7.7			5.81		1	4.08		1	5.5		1	5.57		1
Cyanide (mg/kg)	NC	NA			NA			0.05	U		0.24	J	1	0.05	U	1	0.05	U		0.05	U	1	0.05	U	1	0.05	U	1	0.06	U	1

Notes:

- * NJDEP NRSCC = New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.

D = Dilution Factor
Q = Qualifier
U = Non Detect
J = Estimated
NA = Not Available

TABLE 5-6

Matteo Iron and Metal

Intermediate Soil Sample Results (2-4 ft) from the Scrapyard - Non-Residential Criteria (NRSCC)

SAMPLE LOCATION		GP-30			GP-30			GP-31			HA-1			HA-2			HA-3		
SAMPLE ID		GP 30E			GP-30B			GP-31B			HA-1B			HA-2B			HA-3B		
LAB ID		N16274-5			N1409-2			N1409-5			N1314-13			N1529-2			N1529-4		
DATE		6/14/2002			10/24/2001			10/24/2001			10/23/2001			10/26/2001			10/26/2001		
SAMPLE INTERVAL (BGS)		2.5 - 3			3.5-4			3.5-4			3.5-4			3.5-4			3.5-4		
ANALYTE	*NJDEP Non-*																		
Pesticide & PCB	*Residential*	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Dieldrin	0.18	NA			0.0035	U	1	0.0036	U	1	0.0034	U	1	0.0034	U	1	0.0034	U	1
Aroclor 1242	2	NA			0.035	U	1	0.036	U	1	0.034	U	1	0.034	U	1	0.034	U	1
Aroclor 1248	2	NA			0.035	U	1	0.036	U	1	0.034	U	1	0.034	U	1	0.034	U	1
Aroclor 1254	2	NA			0.035	U	1	0.036	U	1	0.034	U	1	0.034	U	1	0.034	U	1
Aroclor 1260	2	NA			0.035	U	1	0.036	U	1	0.034	U	1	0.034	U	1	0.034	U	1
Total Aroclor	2	NA			0			0			0			0			0		
Metals Analysis		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Aluminum	NC	**2980**		1	**2,470**		1	**2,790**		1	NA			**5,270**		1	**3,310**		1
Antimony	340	**0.64**	J	1	**2.2**	J	1	**0.66**	J	1	NA			0.52	U	1	0.53	U	1
Arsenic	20	**2.1**		1	**2.1**	J	1	**1.6**	J	1	NA			**3.3**		1	**1.5**	J	1
Barium	47,000	**12.5**	J	1	**14.7**	J	1	**11.7**	J	1	NA			**18.6**	J	1	**16.6**	J	1
Beryllium	2	**0.17**	J	1	**0.09**	J	1	**0.14**	J	1	NA			**0.25**	J	1	**0.15**	J	1
Cadmium	100	**0.32**	J	1	**0.16**	J	1	**1.1**	J	1	NA			**0.18**	J	1	**0.31**	J	1
Copper	600	**17.6**		1	**10.8**		1	**2.5**	J	1	NA			**5.4**		1	**6.5**		1
Iron	NC	**6130**		1	**5,440**		1	**5,100**		1	NA			**10,700**		1	**6370**		1
Lead	600	**2.7**		1	**9.6**		1	**3.3**		1	NA			**4.7**		1	**10.9**		1
Manganese	NC	**28.2**		1	**24.1**		1	**25.7**		1	NA			**80.5**		1	**35**		1
Mercury	270	0.04	U	1	2.1	U	1	0.03	U	1	NA			0.04	U	1	0.03	U	1
Nickel	2,400	**4.1**	J	1	**2.9**	J	1	**3.7**	J	1	NA			**6.4**	J	1	**4**	J	1
Silver	110	0.15	U	1	0.15	U	1	0.15	U	1	NA			0.17	U	1	0.18	U	1
Sodium	4,100	**62.8**	J	1	**78.5**	J	1	**84.7**	J	1	NA			**105**	J	1	**121**	J	1
Thallium	2	0.9	U	1	NA			NA			NA			NA			NA		
Zinc	1,500	**74.6**		1	**125**		1	**50.6**		1	NA			**16.6**		1	**18.4**		1
General Chemistry		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
pH	NC	NA			6.8		1	7.03		1	6.95		1	5.46		1	6.43		1
Cyanide (mg/kg)	NC	0.05	U	1	0.05	U	1	0.05	U	1	NA			0.05	U	1	0.05	U	1

Notes:

- * NJDEP NRSCC = New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.

D = Dilution Factor.
Q = Qualifier
U = Non Detect
J = Estimated
NA = Not Available

TABLE 5-7

Matteo Iron and Metal

Deep Soil Sample Results (~10-12 ft) from the Scrapyard - Residential Criteria (RSCC)

SAMPLE LOCATION		GP-01	GP-02	GP-03	GP-04	GP-05	GP-06	GP-07	GP-08	GP-09	GP-10	GP-10
SAMPLE ID		GP-01B	GP-02B	GP-03B	GP-04B	GP-05B	GP-06B	GP-07B	GP-08B	GP-09B	GP-10B	GP-11B
LAB ID		E70304-13	E76579-4	E72118-9	E76579-8	E76579-9	E76579-12	E76579-14	E76579-16	E76579-18	E76579-20	E76579-21
DATE		9/11/2000	9/11/2000	6/28/2000	9/11/2000	9/11/2000	9/11/2000	9/11/2000	9/11/2000	9/11/2000	9/11/2000	9/11/2000
SAMPLE INTERVAL (BGS)		11-11.5	11-11.5	11-11.5	11-11.5	11-11.5	11-11.5	11-11.5	10.5-11	10.5-11	10-11	10-11
ANALYTE	*NJDEP*											
Volatile Organic Compounds	*Residential*	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Benzene	3	0.011 U	0.011 U	0.01 U	**0.003 J**	0.011 U	**0.0005 J**	0.01 U	0.011 U	0.01 U	0.009 U	0.012 U
cis-1,2-Dichloroethene	79	0.011 U	0.011 U	0.01 U	0.01 U	0.011 U	**0.061**	0.01 U	0.011 U	0.01 U	0.009 U	0.012 U
Ethylbenzene	1,000	0.011 U	0.011 U	0.01 U	0.01 U	0.011 U	**0.011**	0.01 U	0.011 U	0.01 U	0.009 U	0.012 U
Vinyl chloride	2	0.011 U	0.011 U	0.01 U	0.01 U	0.011 U	**0.011**	0.01 U	0.011 U	0.01 U	0.009 U	0.012 U
Xylene (total)	410	0.011 U	0.011 U	0.01 U	**0.004 J**	0.011 U	**0.065**	0.01 U	0.011 U	0.01 U	0.009 U	0.012 U
Semi-Volatile Organic Compounds		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Benzo(a)anthracene	0.9	0.33 U	**0.075 J**	0.37 U	**0.08 J**	0.34 U	**0.22 J**	0.37 U	0.39 U	**0.028 J**	0.38 U	**0.027 J**
Benzo(a)pyrene	0.66	0.33 U	**0.091 J**	0.37 U	**0.069 J**	0.34 U	**0.17 J**	0.37 U	0.39 U	**0.05 J**	0.38 U	**0.029 J**
Benzo(b)fluoranthene	0.9	0.33 U	**0.097 J**	0.37 U	**0.089 J**	0.34 U	**0.14 J**	0.37 U	0.39 U	0.38 U	0.38 U	**0.03 J**
Benzo(k)fluoranthene	0.9	0.33 U	**0.064 J**	0.37 U	**0.045 J**	0.34 U	**0.14 J**	0.37 U	0.39 U	0.38 U	0.38 U	**0.024 J**
bis(2-Ethylhexyl)phthalate	49	**0.95**	**0.51**	**0.33 J**	**1.7**	**0.26 J**	**1**	0.37 U	**0.051 J**	**1.2**	**0.24 J**	**0.056 J**
Dibenz(a,h)anthracene	0.66	0.33 U	0.36 U	0.37 U	0.34 U	0.34 U	**0.036 J**	0.37 U	0.39 U	0.38 U	0.38 U	0.37 U
Indeno(1,2,3-cd)pyrene	0.9	0.33 U	**0.057 J**	0.37 U	**0.041 J**	0.34 U	**0.078 J**	0.37 U	0.39 U	0.38 U	0.38 U	0.37 U
Pesticide & PCB		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Dieldrin	0.042	0.0034 U	0.017 U	0.0035 U	0.019 U	0.0041 U	0.0035 U	0.038 U	0.0036 U	0.018 U	0.019 U	0.0034 U
Aroclor 1242	0.49	0.034 U	0.037 U	0.034 U	0.034 U	0.035 U	0.036 U	0.038 U	0.038 U	0.035 U	0.036 U	
Aroclor 1248	0.49	0.034 U	0.037 U	0.034 U	0.034 U	0.035 U	0.036 U	0.038 U	0.038 U	**0.085**	**0.065**	**0.054**
Aroclor 1254	0.49	**0.064**	3.5 D	0.034 U	10.6	0.035 U	**0.12**	0.038 U	0.038 U	**0.1**	**0.039**	**0.049**
Aroclor 1260	0.49	0.034 U	1.1 D	0.034 U	**0.2**	0.035 U	0.036 U	0.038 U	0.038 U	0.035 U	0.036 U	0.034 U
Total Aroclor	0.49	**0.064**	4.5	0.034 U	**0.8**	0.035 U	**0.12**	0.038 U	0.038 U	**0.185**	**0.104**	**0.103**
Metals		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Aluminum	NC	2,680	3,620	3,260	3,330	3,280	1,200	1,250	2,020	6,300	4,500	4,560
Antimony	14	**0.35**	14.9	**0.79 J**	16.4	**1.7 J**	17.3	0.39 U	0.39 U	**6.5 J**	**0.78 J**	**3.2 JN**
Arsenic	20	**0.95 J**	**4.1**	**1.7 J**	**4**	**3.3**	**4.4**	0.53 U	**3.1**	**5.7**	**2.9**	**2.5**
Barium	700	**7.6 J**	**50.3**	**13.9 J**	**42.9**	**21.1 J**	**14.5 J**	**2.7 J**	**3.2 J**	**54**	**22.2 J**	**49.5**
Beryllium	2	**0.07 J**	**0.15 J**	**0.08 J**	**0.12 J**	**0.1 J**	0.04 U	0.05 U	**0.15 J**	**0.16 J**	**0.17 J**	**0.1 J**
Cadmium	39	**0.09 J**	**1.5**	**0.19 J**	**2**	**0.43 J**	0.07 U	0.07 U	0.07 U	**3**	**0.49 J**	**1.3**
Copper	600	**4 J**	11,400	**12.1**	**112**	**225**	**37.4**	**1.6 J**	**2.3 J**	1,220	**35**	**144**
Iron	NC	**5,360**	**15,200**	**6,590**	**11,400**	**6,730**	**5,200**	**1,900**	**7,820**	**32,000**	**10,900**	**12,600**
Lead	400	**4.8**	468	**53**	1,560	**124**	2,170	**2.3**	**1.9**	**265**	**42.2**	**173**
Manganese	NC	**38.2**	**232**	**44.7**	**212**	**37.1**	**14.5**	**18.4**	**15**	**217**	**59.8**	**80.7**
Mercury	14	**0.05 J**	**0.47**	**0.09**	**0.64**	**0.48**	**0.07 J**	0.05 U	0.05 U	**0.42**	**0.17**	**0.29**
Nickel	250	**3.9 J**	**23.8**	**5 J**	**12**	**11.7**	**1.8 J**	**1.3 J**	**1.1 J**	**21.5**	**9.1**	**15.1**
Silver	110	0.15 U	**0.38 J**	**0.25 J**	**0.35 J**	**0.16 J**	0.15 U	0.16 U	0.16 U	**0.79 J**	0.15 U	**0.27 J**
Sodium	NC	17.9 U	**76.3 J**	18.1 U	**74.6 J**	**19.1 J**	**59.4 J**	20 U	20 U	**905 J**	**60.8 J**	**163 J**
Thallium	2	0.75 U	0.77 U	0.76 U	0.75 U	0.76 U	0.79 U	0.84 U	0.83 U	**0.83 J**	0.79 U	0.78 U
Zinc	1,500	**16.8**	**246**	**39.5**	**230**	**163**	**22.4**	**5.1**	**9.2**	**387**	**103**	**281**
Soil Characteristics		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
pH	NC	8.2	7.8	7.4	7.8	7	5.7	5.5	7.5	7.7	7.9	7.9
Cyanide (mg/kg)	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

- * NJDEP RSCC = New Jersey Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Li
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-7

Matteo Iron and Metal

Deep Soil Sample Results (~10-12 ft) from the Scrapyard - Residential Criteria (RSCC)

SAMPLE LOCATION		GP-12	GP-13	GP-14	GP-15	GP-16	GP-17	GP-18	GP-19	GP-20	GP-21
SAMPLE ID		GP-12C	GP-13C	GP-14C	GP-15C	GP-16C	GP-17C	GP-18C	GP-19C	GP-20C	GP-21C
LAB ID		N1314-4	N1314-7	N1314-10	N1315-2	N1315-5	N1315-8	N1315-11	N1313-3	N1313-6	N1313-9
DATE		10/23/2001	10/23/2001	10/23/2001	10/23/2001	10/23/2001	10/23/2001	10/23/2001	10/23/2001	10/23/2001	10/23/2001
SAMPLE INTERVAL (BGS)		11.5-12	11.5-12	11.5-12	11-11.5	11.5-12	12-12.5	11.5-12	11.1-11.6	11-11.5	11.5-12
ANALYTE	*NJDEP*										
Volatile Organic Compounds	*Residential*	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Benzene	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylene (total)	410	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds		Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Benzo(a)anthracene	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	0.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticide & PCB		Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Dieldrin	0.042	0.004 U 1	0.0037 U 1	0.0038 U 1	0.0035 U	0.0036 U 1	0.0036 U 1	0.0037 U 1	0.0037 U 1	0.0036 U 1	0.0036 U 1
Aroclor 1242	0.49	0.04 U 1	0.037 U 1	0.038 U 1	0.035 U	0.036 U 1	0.036 U 1	0.037 U 1	0.037 U 1	0.036 U 1	0.036 U 1
Aroclor 1248	0.49	0.04 U 1	0.037 U 1	0.038 U 1	0.035 U	0.036 U 1	0.036 U 1	0.037 U 1	0.037 U 1	0.036 U 1	0.036 U 1
Aroclor 1254	0.49	0.04 U 1	0.037 U 1	0.038 U 1	0.035 U	0.036 U 1	0.036 U 1	0.037 U 1	0.037 U 1	0.036 U 1	0.036 U 1
Aroclor 1260	0.49	0.04 U 1	0.037 U 1	0.038 U 1	0.035 U	0.036 U 1	0.036 U 1	0.037 U 1	0.037 U 1	0.036 U 1	0.036 U 1
Total Aroclor	0.49	0	0	0	0	0	0	0	0	0	0
Metals		Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Aluminum	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	250	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Soil Characteristics		Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
pH	NC	7.23 1	8.14 1	4.93 1	7.18	5.69 1	5.19 1	5.35 1	6.92 1	5.68 1	4.43 1
Cyanide (mg/kg)	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

- * NJDEP RSCC = New Jersey Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-7

Matteo Iron and Metal

Deep Soil Sample Results (~10-12 ft) from the Scrapyard - Residential Criteria (RSCC)

SAMPLE LOCATION		GP-22	GP-23	GP-24	GP-25	GP-26	GP-28	GP-29	GP-30	GP-31	GP 34
SAMPLE ID		GP-22C	GP-23C	GP-24C	GP-25C	GP-26C	GP-28C	GP-29C	GP-30C	GP-31C	GP 34
LAB ID		N1314-16	N1405-3	N1405-6	N1405-9	N1405-12	N1405-17	N1405-20	N1409-3	N1409-6	N12323-28
DATE		10/23/2001	10/24/2001	10/24/2001	10/24/2001	10/24/2001	10/24/2001	10/24/2001	10/24/2001	10/24/2001	4/11/2002
SAMPLE INTERVAL (BGS)		11-11.5	12-12.5	9.5-10	5-5.5	10-10.5	7.5-8	5.5-6	11.5-12	11.5-12	11 - 11.5
ANALYTE	*NJDEP*										
Volatile Organic Compounds	*Residential*	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Benzene	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylene (total)	410	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds		Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Benzo(a)anthracene	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	0.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	49	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticide & PCB		Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Dieldrin	0.042	0.0035 U 1	0.0039 U 1	0.0038 U 1	0.0041 U 1	0.0038 U 1	0.0039 U 1	0.0039 U 1	0.0035 U 1	0.0036 U 1	NA
Aroclor 1242	0.49	0.035 U 1	0.039 U 1	0.038 U 1	0.041 U 1	0.038 U 1	0.039 U 1	0.039 U 1	0.035 U 1	0.036 U 1	18 U 1
Aroclor 1248	0.49	0.035 U 1	0.039 U 1	0.038 U 1	0.041 U 1	0.038 U 1	0.039 U 1	0.039 U 1	0.035 U 1	0.036 U 1	18 U 1
Aroclor 1254	0.49	0.035 U 1	0.039 U 1	0.038 U 1	0.041 U 1	0.038 U 1	0.039 U 1	0.039 U 1	0.035 U 1	0.036 U 1	18 U 1
Aroclor 1260	0.49	0.035 U 1	0.039 U 1	0.038 U 1	0.041 U 1	0.038 U 1	0.039 U 1	0.039 U 1	0.035 U 1	0.036 U 1	18 U 1
Total Aroclor	0.49	0	0	0	0	0	0	0	0	0	0
Metals		Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
Aluminum	NC	**2,510** 1	**2,400** 1	**4,000** 1	**5,820** 1	**2,970** 1	**2,360** 1	**5,620** 1	**3,340** 1	**2,320** 1	**3,270** 1
Antimony	14	0.45 U 1	0.46 U 1	0.45 U 1	0.47 U 1	**11.2 J** 1	**0.56 J** 1	0.45 U 1	**1.1 J** 1	**0.62 J** 1	1.1 U 1
Arsenic	20	0.5 U 1	**0.84 J** 1	**1.8 J** 1	**1.7 J** 1	**1.9 J** 1	**1.5 J** 1	**3.7** 1	**1.6 J** 1	**1.5 J** 1	**3.4** 1
Barium	700	**7.1 J** 1	**5.5 J** 1	**10.5 J** 1	**11.2 J** 1	**5.7 J** 1	**4.9 J** 1	**13.4 J** 1	**10.2 J** 1	**7.2 J** 1	22 U 1
Beryllium	2	**0.08 J** 1	**0.03 J** 1	**0.18 J** 1	**0.11 J** 1	**0.12 J** 1	**0.04 J** 1	**0.21 J** 1	**0.11 J** 1	**0.07 J** 1	0.54 U 1
Cadmium	39	0.06 U 1	0.07 U 1	0.06 U 1	0.07 U 1	0.06 U 1	0.06 U 1	0.06 U 1	0.07 U 1	**0.35 J** 1	0.54 U 1
Copper	600	**2.4 J** 1	**3.1 J** 1	**4.3 J** 1	**3.7 J** 1	**2.5 J** 1	**1.8 J** 1	**4.6 J** 1	**6.5** 1	**5.8** 1	**4.5** 1
Iron	NC	**3580** 1	**2420** 1	**5,920** 1	**7,240** 1	**5,110** 1	**2,930** * 1	**9,780** 1	**4,460** 1	**4,040** 1	**7,040** 1
Lead	400	**2.2** 1	**3.4** 1	**4** 1	**6.5** 1	**3.9** 1	**2.2** 1	**5.7** 1	**4.2** 1	**2.8** 1	**2.9** 1
Manganese	NC	**39.4** 1	**10.2** 1	**41.2** 1	**31.6** 1	**16.8** 1	**12.6** 1	**80.6** 1	**29** 1	**23** 1	**36.8** 1
Mercury	14	**0.03 J** 1	0.04 U 1	0.03 U 1	0.03 U 1	0.03 U 1	0.04 U 1	0.03 U 1	0.03 U 1	0.04 U 1	0.033 U 1
Nickel	250	**3.7 J** 1	**2.1 J** 1	**5.2 J** 1	**5.4 J** 1	**2.4 J** 1	**1.6 J** 1	**6.2 J** 1	**4.2 J** 1	**3.6 J** 1	4.3 U 1
Silver	110	0.15 U 1	0.15 U 1	0.15 U 1	0.16 U 1	0.15 U 1	0.15 U 1	0.15 U 1	0.16 U 1	0.15 U 1	1.1 U 1
Sodium	NC	20.8 U 1	**60.2 J** 1	**51.6 B** 1	**46 J** 1	**53.3 J** 1	**27.9 J** 1	**34.2 J** 1	**86.8 J** 1	**100 J** 1	540 U 1
Thallium	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 U 1
Zinc	1,500	**11.1** 1	**28.1** 1	**19.3** 1	**85.7** 1	**10.5** 1	**5.9** 1	**17.4** 1	**26.5** 1	**33.2** 1	**22.4** 1
Soil Characteristics		Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D
pH	NC	6.21 1	7.72 1	7.34 1	7.17 1	4.67 1	5.61 1	5.81 1	4.69 1	7.25 1	93.1 1
Cyanide (mg/kg)	NC	0.05 U 1	0.06 UN 1	0.05 UN 1	0.06 UN 1	0.05 UN 1	0.05 UN 1	0.05 UN 1	0.05 U 1	0.05 U 1	NA

Notes:

- * NJDEP RSCC = New Jersey Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-8

Matteo Iron and Metal

Deep Soil Sample Results (~10-12 ft) from the Scrapyard - Non-Residential Criteria (NRSCC)

SAMPLE LOCATION		GP-01	GP-02	GP-03	GP-04	GP-05	GP-06	GP-07	GP-08	GP-09	GP-10	GP-10
SAMPLE ID		GP-01B	GP-02B	GP-03B	GP-04B	GP-05B	GP-06B	GP-07B	GP-08B	GP-09B	GP-10B	GP-11B
LAB ID		E70304-13	E76579-4	E72118-9	E76579-8	E76579-9	E76579-12	E76579-14	E76579-16	E76579-18	E76579-20	E76579-21
DATE		9/11/2000	9/11/2000	6/28/2000	9/11/2000	9/11/2000	9/11/2000	9/11/2000	9/11/2000	9/11/2000	9/11/2000	9/11/2000
SAMPLE INTERVAL (BGS)		11-11.5	11-11.5	11-11.5	11-11.5	11-11.5	11-11.5	11-11.5	10.5-11	10.5-11	10-11	10-11
ANALYTE	*NJDEP Non-Residential*											
Volatile Organic Compounds		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Benzene	13	0.011 U	0.011 U	0.01 U	**0.003 J**	0.011 U	**0.0005 J**	0.01 U	0.011 U	0.01 U	0.009 U	0.012 U
cis-1,2-Dichloroethene	1,000	0.011 U	0.011 U	0.01 U	0.01 U	0.011 U	**0.061**	0.01 U	0.011 U	0.01 U	0.009 U	0.012 U
Ethylbenzene	1,000	0.011 U	0.011 U	0.01 U	0.01 U	0.011 U	**0.011**	0.01 U	0.011 U	0.01 U	0.009 U	0.012 U
Vinyl chloride	7	0.011 U	0.011 U	0.01 U	0.01 U	0.011 U	**0.011**	0.01 U	0.011 U	0.01 U	0.009 U	0.012 U
Xylene (total)	1,000	0.011 U	0.011 U	0.01 U	**0.004 J**	0.011 U	0.065	0.01 U	0.011 U	0.01 U	0.009 U	0.012 U
Semi-Volatile Organic Compounds		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Benzo(a)anthracene	4	0.33 U	**0.075 J**	0.37 U	**0.08 J**	0.34 U	**0.22 J**	0.37 U	0.39 U	**0.028 J**	0.38 U	**0.027 J**
Benzo(a)pyrene	0.66	0.33 U	**0.091 J**	0.37 U	**0.069 J**	0.34 U	**0.17 J**	0.37 U	0.39 U	**0.05 J**	0.38 U	**0.029 J**
Benzo(b)fluoranthene	4	0.33 U	**0.097 J**	0.37 U	**0.089 J**	0.34 U	**0.14 J**	0.37 U	0.39 U	0.38 U	0.38 U	**0.03 J**
Benzo(k)fluoranthene	4	0.33 U	**0.064 J**	0.37 U	**0.045 J**	0.34 U	**0.14 J**	0.37 U	0.39 U	0.38 U	0.38 U	**0.024 J**
bis(2-Ethylhexyl)phthalate	210	**0.95**	**0.51**	**0.33 J**	**1.7**	**0.26 J**	**1**	0.37 U	**0.051 J**	**1.2**	**0.24 J**	**0.056 J**
Dibenz(a,h)anthracene	0.66	0.33 U	0.36 U	0.37 U	0.34 U	0.34 U	**0.036 J**	0.37 U	0.39 U	0.38 U	0.38 U	0.37 U
Indeno(1,2,3-cd)pyrene	4	0.33 U	**0.057 J**	0.37 U	**0.041 J**	0.34 U	**0.078 J**	0.37 U	0.39 U	0.38 U	0.38 U	0.37 U
Pesticide & PCB		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Dieldrin	0.18	0.0034 U	0.017 U	0.0035 U	0.019 U	0.0041 U	0.0035 U	0.038 U	0.0036 U	0.018 U	0.019 U	0.0034 U
Aroclor 1242	2	0.034 U	0.037 U	0.034 U	0.034 U	0.035 U	0.036 U	0.038 U	0.038 U	0.035 U	0.036 U	
Aroclor 1248	2	0.034 U	0.037 U	0.034 U	0.034 U	0.035 U	0.036 U	0.038 U	0.038 U	**0.085**	**0.065**	**0.054**
Aroclor 1254	2	**0.064**	**3.5 D**	0.034 U	**0.6**	0.035 U	**0.12**	0.038 U	0.038 U	**0.1**	**0.039**	**0.049**
Aroclor 1260	2	0.034 U	**1 D**	0.034 U	**0.2**	0.035 U	0.036 U	0.038 U	0.038 U	0.035 U	0.036 U	0.034 U
Total Aroclor	2	**0.064**	**4.5**	0.034 U	**0.8**	0.035 U	**0.12**	0.038 U	0.038 U	**0.185**	**0.104**	**0.103**
Metals		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Aluminum	NC	**2,680**	**3,620**	**3,260**	**3,330**	**3,280**	**1,200**	**1,250**	**2,020**	**6,300**	**4,500**	**4,560**
Antimony	340	**0.35**	**14.9**	**0.79 J**	**16.4**	**1.7 J**	**17.3**	0.39 U	0.39 U	**6.5 J**	**0.78 J**	**3.2 JN**
Arsenic	20	**0.95 J**	**4.1**	**1.7 J**	**4**	**3.3**	**4.4**	0.53 U	**3.1**	**5.7**	**2.9**	**2.5**
Barium	47,000	**7.6 J**	**50.3**	**13.9 J**	**42.9**	**21.1 J**	**14.5 J**	**2.7 J**	**3.2 J**	**54**	**22.2 J**	**49.5**
Beryllium	2	**0.07 J**	**0.15 J**	**0.08 J**	**0.12 J**	**0.1 J**	0.04 U	0.05 U	**0.15 J**	**0.16 J**	**0.17 J**	**0.1 J**
Cadmium	100	**0.09 J**	**1.5**	**0.19 J**	**2**	**0.43 J**	0.07 U	0.07 U	0.07 U	**3**	**0.49 J**	**1.3**
Copper	600	**4 J**	**1,400**	**12.1**	**112**	**225**	**37.4**	**1.6 J**	**2.3 J**	**1,220**	**35**	**144**
Iron	NC	**5,360**	**15,200**	**6,590**	**11,400**	**6,730**	**5,200**	**1,900**	**7,820**	**32,000**	**10,900**	**12,600**
Lead	600	**4.8**	**468**	**53**	**1,560**	**124**	**2,170**	**2.3**	**1.9**	**265**	**42.2**	**173**
Manganese	NC	**38.2**	**232**	**44.7**	**212**	**37.1**	**14.5**	**18.4**	**15**	**217**	**59.8**	**80.7**
Mercury	270	**0.05 J**	**0.47**	**0.09**	**0.64**	**0.48**	**0.07 J**	0.05 U	0.05 U	**0.42**	**0.17**	**0.29**
Nickel	2,400	**3.9 J**	**23.8**	**5 J**	**12**	**11.7**	**1.8 J**	**1.3 J**	**1.1 J**	**21.5**	**9.1**	**15.1**
Silver	110	0.15 U	**0.38 J**	**0.25 J**	**0.35 J**	**0.16 J**	0.15 U	0.16 U	0.16 U	**0.79 J**	0.15 U	**0.27 J**
Sodium	4,100	17.9 U	**76.3 J**	18.1 U	**74.6 J**	**19.1 J**	**59.4 J**	20 U	20 U	**905 J**	**60.8 J**	**163 J**
Thallium	2	0.75 U	0.77 U	0.76 U	0.75 U	0.76 U	0.79 U	0.84 U	0.83 U	**0.83 J**	0.79 U	0.78 U
Zinc	1,500	**16.8**	**246**	**39.5**	**230**	**163**	**22.4**	**5.1**	**9.2**	**387**	**103**	**281**
Soil Characteristics		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
pH	NC	8.2	7.8	7.4	7.8	7	5.7	5.5	7.5	7.7	7.9	7.9
Cyanide (mg/kg)	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

- * NJDEP NRSCC = New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample
- Shaded values meet or exceed New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Li
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-8

Matteo Iron and Metal

Deep Soil Sample Results (~10-12 ft) from the Scrapyard - Non-Residential Criteria (NRSCC)

SAMPLE LOCATION		GP-12			GP-13			GP-14			GP-15			GP-16			GP-17			GP-18			GP-19			GP-20			GP-21		
SAMPLE ID		GP-12C			GP-13C			GP-14C			GP-15C			GP-16C			GP-17C			GP-18C			GP-19C			GP-20C			GP-21C		
LAB ID		N1314-4			N1314-7			N1314-10			N1315-2			N1315-5			N1315-8			N1315-11			N1313-3			N1313-6			N1313-9		
DATE		10/23/2001			10/23/2001			10/23/2001			10/23/2001			10/23/2001			10/23/2001			10/23/2001			10/23/2001			10/23/2001			10/23/2001		
SAMPLE INTERVAL (BGS)		11.5-12			11.5-12			11.5-12			11-11.5			11.5-12			12-12.5			11.5-12			11.1-11.6			11-11.5			11.5-12		
ANALYTE	*NJDEP Non-Residential*	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Volatile Organic Compounds																															
Benzene	13	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
cis-1,2-Dichloroethene	1,000	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Ethylbenzene	1,000	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Vinyl chloride	7	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Xylene (total)	1,000	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Semi-Volatile Organic Compounds		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Benzo(a)anthracene	4	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Benzo(a)pyrene	0.66	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Benzo(b)fluoranthene	4	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Benzo(k)fluoranthene	4	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
bis(2-Ethylhexyl)phthalate	210	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Dibenz(a,h)anthracene	0.66	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Indeno(1,2,3-cd)pyrene	4	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Pesticide & PCB		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D		Q	D	Result	Q	D
Dieldrin	0.18	0.004	U	1	0.0037	U	1	0.0038	U	1	0.0035	U		0.0036	U	1	0.0036	U	1	0.0037	U	1	0.0037	U	1	0.0036	U	1	0.0036	U	1
Aroclor 1242	2	0.04	U	1	0.037	U	1	0.038	U	1	0.035	U		0.036	U	1	0.036	U	1	0.037	U	1	0.037	U	1	0.036	U	1	0.036	U	1
Aroclor 1248	2	0.04	U	1	0.037	U	1	0.038	U	1	0.035	U		0.036	U	1	0.036	U	1	0.037	U	1	0.037	U	1	0.036	U	1	0.036	U	1
Aroclor 1254	2	0.04	U	1	0.037	U	1	0.038	U	1	0.035	U		0.036	U	1	0.036	U	1	0.037	U	1	0.037	U	1	0.036	U	1	0.036	U	1
Aroclor 1260	2	0.04	U	1	0.037	U	1	0.038	U	1	0.035	U		0.036	U	1	0.036	U	1	0.037	U	1	0.037	U	1	0.036	U	1	0.036	U	1
Total Aroclor	2	0			0			0			0			0			0			0			0			0			0		
Metals		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Aluminum	NC	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Antimony	340	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Arsenic	20	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Barium	47,000	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Beryllium	2	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Cadmium	100	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Copper	600	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Iron	NC	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Lead	600	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Manganese	NC	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Mercury	270	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Nickel	2,400	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Silver	110	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Sodium	4,100	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Thallium	2	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Zinc	1,500	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Soil Characteristics		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
pH	NC	7.23		1	8.14		1	4.93		1	7.18			5.69		1	5.19		1	5.35		1	6.92		1	5.68		1	4.43		1
Cyanide (mg/kg)	NC	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		

Notes:

- * NJDEP NRSCC = New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any samp
- Shaded values meet or exceed New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-8

Matteo Iron and Metal

Deep Soil Sample Results (~10-12 ft) from the Scrapyard - Non-Residential Criteria (NRSCC)

SAMPLE LOCATION		GP-22			GP-23			GP-24			GP-25			GP-26			GP-28			GP-29			GP-30			GP-31			GP 34		
SAMPLE ID		GP-22C			GP-23C			GP-24C			GP-25C			GP-26C			GP-28C			GP-29C			GP-30C			GP-31C			GP 34		
LAB ID		N1314-16			N1405-3			N1405-6			N1405-9			N1405-12			N1405-17			N1405-20			N1409-3			N1409-6			N12323-28		
DATE		10/23/2001			10/24/2001			10/24/2001			10/24/2001			10/24/2001			10/24/2001			10/24/2001			10/24/2001			10/24/2001			4/11/2002		
SAMPLE INTERVAL (BGS)		11-11.5			12-12.5			9.5-10			5-5.5			10-10.5			7.5-8			5.5-6			11.5-12			11.5-12			11 - 11.5		
ANALYTE	*NJDEP Non-Residential*																														
Volatile Organic Compounds		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Benzene	13	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
cis-1,2-Dichloroethene	1,000	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Ethylbenzene	1,000	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Vinyl chloride	7	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Xylene (total)	1,000	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Semi-Volatile Organic Compounds		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Benzo(a)anthracene	4	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Benzo(a)pyrene	0.66	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Benzo(b)fluoranthene	4	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Benzo(k)fluoranthene	4	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
bis(2-Ethylhexyl)phthalate	210	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Dibenz(a,h)anthracene	0.66	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Indeno(1,2,3-cd)pyrene	4	NA			NA			NA			NA			NA			NA			NA			NA			NA			NA		
Pesticide & PCB		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Dieldrin	0.18	0.0035	U	1	0.0039	U	1	0.0038	U	1	0.0041	U	1	0.0038	U	1	0.0039	U	1	0.0039	U	1	0.0035	U	1	0.0036	U	1	NA		
Aroclor 1242	2	0.035	U	1	0.039	U	1	0.038	U	1	0.041	U	1	0.038	U	1	0.039	U	1	0.039	U	1	0.035	U	1	0.036	U	1	18	U	1
Aroclor 1248	2	0.035	U	1	0.039	U	1	0.038	U	1	0.041	U	1	0.038	U	1	0.039	U	1	0.039	U	1	0.035	U	1	0.036	U	1	18	U	1
Aroclor 1254	2	0.035	U	1	0.039	U	1	0.038	U	1	0.041	U	1	0.038	U	1	0.039	U	1	0.039	U	1	0.035	U	1	0.036	U	1	18	U	1
Aroclor 1260	2	0.035	U	1	0.039	U	1	0.038	U	1	0.041	U	1	0.038	U	1	0.039	U	1	0.039	U	1	0.035	U	1	0.036	U	1	18	U	1
Total Aroclor	2	0			0			0			0			0			0			0			0			0			0		
Metals		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
Aluminum	NC	2,510		1	2,400		1	4,000		1	5,820		1	2,970		1	2,360		1	5,620		1	3,340		1	2,320		1	3,270		1
Antimony	340	0.45	U	1	0.46	U	1	0.45	U	1	0.47	U	1	11.2	J	1	0.56	J	1	0.45	U	1	1.1	J	1	0.62	J	1	1.1	U	1
Arsenic	20	0.5	U	1	0.84	J	1	1.8	J	1	1.7	J	1	1.9	J	1	1.5	J	1	3.7		1	1.6	J	1	1.5	J	1	3.4		1
Barium	47,000	7.1	J	1	5.5	J	1	10.5	J	1	11.2	J	1	5.7	J	1	4.9	J	1	13.4	J	1	10.2	J	1	7.2	J	1	22	U	1
Beryllium	2	0.08	J	1	0.03	J	1	0.18	J	1	0.11	J	1	0.12	J	1	0.04	J	1	0.21	J	1	0.11	J	1	0.07	J	1	0.54	U	1
Cadmium	100	0.06	U	1	0.07	U	1	0.06	U	1	0.07	U	1	0.06	U	1	0.06	U	1	0.06	U	1	0.07	U	1	0.35	J	1	0.54	U	1
Copper	600	2.4	J	1	3.1	J	1	4.3	J	1	3.7	J	1	2.5	J	1	1.8	J	1	4.6	J	1	6.5		1	5.8		1	4.5		1
Iron	NC	3580		1	2420		1	5,920		1	7,240		1	5,110		1	2,930	*	1	9,780		1	4,460		1	4,040		1	7,040		1
Lead	600	2.2		1	3.4		1	4		1	6.5		1	3.9		1	2.2		1	5.7		1	4.2		1	2.8		1	2.9		1
Manganese	NC	39.4		1	10.2		1	41.2		1	31.6		1	16.8		1	12.6		1	80.6		1	29		1	23		1	36.8		1
Mercury	270	0.03	J	1	0.04	U	1	0.03	U	1	0.03	U	1	0.03	U	1	0.04	U	1	0.03	U	1	0.03	U	1	0.04	U	1	0.033	U	1
Nickel	2,400	3.7	J	1	2.1	J	1	5.2	J	1	5.4	J	1	2.4	J	1	1.6	J	1	6.2	J	1	4.2	J	1	3.6	J	1	4.3	U	1
Silver	110	0.15	U	1	0.15	U	1	0.15	U	1	0.16	U	1	0.15	U	1	0.15	U	1	0.15	U	1	0.16	U	1	0.15	U	1	1.1	U	1
Sodium	4,100	20.8	U	1	60.2	J	1	51.6	B	1	46	J	1	53.3	J	1	27.9	J	1	34.2	J	1	86.8	J	1	100	J	1	540	U	1
Thallium	2	NA			NA			NA			NA			NA			NA			NA			NA			NA			1.1	U	1
Zinc	1,500	11.1		1	28.1		1	19.3		1	85.7		1	10.5		1	5.9		1	17.4		1	26.5		1	33.2		1	22.4		1
Soil Characteristics		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	D
pH	NC	6.21		1	7.72		1	7.34		1	7.17		1	4.67		1	5.61		1	5.81		1	4.69		1	7.25		1	93.1		1
Cyanide (mg/kg)	NC	0.05	U	1	0.06	UN	1	0.05	UN	1	0.06	UN	1	0.05	UN	1	0.05	UN	1	0.05	UN	1	0.05	U	1	0.05	U	1	NA		

Notes:

- * NJDEP NRSCC = New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any s
- Shaded values meet or exceed New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99).
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- D = Sample diluted.
- NA = Not Available.

TABLE 5-9

Matteo Iron and Metal

Soil Boring Sample Analytical Results

SAMPLE LOCATION			MW1		B16		B18	
SAMPLE ID			MW-1A	MW-1B	MW16A	MW16B	MW-18A	MW-18B
LAB ID			E77442-5	E77442-6	E78265-2	E78265-3	E78510-11	E78510-12
DATE			9/25/2000	9/25/2000	10/5/2000	10/5/2000	10/10/2000	10/10/2000
SAMPLE INTERVAL (BGS)			1.0-1.5	10-10.5	2-2.5	6.5-7	3-4	5-6
ANALYTE	*RSCC*	*NRSCC*						
Volatile Organic Compounds								
Benzene	3	13	0.009 U	0.011 U	0.012 U	0.021 U	0.009 U	0.01 U
Chloroform	19	28	0.009 U	0.011 U	0.012 U	0.021 U	0.009 U	0.01 U
cis-1,2-Dichloroethene	79	1,000	0.009 U	0.011 U	0.012 U	0.021 U	0.009 U	0.01 U
Ethylbenzene	1,000	1,000	0.009 U	0.011 U	0.012 U	0.021 U	0.009 U	0.01 U
Vinyl chloride	2	7	0.009 U	0.011 U	0.012 U	0.021 U	0.009 U	0.01 U
Xylene (total)	410	1,000	0.009 U	0.011 U	0.012 U	0.021 U	0.009 U	0.01 U
Semi-Volatile Organic Compounds								
2,4-Dimethylphenol	1,100	10,000	0.35 U	0.36 U	0.51 U	0.53 U	0.38 U	0.39 U
Benzo(a)anthracene	0.9	4	0.35 U	0.36 U	2.4	0.53 U	0.38 U	0.39 U
Benzo(a)pyrene	0.66	0.66	0.35 U	0.36 U	3.3 N	0.53 U	0.38 U	0.39 U
Benzo(b)fluoranthene	0.9	4	0.35 U	0.36 U	2.8	0.53 U	0.38 U	0.39 U
Benzo(k)fluoranthene	0.9	4	0.35 U	0.36 U	2.2	0.53 U	0.38 U	0.39 U
bis(2-Ethylhexyl)phthalate	49	210	**0.07 J**	0.36 U	**29**	**0.075 J**	0.38 U	0.39 U
Dibenz(a,h)anthracene	0.66	0.66	0.35 U	0.36 U	**1**	0.53 U	0.38 U	0.39 U
Indeno(1,2,3-cd)pyrene	0.9	4	0.35 U	0.36 U	2.2	0.53 U	0.38 U	0.39 U
Pesticide & PCB								
Dieldrin	0.042	0.18	0.0034 U	0.0037 U	0.0051 U	0.005 U	0.0039 U	0.004 U
Aroclor 1248	0.49	2	0.034 U	0.037 U	**0.2**	0.050 U	0.039 U	0.040 U
Aroclor 1254	0.49	2	0.034 U	0.037 U	**0.68**	0.050 U	0.039 U	0.040 U
Aroclor 1260	0.49	2	0.034 U	0.037 U	0.051 U	0.050 U	0.039 U	0.040 U
Total Aroclor	0.49	2	0.034 U	0.037 U	0.88	0.050 U	0.039 U	0.040 U
Metals								
Aluminum	NC	NC	**3,240**	**1,370**	**12,700**	**9,400**	**3,030**	**4,250**
Antimony	14	340	**2 J**	**0.43 J**	**13.3 J**	0.56 U	**2.8 J**	**0.43 J**
Arsenic	20	20	**1.4 J**	0.48 U	**16**	**8.2**	**4.9**	**8**
Barium	700	47,000	**24.9 J**	**7.3 J**	**391**	**73.4**	**8.3 J**	**4.5 J**
Beryllium	2	2	**0.2 J**	**0.05 J**	**0.43 J**	**0.57 J**	**0.16 J**	**0.35 J**
Cadmium	39	100	0.07 U	0.06 U	**3.8 J**	**0.28 J**	0.07 U	0.07 U
Copper	600	600	**7**	**3.7 J**	**469**	**8.5**	**2.3 J**	**2 J**
Iron	NC	NC	**5,750**	**3,680**	**153,000**	**10,700**	**10,400**	**15,500**
Lead	400	600	**79.2**	**16.4**	2,460 N	**22.7**	**2.9**	**2.4**
Manganese	NC	NC	**41.4**	**15.2**	**561**	**76**	**16.6**	**22.3**
Mercury	14	270	**0.05 U**	0.05 U	**1.2**	0.06 U	0.05 U	0.05 U
Nickel	250	2,400	**4 J**	**2 J**	**60.1**	**10.1 J**	**3.4 J**	**2.6 J**
Silver	110	4,100	0.15 U	0.15 U	**3.6 J**	0.23 U	0.17 U	0.16 U
Sodium	NC	NC	**18.7 U**	**18 U**	**585 J**	**243 J**	**38.5 J**	**46.8 J**
Thallium	2	2	0.78 U	0.75 U	2.8 U	1.2 U	0.86 U	0.83 U
Zinc	1,500	1,500	**209**	**7.8**	1,680 N	**40.9**	**11.7**	**18.2**

Notes:

- Compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- RSCC: New Jersey Residential Soil Cleanup Criteria
- NRSCC: New Jersey Non-Residential Soil Cleanup Criteria
- Shaded values exceed New Jersey Residential Direct Contact Soil Criteria
- Shaded values with an "N" exceed New Jersey Non Residential and Residential Direct Contact Soil Cleanup Criteria
- Bold values indicate concentrations above MDL.
- All results in mg/kg.
- U = Not detected above the Contract Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.

TABLE 5-10

Matteo Iron and Metal

Soil Boring Sample TOC Results

Sample Location	Sample ID	Lab ID	Date	Depth ft bgs	TOC mg/kg	pH
MW1	MW1C	E77442-7	9/25/2000	14-16	<120	4.2
MW2	MW-2A	E77159-15	9/18/2000	12-14	223	5.1
MW3	MW-3A	E77159-16	9/18/2000	10-12	456	5.4
MW4	MW-4A	E76949-15	9/19/2000	8-9.5	730	5.2
MW5	MW-5A	E77159-17	9/19/2000	12-14	5,780	4.7
MW6	MW-6A	E76949-16	9/20/2000	8-10	1,300	5.5
	MW-6DUP	E76949-17	9/20/2000	8-10	1,610	5.2
MW7	MW-7A	E76949-18	9/21/2000	8.5-10	<110	6.8
MW8	MW8A	E77442-3	9/25/2000	14-16	708	4.5
	MW8B	E77442-4	9/25/2000	16-18	359	4.2
MW9	MW-9A	E77442-1	9/22/2000	10-12	1,000	6.4
MW10	MW-10A	E77442-2	9/22/2000	10-12	413	6.1
MW11	MW-11A	E76949-19	9/21/2000	6-8	600	7
MW12	MW-12A	E76949-20	9/21/2000	6-8.5	722	7
B13	MW13A	E78510-17	10/10/2000	6-7	1,020	4.7
	MW13B	E78510-18	10/10/2000	12-13	12,600	4.9
	MW-13C	E78671-13	10/13/2000	30-36.5	356	5.4
	MW-13D	E78671-14	10/13/2000	55-60.5	381	6
	DUP TOC	E78963-10	10/16/2000	85-86	1,380	4.9
B14	MW14-A	E77892-1	9/29/2000	6-8	1,090	8.1
	MW14-B	E77892-2	9/29/2000	18-20	9,320	5.5
	MW14-C	E78043-1	10/2/2000	45-47	2,150	5.2
	MW14-D	E78043-2	10/2/2000	75-77	2,080	5.7
B15	MW-15A	E78043-12	10/3/2000	2-8	418	7.1
	MW-15B	E78043-13	10/3/2000	8-12	9,340	4.9
	MW-15C	E78043-14	10/3/2000	25-32	269	5.6
	MW-15E	E78043-15	10/3/2000	45-52	672	6.6
	MW15-E	E78265-1	10/4/2000	80-87	314	7.2
B16	MW16C	E78265-4	10/5/2000	10-11.5	2,220	8
	MW16D	E78266-12	10/6/2000	45-46	130	8
	MW16E	E78266-13	10/6/2000	50-51	350	6.7
	MW16F	E78266-14	10/6/2000	60-61	49,700	5.6
	MW16G	E78510-9	10/9/2000	85-86	4,090	5.9
	MW16H	E78510-10	10/9/2000	90-91	22,000	6.6
B17	MW17D-A	E76840-5	9/14/2000	4-5.5	300	5.2
	MW17D-B	E76840-6	9/14/2000	9-10.5	17,300	4.4
	MW17D-C	E76840-7	9/14/2000	18-19	<240	4.2
	MW17D-D	E76840-8	9/14/2000	45-46	1,960	4.8
	MW17D-E	E76840-9	9/14/2000	65-66	3,890	5.3
	MW17D-F	E76840-10	9/14/2000	75-76	16,400	5.3
	MW17D-G	E76949-2	9/15/2000	85-86	73,600	6
B18	MW18C	E78510-13	10/10/2000	6-7	198	6.4
	MW18D	E78510-14	10/10/2000	16-17	227	6.8
	MW18E	E78510-15	10/10/2000	25-26	275	7.8
	MW18F	E78510-16	10/10/2000	50-51	356	7.2

TABLE 5-11

Matteo Iron Metal

Soil Sample Sample Results - Lead/TPH/pH

Sample Location	Sample ID	Lab ID	Date	Depth ft bgs	TPHC mg/kg	Lead		pH
						Res.	Non Res.	
New Jersey Residential Soil Cleanup Criteria					10,000	400	600	NC
TP1A	TP-1A	E76234-3	9/6/2000	1.5-2	903	**25,600**		5.5
TP1B	TP-1B	E76234-4	9/6/2000	6-6.5	535	**8,040**		6.8
TP1B	TPDUP-1	E76234-6	9/6/2000	6-6.5	1,080	**6,270**		6.5
TP1C	TP-1C	E76234-5	9/6/2000	2.5-3	956	**12,000**		5.8
TP2B	TP-2B	E76419-12	9/7/2000	3-3.5	248	**821**		6.1
TP2C	TP-2C	E76419-13	9/7/2000	7-7.5	116	200		5.6
TP3A	TP-3A	E76419-14	9/7/2000	1.5-2	239	**31,300**		5.7
TP3B	TP-3B	E76419-15	9/7/2000	4.5-5	< 26	5.6		7.5
TP4A	TP-4A	E76419-16	9/7/2000	2-2.5	88.5	**10,600**		6.2
TP4B	TP-4B	E76419-17	9/7/2000	2-2.5	< 28	16.3		6.6
TP4C	TP-4C	E76419-18	9/7/2000	5.5-6	120	**5,080**		4.9
TP4D	TP-4D	E76418-14	9/7/2000	13-14	< 31	14.1		3.7
TP5A	TP-5A	E76419-8	9/8/2000	2.5-3	< 33	8.6		4.1
TP5A	TPDUP2	E76419-9	9/8/2000	2.5-3	< 33	10.4		4.2
TP6B	TP-6B	E76419-7	9/8/2000	11-11.5	29.7	2		5.7
TP7A	TP-7A	E76419-3	9/8/2000	10-11	< 28	5.1		5.4
TP8A	TP-8A	E76419-2	9/8/2000	8-8.5	< 29	6.6		5
TP9A	TP-9A	E76419-1	9/8/2000	7.5-8	< 42	**933**		5.6
TP10A	TP-10A	E76571-1	9/11/2000	12-12.5	< 29	4.4		4.7
TP11A	TP-11A	E76571-2	9/11/2000	2-2.5	< 27	3.2		7.2
TP13A	TP-13A	E76571-3	9/11/2000	9.5-10	117	61		6.1
TP14A	TP-14A	E76571-4	9/11/2000	6.5-7	< 29	26.2		4.4
TP15	TP-15A	E76571-5	9/11/2000	9-9.5	< 30	30.1		6.5
TP16	TP-16A	E76571-6	9/11/2000	10.5-11	< 32	222		5.5
TP17	TP-17A	E76571-7	9/11/2000	6-6.5	< 29	3.7		4.5
TP19	TP-19	E76651-2	9/12/2000	6.5-7	< 39	20.2		5.7
TP20	TP-20	E76651-3	9/12/2000	8.5-9	< 30	2.4		6.6
TP21	TP-21	E76651-4	9/12/2000	11.5-12	< 29	1.7		6.7
TP22	TP-22	E76651-5	9/12/2000	13.5-14	< 30	4.5		4.7
TP23	TP-23	E76651-6	9/12/2000	13-13.5	< 26	2		5
TP24	TP-24	E76651-7	9/12/2000	8-8.5	< 31	4.5		4.6
TP26	TP-26	E76651-9	9/12/2000	8.5-9	< 27	1.7		6.8
TP27	TP-27A	E76651-10	9/13/2000	1.5-2	315	**750**		6.9
TP27	TP-27B	E76651-11	9/13/2000	3-3.5	< 29	17.7		7
TP28	TP-28A	E76651-12	9/13/2000	2-2.5	89.9	**7,930**		6.1
TP28	TP-28B	E76651-13	9/13/2000	3.5-4	47.9	262		5.6
TP30	TP-30	E76651-16	9/13/2000	11.5-12	< 28	2.3		6.2
TP31	TP-31	E76651-17	9/13/2000	3-3.5	< 27	2.3		6.8
TP34	TP-34	E76651-19	9/13/2000	2-2.5	29.6	1.7		6
TP36	TP-36A	E76839-2	9/14/2000	3-3.5	< 29	3.6		5.2

Notes:

- New Jersey Residential and Non Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99)
- Bold and Shaded values exceed New Jersey Residential and Non Residential Soil Cleanup Criteria.
- No sample exceeded Impact to Groundwater Criteria.
- All results in mg/kg.

TABLE 5-11

Matteo Iron Metal

Soil Sample Sample Results - Lead/TPH/pH

Sample Location	Sample ID	Lab ID	Date	Depth ft bgs	TPHC mg/kg	Lead		pH
						Res.	Non Res.	
New Jersey Residential Soil Cleanup Criteria					10,000	400	600	NC
TP36	TP-36B	E76839-3	9/14/2000	12.5-13	< 33	12.9		6
TP37	TP-37	E76839-4	9/14/2000	12.5-13	< 30	2.7		6.2
TP38	TP-38	E76839-5	9/14/2000	4-4.5	< 189	**1,650**		6
TP39	TP-39	E76839-6	9/14/2000	9.5-10	< 32	3.7		6.1
TP40	TP-40	E76839-7	9/14/2000	9-9.5	< 288	294		6
TP41	TP-41	E76839-8	9/14/2000	6-6.5	< 191	**3,600**		6
TP42	TP-42A	E76839-9	9/14/2000	3-3.5	< 30	37.7		5.3
TP42	TP-42B	E76839-10	9/14/2000	8.5-9	< 31	1.8		6.3
TP43	TP-43	E76839-11	9/14/2000	12.5-13	< 34	6.6		4.7
TP46	TP-46	E76949-3	9/15/2000	14.5-15	< 28	5.5		6.6
TP46	TP-DUP5	E76949-4	9/15/2000	14.5-15	< 28	2.6		6.6
TP48	TP-48B	E76949-7	9/15/2000	8.5-9	< 30	16.6		5.4
TP50	TP-50B	E76949-10	9/15/2000	13.5-14	< 28	1.4		5.2
TP51	TP-51A	E77159-1	9/18/2000	3-3.5	2,250	**1,680**		6.6
TP51	TP-DUP6	E77159-2	9/18/2000	3-3.5	442	**1,320**		5.9
TP51	TP-51B	E77159-3	9/18/2000	12.5-13	< 34	21.8		5.1
TP52	TP-52	E77159-4	9/18/2000	4-4.5	74	128		6.2
TP54	TP-54	E77159-6	9/18/2000	14.5-15	< 29	7.7		4.1
TP56	TP-56B	E77159-9	9/18/2000	12-12.5	< 29	62.2		6.9
TP62	TP-62A	N1241-4	10/22/2001	0.3-0.8	297	**1,110**		6.18
TP64	TP-64A	N1312-2	10/23/2001	9-10	<28	14.7		4.48
TP65	TP-65A	N1312-3	10/23/2001	4-4.5	<29	3.4		4.77
TP68	TP-68A	N1312-5	10/23/2001	3-3.5	<29	6.8		4.76
TP71	TP-71A	N1315-13	10/24/2001	6-6.5	<29	2.7		7.24
TP71	DUP-2	N1315-17	10/24/2001	6-6.5	<28	1.8		6.94
TP73	TP-73A	N1315-15	10/24/2001	8-8.5	146	54.5		5.37
TPSS-A	TPSS-A1	E76949-11	9/15/2000	0-0.5	64.4	161		6.8
	TPSS-A2	E76949-1	9/15/2000	3.5-4.5	<26	34.7		6.5
TPSS-B	TPSS-B1	E76949-12	9/15/2000	0-0.5	31.6	331		6.4
TPSS-C	TPSS-C1	E76949-13	9/15/2000	0-0.5	2,080	**14,500**		6.1
TPSS-F	TPSS-F1	E77159-12	9/19/2000	0-0.5	63.8	**4,980**		6.4
TPSS-G	TPSS-G1	E77159-13	9/19/2000	0-0.5	61.4	**1,660**		6.4
TPSS-H	TPSS-H1	E77159-14	9/19/2000	0-0.5	118	**9,830**		6

Notes:

- New Jersey Residential and Non Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99)
- Bold and Shaded values exceed New Jersey Residential and Non Residential Soil Cleanup Criteria.
- No sample exceeded Impact to Groundwater Criteria.
- All results in mg/kg.

TABLE 5-12

Matteo Iron Metal

Test Pit Soil Sample Results - Residential Criteria (RSCC)

SAMPLE LOCATION		TP2A	TP6A	TP6A	TP6B	TP6B	TP7A	TP18	TP25	TP28	TP29	TP32	TP35	TP35	TP44
SAMPLE ID		TP-2A	TP-6A	TPDUP3	TP-6C	TP6D	TP-7B	TP-18	TP-25	TP-28C	TP-29	TP-32	TP-35	TP-DUP4	TP-44
LAB ID		E76419-11	E76419-6	E76419-10	E76419-5	E76949-14	E76419-4	E76651-1	E76651-8	E76651-14	E76651-15	E76651-18	E76651-20	E76839-1	E76839-12
DATE		9/7/2000	9/8/2000	9/8/2000	9/8/2000	9/15/2000	9/8/2000	9/12/2000	9/12/2000	9/13/2000	9/13/2000	9/13/2000	9/13/2000	9/14/2000	9/14/2000
SAMPLE INTERVAL (BGS)		3-3.5	6-6.5	6-6.5	2-2.5	1-1.5	1.5-2	8-8.5	2-2.5	0-0.5	9.5-10	1.5-2	5-5.5	5-5.5	2-2.5
ANALYTE	*NJDEP*														
Volatile Organic Compounds	*Residential*	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Benzene	3	0.029 U	0.015	0.003 J	0.022	30 U	0.008 U	0.01 U	0.011 U	0.005 J	0.011 U	NT	0.033 U	0.025 U	0.012 U
Chloroform	19	0.029 U	0.009 U	0.008 U	0.011 U	30 U	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
cis-1,2-Dichloroethene	79	0.029 U	0.009 U	0.008 U	0.011 U	30 U	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
Ethylbenzene	1,000	0.029 U	0.009 U	0.008 U	0.12 DJ	120	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
Vinyl chloride	2	0.029 U	0.009 U	0.008 U	0.011 U	30 U	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
Xylene (total)	410	0.029 U	0.009 U	0.008 U	0.27 DJ	560	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
Semi-Volatile Organic Compounds		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
2,4-Dimethylphenol	1,100	0.71 U	0.37 U	0.36 U	0.04 U	NT	0.38 U	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.68 U	0.68 U	0.42 U
Benzo(a)anthracene	0.9	0.1 J	0.37 U	0.36 U	0.23 J	NT	0.038 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.34 J	0.1 J	0.084 J
Benzo(a)pyrene	0.66	0.71 U	0.37 U	0.36 U	0.073 J	NT	0.039 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.33 J	0.11 J	0.085 J
Benzo(b)fluoranthene	0.9	0.71 U	0.37 U	0.36 U	0.099 J	NT	0.042 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.29 J	0.1 J	0.08 J
Benzo(k)fluoranthene	0.9	0.71 U	0.37 U	0.36 U	0.068 J	NT	0.032 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.24 J	0.094 J	0.068 J
bis(2-Ethylhexyl)phthalate	49	1.1	0.048 J	0.047 J	1.3	NT	0.043 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.051 J	0.044 J	0.042 U
Dibenzo(a,h)anthracene	0.66	0.71 U	0.37 U	0.36 U	0.4 U	NT	0.38 U	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.073 J	0.68 U	0.021 J
Indeno(1,2,3-cd)pyrene	0.9	0.71 U	0.37 U	0.36 U	0.049 J	NT	0.027 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.16 J	0.06 J	0.047 J
Pesticide & PCB		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Dieldrin	0.042	0.35 D	0.0038 U	0.0036 U	0.0039 U	NT	0.0038 U	0.0039 U	0.0041 U	0.025 U	0.0043 U	0.0036 U	0.0073 U	0.0066 U	0.0043 U
Aroclor 1248	0.49	0.069 U	0.038 U	0.036 U	0.039 U	NT	0.038 U	0.039 U	0.041 U	0.25 U	0.043 U	0.036 U	0.073 U	0.066 U	0.043 U
Aroclor 1254	0.49	0.069 U	0.038 U	0.036 U	0.53	NT	0.24	0.039 U	0.041 U	0.25 U	0.043 U	0.25	11 DJ	26	0.043 U
Aroclor 1260	0.49	0.069 U	0.038 U	0.036 U	0.039 U	NT	0.038	0.039 U	0.041 U	0.25 U	0.043 U	0.036 U	5.1 DJ	22	0.043 U
Total PCBs	0.49	0.069 U	0.038 U	0.036 U	0.53	NT	0.24	0.039 U	0.041 U	0.25 U	0.043 U	0.25	16.1 DJ	48	0.043 U
Metals		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Aluminum	NC	7,950	1,800	1,930	8,980	1,980	2,940	2,790	1,470	10,500	1,270	3,500	19,200	14,600	13,600
Antimony	14	17.7 J	7.8 J	5.5 J	20.7	21.4	4.7 J	0.39 U	0.42 U	2.8 J	0.43 U	208	62.9	20.3 J	0.54 J
Arsenic	20	9.7	5.4	5	3.9	0.62 U	5.7	0.53 U	5.7	21.4	4.3	14.8	26.4	21.3	17.5
Barium	700	496	12.4 J	13.4 J	11.6 J	15.3 J	36.1 J	17.8 J	3.7 J	25 J	3.6 J	30.5 J	179	138	107
Beryllium	2	0.14 J	0.16 J	0.17 J	0.11 J	0.07 J	0.25 J	0.22 J	0.24 J	0.96 J	0.19 J	0.35 J	2.2	1.5 J	1 J
Cadmium	39	5.3	0.06 U	0.06 U	0.51 J	1.5 J	0.07 U	0.45 J	0.07 U	1.6	0.08 U	0.36 J	4.9	4.8	3.9
Copper	600	279	5.8	4.8 J	327	110	14.3	108	0.88 J	38.7	0.82 J	7.4	132	187	95.7
Iron	NC	101,000	8,780	8,530	6,880	2,010	11,400	3,060	13,800	3,220	7,350	14,100	40,200	41,700	24,100
Lead	400	2,090	12.4	10.6	91.8	89.8	881	82.5	2.3	41.4	2.7	20.4	11,500	4,030	218
Manganese	NC	256	11.9	20.8	120	1,350	40.8	15.2	10	33	6.6	56.3	679	756	240
Mercury	14	0.57	0.05 J	0.06 J	0.41	0.06 U	0.15	0.05 U	0.05 U	0.14	0.05 U	0.06 J	1.3	1.2	0.76
Nickel	250	68.7	12.5	11.6	185	236	4.3 J	4 J	1.2 J	5.8 J	0.88 J	8.4 J	47.2	38.2	25.6
Silver	110	32.7	0.15 U	0.15 U	0.32 J	0.19 U	0.15 U	0.16	0.17 U	0.2 U	0.18 U	0.15 U	19	143	1.1 J
Sodium	NC	70.8 J	18.3 U	18.4 U	23.5 J	936 J	23.2 J	32.3 J	38.8 J	90.1 J	36 J	36.1 J	195 J	174 J	171 J
Thallium	2	1.5 U	0.76 U	0.77 U	0.82 U	3.9 U	0.78 U	0.83 U	0.89 U	1 U	0.92 U	0.77 U	1.5 U	1.4 U	0.9 U
Zinc	1,500	1610	21.9	20.9	472	31.4	47.4	84.7	5.9	367	6	40	694	516	584
Soil Characteristics		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Ph	NC	5	5.4	4.7	5.9	6.6	6.7	7.4	6.6	6.6	6.7	6.7	5.6	5.3	5
Cyanide	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: - NJDEP RSCC = New Jersey Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99). Bold values indicate concentrations above MDL.
- All results in mg/kg.
- D = Sample diluted.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.

TABLE 5-12

Matteo Iron Metal

Test Pit Soil Sample Results - Residential Criteria (RSCC)

SAMPLE LOCATION		TP45	TP45	TP47	TP48	TP49	TP50	TP53	TP55	TP56	TP-60	TP-61	TP-61	TP-64
SAMPLE ID		TP-45A	TP-45B	TP-47	TP-48A	TP-49	TP-50A	TP-53	TP-55	TP-56A	TP-60A	TP-61A	TP-61B	TP-64B
LAB ID		E76839-13	E76839-14	E76949-5	E76949-6	E76949-8	E76949-9	E77159-5	E77159-7	E77159-8	N1241-1	N1241-2	N1241-3	N1312-1
DATE		9/14/2000	9/14/2000	9/15/2000	9/15/2000	9/15/2000	9/15/2000	9/18/2000	9/18/2000	9/18/2000	10/22/2001	10/22/2001	10/22/2001	10/23/2001
SAMPLE INTERVAL (BGS)		1.5-2	2-2.5	12.5-13	1-1.5	1-1.5	1-1.5	12.5-13	7.5-8	2-2.5	1.5-2	1-1.5	6-6.5	9-10
ANALYTE	NJDEP													
Volatile Organic Compounds	Residential	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Benzene	3	0.58 J	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U 1	0.01 U 1
Chloroform	19	1.3 J	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U 1	0.01 U 1
cis-1,2-Dichloroethene	79	4.6 U	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U 1	0.01 U 1
Ethylbenzene	1,000	3.7 J	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U 1	0.01 U 1
Vinyl chloride	2	4.6 U	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U 1	0.01 U 1
Xylene (total)	410	32	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U 1	0.01 U 1
Semi-Volatile Organic Compounds		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
2,4-Dimethylphenol	1,100	35 D	0.34 U	0.41 U	0.37 U	0.39 U	0.36 U	0.44 U	0.35 U	0.34 U	0.35 U 1	0.34 U 1	0.35 U 1	0.38 U 1
Benzo(a)anthracene	0.9	1.8 U	0.34 U	0.41 U	0.046 J	0.036 J	0.022 J	0.44 U	0.35 U	0.34 U	0.35 U 1	0.34 U 1	0.35 U 1	0.38 U 1
Benzo(a)pyrene	0.66	1.8 U	0.34 U	0.41 U	0.046 J	0.036 J	0.026 J	0.44 U	0.35 U	0.34 U	0.35 U 1	0.34 U 1	0.35 U 1	0.38 U 1
Benzo(b)fluoranthene	0.9	1.8 U	0.34 U	0.41 U	0.041 J	0.046 J	0.029 J	0.44 U	0.35 U	0.34 U	0.35 U 1	0.34 U 1	0.35 U 1	0.38 U 1
Benzo(k)fluoranthene	0.9	1.8 U	0.34 U	0.41 U	0.039 J	0.031 J	0.021 J	0.44 U	0.35 U	0.34 U	0.35 U 1	0.34 U 1	0.35 U 1	0.38 U 1
bis(2-Ethylhexyl)phthalate	49	1.8 U	0.34 U	0.41 U	0.37 U	0.036 J	0.36 U	0.44 U	0.35 U	0.34 U	0.35 U 1	0.052 J 1	0.35 U 1	0.047 J
Dibenzo(a,h)anthracene	0.66	1.8 U	0.34 U	0.41 U	0.37 U	0.39 U	0.36 U	0.44 U	0.35 U	0.34 U	0.35 U 1	0.34 U 1	0.35 U 1	0.38 U 1
Indeno(1,2,3-cd)pyrene	0.9	1.8 U	0.34 U	0.41 U	0.026 J	0.025 J	0.36 U	0.44 U	0.35 U	0.34 U	0.35 U 1	0.34 U 1	0.35 U 1	0.38 U 1
Pesticide & PCB		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Dieldrin	0.042	0.018 U	0.0036 U	0.0041 U	0.0038 U	0.0037 U	0.0035 U	0.0045 U	0.0035 U	0.0033 U	0.0035 U 1	0.0034 U 1	0.0035 U 1	0.004 U 1
Aroclor 1248	0.49	0.86	0.036 U	0.041 U	0.038 U	0.037 U	0.035 U	0.045 U	0.035 U	0.033 U	0.035 U 1	0.034 U 1	0.035 U 1	0.04 U 1
Aroclor 1254	0.49	0.18 U	0.036 U	0.041 U	0.038 U	0.037 U	0.035 U	0.045 U	0.035 U	0.033 U	0.059 1	0.034 U 1	0.14 1	0.04 U 1
Aroclor 1260	0.49	0.18 U	0.036 U	0.041 U	0.038 U	0.037 U	0.035 U	0.045 U	0.035 U	0.033 U	0.035 U 1	0.034 U 1	0.12 1	0.04 U 1
Total PCBs	0.49	0.86	0.036 U	0.041 U	0.038 U	0.037 U	0.035 U	0.045 U	0.035 U	0.033 U	0.059	0.034 U	0.26	0.04 U
Metals		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Aluminum	NC	2,600	1,840	7,040	1,970	1,910	2,350	13,600	1,860	1,760	3,990 1	1,210 1	1,670 1	2,170 1
Antimony	14	108	2.6 J	0.39 U	1.6 J	1.9 J	1.1 J	0.46 UN	0.79 J	0.34 U	0.45 U 1	0.44 U 1	1.6 J 1	0.5 u 1
Arsenic	20	5.3	3	23.3	2.2 J	3	2.1	24.1	3.2	3.9	7.4 1	2.5 1	3.3 1	4.1 1
Barium	700	43	6.4 J	25.6 J	18.9 J	18 J	16.7 J	27 J	9.1 J	6.8 J	6.6 J 1	8.9 J 1	8 J 1	4.9 J 1
Beryllium	2	0.18 J	0.25 J	0.92 J	0.16 J	0.13 J	0.15 J	1.4 J	0.13 J	0.12 J	0.17 J 1	0.1 J 1	0.12 J 1	0.17 J 1
Cadmium	39	0.98 J	0.06 U	0.07 U	0.07 U	0.13 J	0.06 J	0.08 U	0.06 J	0.06 U	0.06 U 1	0.06 U 1	0.07 U 1	0.07 U 1
Copper	600	16.5	2.6 J	2.8 J	6.1	14.5	6.9	5.9 J	2.2 J	0.88 J	2.4 J 1	2.6 J 1	5.1 J 1	15.8 1
Iron	NC	16,200	9,450	71,300	4,440	8,120	4,570	34,000	6,450	6,680	13,100 1	4,080 1	7,320 1	10,800 1
Lead	400	24,300	9.1	8.6	57.9	108	104	10.2	19.5	2	4.8 1	2 1	8.3 1	6.3 1
Manganese	NC	249	45.2	181	77	74.2	50.6	86.5	26.9	11.8	32.7 1	10.6 1	24.1 1	87.9 1
Mercury	14	0.06 J	0.04 U	0.06 U	0.04 U	0.05 U	0.04 U	0.06 U	0.04 U	0.04 U	0.04 J 1	0.04 J 1	0.04 J 1	0.03 U 1
Nickel	250	64.6	5.9 J	16.5	3.3 J	5.3 J	4 J	15.5	3.2 J	1.6 J	1.9 J 1	2.2 J 1	2.4 J 1	1.6 J 1
Silver	110	0.17 J	0.15 U	0.16 U	0.15 U	0.15 U	0.14 U	0.19 U	0.14 U	0.14 U	0.15 U 1	0.15 U 1	0.16 U 1	0.17 U 1
Sodium	NC	96.3 J	25.7 J	19.7 U	19.4 J	18.7 U	16.9 U	59.5 J	27.1 J	32.5 J	89.7 J 1	79.8 J 1	89 J 1	40.5 J 1
Thallium	2	0.76 U	0.75 U	0.82 U	0.79 U	0.78 U	0.71 U	0.98 U	0.73 U	0.72 U	NA 1	NA J 1	NA 1	NA J 1
Zinc	1,500	1,570	14.5	44.8	33.4	42.1	34.5	68.2	59.5	6.5	13.3 1	27.7 1	46.9 1	11.3 1
Soil Characteristics		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Ph	NC	6	5.1	5.4	5.7	6.6	5.7	4.3	7.2	7.2	6.95 1	5.71 1	7.27 1	4.39 1
Cyanide	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05 U 1	0.05 U 1	0.05 U 1	0.06 U 1

Notes: - NJDEP RSCC = New Jersey Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99). Bold values indicate concentrations above MDL.
- All results in mg/kg.
- D = Sample diluted.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.

TABLE 5-12

Matteo Iron Metal

Test Pit Soil Sample Results - Residential Criteria (RSCC)

SAMPLE LOCATION		TP-67	TP-67	TP-70	TP-72	TP-74	TP-78	TP-78	TP-79	TP-81	TP-81	TP-81	TP-84	TP-86	TP-87	TP-88
SAMPLE ID		TP-67A	DUP-A	TP-70A	TP-72A	TP-74A	TP-78A	TP-78B	TP-79A	TP-81A	TP-81B	TP-81C	TP-84A	TP-86A	TP-87A	TP-88A
LAB ID		N1312-4	N1312-6	N1315-12	N1315-14	N1315-16	N1409-9	N1409-10	N1409-11	N1409-12	N1409-13	N1409-14	N1409-15	N1529-5	N1529-6	N1529-7
DATE		10/23/2001	10/23/2001	10/24/2001	10/24/2001	10/24/2001	10/25/2001	10/25/2001	10/25/2001	10/25/2001	10/25/2001	10/25/2001	10/25/2001	10/26/2001	10/26/2001	10/26/2001
SAMPLE INTERVAL (BGS)		3-3.5	3-3.5	4.5-5	4-4.5	7-7.5	8-8.5	5-5.5	7-7.5	3-3.5	3.5-4	7-7.5	5-5.5	4.5-5	4.5-5	2.5-3
ANALYTE	NJDEP Residential	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q	Result Q D	Result Q D
Volatile Organic Compounds																
Benzene	3	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.001 J 1	0.01 U 1	0.011 U 1	0.01 U 1	13 U 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U 1	0.01 U 1
Chloroform	19	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	13 U 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U 1	0.01 U 1
cis-1,2-Dichloroethene	79	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	3.1 J 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U 1	0.01 U 1
Ethylbenzene	1,000	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	13 U 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U 1	0.01 U 1
Vinyl chloride	2	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	280 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U 1	0.01 U 1
Xylene (total)	410	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	280 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U 1	0.01 U 1
Semi-Volatile Organic Compounds		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q	Result Q D	Result Q D
2,4-Dimethylphenol	1,100	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.35 U 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U 1	350 U 1	350 U 1
Benzo(a)anthracene	0.9	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.046 J 1	0.37 U 1	0.023 J 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U 1	360 U 1	350 U 1
Benzo(a)pyrene	0.66	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.021 J 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U 1	360 U 1	350 U 1
Benzo(b)fluoranthene	0.9	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.034 J 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U 1	360 U 1	350 U 1
Benzo(k)fluoranthene	0.9	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.4 1	0.38 U 1	0.35 U 1	0.4 U 1	6.7 J 1	0.38 U	0.44 U 1	0.39 U 1	370 U 1	360 U 1	350 U 1
bis(2-Ethylhexyl)phthalate	49	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.35 U 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U 1	360 U 1	350 U 1
Dibenzo(a,h)anthracene	0.66	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.35 U 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U 1	360 U 1	350 U 1
Indeno(1,2,3-cd)pyrene	0.9	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.35 U 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U 1	360 U 1	350 U 1
Pesticide & PCB		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q	Result Q D	Result Q D
Dieldrin	0.042	0.0037 U 1	0.0035 U 1	0.0037 U	0.0038 U 1	0.0037 U 1	0.0034 U 1	0.0035 1	0.004 U 1	0.022 U 1	0.0036 U	0.0042 U 1	0.0041 U 1	0.0036 U	0.0036 U 1	0.0035 U 1
Aroclor 1248	0.49	0.037 U 1	0.035 U 1	0.037 U	0.038 U 1	0.037 U 1	0.034 U 1	0.035 U 1	0.04 U 1	0.22 U 1	0.036 U	0.042 U 1	0.041 U 1	0.036 U	0.036 U 1	0.035 U 1
Aroclor 1254	0.49	0.037 U 1	0.035 U 1	0.037 U	0.038 U 1	0.037 U 1	0.034 U 1	0.035 U 1	0.04 U 1	0.22 U 1	0.036 U	0.042 U 1	0.041 U 1	460 D	0.036 U 1	0.035 U 1
Aroclor 1260	0.49	0.037 U 1	0.035 U 1	0.037 U	0.038 U 1	0.037 U	0.034 U	0.035 U	0.04 U	0.22 U	0.036 U	0.042 U	0.041 U	460	0	0
Total PCBs	0.49	0.037 U	0.035 U	0.037 U	0.038 U	0.037 U	0.034 U	0.035 U	0.04 U	0.22 U	0.036 U	0.042 U	0.041 U	460	0	0
Metals		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q	Result Q D	Result Q D
Aluminum	NC	3,870 1	2,280 1	2,120	1,380 1	5,670 1	1,950 1	2,340 1	2,650 1	2,250 1	2,860	2,690 1	2,330 1	3,190	1,670 1	3,110 1
Antimony	14	0.88 J 1	2.7 J 1	0.45 U	1 J 1	79.8 1	4.3 J 1	2 J 1	5.9 J 1	1.4 J 1	1.1 J	0.72 J 1	4.6 J 1	0.57 U	0.55 U 1	0.56 U 1
Arsenic	20	6.1 1	3.1 1	5.8	1.4 J 1	6.5 1	7.5 1	8.6 1	8.4 1	2.1 J 1	5.7	7.6 1	5.4 1	7.1	6.9 1	6.3 1
Barium	700	15.3 J 1	15.7 J 1	3.6 J	5.3 J 1	10.6 J 1	4.9 J 1	19.5 J 1	11 J 1	32.5 J 1	10 J	7.8 J 1	9 J 1	13.1 J	6.8 J 1	5.3 J 1
Beryllium	2	0.28 J 1	0.83 J 1	0.31 J	0.14 J 1	0.17 J 1	0.21 J 1	0.16 J 1	0.24 J 1	0.06 J	0.24 J	0.24 J 1	0.19 J 1	0.27 J	0.2 J 1	0.24 J 1
Cadmium	39	0.06 U 1	0.06 U 1	0.06 U	0.07 U 1	0.07 U 1	0.07 U 1	0.06 J 1	0.1 J 1	1.1 J 1	0.06 U	0.08 U 1	0.08 U 1	0.17 J	0.18 J 1	0.19 J 1
Copper	600	5.8 1	6.9 1	1.7 J	1 J 1	12.9 1	4.3 J 1	5.8 1	4.5 J 1	12.2 1	2.1 J	2.8 J 1	2 J 1	2.5 J	2.1 J 1	2.3 J 1
Iron	NC	13,000 1	6,150 1	9,730	2,500 1	12,500 1	13,400 1	5,590 1	8,950 1	6,630 1	10,100	11,300 1	7,370 1	11,400	10,600 1	12,700 1
Lead	400	122 1	296 1	2.6	1.7 1	73.4 1	5.1 1	25.8 1	6.5 1	520 1	4.1	3.4 1	3.1 1	2.8	2.3 1	2.4 1
Manganese	NC	69.6 1	53.1 1	16.3	9.7 1	24.1 1	26.2 1	85.6 1	11.1 1	32.3 1	19.8	18.2 1	7.2 1	39.1	19.9 1	14.5 1
Mercury	14	0.05 J 1	0.07 J 1	0.04 J	0.03 J 1	0.05 J 1	0.11 1	0.04 J 1	0.03 U 1	0.06 J	0.03 U	0.03 U 1	0.04 U 1	0.03 U	0.03 U 1	0.03 U 1
Nickel	250	3.9 J 1	2.3 J 1	1.3 J	1.7 J 1	6.9 J 1	2.2 J 1	2 J 1	3.2 J 1	5.1 J	3.3 J	3.4 J 1	1.8 J 1	1.9 J	0.99 J 1	1.1 J 1
Silver	110	0.16 J 1	0.15 U 1	0.15 U	0.16 U 1	0.16 U 1	0.52 J 1	0.15 U 1	0.15 U 1	0.17 U 1	0.15 U	0.18 U 1	0.18 U 1	0.19 U	0.18 U 1	0.19 U 1
Sodium	NC	39.2 J 1	41.4 J 1	72.4 J	120 J 1	80.3 J 1	87.4 J 1	78.3 J 1	86.4 J 1	105 J 1	94.7 J	115 J 1	82 J 1	137 J	137 J 1	149 J 1
Thallium	2	NA 1	NA 1	NA	NA J 1	NA 1	NA 1	NA 1	NA 1	NA 1	NA	NA 1	NA 1	0.98 U	0.94 U 1	0.96 U 1
Zinc	1,500	18.6 1	20 1	7.1	8.4 1	44.3 1	25 1	21.7 1	72.3 1	259 1	22.8	13.4 1	179 1	14.8	7.9 1	10.9 1
Soil Characteristics		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q	Result Q D	Result Q D
Ph	NC	7.59 1	7.46 1	7.07	7.34 1	4.88 1	5.15 1	6.25 1	6.43 1	5.61 1	6.56	6.48 1	5.7 1	4.89	6.76 1	6.85 1
Cyanide	NC	0.05 U 1	0.05 U 1	0.05 U	0.06 U 1	0.05 U 1	0.05 U 1	0.05 U 1	0.06 U 1	0.05 U 1	0.05 U	0.06 U 1	0.06 U 1	0.06 UN	0.05 UN 1	0.05 UN 1

Notes:
- NJDEP RSCC = New Jersey Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99). Bold values indicate concentrations above MDL.
- All results in mg/kg.
- D = Sample diluted.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.

TABLE 5-13

Matteo Iron Metal

Test Pit Soil Sample Results - Non-Residential Criteria (NRSCC)

SAMPLE LOCATION		TP2A	TP6A	TP6A	TP6B	TP6B	TP7A	TP18	TP25	TP28	TP29	TP32	TP35	TP35	TP44
SAMPLE ID		TP-2A	TP-6A	TPDUP3	TP-6C	TP6D	TP-7B	TP-18	TP-25	TP-28C	TP-29	TP-32	TP-35	TP-DUP4	TP-44
LAB ID		E76419-11	E76419-6	E76419-10	E76419-5	E76949-14	E76419-4	E76651-1	E76651-8	E76651-14	E76651-15	E76651-18	E76651-20	E76839-1	E76839-12
DATE		9/7/2000	9/8/2000	9/8/2000	9/8/2000	9/15/2000	9/8/2000	9/12/2000	9/12/2000	9/13/2000	9/13/2000	9/13/2000	9/13/2000	9/14/2000	9/14/2000
SAMPLE INTERVAL (BGS)		3-3.5	6-6.5	6-6.5	2-2.5	1-1.5	1.5-2	8-8.5	2-2.5	0-0.5	9.5-10	1.5-2	5-5.5	5-5.5	2-2.5
ANALYTE	*NJDEP Non Residential*														
Volatile Organic Compounds		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Benzene	13	0.029 U	0.015	0.003 J	0.022	44	0.008 U	0.01 U	0.011 U	0.005 J	0.011 U	NT	0.033 U	0.025 U	0.012 U
Chloroform	28	0.029 U	0.009 U	0.008 U	0.011 U	30 U	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
cis-1,2-Dichloroethene	1,000	0.029 U	0.009 U	0.008 U	0.011 U	30 U	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
Ethylbenzene	1,000	0.029 U	0.009 U	0.008 U	0.12 DJ	120	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
Vinyl chloride	7	0.029 U	0.009 U	0.008 U	0.011 U	30 U	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
Xylene (total)	1,000	0.029 U	0.009 U	0.008 U	0.27 DJ	560	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
Semi-Volatile Organic Compounds		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
2,4-Dimethylphenol	10,000	0.71 U	0.37 U	0.36 U	0.04 U	NT	0.38 U	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.68 U	0.68 U	0.42 U
Benzo(a)anthracene	4	0.1 J	0.37 U	0.36 U	0.23 J	NT	0.038 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.34 J	0.1 J	0.084 J
Benzo(a)pyrene	0.66	0.71 U	0.37 U	0.36 U	0.073 J	NT	0.039 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.33 J	0.11 J	0.085 J
Benzo(b)fluoranthene	4	0.71 U	0.37 U	0.36 U	0.099 J	NT	0.042 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.29 J	0.1 J	0.08 J
Benzo(k)fluoranthene	4	0.71 U	0.37 U	0.36 U	0.068 J	NT	0.032 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.24 J	0.094 J	0.068 J
bis(2-Ethylhexyl)phthalate	210	1.1	0.048 J	0.047 J	1.3	NT	0.043 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.051 J	0.044 J	0.042 U
Dibenzo(a,h)anthracene	0.66	0.71 U	0.37 U	0.36 U	0.4 U	NT	0.38 U	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.073 J	0.68 U	0.021 J
Indeno(1,2,3-cd)pyrene	4	0.71 U	0.37 U	0.36 U	0.049 J	NT	0.027 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.16 J	0.06 J	0.047 J
Pesticide & PCB		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Dieldrin	0.18	0.35 D	0.0038 U	0.0036 U	0.0039 U	NT	0.0038 U	0.0039 U	0.0041 U	0.025 U	0.0043 U	0.0036 U	0.0073 U	0.0066 U	0.0043 U
Aroclor 1248	2	0.069 U	0.038 U	0.036 U	0.039 U	NT	0.038 U	0.039 U	0.041 U	0.25 U	0.043 U	0.036 U	0.073 U	0.066 U	0.043 U
Aroclor 1254	2	0.069 U	0.038 U	0.036 U	0.53	NT	0.24	0.039 U	0.041 U	0.25 U	0.043 U	0.25	11 DJ	26	0.043 U
Aroclor 1260	2	0.069 U	0.038 U	0.036 U	0.039 U	NT	0.038	0.039 U	0.041 U	0.25 U	0.043 U	0.036 U	5.1 DJ	22	0.043 U
Total PCBs	2	0.069 U	0.038 U	0.036 U	0.53	NT	0.24	0.039 U	0.041 U	0.25 U	0.043 U	0.25	16.1 DJ	48	0.043 U
Metals		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Aluminum	NC	7,950	1,800	1,930	8,980	1,980	2,940	2,790	1,470	10,500	1,270	3,500	19,200	14,600	13,600
Antimony	340	17.7 J	7.8 J	5.5 J	20.7	21.4	4.7 J	0.39 U	0.42 U	2.8 J	0.43 U	208	62.9	20.2 J	0.54 J
Arsenic	20	9.7	5.4	5	3.9	0.62 U	5.7	0.53 U	5.7	21.4	4.3	14.8	26.4	21.3	17.5
Barium	47,000	496	12.4 J	13.4 J	11.6 J	15.3 J	36.1 J	17.8 J	3.7 J	25 J	3.6 J	30.5 J	179	138	107
Beryllium	2	0.14 J	0.16 J	0.17 J	0.11 J	0.07 J	0.25 J	0.22 J	0.24 J	0.96 J	0.19 J	0.35 J	2.2	1.5 J	1 J
Cadmium	100	5.3	0.06 U	0.06 U	0.51 J	1.5 J	0.07 U	0.45 J	0.07 U	1.6	0.08 U	0.36 J	4.9	4.8	3.9
Copper	600	279	5.8	4.8 J	327	110	14.3	108	0.88 J	38.7	0.82 J	7.4	132	187	95.7
Iron	NC	101,000	8,780	8,530	6,880	2,010	11,400	3,060	13,800	3,220	7,350	14,100	40,200	41,700	24,100
Lead	600	2,090	12.4	10.6	91.8	89.8	881	82.5	2.3	41.4	2.7	20.4	11,500	4,030	218
Manganese	NC	256	11.9	20.8	120	1,350	40.8	15.2	10	33	6.6	56.3	679	756	240
Mercury	270	0.57	0.05 J	0.06 J	0.41	0.06 U	0.15	0.05 U	0.05 U	0.14	0.05 U	0.06 J	1.3	1.2	0.76
Nickel	2,400	68.7	12.5	11.6	185	234	4.3 J	4 J	1.2 J	5.8 J	0.88 J	8.4 J	47.2	38.2	25.6
Silver	4,100	32.7	0.15 U	0.15 U	0.32 J	0.19 U	0.15 U	0.16	0.17 U	0.2 U	0.18 U	0.15 U	19	143	1.1 J
Sodium	NC	70.8 J	18.3 U	18.4 U	23.5 J	936 J	23.2 J	32.3 J	38.8 J	90.1 J	36 J	36.1 J	195 J	174 J	171 J
Thallium	2	1.5 U	0.76 U	0.77 U	0.82 U	3.9 U	0.78 U	0.83 U	0.89 U	1 U	0.92 U	0.77 U	1.5 U	1.4 U	0.9 U
Zinc	1,500	1610	21.9	20.9	472	31.4	47.4	84.7	5.9	367	6	40	694	516	584
Soil Characteristics		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Ph	NC	5	5.4	4.7	5.9	6.6	6.7	7.4	6.6	6.6	6.7	6.7	5.6	5.3	5
Cyanide	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: - NJDEP NRSCC = New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99). Bold values indicate concentrations above MDL.
- All results in mg/kg.
- D = Sample diluted.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.

TABLE 5-13

Matteo Iron Metal

Test Pit Soil Sample Results - Non-Residential Criteria (NRSCC)

SAMPLE LOCATION		TP45	TP45	TP47	TP48	TP49	TP50	TP53	TP55	TP56	TP-60	TP-61	TP-61	TP-64
SAMPLE ID		TP-45A	TP-45B	TP-47	TP-48A	TP-49	TP-50A	TP-53	TP-55	TP-56A	TP-60A	TP-61A	TP-61B	TP-64B
LAB ID		E76839-13	E76839-14	E76949-5	E76949-6	E76949-8	E76949-9	E77159-5	E77159-7	E77159-8	N1241-1	N1241-2	N1241-3	N1312-1
DATE		9/14/2000	9/14/2000	9/15/2000	9/15/2000	9/15/2000	9/15/2000	9/18/2000	9/18/2000	9/18/2000	10/22/2001	10/22/2001	10/22/2001	10/23/2001
SAMPLE INTERVAL (BGS)		1.5-2	2-2.5	12.5-13	1-1.5	1-1.5	1-1.5	12.5-13	7.5-8	2-2.5	1.5-2	1-1.5	6-6.5	9-10
ANALYTE	*NJDEP*													
Volatile Organic Compounds	*Residential*	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Benzene	13	0.58 J	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U	0.01 U
Chloroform	28	1.3 J	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U	0.01 U
cis-1,2-Dichloroethene	1,000	4.6 U	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U	0.01 U
Ethylbenzene	1,000	3.7 J	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U	0.01 U
Vinyl chloride	7	4.6 U	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U	0.01 U
Xylene (total)	1,000	32	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U	0.01 U
Semi-Volatile Organic Compounds		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
2,4-Dimethylphenol	10,000	35 D	0.34 U	0.41 U	0.37 U	0.39 U	0.36 U	0.44 U	0.35 U	0.34 U	0.35 U	0.34 U	0.35 U	0.38 U
Benzo(a)anthracene	4	1.8 U	0.34 U	0.41 U	0.046 J	0.036 J	0.022 J	0.44 U	0.35 U	0.34 U	0.35 U	0.34 U	0.35 U	0.38 U
Benzo(a)pyrene	0.66	1.8 U	0.34 U	0.41 U	0.046 J	0.036 J	0.026 J	0.44 U	0.35 U	0.34 U	0.35 U	0.34 U	0.35 U	0.38 U
Benzo(b)fluoranthene	4	1.8 U	0.34 U	0.41 U	0.041 J	0.046 J	0.029 J	0.44 U	0.35 U	0.34 U	0.35 U	0.34 U	0.35 U	0.38 U
Benzo(k)fluoranthene	4	1.8 U	0.34 U	0.41 U	0.039 J	0.031 J	0.021 J	0.44 U	0.35 U	0.34 U	0.35 U	0.34 U	0.35 U	0.38 U
bis(2-Ethylhexyl)phthalate	210	1.8 U	0.34 U	0.41 U	0.37 U	0.036 J	0.36 U	0.44 U	0.35 U	0.34 U	0.35 U	0.052 J	0.35 U	0.047
Dibenzo(a,h)anthracene	0.66	1.8 U	0.34 U	0.41 U	0.37 U	0.39 U	0.36 U	0.44 U	0.35 U	0.34 U	0.35 U	0.34 U	0.35 U	0.38 U
Indeno(1,2,3-cd)pyrene	4	1.8 U	0.34 U	0.41 U	0.026 J	0.025 J	0.36 U	0.44 U	0.35 U	0.34 U	0.35 U	0.34 U	0.35 U	0.38 U
Pesticide & PCB		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Dieldrin	0.18	0.018 U	0.0036 U	0.0041 U	0.0038 U	0.0037 U	0.0035 U	0.0045 U	0.0035 U	0.0033 U	0.0035 U	0.0034 U	0.0035 U	0.004 U
Aroclor 1248	2	0.86	0.036 U	0.041 U	0.038 U	0.037 U	0.035 U	0.045 U	0.035 U	0.033 U	0.035 U	0.034 U	0.035 U	0.04 U
Aroclor 1254	2	0.18 U	0.036 U	0.041 U	0.038 U	0.037 U	0.035 U	0.045 U	0.035 U	0.033 U	0.059	0.034 U	0.14	0.04 U
Aroclor 1260	2	0.18 U	0.036 U	0.041 U	0.038 U	0.037 U	0.035 U	0.045 U	0.035 U	0.033 U	0.035 U	0.034 U	0.12	0.04 U
Total PCBs	2	0.86	0.036 U	0.041 U	0.038 U	0.037 U	0.035 U	0.045 U	0.035 U	0.033 U	0.059	0.034 U	0.26	0.04 U
Metals		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Aluminum	NC	2,600	1,840	7,040	1,970	1,910	2,350	13,600	1,860	1,760	3,990	1,210	1,670	2,170
Antimony	340	108	2.6 J	0.39 U	1.6 J	1.9 J	1.1 J	0.46 UN	0.79 J	0.34 U	0.45 U	0.44 U	1.6 J	0.5 u
Arsenic	20	5.3	3	22.3	2.2 J	3	2.1	24.1	3.2	3.9	7.4	2.5	3.3	4.1
Barium	47,000	43	6.4 J	25.6 J	18.9 J	18 J	16.7 J	27 J	9.1 J	6.8 J	6.6 J	8.9 J	8 J	4.9 J
Beryllium	2	0.18 J	0.25 J	0.92 J	0.16 J	0.13 J	0.15 J	1.4 J	0.13 J	0.12 J	0.17 J	0.1 J	0.12 J	0.17 J
Cadmium	100	0.98 J	0.06 U	0.07 U	0.07 U	0.13 J	0.06 J	0.08 U	0.06 J	0.06 U	0.06 U	0.06 U	0.07 U	0.07 U
Copper	600	16.5	2.6 J	2.8 J	6.1	14.5	6.9	5.9 J	2.2 J	0.88 J	2.4 J	2.6 J	5.1 J	15.8
Iron	NC	16,200	9,450	71,300	4,440	8,120	4,570	34,000	6,450	6,680	13,100	4,080	7,320	10,800
Lead	600	24,300	9.1	8.6	57.9	108	104	10.2	19.5	2	4.8	2	8.3	6.3
Manganese	NC	249	45.2	181	77	74.2	50.6	86.5	26.9	11.8	32.7	10.6	24.1	87.9
Mercury	270	0.06 J	0.04 U	0.06 U	0.04 U	0.05 U	0.04 U	0.06 U	0.04 U	0.04 U	0.04 J	0.04 J	0.04 J	0.03 U
Nickel	2,400	64.6	5.9 J	16.5	3.3 J	5.2 J	4 J	15.5	3.2 J	1.6 J	1.9 J	2.2 J	2.4 J	1.6 J
Silver	4,100	0.17 J	0.15 U	0.16 U	0.15 U	0.15 U	0.14 U	0.19 U	0.14 U	0.14 U	0.15 U	0.15 U	0.16 U	0.17 U
Sodium	NC	96.3 J	25.7 J	19.7 U	19.4 J	18.7 U	16.9 U	59.5 J	27.1 J	32.5 J	89.7 J	75.8 J	89 J	40.5 J
Thallium	2	0.76 U	0.75 U	0.82 U	0.79 U	0.78 U	0.71 U	0.98 U	0.73 U	0.72 U	NA	NA J	NA	NA J
Zinc	1,500	1,570	14.5	44.8	32.4	42.1	34.5	68.2	59.5	6.5	13.3	27.7	46.9	11.3
Soil Characteristics		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Ph	NC	6	5.1	5.4	5.7	6.6	5.7	4.3	7.2	7.2	6.95	5.71	7.27	4.39
Cyanide	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05 U	0.05 U	0.05 U	0.06 U

Notes: - NJDEP NRSCC = New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99). Bold values indicate concentrations above MDL.
- All results in mg/kg.
- D = Sample diluted.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.

TABLE 5-13

Matteo Iron Metal

Test Pit Soil Sample Results - Non-Residential Criteria (NRSCC)

SAMPLE LOCATION		TP-67	TP-67	TP-70	TP-72	TP-74	TP-78	TP-78	TP-79	TP-81	TP-81	TP-81	TP-84	TP-86	TP-87	TP-88
SAMPLE ID		TP-67A	DUP-A	TP-70A	TP-72A	TP-74A	TP-78A	TP-78B	TP-79A	TP-81A	TP-81B	TP-81C	TP-84A	TP-86A	TP-87A	TP-88A
LAB ID		N1312-4	N1312-6	N1315-12	N1315-14	N1315-16	N1409-9	N1409-10	N1409-11	N1409-12	N1409-13	N1409-14	N1409-15	N1529-5	N1529-6	N1529-7
DATE		10/23/2001	10/23/2001	10/24/2001	10/24/2001	10/24/2001	10/25/2001	10/25/2001	10/25/2001	10/25/2001	10/25/2001	10/25/2001	10/25/2001	10/26/2001	10/26/2001	10/26/2001
SAMPLE INTERVAL (BGS)		3-3.5	3-3.5	4.5-5	4-4.5	7-7.5	8-8.5	5-5.5	7-7.5	3-3.5	3.5-4	7-7.5	5-5.5	4.5-5	4.5-5	2.5-3
ANALYTE	NJDEP Non Residential	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q	Result Q	Result Q
Volatile Organic Compounds																
Benzene	13	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.001 J 1	0.01 U 1	0.011 U 1	0.01 U 1	13 U 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U	0.01 U
Chloroform	28	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	13 U 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U	0.01 U
cis-1,2-Dichloroethene	1,000	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	13 U 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U	0.01 U
Ethylbenzene	1,000	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	3.1 J 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U	0.01 U
Vinyl chloride	7	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	13 U 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U	0.01 U
Xylene (total)	1,000	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	280 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U	0.01 U
Semi-Volatile Organic Compounds		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q	Result Q	Result Q
2,4-Dimethylphenol	10,000	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.35 U 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U	350 U
Benzo(a)anthracene	4	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.023 J 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U	350 U
Benzo(a)pyrene	0.66	0.33 U 1	0.33 U 1	0.37 U	0.046 J 1	0.37 U 1	0.38 U 1	0.021 J 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U	350 U
Benzo(b)fluoranthene	4	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.034 J 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U	350 U
Benzo(k)fluoranthene	4	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.35 U 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U	350 U
bis(2-Ethylhexyl)phthalate	210	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.4 1	0.38 U 1	0.35 U 1	0.4 U 1	6.7 J 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U	350 U
Dibenzo(a,h)anthracene	0.66	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.35 U 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U	350 U
Indeno(1,2,3-cd)pyrene	4	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.35 U 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U	350 U
Pesticide & PCB		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q	Result Q	Result Q
Dieldrin	0.18	0.0037 U 1	0.0035 U 1	0.0037 U	0.0038 U 1	0.0037 U 1	0.0034 U 1	0.0035 1	0.004 U 1	0.022 U 1	0.0036 U	0.0042 U 1	0.0041 U 1	0.0036 U	0.0036 U	0.0035 U
Aroclor 1248	2	0.037 U 1	0.035 U 1	0.037 U	0.038 U 1	0.037 U 1	0.034 U 1	0.035 U 1	0.04 U 1	0.22 U 1	0.036 U	0.042 U 1	0.041 U 1	0.036 U	0.036 U	0.035 U
Aroclor 1254	2	0.037 U 1	0.035 U 1	0.037 U	0.038 U 1	0.037 U 1	0.034 U 1	0.035 U 1	0.04 U 1	0.22 U 1	0.036 U	0.042 U 1	0.041 U 1	0.036 U	0.036 U	0.035 U
Aroclor 1260	2	0.037 U 1	0.035 U 1	0.037 U	0.038 U 1	0.037 U 1	0.034 U 1	0.035 U 1	0.04 U 1	0.22 U 1	0.036 U	0.042 U 1	0.041 U 1	460 D	0.036 U	0.035 U
Total PCBs	2	0.037 U	0.035 U	0.037 U	0.038 U	0.037 U	0.034 U	0.035 U	0.04 U	0.22 U	0.036 U	0.042 U	0.041 U	460	0	0
Metals		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q	Result Q	Result Q
Aluminum	NC	3,870 1	2,280 1	2,120	1,380 1	5,670 1	1,950 1	2,340 1	2,650 1	2,250 1	2,860	2,690 1	2,330 1	3,190	1,670	3,110
Antimony	340	0.88 J 1	2.7 J 1	0.45 U	1 J 1	79.8 1	4.3 J 1	2 J 1	5.9 J 1	1.4 J 1	1.1 J	0.72 J 1	4.6 J 1	0.57 U	0.55 U	0.56 U
Arsenic	20	6.1 1	3.1 1	5.8	1.4 J 1	6.5 1	7.5 1	5.6 1	8.4 1	2.1 J 1	5.7	7.6 1	5.4 1	7.1	6.9	6.3
Barium	47,000	15.3 J 1	15.7 J 1	3.6 J	5.3 J 1	10.6 J 1	4.9 J 1	19.5 J 1	11 J 1	32.5 J 1	10 J	7.8 J 1	9 J 1	13.1 J	6.8 J	5.3 J
Beryllium	2	0.28 J 1	0.13 J 1	0.21 J	0.14 J 1	0.17 J 1	0.21 J 1	0.16 J 1	0.24 J 1	0.06 J 1	0.24 J	0.24 J 1	0.19 J 1	0.27 J	0.2 J	0.24 J
Cadmium	100	0.06 U 1	0.06 U 1	0.06 U	0.07 U 1	0.07 U 1	0.07 U 1	0.06 J 1	0.1 J 1	1.1 J 1	0.06 U	0.08 U 1	0.08 U 1	0.17 J	0.18 J	0.19 J
Copper	600	5.8 1	6.9 1	1.7 J	1 J 1	12.9 1	4.3 J 1	5.8 1	4.5 J 1	12.2 1	2.1 J	2.8 J 1	2 J 1	2.5 J	2.1 J	2.3 J
Iron	NC	13,000 1	6,150 1	9,730	2,500 1	12,500 1	12,400 1	5,590 1	8,950 1	6,630 1	10,100	11,300 1	7,370 1	11,400	10,600	12,700
Lead	600	122 1	296 1	2.6	1.7 1	73.4 1	5.1 1	25.8 1	6.5 1	520 1	4.1	2.4 1	3.1 1	2.8	2.3	2.4
Manganese	NC	69.6 1	53.1 1	16.3	9.7 1	24.1 1	26.2 1	85.6 1	11.1 1	32.3 1	19.8	18.2 1	7.2 1	39.1	19.9	14.5
Mercury	270	0.05 J 1	0.07 J 1	0.04 J	0.03 J 1	0.05 J 1	0.11 1	0.04 J 1	0.03 U 1	0.06 J 1	0.03 U	0.03 U 1	0.04 U 1	0.03 U	0.03 U	0.03 U
Nickel	2,400	3.9 J 1	2.3 J 1	1.3 J	1.7 J 1	6.9 J 1	2.2 J 1	2 J 1	3.2 J 1	5.1 J 1	3.3 J	3.4 J 1	1.8 J 1	1.9 J	0.99 J	1.1 J
Silver	4,100	0.16 J 1	0.15 U 1	0.15 U	0.16 U 1	0.16 U 1	0.52 J 1	0.15 U 1	0.15 U 1	0.17 U 1	0.15 U	0.18 U 1	0.18 U 1	0.19 U	0.18 U	0.19 U
Sodium	NC	39.2 J 1	41.4 J 1	72.4 J	120 J 1	80.3 J 1	87.4 J 1	78.3 J 1	86.4 J 1	105 J 1	94.7 J	115 J 1	82 J 1	137 J	137 J	149 J
Thallium	2	NA 1	NA 1	NA	NA J 1	NA 1	NA 1	NA 1	NA 1	NA 1	NA	NA 1	NA 1	0.98 U	0.94 U	0.96 U
Zinc	1,500	18.6 1	20 1	7.1	8.4 1	44.3 1	25 1	21.7 1	72.3 1	259 1	22.8	13.4 1	179 1	14.8	7.9	10.9
Soil Characteristics		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q	Result Q	Result Q
Ph	NC	7.59 1	7.46 1	7.07	7.34 1	4.88 1	5.15 1	6.25 1	6.43 1	5.61 1	6.56	6.48 1	5.7 1	4.89	6.76	6.85
Cyanide	NC	0.05 U 1	0.05 U 1	0.05 U	0.06 U 1	0.05 U 1	0.05 U 1	0.05 U 1	0.06 U 1	0.05 U 1	0.05 U	0.06 U 1	0.06 U 1	0.06 UN	0.05 UN	0.05 UN

Notes: - NJDEP NRSCC = New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Non-Residential Soil Cleanup Criteria (N.J.A.C 7:26D 5/99). Bold values indicate concentrations above MDL.
- All results in mg/kg.
- D = Sample diluted.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.

TABLE 5-14

Matteo Iron Metal

Test Pit Soil Sample Results - Impact to Groundwater Criteria (IGW)

SAMPLE LOCATION		TP2A	TP6A	TP6A	TP6B	TP6B	TP7A	TP18	TP25	TP28	TP29	TP32	TP35	TP35	TP44
SAMPLE ID		TP-2A	TP-6A	TPDUP3	TP-6C	TP6D	TP-7B	TP-18	TP-25	TP-28C	TP-29	TP-32	TP-35	TP-DUP4	TP-44
LAB ID		E76419-11	E76419-6	E76419-10	E76419-5	E76949-14	E76419-4	E76651-1	E76651-8	E76651-14	E76651-15	E76651-18	E76651-20	E76839-1	E76839-12
DATE		9/7/2000	9/8/2000	9/8/2000	9/8/2000	9/15/2000	9/8/2000	9/12/2000	9/12/2000	9/13/2000	9/13/2000	9/13/2000	9/13/2000	9/14/2000	9/14/2000
SAMPLE INTERVAL (BGS)		3-3.5	6-6.5	6-6.5	2-2.5	1-1.5	1.5-2	8-8.5	2-2.5	0-0.5	9.5-10	1.5-2	5-5.5	5-5.5	2-2.5
ANALYTE	*NJDEP IGW*														
Volatile Organic Compounds		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Benzene	1	0.029 U	0.015	0.003 J	0.022	44	0.008 U	0.01 U	0.011 U	0.005 J	0.011 U	NT	0.033 U	0.025 U	0.012 U
Chloroform	1	0.029 U	0.009 U	0.008 U	0.011 U	30 U	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
cis-1,2-Dichloroethene	1	0.029 U	0.009 U	0.008 U	0.011 U	30 U	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
Ethylbenzene	100	0.029 U	0.009 U	0.008 U	0.12 DJ	120	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
Vinyl chloride	10	0.029 U	0.009 U	0.008 U	0.011 U	30 U	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
Xylene (total)	67	0.029 U	0.009 U	0.008 U	0.27 DJ	560	0.008 U	0.01 U	0.011 U	0.036 U	0.011 U	NT	0.033 U	0.025 U	0.012 U
Semi-Volatile Organic Compounds		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
2,4-Dimethylphenol	10	0.71 U	0.37 U	0.36 U	0.04 U	NT	0.38 U	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.68 U	0.68 U	0.42 U
Benzo(a)anthracene	500	0.1 J	0.37 U	0.36 U	0.23 J	NT	0.038 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.34 J	0.1 J	0.084 J
Benzo(a)pyrene	100	0.71 U	0.37 U	0.36 U	0.073 J	NT	0.039 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.33 J	0.11 J	0.085 J
Benzo(b)fluoranthene	50	0.71 U	0.37 U	0.36 U	0.099 J	NT	0.042 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.29 J	0.1 J	0.08 J
Benzo(k)fluoranthene	500	0.71 U	0.37 U	0.36 U	0.068 J	NT	0.032 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.24 J	0.094 J	0.068 J
bis(2-Ethylhexyl)phthalate	100	1.1	0.048 J	0.047 J	1.3	NT	0.043 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.051 J	0.044 J	0.042 U
Dibenzo(a,h)anthracene	100	0.71 U	0.37 U	0.36 U	0.4 U	NT	0.38 U	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.073 J	0.68 U	0.021 J
Indeno(1,2,3-cd)pyrene	500	0.71 U	0.37 U	0.36 U	0.049 J	NT	0.027 J	0.39 U	0.4 U	2.5 U	0.4 U	0.35 U	0.16 J	0.06 J	0.047 J
Pesticide & PCB		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Dieldrin	50	0.35 D	0.0038 U	0.0036 U	0.0039 U	NT	0.0038 U	0.0039 U	0.0041 U	0.025 U	0.0043 U	0.0036 U	0.0073 U	0.0066 U	0.0043 U
Aroclor 1248	50	0.069 U	0.038 U	0.036 U	0.039 U	NT	0.038 U	0.039 U	0.041 U	0.25 U	0.043 U	0.036 U	0.073 U	0.066 U	0.043 U
Aroclor 1254	50	0.069 U	0.038 U	0.036 U	0.53	NT	0.24	0.039 U	0.041 U	0.25 U	0.043 U	0.25	11 DJ	26	0.043 U
Aroclor 1260	50	0.069 U	0.038 U	0.036 U	0.039 U	NT	0.038	0.039 U	0.041 U	0.25 U	0.043 U	0.036 U	5.1 DJ	22	0.043 U
Total PCBs	50	0.069 U	0.038 U	0.036 U	0.53	NT	0.24	0.039 U	0.041 U	0.25 U	0.043 U	0.25	16.1 DJ	48	0.043 U
Metals		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Aluminum	(b)	7,950	1,800	1,930	8,980	1,980	2,940	2,790	1,470	10,500	1,270	3,500	19,200	14,600	13,600
Antimony	(h)	17.7 J	7.8 J	5.5 J	20.7	21.4	4.7 J	0.39 U	0.42 U	2.8 J	0.43 U	208	62.9	20.2 J	0.54 J
Arsenic	(h)	9.7	5.4	5	3.9	0.62 U	5.7	0.53 U	5.7	21.4	4.3	14.8	26.4	21.3	17.5
Barium	(h)	496	12.4 J	13.4 J	11.6 J	15.3 J	36.1 J	17.8 J	3.7 J	25 J	3.6 J	30.5 J	179	138	107
Beryllium	(h)	0.14 J	0.16 J	0.17 J	0.11 J	0.07 J	0.25 J	0.22 J	0.24 J	0.96 J	0.19 J	0.35 J	2.2	1.5 J	1 J
Cadmium	(h)	5.3	0.06 U	0.06 U	0.51 J	1.5 J	0.07 U	0.45 J	0.07 U	1.6	0.08 U	0.36 J	4.9	4.8	3.9
Copper	(h)	279	5.8	4.8 J	327	110	14.3	108	0.88 J	38.7	0.82 J	7.4	132	187	95.7
Iron	(b)	101,000	8,780	8,530	6,880	2,010	11,400	3,060	13,800	3,220	7,350	14,100	40,200	41,700	24,100
Lead	(h)	2,090	12.4	10.6	91.8	89.8	881	82.5	2.3	41.4	2.7	20.4	11,500	4,030	218
Manganese	(h)	256	11.9	20.8	120	1,350	40.8	15.2	10	33	6.6	56.3	679	756	240
Mercury	(h)	0.57	0.05 J	0.06 J	0.41	0.06 U	0.15	0.05 U	0.05 U	0.14	0.05 U	0.06 J	1.3	1.2	0.76
Nickel	(h)	68.7	12.5	11.6	185	234	4.3 J	4 J	1.2 J	5.8 J	0.88 J	8.4 J	47.2	38.2	25.6
Silver	(h)	32.7	0.15 U	0.15 U	0.32 J	0.19 U	0.15 U	0.16	0.17 U	0.2 U	0.18 U	0.15 U	19	143	1.1 J
Sodium	(h)	70.8 J	18.3 U	18.4 U	23.5 J	936 J	23.2 J	32.3 J	38.8 J	90.1 J	36 J	36.1 J	195 J	174 J	171 J
Thallium	(h)	1.5 U	0.76 U	0.77 U	0.82 U	3.9 U	0.78 U	0.83 U	0.89 U	1 U	0.92 U	0.77 U	1.5 U	1.4 U	0.9 U
Zinc	(h)	1610	21.9	20.9	472	31.4	47.4	84.7	5.9	367	6	40	694	516	584
Soil Characteristics		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
Ph	NC	5	5.4	4.7	5.9	6.6	6.7	7.4	6.6	6.6	6.7	6.7	5.6	5.3	5
Cyanide	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: - NJDEP IGW = New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C 7:26D 5/99). Bold values indicate concentrations above MDL.
- All results in mg/kg.
- D = Sample diluted.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.

TABLE 5-14

Matteo Iron Metal

Test Pit Soil Sample Results - Impact to Groundwater Criteria (IGW)

SAMPLE LOCATION		TP45	TP45	TP47	TP48	TP49	TP50	TP53	TP55	TP56	TP-60	TP-61	TP-61	TP-64
SAMPLE ID		TP-45A	TP-45B	TP-47	TP-48A	TP-49	TP-50A	TP-53	TP-55	TP-56A	TP-60A	TP-61A	TP-61B	TP-64B
LAB ID		E76839-13	E76839-14	E76949-5	E76949-6	E76949-8	E76949-9	E77159-5	E77159-7	E77159-8	N1241-1	N1241-2	N1241-3	N1312-1
DATE		9/14/2000	9/14/2000	9/15/2000	9/15/2000	9/15/2000	9/15/2000	9/18/2000	9/18/2000	9/18/2000	10/22/2001	10/22/2001	10/22/2001	10/23/2001
SAMPLE INTERVAL (BGS)		1.5-2	2-2.5	12.5-13	1-1.5	1-1.5	1-1.5	12.5-13	7.5-8	2-2.5	1.5-2	1-1.5	6-6.5	9-10
ANALYTE	NJDEP Impact to GW													
Volatile Organic Compounds		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Benzene	1	0.58 J	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U	0.01 U
Chloroform	1	1.3 J	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U	0.01 U
cis-1,2-Dichloroethene	1	4.6 U	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U	0.01 U
Ethylbenzene	100	3.7 J	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U	0.01 U
Vinyl chloride	10	4.6 U	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U	0.01 U
Xylene (total)	67	32	0.01 U	0.012 U	0.012 U	0.013 U	0.011 U	0.012 U	0.01 U	0.011 U	NA	NA	0.011 U	0.01 U
Semi-Volatile Organic Compounds		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
2,4-Dimethylphenol	10	35 D	0.34 U	0.41 U	0.37 U	0.39 U	0.36 U	0.44 U	0.35 U	0.34 U	0.35 U	0.34 U	0.35 U	0.38 U
Benzo(a)anthracene	500	1.8 U	0.34 U	0.41 U	0.046 J	0.036 J	0.022 J	0.44 U	0.35 U	0.34 U	0.35 U	0.34 U	0.35 U	0.38 U
Benzo(a)pyrene	100	1.8 U	0.34 U	0.41 U	0.046 J	0.036 J	0.026 J	0.44 U	0.35 U	0.34 U	0.35 U	0.34 U	0.35 U	0.38 U
Benzo(b)fluoranthene	50	1.8 U	0.34 U	0.41 U	0.041 J	0.046 J	0.029 J	0.44 U	0.35 U	0.34 U	0.35 U	0.34 U	0.35 U	0.38 U
Benzo(k)fluoranthene	500	1.8 U	0.34 U	0.41 U	0.039 J	0.031 J	0.021 J	0.44 U	0.35 U	0.34 U	0.35 U	0.34 U	0.35 U	0.38 U
bis(2-Ethylhexyl)phthalate	100	1.8 U	0.34 U	0.41 U	0.37 U	0.036 J	0.36 U	0.44 U	0.35 U	0.34 U	0.35 U	0.34 U	0.35 U	0.38 U
Dibenzo(a,h)anthracene	100	1.8 U	0.34 U	0.41 U	0.37 U	0.39 U	0.36 U	0.44 U	0.35 U	0.34 U	0.35 U	0.052 J	0.35 U	0.047
Indeno(1,2,3-cd)pyrene	500	1.8 U	0.34 U	0.41 U	0.026 J	0.025 J	0.36 U	0.44 U	0.35 U	0.34 U	0.35 U	0.34 U	0.35 U	0.38 U
Pesticide & PCB		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Dieldrin	50	0.018 U	0.0036 U	0.0041 U	0.0038 U	0.0037 U	0.0035 U	0.0045 U	0.0035 U	0.0033 U	0.0035 U	0.0034 U	0.0035 U	0.004 U
Aroclor 1248	50	0.86	0.036 U	0.041 U	0.038 U	0.037 U	0.035 U	0.045 U	0.035 U	0.033 U	0.035 U	0.034 U	0.035 U	0.04 U
Aroclor 1254	50	0.18 U	0.036 U	0.041 U	0.038 U	0.037 U	0.035 U	0.045 U	0.035 U	0.033 U	0.059	0.034 U	0.14	0.04 U
Aroclor 1260	50	0.18 U	0.036 U	0.041 U	0.038 U	0.037 U	0.035 U	0.045 U	0.035 U	0.033 U	0.035 U	0.034 U	0.12	0.04 U
Total PCBs	50	0.86	0.036 U	0.041 U	0.038 U	0.037 U	0.035 U	0.045 U	0.035 U	0.033 U	0.059	0.034 U	0.26	0.04 U
Metals		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Aluminum	(h)	2,600	1,840	7,040	1,970	1,910	2,350	13,600	1,860	1,760	3,990	1,210	1,670	2,170
Antimony	(h)	108	2.6 J	0.39 U	1.6 J	1.9 J	1.1 J	0.46 UN	0.79 J	0.34 U	0.45 U	0.44 U	1.6 J	0.5 u
Arsenic	(h)	5.3	3	22.3	2.2 J	3	2.1	24.1	3.2	3.9	7.4	2.5	3.3	4.1
Barium	(h)	43	6.4 J	25.6 J	18.9 J	18 J	16.7 J	27 J	9.1 J	6.8 J	6.6 J	8.9 J	8 J	4.9 J
Beryllium	(h)	0.18 J	0.25 J	0.92 J	0.16 J	0.13 J	0.15 J	1.4 J	0.13 J	0.12 J	0.17 J	0.1 J	0.12 J	0.17 J
Cadmium	(h)	0.98 J	0.06 U	0.07 U	0.07 U	0.13 J	0.06 J	0.08 U	0.06 J	0.06 U	0.06 U	0.06 U	0.07 U	0.07 U
Copper	(h)	16.5	2.6 J	2.8 J	6.1	14.5	6.9	5.9 J	2.2 J	0.88 J	2.4 J	2.6 J	5.1 J	15.8
Iron	(h)	16,200	9,450	71,300	4,440	8,120	4,570	34,000	6,450	6,680	13,100	4,080	7,320	10,800
Lead	(h)	24,300	9.1	8.6	57.9	108	104	10.2	19.5	2	4.8	2	8.3	6.3
Manganese	(h)	249	45.2	181	77	74.2	50.6	86.5	26.9	11.8	32.7	10.6	24.1	87.9
Mercury	(h)	0.06 J	0.04 U	0.06 U	0.04 U	0.05 U	0.04 U	0.06 U	0.04 U	0.04 U	0.04 J	0.04 J	0.04 J	0.03 U
Nickel	(h)	64.6	5.9 J	16.5	3.3 J	5.2 J	4 J	15.5	3.2 J	1.6 J	1.9 J	2.2 J	2.4 J	1.6 J
Silver	(h)	0.17 J	0.15 U	0.16 U	0.15 U	0.15 U	0.14 U	0.19 U	0.14 U	0.14 U	0.15 U	0.15 U	0.16 U	0.17 U
Sodium	(h)	96.3 J	25.7 J	19.7 U	19.4 J	18.7 U	16.9 U	59.5 J	27.1 J	32.5 J	89.7 J	75.8 J	89 J	40.5 J
Thallium	(h)	0.76 U	0.75 U	0.82 U	0.79 U	0.78 U	0.71 U	0.98 U	0.73 U	0.72 U	NA	NA J	NA	NA J
Zinc	(h)	1,570	14.5	44.8	32.4	42.1	34.5	68.2	59.5	6.5	13.3	27.7	46.9	11.3
Soil Characteristics		Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q D	Result Q D	Result Q D	Result Q D
Ph	NC	6	5.1	5.4	5.7	6.6	5.7	4.3	7.2	7.2	6.95	5.71	7.27	4.39
Cyanide	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05 U	0.05 U	0.05 U	0.06 U

Notes:
- NJDEP SCC = New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C 7:26D 5/99). Bold values indicate concentrations above MDL.
- All results in mg/kg.
- D = Sample diluted.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.

TABLE 5-14

Matteo Iron Metal

Test Pit Soil Sample Results - Impact to Groundwater Criteria (IGW)

SAMPLE LOCATION		TP-67	TP-67	TP-70	TP-72	TP-74	TP-78	TP-78	TP-79	TP-81	TP-81	TP-81	TP-84	TP-86	TP-87	TP-88
SAMPLE ID		TP-67A	DUP-A	TP-70A	TP-72A	TP-74A	TP-78A	TP-78B	TP-79A	TP-81A	TP-81B	TP-81C	TP-84A	TP-86A	TP-87A	TP-88A
LAB ID		NI312-4	NI312-6	NI315-12	NI315-14	NI315-16	NI409-9	NI409-10	NI409-11	NI409-12	NI409-13	NI409-14	NI409-15	NI529-5	NI529-6	NI529-7
DATE		10/23/2001	10/23/2001	10/24/2001	10/24/2001	10/24/2001	10/25/2001	10/25/2001	10/25/2001	10/25/2001	10/25/2001	10/25/2001	10/25/2001	10/26/2001	10/26/2001	10/26/2001
SAMPLE INTERVAL (BGS)		3-3.5	3-3.5	4.5-5	4-4.5	7-7.5	8-8.5	5-5.5	7-7.5	3-3.5	3.5-4	7-7.5	5-5.5	4.5-5	4.5-5	2.5-3
ANALYTE	NJDEP															
Volatile Organic Compounds	Impact to GW	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D
Benzene	1	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.001 J 1	0.01 U 1	0.011 U 1	0.01 U 1	13 U 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U 1	0.01 U 1
Chloroform	1	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	13 U 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U 1	0.01 U 1
cis-1,2-Dichloroethene	1	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	13 U 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U 1	0.01 U 1
Ethylbenzene	100	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	3.1 J 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U 1	0.01 U 1
Vinyl chloride	10	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	13 U 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U 1	0.01 U 1
Xylene (total)	67	0.01 U 1	0.01 U 1	0.01 U	0.01 U 1	0.011 U 1	0.01 U 1	0.011 U 1	0.01 U 1	280 1000	0.011 U	0.011 U 1	0.01 U 1	0.011 U	0.011 U 1	0.01 U 1
Semi-Volatile Organic Compounds		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q	Result Q D	Result Q D
2,4-Dimethylphenol	10	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.35 U 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U 1	350 U 1
Benzo(a)anthracene	500	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.023 J 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U 1	350 U 1
Benzo(a)pyrene	100	0.33 U 1	0.33 U 1	0.37 U	0.046 J 1	0.37 U 1	0.38 U 1	0.021 J 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U 1	350 U 1
Benzo(b)fluoranthene	50	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.034 J 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U 1	350 U 1
Benzo(k)fluoranthene	500	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.35 U 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U 1	350 U 1
bis(2-Ethylhexyl)phthalate	100	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.4 1	0.38 U 1	0.35 U 1	0.4 U 1	6.7 J 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U 1	350 U 1
Dibenzo(a,h)anthracene	100	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.35 U 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U 1	350 U 1
Indeno(1,2,3-cd)pyrene	500	0.33 U 1	0.33 U 1	0.37 U	0.37 U 1	0.37 U 1	0.38 U 1	0.35 U 1	0.4 U 1	11 U 1	0.38 U	0.44 U 1	0.39 U 1	370 U	360 U 1	350 U 1
Pesticide & PCB		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q	Result Q D	Result Q D
Dieldrin	50	0.0037 U 1	0.0035 U 1	0.0037 U	0.0038 U 1	0.0037 U 1	0.0034 U 1	0.0035 1	0.004 U 1	0.022 U 1	0.0036 U	0.0042 U 1	0.0041 U 1	0.0036 U	0.0036 U 1	0.0035 U 1
Aroclor 1248	50	0.037 U 1	0.035 U 1	0.037 U	0.038 U 1	0.037 U 1	0.034 U 1	0.035 U 1	0.04 U 1	0.22 U 1	0.036 U	0.042 U 1	0.041 U 1	0.036 U	0.036 U 1	0.035 U 1
Aroclor 1254	50	0.037 U 1	0.035 U 1	0.037 U	0.038 U 1	0.037 U 1	0.034 U 1	0.035 U 1	0.04 U 1	0.22 U 1	0.036 U	0.042 U 1	0.041 U 1	0.036 U	0.036 U 1	0.035 U 1
Aroclor 1260	50	0.037 U 1	0.035 U 1	0.037 U	0.038 U 1	0.037 U 1	0.034 U 1	0.035 U 1	0.04 U 1	0.22 U 1	0.036 U	0.042 U 1	0.041 U 1	460 D	0.036 U 1	0.035 U 1
Total PCBs	50	0.037 U	0.035 U	0.037 U	0.038 U	0.037 U	0.034 U	0.035 U	0.04 U	0.22 U	0.036 U	0.042 U	0.041 U	460	0	0
Metals		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q	Result Q D	Result Q D
Aluminum	(h)	3,870 1	2,280 1	2,120	1,380 1	5,670 1	1,950 1	2,340 1	2,650 1	2,250 1	2,860	2,690 1	2,330 1	3,190	1,670 1	3,110 1
Antimony	(h)	0.88 J 1	2.7 J 1	0.45 U	1 J 1	79.8 1	4.3 J 1	2 J 1	5.9 J 1	1.4 J 1	1.1 J	0.72 J 1	4.6 J 1	0.57 U	0.55 U 1	0.56 U 1
Arsenic	(h)	6.1 1	3.1 1	5.8	1.4 J 1	6.5 1	7.5 1	5.6 1	8.4 1	2.1 J 1	5.7	7.6 1	5.4 1	7.1	6.9 1	6.3 1
Barium	(h)	15.3 J 1	15.7 J 1	3.6 J	5.3 J 1	10.6 J 1	4.9 J 1	19.5 J 1	11 J 1	32.5 J 1	10 J	7.8 J 1	9 J 1	13.1 J	6.8 J 1	5.3 J 1
Beryllium	(h)	0.28 J 1	0.13 J 1	0.21 J	0.14 J 1	0.17 J 1	0.21 J 1	0.16 J 1	0.24 J 1	0.06 J 1	0.24 J	0.24 J 1	0.19 J 1	0.27 J	0.2 J 1	0.24 J 1
Cadmium	(h)	0.06 U 1	0.06 U 1	0.06 U	0.07 U 1	0.07 U 1	0.07 U 1	0.06 J 1	0.1 J 1	1.1 J 1	0.06 U	0.08 U 1	0.08 U 1	0.17 J	0.18 J 1	0.19 J 1
Copper	(h)	5.8 1	6.9 1	1.7 J	1 J 1	12.9 1	4.3 J 1	5.8 1	4.5 J 1	12.2 1	2.1 J	2.8 J 1	2 J 1	2.5 J	2.1 J 1	2.3 J 1
Iron	(h)	13,000 1	6,150 1	9,730	2,500 1	12,500 1	12,400 1	5,590 1	8,950 1	6,630 1	10,100	11,300 1	7,370 1	11,400	10,600 1	12,700 1
Lead	(h)	122 1	296 1	2.6	1.7 1	73.4 1	5.1 1	25.8 1	6.5 1	520 1	4.1	2.4 1	3.1 1	2.8	2.3 1	2.4 1
Manganese	(h)	69.6 1	53.1 1	16.3	9.7 1	24.1 1	26.2 1	85.6 1	11.1 1	32.3 1	19.8	18.2 1	7.2 1	39.1	19.9 1	14.5 1
Mercury	(h)	0.05 J 1	0.07 J 1	0.04 J	0.03 J 1	0.05 J 1	0.11 1	0.04 J 1	0.03 U 1	0.06 J 1	0.03 U	0.03 U 1	0.04 U 1	0.03 U	0.03 U 1	0.03 U 1
Nickel	(h)	3.9 J 1	2.3 J 1	1.3 J	1.7 J 1	6.9 J 1	2.2 J 1	2 J 1	3.2 J 1	5.1 J 1	3.3 J	3.4 J 1	1.8 J 1	1.9 J	0.99 J 1	1.1 J 1
Silver	(h)	0.16 J 1	0.15 U 1	0.15 U	0.16 U 1	0.16 U 1	0.52 J 1	0.15 U 1	0.15 U 1	0.17 U 1	0.15 U	0.18 U 1	0.18 U 1	0.19 U	0.18 U 1	0.19 U 1
Sodium	(h)	39.2 J 1	41.4 J 1	72.4 J	120 J 1	80.3 J 1	87.4 J 1	78.3 J 1	86.4 J 1	105 J 1	94.7 J	115 J 1	82 J 1	137 J	137 J 1	149 J 1
Thallium	(h)	NA 1	NA 1	NA	NA 1	NA 1	NA 1	NA 1	NA 1	NA 1	NA	NA 1	NA 1	0.98 U	0.94 U 1	0.96 U 1
Zinc	(h)	18.6 1	20 1	7.1	8.4 1	44.3 1	25 1	21.7 1	72.3 1	259 1	22.8	13.4 1	179 1	14.8	7.9 1	10.9 1
Soil Characteristics		Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D	Result Q	Result Q D	Result Q D
Ph	NC	7.59 1	7.46 1	7.07	7.34 1	4.88 1	5.15 1	6.25 1	6.43 1	5.61 1	6.56	6.48 1	5.7 1	4.89	6.76 1	6.85 1
Cyanide	NC	0.05 U 1	0.05 U 1	0.05 U	0.06 U 1	0.05 U 1	0.05 U 1	0.05 U 1	0.06 U 1	0.05 U 1	0.05 U	0.06 U 1	0.06 U 1	0.06 UN	0.05 UN 1	0.05 UN 1

Notes:
- NJDEP SCC = New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C. 7:26D 5/99) compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed New Jersey Impact to Groundwater Soil Cleanup Criteria (N.J.A.C 7:26D 5/99). Bold values indicate concentrations above MDL.
- All results in mg/kg.
- D = Sample diluted.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.

TABLE 5-15
Matteo Iron and Metal
SURFACE SOIL SAMPLE RESULTS (TCL/TAL/pH)

LOCATION			FULL-1	FULL-2	FULL-3	FULL-3	FULL-4	FULL-5	TPSS-D1	TPSS-E1	TPSS-I1	TPSS-I1	TPSS-J1	TPSS-K1	TPSS-L1	TPSS-M1
SAMPLE ID			FULL-1	FULL-2	FULL-3	FULLDUP	FULL-4	FULL-5	TPSS-D1	TPSS-E1	TPSS-I1	TPSSDUP	TPSS-J1	TPSS-K1	TPSS-L1	TPSS-M1
LAB ID			E81503-2	E81503-3	E81503-4	E81503-7	E81503-5	E81503-6	E77159-10	E77159-11	E78373-1	E78373-6	E78373-2	E78373-3	E78373-4	E78373-5
DATE			11/28/2000	11/28/2000	11/28/2000	11/28/2000	11/28/2000	11/28/2000	9/19/2000	9/19/2000	10/6/2000	10/6/2000	10/6/2000	10/6/2000	10/6/2000	10/6/2000
SAMPLE INTERVAL (BGS)			0.5-0.8	0.5-0.8	1	1	0.5-1	0.5-1	0-0.5	0-0.5	0.5-0.8	0.5-0.8	0.5-0.8	0.5-0.8	0.5-0.8	0.5-0.8
ANALYTE	*RSCC**	*NRSCC**														
Volatile Organic Compounds																
Benzene	3	13	0.009 U	0.01 U	0.009 U	0.009 U	0.015 U	0.012 U	0.013 U	0.017 U	0.011 U	0.01 U	0.01 U	0.01 U	0.016 U	0.011 U
Chloroform	19	28	0.009 U	0.01 U	0.009 U	0.009 U	0.015 U	0.012 U	0.013 U	0.017 U	0.011 U	0.01 U	0.01 U	0.01 U	0.016 U	0.011 U
cis-1,2-Dichloroethene	79	1,000	0.009 U	0.01 U	0.009 U	0.009 U	0.015 U	0.012 U	0.013 U	0.017 U	0.011 U	0.01 U	0.01 U	0.01 U	0.016 U	0.011 U
Ethylbenzene	1,000	1,000	0.009 U	0.01 U	0.009 U	0.009 U	0.015 U	0.012 U	0.013 U	0.017 U	0.011 U	0.01 U	0.01 U	0.01 U	0.016 U	0.011 U
Vinyl chloride	2	7	0.009 U	0.01 U	0.009 U	0.009 U	0.015 U	0.012 U	0.013 U	0.017 U	0.011 U	0.01 U	0.01 U	0.01 U	0.016 U	0.011 U
Xylene (total)	410	1,000	0.009 U	0.01 U	0.009 U	0.009 U	0.015 U	0.002 J	0.013 U	0.017 U	0.011 U	0.01 U	0.01 U	0.01 U	0.016 U	0.011 U
Semi-Volatile Organic Compounds																
2,4-Dimethylphenol	1,100	10,000	0.42 U	0.43 U	0.4 U	0.38 U	0.44 U	0.44 U	0.39 U	0.49 U	0.36 U	0.36 U	0.37 U	0.36 U	0.43 U	0.38 U
Benzo(a)anthracene	0.9	4	0.028 J	0.058 J	0.4 U	0.38 U	0.032 J	0.076 J	0.058 J	0.49 U	0.140 J	0.045 J	0.042 J	0.023 J	0.062 J	0.38 U
Benzo(a)pyrene	0.66	0.66	0.024 J	0.100 J	0.4 U	0.38 U	0.44 U	0.098 J	0.066 J	0.49 U	0.110 J	0.035 J	0.038 J	0.019 J	0.110 J	0.38 U
Benzo(b)fluoranthene	0.9	4	0.024 J	0.092 J	0.4 U	0.38 U	0.44 U	0.076 J	0.065 J	0.49 U	0.110 J	0.028 J	0.025 J	0.021 J	0.150 J	0.38 U
Benzo(k)fluoranthene	0.9	4	0.026 J	0.058 J	0.4 U	0.38 U	0.44 U	0.083 J	0.058 J	0.49 U	0.100 J	0.041 J	0.045 J	0.020 J	0.089 J	0.38 U
bis(2-Ethylhexyl)phthalate	49	210	0.42 U	0.062 J	0.4 U	0.38 U	0.44 U	0.44 U	0.39 U	0.046 J	0.36 U	0.36 U	0.37 U	0.36 U	0.920	0.38 U
Dibenz(a,h)anthracene	0.66	0.66	0.42 U	0.43 U	0.4 U	0.38 U	0.44 U	0.44 U	0.39 U	0.49 U	0.025 J	0.36 U	0.37 U	0.36 U	0.024 J	0.38 U
Indeno(1,2,3-cd)pyrene	0.9	4	0.42 U	0.056 J	0.4 U	0.38 U	0.44 U	0.048 J	0.039 J	0.49 U	0.058 J	0.023 J	0.023 J	0.36 U	0.055 J	0.38 U
Pesticide & PCB																
Dieldrin	0.042	0.18	0.0043 U	0.0043 U	0.004 U	0.0037 U	0.0045 U	0.0043	0.0039 U	0.0049 U	0.0036 U	0.0035 U	0.0037 U	0.0037 U	0.0042 U	0.0038 U
Aroclor 1248	0.49	2	0.043 U	0.043 U	0.04 U	0.037 U	0.045 U	0.043 U	0.039 U	0.049 U	0.036 U	0.035 U	0.037 U	0.037 U	0.042 U	0.038 U
Aroclor 1254	0.49	2	0.043 U	0.24	0.049	0.046	0.045 U	0.043 U	0.039 U	0.049 U	0.036 U	0.035 U	0.037 U	0.037 U	8	0.038 U
Aroclor 1260	0.49	2	0.043 U	0.29	0.05 J	0.04 J	0.045 U	0.043 U	0.039 U	0.049 U	0.036 U	0.035 U	0.037 U	0.037 U	7.2	0.038 U
Total Aroclor	0.49	2	0.043 U	0.53	0.10	0.086	0.045 U	0.043 U	0.039 U	0.049 U	0.036 U	0.035 U	0.037 U	0.037 U	15.2 N	0.038 U
Metals																
Aluminum	NC	NC	2,850	5,440	2,200	2,190	2,890	2,680	1,980	2,640	2,150	1,960	2,090	2,270	3,000	8,060
Antimony	14	340	31.3	212	38.2	51.3	14.3 U	9.1 J	1.1 J	10.3 J	1.9 J	2 J	1 J	0.37	12.3 J	0.58 J
Arsenic	20	20	4.4	11.4	3.2	1.7 J	4.2	4	4.1	3.9	16.5	15.9	4.7	4.8	7.2	15.2
Barium	700	47,000	21.8 J	69.4	9.3 J	10.6 J	9.5 J	35.9 J	33.1 J	35.2 J	20.1 J	22.6 J	30.8 J	26.2 J	232	16.9 J
Beryllium	2	2	0.18 J	0.22 J	0.15 J	0.11 J	0.11 J	0.17 J	0.13 J	0.15 J	0.12 J	0.13 J	0.22 J	0.16 J	0.32 J	0.42 J
Cadmium	39	100	0.19 J	0.61 J	0.09 J	0.09 J	0.22 J	0.21 J	0.16 J	0.11 J	0.32 J	0.32 J	0.09 J	0.12 J	0.87 J	0.07 U
Copper	600	600	6.6	15.8	2.4 J	2.3 J	5.6 J	13.2	10	13.2	50.8	51.4	6.2	5.5	1350 N	13.2
Iron	NC	NC	6,470	9,680	6130	5,040	5,420	6,750	6,740	6,940	4,920	4,940	5,300	4,080	14,200	25,800
Lead	400	600	26.8	52.4	4.7	5.1	28.4	88.8	120	35.8	43.6	44.1	34.3	31.4	190	19.9
Manganese	NC	NC	147	277	14.7	14.6	34.7	57.7	108	221	58.9	60.1	88.9	99.8	696	51.3
Mercury	14	270	0.09	0.14	0.06 J	0.05 U	0.1 J	0.22	0.1	0.17	0.3	0.32	0.04 U	0.06 J	0.41	0.06 U
Nickel	250	2,400	3.8 J	4.6 J	2.00 J	1.9 J	1.9 J	5.4 J	4.3 J	7.4 J	1.5 J	1.5 J	2.2 J	2.5 J	10.4	6.8 J
Silver	110	4,100	0.15 U	0.16 U	0.14 U	0.14 U	0.17 U	0.17 U	0.16 U	0.28 J	0.14 U	0.14 U	0.15 U	0.15 U	1.8 J	0.16 U
Sodium	NC	NC	45.2 J	36.2	31 J	34.6 J	49.3 J	27.2 J	41.5 J	86.9 J	60.7 J	119 J	117 J	113 J	194 J	133 J
Thallium	2	2	0.77 U	0.84	0.7 U	0.73 U	0.87 U	0.88 U	0.83 U	1 U	0.72 U	0.74 U	0.79 U	0.76 U	0.9 U	0.8 U
Zinc	1,500	1,500	35.6	126	17.3	15.8	23.9	33.4	66.8	70.8	16.7	15.8	19.6	23.5	355	32.8
Soil Characteristics																
Ph			7	5.4	6.5	6.7	5.3	5.7	7.2	6.6	4.6	4.6	5.3	5.4	6.4	4.6

Notes: - * N.J. Residential Soil Cleanup Criteria (RSCC); Non-Residential Soil Cleanup Criteria (NRSCC). Compounds not listed did not meet or exceed soil cleanup criteria in any sample.
- Shaded values meet or exceed N.J. Residential Direct Soil Criteria
- Shaded values with "N" meet or exceed N.J. Non-Residential Soil Criteria.
- All results in mg/kg.
- U = Not detected above the Contract Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.

TABLE 5-16

Matteo Iron Metal

Soil Characteristics Sample Results

Location ID		T-1			T-2			T-3			T-4		T-5		
Sample ID	TCLP Maximums	T-1			T-2			T-3			T-4		T-5		
Lab Sample ID	(RCRA Standards)	N12322-1			N12322-2			N12322-3			N12322-4		N12322-5		
Sampling Date		4/11/2002			4/11/2002			4/11/2002			4/11/2002		4/11/2002		
Depth (ft)		0-1			0-1			0-1			0-1		0-1		
Units		mg/l			mg/l			mg/l			mg/l		mg/l		
GC/MS Volatiles (SW846 8260B)		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	Result	Q	D
Benzene	0.5	0.005	U	5	0.005	U	5	0.005	U	5	0.005	U	0.005	U	5
2-Butanone (MEK)	200	0.025	U	5	0.025	U	5	0.025	U	5	0.025	U	0.025	U	5
Carbon tetrachloride	0.5	0.005	U	5	0.005	U	5	0.005	U	5	0.005	U	0.005	U	5
Chlorobenzene	100	0.01	U	5	0.01	U	5	0.01	U	5	0.01	U	0.01	U	5
Chloroform	6	0.025	U	5	0.025	U	5	0.025	U	5	0.025	U	0.025	U	5
1,4-Dichlorobenzene	7.5	0.025	U	5	0.025	U	5	0.025	U	5	0.025	U	0.025	U	5
1,2-Dichloroethane	0.5	0.01	U	5	0.01	U	5	0.01	U	5	0.01	U	0.01	U	5
1,1-Dichloroethene	0.7	0.01	U	5	0.01	U	5	0.01	U	5	0.01	U	0.01	U	5
Tetrachloroethene	0.7	0.005	U	5	0.005	U	5	0.005	U	5	0.005	U	0.005	U	5
Trichloroethene	0.5	0.005	U	5	0.005	U	5	0.005	U	5	0.005	U	0.005	U	5
Vinyl chloride	0.2	0.005	U	5	0.005	U	5	0.005	U	5	0.005	U	0.005	U	5
GC/MS Semi-volatiles (SW846 8270C)		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	Result	Q	D
2-Methylphenol	200	0.05	U	1	0.05	U	1	0.05	U	1	0.05	U	0.05	U	1
3&4-Methylphenol	200	0.05	U	1	0.05	U	1	0.05	U	1	0.05	U	0.05	U	1
Pentachlorophenol	100	0.2	U	1	0.2	U	1	0.2	U	1	0.2	U	0.2	U	1
2,4,5-Trichlorophenol	400	0.05	U	1	0.05	U	1	0.05	U	1	0.05	U	0.05	U	1
2,4,6-Trichlorophenol	2	0.05	U	1	0.05	U	1	0.05	U	1	0.05	U	0.05	U	1
1,4-Dichlorobenzene	7.5	0.02	U	1	0.02	U	1	0.02	U	1	0.02	U	0.02	U	1
2,4-Dinitrotoluene	0.13	0.02	U	1	0.02	U	1	0.02	U	1	0.02	U	0.02	U	1
Hexachlorobenzene	0.13	0.02	U	1	0.02	U	1	0.02	U	1	0.02	U	0.02	U	1
Hexachlorobutadiene	0.5	0.02	U	1	0.02	U	1	0.02	U	1	0.02	U	0.02	U	1
Hexachloroethane	3	0.05	U	1	0.05	U	1	0.05	U	1	0.05	U	0.05	U	1
Nitrobenzene	2	0.02	U	1	0.02	U	1	0.02	U	1	0.02	U	0.02	U	1
Pyridine	5	0.02	U	1	0.02	U	1	0.02	U	1	0.02	U	0.02	U	1
GC Semi-volatiles (SW846 8151)		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	Result	Q	D
2,4-D	10	0.005	U	1	0.005	U	1	0.005	U	1	0.005	U	0.005	U	1
2,4,5-TP (Silvex)	1	0.001	U	1	0.001	U	1	0.001	U	1	0.001	U	0.001	U	1
gamma-BHC (Lindane)	0.4	0.0002	U	1	0.0002	U	1	0.0002	U	1	0.0002	U	0.0002	U	1
Chlordane	0.03	0.005	U	1	0.005	U	1	0.005	U	1	0.005	U	0.005	U	1
Endrin	0.02	0.0002	U	1	0.0002	U	1	0.0002	U	1	0.0002	U	0.0002	U	1
Heptachlor	0.008	0.0002	U	1	0.0002	U	1	0.0002	U	1	0.0002	U	0.0002	U	1
Heptachlor epoxide	0.008	0.0002	U	1	0.0002	U	1	0.0002	U	1	0.0002	U	0.0002	U	1
Methoxychlor	10	0.0005	U	1	0.0005	U	1	0.0005	U	1	0.0005	U	0.0005	U	1
Toxaphene	0.5	0.0025	U	1	0.0025	U	1	0.0025	U	1	0.0025	U	0.0025	U	1
Metals Analysis		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	Result	Q	D
Arsenic	5	0.5	U	1	0.5	U	1	0.5	U	1	0.5	U	0.5	U	1
Barium	100	1	U	1	1	U	1	1	U	1	1	U	1	U	1
Cadmium	1	**0.043**		1	**0.011**		1	0.005	U	1	**0.0058**		0.005	U	1
Chromium	5	0.01	U	1	0.01	U	1	0.01	U	1	0.01	U	0.01	U	1
Lead	5	0.5	U	1	**62**		2	**3.8**		1	**241**		**0.52**		1
Mercury		0.0002	U	1	0.0002	U	1	0.0002	U	1	0.0002	U	0.0002	U	1
Selenium		0.5	U	1	0.5	U	1	0.5	U	1	0.5	U	0.5	U	1
Silver	5	0.01	U	1	0.01	U	1	0.01	U	1	0.01	U	0.01	U	1
General Chemistry		Result	Q	D	Result	Q	D	Result	Q	D	Result	Q	Result	Q	D
Units		mg/kg			mg/kg			mg/kg			mg/kg		mg/kg		
Cyanide Reactivity	250	1.6	U	1	2	U	1	2.7	U	1	1.6	U	1.5	U	1
Sulfide Reactivity	500	50	U	1	50	U	1	50	U	1	50	U	50	U	1
Ignitability (Flashpoint) (Deg. F)	>140	200	>	1	200	>	1	200	>	1	200	>	200	>	1
Solids, Percent (%)	NC	90.6		1	75.1		1	54.8		1	94.8		97		1
Corrosivity as pH ( )	NC	7.62 NC		1	6.12 NC		1	6.67 NC		1	6.02 NC		6.77 NC		1

Notes:

- Shaded values meet or exceed RCRA Standards.
- Bold values indicate concentrations above MDL.

D = Dilution Factor

Q = Qualifier

U = Non Detect

TABLE 5-17
Matteo Iron and Metal
Hydraulic Conductivity Test Results

Well ID	Test Date	Localized Horizontal Permeability Value
MW-14D	11/2/2000	22.7 ft. / day
MW-16D	11/2/2000	6.4 ft. / day
MW-17D	11/2/2000	11.9 ft. / day
Average Horizontal Permeability	**=**	**13.6 ft. / day**

TABLE 5-18

Matteo Iron and Metal

Groundwater Monitoring Well Results: Round 1 - Unfiltered (December 4 to 8, 2000)

SAMPLE LOCATION		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12
SAMPLE ID		MW-01	MW-02	MW-03	MW-04	MW-05	MW-06	MW-07	MW-08	MW-09	MW-10	MW-11	MW-12
LAB ID		E82056-33	E81966-10	E82056-27	E82056-30	E82056-28	E82056-17	E81966-8	E82056-16	E82056-5	E82056-4	E82056-3	E82056-6
DATE		12/8/2000	12/5/2000	12/8/2000	12/8/2000	12/8/2000	12/7/2000	12/5/2000	12/7/2000	12/6/2000	12/6/2000	12/6/2000	12/6/2000
ANALYTE	*NJ GWQS**												
Volatile Organic Compounds													
Benzene	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	6	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	70	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	700	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylene (total)	40	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Semi-Volatile Organic Compounds													
2,4-Dimethylphenol	100	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	0.2	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	10	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	1	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	30	7	11 U	2 J	1 J	11 U	11 U	11 U	9 J	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	1	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U
Pesticide & PCB													
Dieldrin	0.03	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Aroclor 1248	1	1.1 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Aroclor 1254	1	1.1 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Aroclor 1260	1	1.1 U	1.1 U	1.0 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Metals													
Aluminum	200	5,900	200	862	419	8,130	6,850	3,540	2,470	3,010	8,630	14,900	16,300
Antimony	20	2.4 U	1.7 U	2.4 U	2.4 U	58.1 J	2.4 U	1.7 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Arsenic	8	7.4	2.3 U	4.3 U	4.3 U	12.2	11.8	8.4 J	4.3 U	7.5 J	12.4	20.3	55.9
Barium	2,000	34.2 J	19.7 J	40.5 J	46.4 J	82.5 J	53.3 J	23.5 J	61.8 J	44.5 J	10.6 J	73.7 J	44 J
Beryllium	20	0.51 J	0.2 U	0.4 U	0.4 U	1.1 J	0.78 J	0.37 J	0.74 J	0.68 J	0.46 J	0.92 J	1.3 J
Cadmium	4	1.4 J	0.3 U	0.6 U	0.83 J	6.9	0.6 U	0.31 J	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chromium	100	13.4	1 J	3.5 J	1.9 U	23.5	18.9	11.1	10	9.7 J	26.3	44.7	47.7
Copper	1,000	99.9	0.75 J	2.9 J	3 J	104	9.6 J	2.5 J	8.7 J	5.6 J	5.8 J	9.8 J	10.8 J
Iron	300	9,920	573	150	517	11,500	12,900	7,360	5,140	9,260	26,600	53,100	64,900
Lead	10	11.7	1.6 J	1.8 U	7.7	6,050	8.9	2 J	6.1	4.2	5.4	27.1	11.2
Manganese	50	477.2	14.2 J	41.1	43.1	197	62	29.9	138	23.7	24.4	68.1	67.8
Mercury	2	0.1 U	0.1 U	0.1 U	0.1 U	0.49	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	100	15.9 J	1.3 U	4.1 J	6.4 J	38.3 J	16.9 J	2.2 J	10.4 J	3.5 J	4.8 J	10.3 J	8.6 J
Silver	N/A	1 U	0.7 U	1 U	1 U	1 U	1 U	0.7 U	1 U	1 U	1 U	1 U	1 U
Sodium	50,000	10,800	1,370	2,070 J	4,170 J	12,400	23,400	2,150 J	6,810	15,900	14,900	18,200	18,800
Thallium	10	3.3 U	3.6 U	3.5 J	3.3 U	3.3 U	3.3 U	3.6 U	3.3 J	3.3 U	3.3 U	3.3 U	3.3 U
Zinc	5,000	331	18.8 J	33.7	204	1,540	140	18.8 J	66.7	33.2	29.5	60	50.5

Notes: - * GWQS = New Jersey Ground Water Quality Standards: Compounds not listed did not meet or exceed criteria in any sample.
- Shaded values meet or exceed New Jersey Ground Water Quality Standards. Bold values indicated detections above MDL.
- All results in ug/l.
- U = Not detected above the Contract Required Quantitation Limit (CRQL).
- J = Estimated value.

TABLE 5-18

Matteo Iron and Metal

Groundwater Monitoring Well Results: Round 1 - Unfiltered (December 4 to 8, 2000)

SAMPLE LOCATION		MW-13S	MW-14S	MW-15S	MW-16S	MW-17S	MW-18S	MW-13D	MW-14D	MW-15D	MW-16D	MW-17D	MW-18D
SAMPLE ID		MW-13S	MW-14S	MW-15S	MW-16S	MW-17S	MW-18S	MW-13D	MW-14D	MW-15D	MW-16D	MW-17D	MW-18D
LAB ID		E82056-19	E81966-2	E82056-14	E82056-32	E81966-4	E82056-1	E82056-18	E81966-1	E82056-15	E82056-31	E81966-5	E82056-2
DATE		12/6/2000	12/4/2000	12/7/2000	12/8/2000	12/5/2000	12/6/2000	12/6/2000	12/4/2000	12/7/2000	12/8/2000	12/5/2000	12/6/2000
ANALYTE	*NJ GWQS**												
Volatile Organic Compounds													
Benzene	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	6	10 U	10 U	10 U	10 U	10 U	10 U	1 J	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	70	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	17	10 U	10 U
Ethylbenzene	700	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	13	8 J	6 J	10 U	10 U
Xylene (total)	40	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Semi-Volatile Organic Compounds													
2,4-Dimethylphenol	100	11 U	11 U	11 U	11 U	11 U	10 U	10 U	11 U	11 U	11 U	11 U	10 U
Benzo(a)anthracene	0.2	11 U	11 U	11 U	11 U	11 U	10 U	10 U	11 U	11 U	11 U	11 U	10 U
Benzo(a)pyrene	0.2	11 U	11 U	11 U	11 U	11 U	10 U	10 U	11 U	11 U	11 U	11 U	10 U
Benzo(b)fluoranthene	10	11 U	11 U	11 U	11 U	11 U	10 U	10 U	11 U	11 U	11 U	11 U	10 U
Benzo(k)fluoranthene	1	11 U	11 U	11 U	11 U	11 U	10 U	10 U	11 U	11 U	11 U	11 U	10 U
bis(2-Ethylhexyl)phthalate	30	11 U	2 J	11 U	2 J	11 U	10 U	1 J	11 U	35	14	24	3 J
Dibenz(a,h)anthracene	1	11 U	11 U	11 U	11 U	11 U	10 U	10 U	11 U	11 U	11 U	11 U	10 U
Indeno(1,2,3-cd)pyrene	10	11 U	11 U	11 U	11 U	11 U	10 U	10 U	11 U	11 U	11 U	11 U	10 U
Pesticide & PCB													
Dieldrin	0.03	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U
Aroclor 1248	1	1.0 U	1.0 U	1.0 U	1.1 U	1.1 U	1.0 U	1.0 U	1.1 U	1.1 U	1.1 U	1.1 U	1.0 U
Aroclor 1254	1	1.0 U	1.0 U	1.0 U	1.1 U	1.1 U	1.0 U	1.0 U	1.1 U	1.1 U	1.1 U	1.1 U	1.0 U
Aroclor 1260	1	1.0 U	1.0 U	1.0 U	1.1 U	1.1 U	1.0 U	1.0 U	1.1 U	1.1 U	1.1 U	1.1 U	1.0 U
Metals													
Aluminum	200	3,890	2,520	518	605	18,900	5,920	615	750	713	324	1,410	525
Antimony	20	2.4 U	1.7 U	2.4 U	2.4 U	1.7 U	4.9 J	2.4 U	1.7 U	2.4 U	2.4 U	1.7 U	2.4 U
Arsenic	8	18.7	6.7 J	4.3 U	4.3 U	27.4	14.7	58.3	24.8	36.8	6.5 J	2.5 J	4.3 U
Barium	2,000	70.4 J	61.7 J	48.3 J	402	49.3 J	20.4 J	39.7	133 J	38.2 J	39.4 J	16.4 J	11 J
Beryllium	20	1.4 J	0.23 J	0.43 J	0.4 U	1.1 J	0.46 J	0.4 U	0.2 U	0.4 U	0.4 U	0.2 U	0.4 U
Cadmium	4	4.4 J	0.3 U	0.6 U	0.6 U	0.33 J	0.6 U	0.6 U	0.3 J	0.6 U	0.6 U	0.3 U	0.6 U
Chromium	100	25.7	16.9	1.9 U	3.9 J	47.3	19.3	5.4 J	5.1 J	4.2 J	2.7 J	4.3 J	2.5 J
Copper	1,000	11.7 J	2.5 J	4.6 J	4.1 J	12 J	4 J	4.5 J	0.91 J	4.1 J	5.1 J	4.4 J	5.3 J
Iron	300	33,500	24,700	4,959	5,170	28,400	24,000	49,100	48,200	23,700	14,600	1,460	4,720
Lead	10	12.6	3.1	3.6	39.8	9.4 J	1.8 U	15.2	1.5 J	3.8	5.1	2.8 J	1.8 U
Manganese	50	453	140	57.1	491	72.7	61.9	572	736	185	96.5	18.5	75.4
Mercury	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	100	35 J	11.2 J	5.6 J	2.1 U	14.7 J	7 J	4.3 J	1.7 J	3.2 J	2.1 U	2.3 J	4.4 J
Silver	N/A	1 U	0.7 U	1 U	1 U	0.7 U	1 U	1 U	0.7 U	1 U	1 U	0.7 U	1 U
Sodium	50,000	26,200	9,440	5,040	20,700	14,900	18,500	21,800	16,600	27,800	21,000	26,100	28,500
Thallium	10	3.3 U	3.6 U	3.3 U	3.3 U	3.6 U	3.3 U	3.3 U	3.6 U	3.3 U	5.2 J	3.6 U	3.3 U
Zinc	5,000	515	28.3	46.3	48.9	56.6	36.2	30.7	10.6 J	15.6 J	24.7	9.8 J	20.8

Notes: - * GWQS = New Jersey Ground Water Quality Standards: Compounds not listed did not meet or exceed criteria in any sample.
- Shaded values meet or exceed New Jersey Ground Water Quality Standards. Bold values indicated detections above MDL.
- All results in ug/l.
- U = Not detected above the Contract Required Quantitation Limit (CRQL).
- J = Estimated value.

TABLE 5-19

Matteo Iron and Metal

Groundwater Monitoring Well Results: Round 1 - Filtered (December 4 to 8, 2000)

SAMPLE LOCATION		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12
SAMPLE ID		MW-01	MW-02	MW-03	MW-04	MW-05	MW-06	MW-07	MW-08	MW-09	MW-10	MW-11	MW-12
LAB ID		E82056-41	E81966-17	E82056-36	E82056-38	E82056-37	E82056-24	E81966-16	E82056-23	E82056-12	E82056-11	E82056-10	E82056-13
DATE		12/8/2000	12/5/2000	12/8/2000	12/8/2000	12/8/2000	12/6/2000	12/5/2000	12/6/2000	12/6/2000	12/6/2000	12/6/2000	12/6/2000
ANALYTE	*NJ GWQS**												
Metals													
Aluminum	200	1800	48.4 U	119 J	7230	1,280	93.5 J	48.4 U	326	245	32.4 U	32.4 U	32.4 U
Antimony	20	2.4 U	1.7 U	2.4 U	2.4 U	2.4 U	2.4 U	1.7 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Arsenic	8	4.3 U	2.3 U	4.3 U	4.3 U	4.3 U	4.3 U	2.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U
Barium	2,000	8.5 J	17.4 J	32.2 J	40.1 J	41.1 J	32.5 J	17.9 J	49.4 J	33.4 J	10.6	28.2 J	6.4 J
Beryllium	20	0.51 J	0.2 U	0.4 U	0.4 U	0.84 J	0.4 U	0.4 J	0.5 J	0.4 U	0.4 U	0.4 U	0.4 U
Cadmium	4	2.1 J	0.3 U	0.6 U	0.99 J	6.9	0.6 U	0.59 J	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Copper	1,000	98.2	0.6 U	2.3 U	2.3 U	44.8	2.3 U	0.72 J	2.3 U	2.3 U	2.3 U	2.3 U	2.3 J
Iron	300	60.9 U	60.9 U	60.9 U	60.9 U	198	60.9 U	60.9 U	277	101	60.9 U	60.9 U	60.9 U
Lead	10	1.8 U	1.8 J	1.8 U	4.8	3,290	1.8 U	1.3 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Manganese	50	63.9	13.1 J	24.9	44.3	113	41.3	20.2	143	18.5	6.2 U	6.2 U	6.2 U
Mercury	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.43
Nickel	100	14.5 J	1.8 J	2.8 J	5.6 J	35 J	11.4 J	1.3 U	9.6 J	3 J	2.1 U	2.1 U	2.1 U
Silver	N/A	1 U	0.7 U	1 U	1 U	1 U	1 U	0.7 U	1 U	1 U	1 U	1 U	1 U
Sodium	50,000	9,310	1,280 J	1,810 J	3,890 J	13,200	23,200	2,060 J	6,330	14,600	15,000	17,600	18,900
Thallium	10	3.3 U	3.6 U	3.3 U	3.3 U	3.3 U	3.3 U	3.6 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Zinc	5,000	328	16.9 J	27.6	206	1410	115	13.5 J	60.9	30	12.1	16.8 J	10.8 J

SAMPLE LOCATION		MW-13S	MW-14S	MW-15S	MW-16S	MW-17S	MW-18S	MW-13D	MW-14D	MW-15D	MW-16D	MW-17D	MW-18D
SAMPLE ID		MW-13S	MW-14S	MW-15S	MW-16S	MW-17S	MW-18S	MW-13D	MW-14D	MW-15D	MW-16D	MW-17D	MW-18D
LAB ID		E82056-26	E81966-12	E82056-21	E82056-40	E81966-13	E82056-8	E82056-25	E81966-11	E82056-22	E82056-39	E81966-14	E82056-9
DATE		12/6/2000	12/4/2000	12/6/2000	12/8/2000	12/5/2000	12/6/2000	12/6/2000	12/4/2000	12/6/2000	12/8/2000	12/5/2000	12/6/2000
ANALYTE	*NJ GWQS**												
Metals													
Aluminum	200	777	48.4 U	305	32.4 U	48.4 U	32.4 U	32.4 U	48.4 U	32.4 U	32.4 U	48.4 U	32.4 U
Antimony	20	2.4 U	1.7 U	2.4 U	2.4 U	1.7 U	3.9 J	2.4 U	1.7 U	2.4 U	2.4 U	1.7 U	2.4 U
Arsenic	8	4.3 U	2.3 U	4.3 U	4.3 U	2.3 U	4.3 U	50.4	23.7	31.4	6.7 J	2.7 J	4.3 U
Barium	2,000	35 J	41.2 J	43.7 J	379	10.7 J	7.9 J	31.5 J	135 J	30.2 J	34.7 J	9.8 J	3.9 J
Beryllium	20	1.1 J	0.2 U	0.4 U	0.4 U	0.2 U	0.4 U	0.4 U	0.2 U	0.4 U	0.4 U	0.2 U	0.4 U
Cadmium	4	5.3	0.3 U	0.6 U	0.6 U	0.3 U	0.6 U	0.6 U	0.34 J	0.6 U	0.6 U	0.3 U	0.6 U
Copper	1,000	2.3 U	0.6 U	2.8 J	2.3 U	0.66 J	2.3 U	2.3 U	0.6 U	2.3 U	2.3 U	0.6 U	2.3 U
Iron	300	1,010	350	428	3,520	60.9 U	60.9 U	43,200	43,200	20,500	13,400	731	1,280
Lead	10	1.8 U	1.3 U	1.8 U	1.8 U	1.3 U	1.8 U	1.8 U	1.3 U	1.8 U	1.8 U	1.3 U	1.8 U
Manganese	50	380	79.6	58.8	506	16.9	38	561	774	183	103	18.4	73.6
Mercury	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	100	26.7 J	6.9 J	6.2 J	4 J	3.5 J	2.3 J	2.1 U	1.3 U	2.1 U	2.1 U	1.4 J	2.7 J
Silver	N/A	1 U	0.7 U	1 U	1 U	0.7 U	1 U	1 U	0.7 U	1 U	1 U	0.7 U	1 U
Sodium	50,000	24,700	10,000	4,720 J	19,100	15,400	18,300	22,400	17,900	26,600	20,000	25,800	27,100
Thallium	10	3.3 U	3.6 U	3.3 U	3.3 U	3.6 U	3.3 U	3.3 U	3.6 U	3.3 U	3.3 U	3.6 U	3.3 U
Zinc	5,000	490	16.3 J	45.7	13.9 J	17 J	19.7 J	14.1 J	8.6 J	10.7 J	10.8 J	6.4 J	7.9 J

Notes: - * GWQS = New Jersey Ground Water Quality Standards: Compounds not listed did not meet or exceed criteria in any sample.
- Shaded values meet or exceed New Jersey Ground Water Quality Standards. Bold values indicated detections above MDL.
- All results in ug/l.
- U = Not detected above the Contract Required Quantitation Limit (CRQL).
- J = Estimated value.

TABLE 5-20

Matteo Iron and Metal

Potable Well Sample Results: Round 1 (December 4 to 8, 2000)

SAMPLE LOCATION		PW-1	PW-1	PW-2
SAMPLE ID		HOUWELL	PWDUP-1	MIMWELL
LAB ID		E81965-2	E81965-3	E81965-1
DATE		12/5/2000	12/5/2000	12/4/2000
ANALYTE	*NJDWS**			
Volatile Organic Compounds				
Benzene	1	0.25 U	0.25 U	0.25 U
Chloroform	100	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	70	0.32 U	0.32 U	0.32 U
Ethylbenzene	700	0.31 U	0.31 U	0.31 U
Vinyl chloride	2	0.32 U	0.32 U	0.32 U
Xylene (total)	1,000	0.58 U	0.58 U	0.58 U
Semi-Volatile Organic Compounds				
2,4-Dimethylphenol	NC	NT	NT	NT
Benzo(a)anthracene	NC	NT	NT	NT
Benzo(a)pyrene	0.2	0.02 U	0.02 U	0.02 U
Benzo(b)fluoranthene	NC	NT	NT	NT
Benzo(k)fluoranthene	NC	NT	NT	NT
bis(2-Ethylhexyl)phthalate	6	0.6 U	0.6 U	0.6 U
Dibenz(a,h)anthracene	NC	NT	NT	NT
Indeno(1,2,3-cd)pyrene	NC	NT	NT	NT
Pesticide & PCB				
Dieldrin	NC	0.1 U	0.1 U	0.1 U
Aroclor 1248	0.5	0.1 U	0.1 U	0.1 U
Aroclor 1254	0.5	0.1 U	0.1 U	0.1 U
Aroclor 1260	0.5	0.2 U	0.2 U	0.2 U
Metals				
Aluminum	200	150 U	150 U	150 U
Antimony	6	5 U	5 U	5 U
Arsenic	50	5 U	5 U	5 U
Barium	2,000	200 U	200 U	200 U
Beryllium	4	3 U	3 U	3 U
Cadmium	5	4 U	4 U	4 U
Chromium	100	10 U	10 U	10 U
Copper	1,300	25 U	25 U	25 U
Iron	300	**680**	**690**	**27,400**
Lead	15	3 U	3 U	3 U
Manganese	50	**22**	**22**	**270**
Mercury	2	0.2 U	0.2 U	0.2 U
Nickel	NC	40 U	40 U	40 U
Silver	100	10 U	10 U	10 U
Sodium	NC	**54,600**	**55,600**	**25,800**
Thallium	NC	2 U	2 U	2 U
Zinc	5,000	**110**	**89**	20 U

Notes:

- NJDWS* = New Jersey Drinking Water Standards - November, 1996 N.J. MCL [A-280]. Analytes not listed did not meet or exceed criteria in any sample.
- Shaded values meet or exceed New Jersey Drinking Water Standards
- Bold indicate concentrations above MDL.
- All results in ug/l.
- U = Not detected above the Contract Required Quantitation Limit (CRQL).
- NC = No Criteria.
- NT = Not tested.

TABLE 5-21

Matteo Iron and Metal

Groundwater Monitoring Well Results: Round 2 (January 25 to February 2, 2001)

SAMPLE LOCATION		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12
SAMPLE ID		MW-01	MW-02	MW-03	MW-04	MW-05	MW-06	MW-07	MW-08	MW-09	MW-10	MW-11	MW-12
LAB ID		E85211-11	E84957-1	E85211-3	E85211-6	E84958-12	E84958-13	E85211-5	E85211-12	E84957-5	E84957-6	E85211-8	E85211-1
DATE		2/1/2001	1/26/2001	2/1/2001	2/1/2001	1/31/2001	1/31/2001	2/1/2001	2/2/2001	1/26/2001	1/26/2001	1/31/2001	2/1/2001
ANALYTE	*NJ GWQS**												
Volatile Organic Compounds													
Benzene	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	6	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	70	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	700	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylene (total)	40	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Semi-Volatile Organic Compounds													
2,4-Dimethylphenol	100	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	0.2	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	0.2	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	30	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pesticide & PCB													
Dieldrin	0.03	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1248	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1254	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1260	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Metals													
Aluminum	200	160 J	51.4 J	134 J	462	719	1,930	234	8,480	435	271	628	377
Antimony	20	2.4 U	2.4 U	2.4 U	2.4 U	5.9 J	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Arsenic	8	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	82.9	4.3 U	7.3 J	4.3 U	4.3 U	4.3 U	4.3 U
Barium	2,000	12.1 J	8.2 J	29.3 J	44.8 J	53.4 J	28.9 J	19.4 J	71.7 J	38.6 J	5.5 J	39.4 J	9.7 J
Beryllium	20	0.46 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.61 J	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	100	29	1.9 U	1.9 U	2.3 J	20.8	11.3	3.2 J	164	3.1 J	10.8	5.7 J	2.3 J
Cadmium	4	2.2 J	0.6 U	0.6 U	0.65 J	8.6	0.74 J	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Copper	1,000	137	2.3 U	2.8 J	2.3 U	35.2	6.5 J	2.3 U	9.8 J	2.3 U	2.3 U	2.3 U	2.3 U
Iron	300	1792	60.9 U	60.9 U	190	700	2,930	301	16,900	532	949	2,050	1,130
Lead	10	6.8	1.8 U	1.8 U	3	1,320	3	4.9	14.5	1.8 U	2.1 J	2.9 J	1.8 U
Manganese	50	65.2	9.6 J	13.7 J	103	69.3	35.3	23	92.9	27.4	6.2 U	6.2 U	6.2 U
Mercury	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	100	33.1 J	4.1 J	2.1 U	11.7 J	46.4	14.8 J	2.2 J	174	10 J	12 J	2.8 J	2.1 U
Silver	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Sodium	50,000	6,310 J	1,150 J	1,900 J	4,920 J	5,750	18,400	2,360 J	26,800 J	13,400	13,700	19,800 J	18,800 J
Thallium	10	3.3 U	7.7 J	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	4.6 J	4.3 J	3.3 U	3.3 U
Zinc	5,000	329	6.7 U	33.7	617	1,760	176	10.9 J	73.7	24.1	6.7 U	23.1	11.4 J

Notes: - * GWQS = New Jersey Ground Water Quality Standards: Compounds not listed did not meet or exceed criteria in any sample.
- Shaded values meet or exceed New Jersey Ground Water Quality Standards. Bold values indicated detections above MDL.
- All results in ug/l.
- U = Not detected above the Contract Required Quantitation Limit (CRQL).
- J = Estimated value.
- Low Flow sampling procedures were used to purge/collect samples.

TABLE 5-21

Matteo Iron and Metal

Groundwater Monitoring Well Results: Round 2 (January 25 to February 2, 2001)

SAMPLE LOCATION		MW-13S	MW-14S	MW-15S	MW-16S	MW-17S	MW-18S	MW-13D	MW-14D	MW-15D	MW-16D	MW-17D	MW-18D
SAMPLE ID		MW-13S	MW-14S	MW-15S	MW-16S	MW-17S	MW-18S	MW-13D	MW-14D	MW-15D	MW-16D	MW-17D	MW-18D
LAB ID		E84958-5	E84958-8	E84958-15	E84958-9	E84958-17	E84958-3	E84958-6	E84958-7	E84958-16	E85211-4	E84958-18	E84958-4
DATE		1/29/2001	1/29/2001	1/31/2001	1/30/2001	1/31/2001	1/26/2001	1/29/2001	1/29/2001	1/31/2001	2/1/2001	1/31/2001	1/26/2001
ANALYTE	*NJ GWQS**												
Volatile Organic Compounds													
Benzene	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	6	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	70	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	6 J	15	10 U	10 U
Ethylbenzene	700	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	17	11	8 J	10 U	10 U
Xylene (total)	40	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Semi-Volatile Organic Compounds													
2,4-Dimethylphenol	100	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U
Benzo(a)anthracene	0.2	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U
Benzo(a)pyrene	0.2	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U
Benzo(b)fluoranthene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U
Benzo(k)fluoranthene	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U
bis(2-Ethylhexyl)phthalate	30	10 U	10 U	10 U	10 U	10 U	3 J	10 U	10 U	1 J	10 U	10 U	11 U
Dibenz(a,h)anthracene	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U
Indeno(1,2,3-cd)pyrene	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U
Pesticide & PCB													
Dieldrin	0.03	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Aroclor 1248	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1254	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1260	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Metals													
Aluminum	200	1,020	57.2 J	466	32.4 U	681	194 J	34.3 J	313	176 J	106 J	240	109 J
Antimony	20	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	12.2 J	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Arsenic	8	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	58.9	23.6	42.2	5.1 J	4.3 U	4.3 U
Barium	2,000	41 J	45.6 J	44.8 J	366	10.3 J	11.5 J	33.1 J	143 J	35.3 J	41.1 J	11.8 J	7.8 J
Beryllium	20	0.71 J	0.4 U	0.65 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Cadmium	4	2.4 J	0.6 U	0.68 J	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Chromium	100	58.2	4.3 J	5.4 J	1.9 U	3.5 J	21.3	2.7 J	9 J	14.5	4 J	8.4 J	14.7
Copper	1,000	3.1 J	2.3 U	18.4 J	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	6.7 J	2.3 U
Iron	300	5,070	402	1,580	13,840	891	720	53,100	48,900	24,400	15,500	912	631
Lead	10	1.8 U	1.8 U	6.6	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	7.3	1.8 U
Manganese	50	337	87.7	70.5	520	19.1	11.2 J	642	789	187	111	12.7 J	16.2
Mercury	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	100	68.9	7.6 J	8.8 J	2.1 U	3.9 J	12.1 J	2.1 U	3.9 J	9.6 J	2.1 U	4.9 J	10.7 J
Silver	N/A	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Sodium	50,000	19,500	12,000	5,080	20,000	13,900	23,500	19,300	15,700	25,700	20,700 E	26,400	28,000
Thallium	10	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Zinc	5,000	237	8 J	58.8	6.7 U	10 J	12.7 J	6.7 U	6.7 U	6.7 U	6.7 U	26.8	16.3 J

Notes: - * GWQS = New Jersey Ground Water Quality Standards: Compounds not listed did not meet or exceed criteria in any sample.
- Shaded values meet or exceed New Jersey Ground Water Quality Standards. Bold values indicated detections above MDL.
- All results in ug/l.
- U = Not detected above the Contract Required Quantitation Limit (CRQL).
- J = Estimated value.
- Low Flow sampling procedures were used to purge/collect samples.

TABLE 5-22

Matteo Iron and Metal

Potable Well Sample Results: Round 2 (January 25 to February 2, 2001)

SAMPLE LOCATION		PW-1	PW-1	PW-2
SAMPLE ID		PW-1	PWDUP-1	PW-2
LAB ID		E84958-1A	E84957-4A	E84957-2A
DATE		1/26/2001	1/26/2001	1/26/2001
ANALYTE	*NJDWS**			
Volatile Organic Compounds				
Benzene	1	0.25 U	0.25 U	0.25 U
Chloroform	100	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	70	0.32 U	0.32 U	0.32 U
Ethylbenzene	700	0.31 U	0.31 U	0.31 U
Vinyl chloride	2	0.32 U	0.32 U	0.32 U
Xylene (total)	1,000	0.31 U	0.31 U	0.31 U
Semi-Volatile Organic Compounds				
2,4-Dimethylphenol	NC	NT	NT	NT
Benzo(a)anthracene	NC	NT	NT	NT
Benzo(a)pyrene	0.2	0.02 U	0.02 U	0.02 U
Benzo(b)fluoranthene	NC	NT	NT	NT
Benzo(k)fluoranthene	NC	NT	NT	NT
bis(2-Ethylhexyl)phthalate	6	0.6 U	0.6 U	0.6 U
Dibenz(a,h)anthracene	NC	NT	NT	NT
Indeno(1,2,3-cd)pyrene	NC	NT	NT	NT
Pesticide & PCB				
Dieldrin	NC	0.1 U	0.1 U	0.1 U
Aroclor 1248	0.5	0.1 U	0.1 U	0.1 U
Aroclor 1254	0.5	0.1 U	0.1 U	0.1 U
Aroclor 1260	0.5	0.2 U	0.2 U	0.2 U
Metals				
Aluminum	200	150 U	150 U	150 U
Antimony	6	5 U	5 U	5 U
Arsenic	50	5 U	5 U	5 U
Barium	2,000	200 U	200 U	200 U
Beryllium	4	3 U	3 U	3 U
Cadmium	5	4 U	4 U	4 U
Chromium	100	10 U	10 U	10 U
Copper	1,300	25 U	25 U	25 U
Iron	300	**1,700**	**1,700**	**26,900**
Lead	15	3 U	3 U	3 U
Manganese	50	**32**	**32**	**260**
Mercury	2	0.2 U	0.2 U	0.2 U
Nickel	NC	40 U	40 U	40 U
Silver	100	10 U	10 U	10 U
Sodium	NC	**52,500**	**53,400**	**25,500**
Thallium	NC	2 U	2 U	2 U
Zinc	5,000	**68**	**62**	20 U

Notes:

- NJDWS* = New Jersey Drinking Water Standards - November, 1996 N.J. MCL [A-280]. Analytes not listed did not meet or exceed criteria in any sample.
- Shaded values meet or exceed New Jersey Drinking Water Standards - November, 1996.
- Bold indicate concentrations above MDL.
- All results in ug/l.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- NC = No Criteria.
- NT = Not tested.

TABLE 5-23

Matteo Iron Metal

Groundwater Monitoring Sample Results: Round 3 (April 9 and 10, 2002)

SAMPLE LOCATION		MW-10D	MW-11D	MW-14D	MW-14D	MW-15D	MW-16D	MW-18D	FB-01	FB-02	TB
SAMPLE ID		MW-10D	MW-11D	MW-14D	GW DUPE	MW-15D	MW-16D	MW-18D	FB-01	FB-02	TB
LAB ID		N12137-4	N12137-6	N12137-1	N12137-9	N12137-2	N12137-5	N12137-3	N12137-7	N12137-8	N12137-10
DATE		4/9/2002	4/10/2002	4/9/2002	4/9/2002	4/9/2002	4/10/2002	4/9/2002	4/9/2002	4/10/2002	4/10/2002
ANALYTE	NJ GWQS*	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D
Volatile Organic Compounds											
Benzene	1	10 U 1	10 U 1	10 U 1	10 U 1	10 U 1	10 U 1	10 U 1	10 U	10 U 1	10 U 1
Chloroform	6	10 U 1	10 U 1	10 U 1	10 U 1	10 U 1	10 U 1	10 U 1	10 U	10 U 1	10 U 1
cis-1,2-Dichloroethene	70	10 U 1	10 U 1	1 J 1	1 J 1	8 J 1	10 1	10 U 1	10 U	10 U 1	10 U 1
Ethylbenzene	700	10 U 1	10 U 1	10 U 1	10 U 1	10 U 1	10 U 1	10 U 1	10 U	10 U 1	10 U 1
Vinyl chloride	5	10 U 1	10 U 1	15 1	12 1	7 J 1	3 J 1	10 U 1	10 U	10 U 1	10 U 1
Xylene (total)	40	10 U 1	10 U 1	10 U 1	10 U 1	10 U 1	10 U 1	10 U 1	10 U	10 U 1	10 U 1
Metals		Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q D	Result Q	Result Q D	Result Q D
Aluminum	200	691 1	480 1	236 1	275 1	166 J 1	253 1	578 1	84.9 J	109 J 1	NA
Antimony	20	2.9 U 1	2.9 U 1	2.9 U 1	2.9 U 1	2.9 U 1	2.9 U 1	2.9 U 1	2.9 U	2.9 U 1	NA
Arsenic	8	5.8 J 1	3 U 1	29 1	32.8 1	34.2 1	4.1 J 1	3 U 1	3 U	3 U 1	NA
Barium	2,000	21.4 J 1	55.8 J 1	157 J 1	167 J 1	22.8 J 1	36 J 1	13.4 J 1	5.1 J	4.9 J 1	NA
Beryllium	20	0.3 U 1	0.3 U 1	0.3 U 1	0.3 U 1	0.3 U 1	0.3 U 1	0.3 U 1	0.3 U	0.3 U 1	NA
Cadmium	4	0.3 U 1	0.3 U 1	0.3 U 1	0.79 J 1	0.3 U 1	0.3 U 1	0.42 J 1	0.3 U	0.3 U 1	NA
Chromium	100	2.6 J 1	3.9 J 1	2.5 J 1	3 J 1	0.7 U 1	1.2 J 1	1.4 J 1	0.7 U	0.7 U 1	NA
Copper	1,000	1.8 U 1	2.1 J 1	1.8 U 1	1.8 U 1	1.8 U 1	1.8 U 1	1.8 U 1	1.8 U	5.7 J 1	NA
Iron	300	12,200 1	3,950 1	57,000 1	55,200 1	15,200 1	15,300 1	1,200 1	17.9 U	33 J 1	NA
Lead	10	2.6 J 1	4.4 1	2.2 U 1	2.2 U 1	2.2 U 1	2.4 J 1	2.2 U 1	2.2 U	2.3 J 1	NA
Manganese	50	241 1	120 1	871 1	871 1	132 1	130 1	15.2 1	1.9 J	1.6 J 1	NA
Mercury	2	0.07 U 1	0.07 U 1	0.07 U 1	0.07 U 1	0.07 U 1	0.07 U 1	0.07 U 1	0.07 U	0.07 U 1	NA
Nickel	100	7.7 J 1	11 J 1	6 J 1	5.2 J 1	6 J 1	7.8 J 1	7.2 J 1	9.5 J	4.2 J 1	NA
Silver	N/A	1.2 U 1	1.2 U 1	1.2 U 1	1.2 U 1	1.2 U 1	1.2 U 1	1.2 U 1	1.2 U	1.2 U 1	NA
Sodium	50,000	28,000 1	26,300 1	17,100 1	17,000 1	21,900 1	21,400 1	23,400 1	340 U	340 U 1	NA
Thallium	10	5.9 U 1	5.9 U 1	5.9 U 1	5.9 U 1	5.9 U 1	5.9 U 1	5.9 U 1	5.9 U	5.9 U 1	NA
Zinc	5,000	17.5 J 1	46.4 1	13.7 J 1	15.2 J 1	11.9 J 1	13.2 J 1	31 1	5.8 J	7.5 J 1	NA

Notes:

- * NJDEP GWQS = New Jersey Ground Water Quality Standards (N.J.A.C. 7:9-6 9/98) compounds not listed did not meet or exceed criteria in any sample.
- Bold values indicate detections.
- Shaded values meet or exceed New Jersey Ground Water Quality Standards - Higher of PQLs and Ground Water Quality Criteria (N.J.A.C 7:9-6 9/98). Bold values indicate concentrations above MDL.
- All results in ug/l.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- J = Estimated value, below the CRQL.
- Standard purge & collection procedures were used to sample the wells samples.

TABLE 5-25
Matteo Iron and Metal
Seep Sample Results

Sample Location	Sample ID	Lab ID	Date	Lead (ug/l) Filtered	Lead (ug/l) Unfiltered	Hardness (mg/l)	Lead (ug/l) Filtered	Lead (ug/l) Unfiltered	Lead (ug/l) Corrected	Lead (ug/l) Filtered	Lead (ug/l) Unfiltered
New Jersey Quality Standards				Groundwater			Human		Ecological		
				10	10	250	5	5			2.5
SP-1	SP-1F	E80831-9	11/16/2000	1.3 U			1.3 U		2.7	1.3 U	
	SP-1U	E80831-8	11/16/2000		71.1	108		71.1			71.1
SP-2	SP-2F	E80831-11	11/16/2000	1.3 U			1.3 U		2.8	1.3 U	
	SP-2U	E80831-10	11/16/2000		29.1	110		29.1			29.1
SP-3	SP-3F	E80831-13	11/16/2000	5.2			5.2		2.5	5.2	
	SP-3U	E80831-12	11/16/2000		1,190	100		1,190			1,190
SP-4	SP-4F	E80831-15	11/16/2000	1.4 J			1.4 J		2.4	1.4 J	
	SP-4U	E80831-14	11/16/2000		82.6	96		82.6			82.6
SP-5	SP-5F	E80831-17	11/16/2000	1.3 U			1.3 U		5.2	1.3 U	
	SP-5U	E80831-16	11/16/2000		2,370	196		2,370			2,370
SP-6	SP-6F	E81101-11	11/16/2000	9.4			9.4		2.5	9.4	
	SP-6U	E81101-10	11/16/2000		1,280	98		1,280			1,280
SP-7	SP-7F	E81101-13	11/16/2000	2.3 U			2.3 U		4.0	2.3 U	
	SP-7U	E81101-12	11/16/2000		110	152		110			110
SP-8	SP-8F	E81101-15	11/17/2000	11.7			11.7		2.6	11.7	
	SP-8U	E81101-14	11/17/2000		74.9	104		74.9			74.9
SP-9	SP-9F	E81101-17	11/17/2000	27.5			27.5		3.0	27.5	
	SP-9U	E81101-16	11/17/2000		147	118		147			147
	SP-9U - SP DUP-1	E81101-1	11/17/2000		318	102		318			318
SP-10	SP-10F	E81101-19	11/17/2000	13.6			13.6		2.4	13.6	
	SP-10U	E81101-18	11/17/2000		54.4	94		54.4			54.4

Notes:
NJDEP GWQS = New Jersey Ground Water Quality Standards (N.J.A.C. 7:9-6 9/98)
NJDEP Surface Water Quality Standards (N.J.A.C. 5/00)
Aquatic SWQS for Lead is 2.5 ug/l (total)
Aquatic SWQS for Lead (dissolved) is dependent on hardness. The following equations will provide the new criteria.
Chronic criterion (dissolved) = WER x $e^{(mC(\ln(\text{hardness}))+bC)}$ x chronic CF
chronic CF = 1.46203 - ((ln hardness)(0.145712))
Shaded values meet or exceed New Jersey Quality Standards.
Bold values indicates concentrations above MDL.
Delaware River Basin Commission - Administrative Manual - Part III (October 23, 1995) TABLE 5: Stream Quality Objectives for Toxic Pollutants for the Protection of Aquatic Life in the Delaware River Estuary - Lead is 16 ug/l.
U = Not detected above the Contact Required Quantitation Limit (CRQL).
J = Estimated value.

TABLE 5-24

Matteo Iron & Metal

Potable Well Sample Results from PW-3

Sample ID	NJ Groundwater	NJ Drinking Water	PW-3	PW-3	PW-3
Lab Sample ID	Quality	Standards		N1485-1	N2393-1
Sampling Date	Standards		4/24/1998	10/25/2001	11/8/2001
Matrix				Drinking Water	Drinking Water
Units			ug/l	ug/l	ug/l
GC/MS Volatiles (EPA 524.2 REV 4.1)			Result	Result	Result
Acetone	700	NC	NT	**2.6**	**2.4**
cis-1,2-Dichloroethylene	10	70	NT	**2.2**	**2.4**
Methyl Tert Butyl Ether	NC	70*	NT	**0.7**	**0.41**
Vinyl chloride	5	2	NT	**3.5**	**4.8**
TOTAL TARGETED GC/MS Volatiles			NT	9	10.01
TOTAL NON-TARGETED GC/MS Volatiles	NC		NT	7.53	8.6
TOTAL GC/MS Volatiles			NT	16.53	18.61
Metals Analysis			Result	Result	Result
Arsenic	8	50	NT	**9**	**15**
Calcium	NC	NC	NT	19,800	19,600
Iron	300	300	**11,870**	**18,200**	**18,500**
Magnesium	NC	NC	NT	6,000	5,900
Manganese	50	50	**166**	**170**	**170**
Sodium	50,000	NC	NT	20,200	19,600
Zinc	5,000	5,000	NT	54	43

Notes

- NJDWS* = New Jersey Drinking Water Standards - November, 1996 N.J. MCL [A-280]. Analytes not listed did not meet or exceed criteria in any sample.
- Shaded values meet or exceed New Jersey Drinking Water Standards - November, 1996.
- Bold indicate concentrations above MDL.
- All results in ug/l.
- U = Not detected above the Contact Required Quantitation Limit (CRQL).
- NC = No Criteria.
- NT = Not tested.

TABLE 5-26
Matteo Iron and Metal
Sediment Sample Results: Lead

Sample Location	Sample ID	Lab ID	Date	Depth (ft)	Lead-Low Level (31 mg/kg)	Lead-High Level (250 mg/kg)	pH (su)
T1-A	T1-AA	E81104-1	11/16/2000	0-0.5	49.3	49.3	6
	T1-AB	E81104-2	11/16/2000	1-2	33.3	33.3	5.2
	T1-AC	E81104-3	11/16/2000	2-3	19	19	5
T1-B	T1-BA	E81104-4	11/16/2000	0-0.5	384	384	5.2
	T1-BB	E81104-5	11/16/2000	1-2	411	411	5.5
	T1-BC	E81104-6	11/16/2000	2-3	57	57	5.5
T1-C	T1-CA	E81104-11	11/16/2000	0-0.5	131	131	6.2
	T1-CB	E81104-12	11/16/2000	1-2	40.9	40.9	6.2
	T1-CC	E81104-13	11/16/2000	2-3	9.6	9.6	4.8
T1-D	T1-DA	E81104-7	11/16/2000	0-0.5	128	128	6.4
	TDUP-21/T1-DA	E81104-10	11/16/2000	0-0.5	282	282	6.4
	T1-DB	E81104-8	11/16/2000	1-2	158	158	4.9
	T1-DC	E81104-9	11/16/2000	2-3	25.1	25.1	4.9
T1-E	T1-EA	E81104-14	11/16/00	0-0.5	76.3	76.3	6
	T1-EB	E81104-15	11/16/2000	1-2	22	22	5.8
	T1-EC	E81104-16	11/16/2000	2-3	6.9	6.9	5.7
T2-A	T2-AA	E79744-13	10/31/2000	0-0.5	205	205	5.4
	T2-AB	E79744-14	10/31/2000	1-2	246	246	5.7
	T2-AC	E79744-15	10/31/2000	2-3	246	246	5.4
T2-B	T2-BA	E79745-10	10/31/2000	0-0.5	183	183	6.7
	T2-BB	E79745-11	10/31/2000	1-2	258	258	5.7
	T2-BC	E79744-12	10/31/2000	2-3	40.9	40.9	5.5
T2-C	T2-CA	E79745-7	10/31/2000	0-0.5	103	103	6.3
	T2-CB	E79745-8	10/31/2000	1-2	58.5	58.5	6.3
	T2-CC	E79745-9	10/31/2000	2-3	18.4	18.4	5.6
T2-D	T2-DA	E79745-4	10/31/2000	0-0.5	112	112	5.3
	T2-DB	E79745-5	10/31/2000	1-2	110	110	5.8
	T2-DC	E79745-6	10/31/2000	2-3	84.5	84.5	5.5
T2-E	T2-EA	E79745-1	10/31/2000	0-0.5	177	177	5.8
	T2-EB	E79745-2	10/31/2000	1-2	143	143	5.6
	T2-EC	E79745-3	10/31/2000	2-3	169	169	5.5
T3-A	T3-AA	E80832-1	11/15/2000	0-0.5	200	200	7.5
	T3-AB	E80832-2	11/15/2000	1-2	322	322	6
	T3-AC	E80832-3	11/15/2000	2-3	358	358	6
T3-B	T3-BA	E80832-4	11/15/2000	0-0.5	162	162	6.3
	T3-BB	E80832-5	11/15/2000	1-2	236	236	5.8
	T3-BC	E80832-6	11/15/2000	2-3	291	291	6.3
T3-C	T3-CA	E80833-8	11/15/2000	0-0.5	89.4	89.4	5.8
	T3-CB	E80833-9	11/15/2000	1-2	8.6	8.6	6.4
	T3-CC	E80833-10	11/15/2000	2-3	8.5	8.5	5.6
T3-D	T3-DA	E80831-5	11/15/2000	0-0.5	144	144	6.2
	T3-DB	E80831-6	11/15/2000	1-2	222	222	5.3
	T3-DC	E80831-7	11/15/2000	2-3	306	306	6
T3-E	T3-EA	E80832-7	11/15/2000	0-0.5	161	161	5.4
	TDUP-20/T3-EA	E80832-10	11/15/2000	0-0.5	191	191	6.7
	T3-EB	E80832-8	11/15/2000	1-2	177	177	6.1
	T3-EC	E80832-9	11/15/2000	2-3	206	206	5.9
T4-C	T4-CA	E79744-16	10/30/2000	0-0.5	69.4	69.4	6.5
	TDUP5/T4-CA	E79744-19	10/30/2000	0-0.5	57.2	57.2	6.7
	T4-CB	E79744-17	10/30/2000	1-2	28.9	28.9	6.3
	T4-CC	E79744-18	10/30/2000	2-3	21.3	21.3	6.1
T4-D	T4-DA	E79744-20	10/30/2000	0-0.5	271	271	5
	T4-DB	E79744-21	10/30/2000	1-2	202	202	5.4
	T4-DC	E79744-22	10/30/2000	2-3	380	380	5.6
T4-E	T4-EA	E79744-1	10/30/2000	0-0.5	381	381	6.2
	T4-EB	E79744-2	10/30/2000	1-2	1,050	1,050	4.9
	T4-EC	E79744-3	10/30/2000	2-3	391	391	5.5
T5-C	T5-CA	E79743-8	10/31/2000	0-0.5	88.4	88.4	6.9
	T5-CB	E79743-9	10/31/2000	1-2	13.8	13.8	5.9
	T5-CC	E79743-10	10/31/2000	2-3	12.3	12.3	5.8
T5-D	T5-DA	E79743-5	10/30/2000	0-0.5	437	437	5.5
	T5-DB	E79743-6	10/30/2000	1-2	232	232	5.8
	T5-DC	E79743-7	10/30/2000	2-3	238	238	5.8
T5-E	T5-EA	E79743-2	10/30/2000	0-0.5	14.5	14.5	5.8
	T5-EB	E79743-3	10/30/2000	1-2	17.9	17.9	5.7
	T5-EC	E79743-4	10/30/2000	2-3	11.1	11.1	5.1
T6-C	T6-CA	E79744-10	10/30/2000	0-0.5	25.3	25.3	5.4
	T6-CB	E79744-11	10/30/2000	1-2	33	33	5.8
	T6-CC	E79743-1	10/30/2000	2-3	10.5	10.5	5.6
T6-D	T6-DA	E79744-7	10/30/2000	0-0.5	216	216	6
	T6-DB	E79744-8	10/30/2000	1-2	243	243	5.9
	T6-DC	E79744-9	10/30/2000	2-3	206	206	5.8
T6-E	T6-EA	E79744-4	10/30/2000	0-0.5	2,070	2,070	5.8
	T6-EB	E79744-5	10/30/2000	1-2	262	262	6
	T6-EC	E79744-6	10/30/2000	2-3	220	220	5.8
T7-C	T7-CA	E79745-13	10/31/2000	0-0.5	25.5	25.5	6.1
	T7-CB	E79745-14	10/31/2000	1-2	15.5	15.5	5.6
	T7-CC	E79745-15	10/31/2000	2-3	17.5	17.5	5.9

TABLE 5-26
Matteo Iron and Metal
Sediment Sample Results: Lead

Sample Location	Sample ID	Lab ID	Date	Depth (ft)	Lead-Low Level (31 mg/kg)	Lead-High Level (250 mg/kg)	pH (su)
T7-D	T7-DA	E79745-16	10/31/2000	0-0.5	36.7	36.7	5.8
	T7-DB	E79745-17	10/31/2000	1-2	135	135	5.8
	T7-DC	E79745-18	10/31/2000	2-3	141	141	5.9
T7-E	T7-EA	E79743-11	10/31/2000	0-0.5	1,940	1,940	5.1
	T7-EB	E79743-12	10/31/2000	1-2	62.7	62.7	5.2
	T7-EC	E79743-13	10/31/2000	2-3	130	130	5.5
T8-C	T8-CA	E79743-20	10/31/2000	0-0.5	25.3	25.3	6
	TDUP6/T8-CA	E79745-12	10/31/2000	0-0.5	173	173	6.2
	T8-CB	E79743-21	10/31/2000	1-2	201	201	6.6
	T8-CC	E79743-22	10/31/2000	2-3	28.4	28.4	5.6
T8-D	T8-DA	E79743-17	10/31/2000	0-0.5	34.1	34.1	5.8
	T8-DB	E79743-18	10/31/2000	1-2	169	169	6.1
	T8-DC	E79743-19	10/31/2000	2-3	24.6	24.6	6.2
T8-E	T8-EA	E79743-14	10/31/2000	0-0.5	788	788	5.8
	T8-EB	E79743-15	10/31/2000	1-2	71.8	71.8	5.5
	T8-EC	E79743-16	10/31/2000	2-3	31.4	31.4	5.2
T9-A	T9-AA	E80555-7	11/10/2000	0-0.5	172	172	5.6
	TDUP-17/T9-AA	E80555-10	11/10/2000	0-0.5	137	137	5.6
	T9-AB	E80555-8	11/10/2000	1-2	228	228	5.7
	T9-AC	E80555-9	11/10/2000	2-3	271	271	6
T9-B	T9-BA	E80555-11	11/10/2000	0-0.5	158	158	5.6
	T9-BB	E80555-12	11/10/2000	1-2	248	248	6.2
	T9-BC	E80555-13	11/10/2000	2-3	245	245	5.8
T9-C	T9-CA	E80555-4	11/10/2000	0-0.5	142	142	6
	T9-CB	E80555-5	11/10/2000	1-2	224	224	6.4
	T9-CC	E80555-6	11/10/2000	2-3	16.7	16.7	6.5
T9-D	T9-DA	E80555-1	11/10/2000	0-0.5	1,720	1,720	6.7
	T9-DB	E80555-2	11/10/2000	1-2	195	195	6.2
	T9-DC	E80555-3	11/10/2000	2-3	109	109	6.2
T9-E	T9-EA	E80555-14	11/10/2000	0-0.5	15,300	15,300	6.1
	T9-EB	E80555-15	11/10/2000	1-2	25,200	25,200	5.8
	T9-EC	E80555-16	11/10/2000	2-3	19,500	19,500	5.7
T11-A	T11-AA	E79555-11	10/27/2000	0-0.5	181	181	5.3
	T11-AB	E79555-12	10/27/2000	1-2	269	269	5.6
	T11-AC	E79555-13	10/27/2000	2-3	277	277	5.6
T11-B	T11-BA	E79555-14	10/27/2000	0-0.5	152	152	5.9
	T11-BB	E79555-15	10/27/2000	1-2	293	293	5.6
	T11-BC	E79555-16	10/27/2000	2-3	265	265	5.5
T11-C	T11-CA	E79555-8	10/27/2000	0-0.5	223	223	5.6
	T11-CB	E79555-9	10/27/2000	1-2	228	228	5.8
	T11-CC	E79555-10	10/27/2000	2-3	265	265	5.7
T11-D	T11-DA	E79555-4	10/27/2000	0-0.5	232	232	5.8
	TDUP4/T11-DA	E79555-7	10/27/2000	0-0.5	274	274	5.8
	T11-DB	E79555-5	10/27/2000	1-2	358	358	6.1
	T11-DC	E79555-6	10/27/2000	2-3	214	214	5.7
T11-E	T11-EA	E79555-1	10/27/00	0-0.5	2,490	2,490	5.6
	T11-EB	E79555-2	10/27/2000	1-2	778	778	5.9
	T11-EC	E79555-3	10/27/2000	2-3	277	277	6.2
T13-A	T13-AA	E79453-3	10/25/2000	0-0.5	132	132	5.6
	T13-AB	E79453-4	10/25/2000	1-2	98.6	98.6	5.6
	T13-AC	E79453-5	10/25/2000	2-3	95	95	5.7
T13-BA	T13-BA	E79452-21	10/25/2000	0-0.5	97.1	97.1	5.8
	T13-BB	E79453-1	10/25/2000	1-2	55.8	55.8	5.7
	T13-BC	E79453-2	10/25/2000	2-3	191	191	5.4
T13-C	T13-CA	E79452-15	10/25/2000	0-0.5	155	155	6.5
	T13-CB	E79452-16	10/25/2000	1-2	31.9	31.9	6.4
	T13-CC	E79452-17	10/25/2000	2-3	13.3	13.3	6.3
T13-D	T13-DA	E79452-18	10/25/2000	0-0.5	179	179	5.8
	T13-DB	E79452-19	10/25/2000	1-2	168	168	6.1
	T13-DC	E79452-20	10/25/2000	2-3	17.1	17.1	6.4
T13-E	T13-EA	E79452-11	10/25/00	2.0-2.5	788	788	8
	TDUP2/T13-EA	E79452-14	10/25/2000	0-0.5	221	221	6.6
	T13-EB	E79452-12	10/25/2000	1-2	35,200	35,200	6
	T13-EC	E79452-13	10/25/2000	2-3	7,000	7,000	6.2
T14-A	T14-AA	E78963-7	10/18/2000	0-0.5	266	266	5.8
	T14-AB	E78963-8	10/18/2000	1-2	220	220	5.7
	T14-AC	E78963-9	10/18/2000	2-3	162	162	5.8
T14-B	T14-BA	E78963-4	10/18/2000	0-0.5	125	125	6.7
	T14-BB	E78963-5	10/18/2000	1-2	196	196	6.2
	T14-BC	E78963-6	10/18/2000	2-3	214	214	6
T14-C	T14-CA	E78964-6	10/18/2000	0-0.5	10.7	10.7	6.2
	T14-CB	E78964-7	10/18/2000	1-2	9.2	9.2	5.4
	T14-CC	E78964-8	10/18/2000	2-3	10.2	10.2	5.3
T14-D	T14-DA	E78963-1	10/18/2000	0-0.5	668	668	6.5
	T14-DB	E78963-2	10/18/2000	1-2	9.5	9.5	6.4
	T14-DC	E78963-3	10/18/2000	2-3	13.9	13.9	6
T14-E	T14-EA	E78964-9	10/18/00	1.0-1.5	9,970	9,970	5.5
	T14-EB	E78964-10	10/18/2000	1-2	246	246	5.7
	T14-EC	E78964-11	10/18/2000	2-3	2,240	2,240	5.5
	T15-AA	E78963-18	10/17/2000	0-0.5	168	168	5.9

TABLE 5-26
Matteo Iron and Metal
Sediment Sample Results: Lead

Sample Location	Sample ID	Lab ID	Date	Depth (ft)	Lead-Low Level (31 mg/kg)	Lead-High Level (250 mg/kg)	pH (su)
T15-A	T15-AB	E78963-19	10/17/2000	1-2	27.8	27.8	5.9
	T15-AC	E78963-20	10/17/2000	2-3	8.9	8.9	6
T15-B	T15-BA	E78963-21	10/17/2000	0-0.5	209	209	6.5
	T15-BB	E78964-1	10/17/2000	1-2	167	167	5.7
	T15-BC	E78964-2	10/17/2000	2-3	68.2	68.2	5.4
T15-C	T15-CA	E78964-3	10/18/2000	0-0.5	10.2	10.2	5.9
	T15-CB	E78964-4	10/18/2000	1-2	10.4	10.4	5.6
	T15-CC	E78964-5	10/18/2000	2-3	8.6	8.6	5.8
T15-D	T15-DA	E78963-15	10/17/2000	0-0.5	10.3	10.3	6.5
	T15-DB	E78963-16	10/17/2000	1-2	8.8	8.8	6.4
	T15-DC	E78963-17	10/17/2000	2-3	11.1	11.1	6.2
T15-E	T15-EA	E78963-11	10/17/00	0-0.5	494	494	6.1
	TDUP-1/T15-EA	E78963-14	10/17/2000	0-0.5	594	594	5.4
	T15-EB	E78963-12	10/17/2000	1-2	262	262	5.7
	T15-EC	E78963-13	10/17/2000	2-3	274	274	6.1
T16-A	T16-AA	E79452-1	10/26/2000	0-0.5	169	169	6.8
	T16-AB	E79452-2	10/26/2000	1-2	186	186	5.9
	TDUP3/T16-AB	E79452-4	10/26/2000	1-2	171	171	6
	T16-AC	E79452-3	10/26/2000	2-3	21.5	21.5	6.1
T16-B	T16-BA	E79452-8	10/26/2000	0-0.5	113	113	6.9
	T16-BB	E79452-9	10/26/2000	1-2	115	115	6.6
	T16-BC	E79452-10	10/26/2000	2-3	11.8	11.8	5.7
T16-C	T16-CA	E79452-5	10/26/2000	0-0.5	93	93	6.8
	T16-CB	E79452-6	10/26/2000	1-2	12.1	12.1	7
	T16-CC	E79452-7	10/26/2000	2-3	12.6	12.6	6
T16-D	T16-DA	E79453-6	10/26/2000	0-0.5	152	152	5.6
	T16-DB	E79453-7	10/26/2000	1-2	65.5	65.5	5.9
	T16-DC	E79453-8	10/26/2000	2-3	11.5	11.5	6.1
T16-E	T16-EA	E79453-9	10/26/00	0-0.5	274	274	5.1
	T16-EB	E79453-10	10/26/2000	1-2	217	217	5.2
	T16-EC	E79453-11	10/26/2000	2-3	28.8	28.8	5.3
T17-A	T17-AA	E79931-16	11/2/2000	0-0.5	171	171	5.8
	T17-AB	E79931-17	11/2/2000	1-2	168	168	6.1
	T17-AC	E79931-18	11/2/2000	2-3	2,130	2,130	6.5
T17-B	T17-BA	E79931-13	11/2/2000	0-0.5	241	241	6
T17-B	T17-BB	E79931-14	11/2/2000	1-2	1,090	1,090	5.9
	T17-BC	E79931-15	11/2/2000	2-3	156	156	5.9
T17-C	T17-CA	E79932-6	11/2/2000	0-0.5	13.2	13.2	6.4
	T17-CB	E79932-7	11/2/2000	1-2	11.6	11.6	6.5
	T17-CC	E79932-8	11/2/2000	2-3	10.1	10.1	5.9
T17-D	T17-DA	E79932-9	11/2/2000	0-0.5	141	141	6.1
	TDUP-9/T17-DA	E79932-10	11/2/2000	0-0.5	146	146	6.1
	T17-DB	E79931-11	11/2/2000	1-2	20.9	20.9	6
	T17-DC	E79931-12	11/2/2000	2-3	14.6	14.6	5.8
T17-E	T17-EA	E79931-7	11/01/00	0-0.5	66.8	66.8	6.4
	T17-EB	E79931-8	11/1/2000	1-2	52	52	6.5
	T17-EC	E79931-9	11/1/2000	2-3	8.5	8.5	6.3
T18-A	T18-AA	E80833-1	11/15/2000	0-0.5	127	127	5.9
	T18-AB	E80833-2	11/15/2000	1-2	181	181	6
	T18-AC	E80833-3	11/15/2000	2-3	9.1	9.1	7.1
T18-B	T18-BA	E80833-4	11/15/2000	0-0.5	46.8	46.8	6.7
	TDUP-19/T18-BA	E80833-7	11/15/2000	0-0.5	70.2	70.2	7
	T18-BB	E80833-5	11/15/2000	1-2	26.8	26.8	6.2
	T18-BC	E80833-6	11/15/2000	2-3	8	8	6.9
T18-C	T18-CA	E80720-12	11/13/2000	0-0.5	70.7	70.7	6.6
	T18-CB	E80720-13	11/13/2000	1-2	10.2	10.2	6.7
	T18-CC	E80720-14	11/13/2000	2-3	10.7	10.7	6
T18-D	T18-DA	E80721-9	11/14/2000	0-0.5	27.4	27.4	6.6
	T18-DB	E80721-10	11/14/2000	1-2	23	23	6.7
	T18-DC	E80720-11	11/13/2000	2-3	98.6	98.6	6.7
T18-E	T18-EA	E80721-6	11/14/00	0-0.5	191	191	5.9
	T18-EB	E80721-7	11/14/2000	1-2	117	117	7.1
	T18-EC	E80721-8	11/14/2000	2-3	34.7	34.7	6
T19-A	T19-AA	E79931-4	11/1/2000	0-0.5	177	177	6.3
	T19-AB	E79931-5	11/1/2000	1-2	131	131	6.1
	T19-AC	E79931-6	11/1/2000	2-3	135	135	5.9
T19-B	T19-BA	E79931-1	11/1/2000	0-0.5	112	112	6.6
	T19-BB	E79931-2	11/1/2000	1-2	10.7	10.7	6.7
	T19-BC	E79931-3	11/1/2000	2-3	10.6	10.6	6.3
T19-C	T19-CA	E79933-1	11/1/2000	0-0.5	9.3	9.3	7
	T19-CB	E79933-2	11/1/2000	1-2	9.7	9.7	6.7
	T19-CC	E79933-3	11/1/2000	2-3	8.9	8.9	6.5

TABLE 5-26
Matteo Iron and Metal
Sediment Sample Results: Lead

Sample Location	Sample ID	Lab ID	Date	Depth (ft)	Lead-Low Level (31 mg/kg)	Lead-High Level (250 mg/kg)	pH (su)
T19-D	T19-DA	E79933-8	11/1/2000	0-0.5	31.6	31.6	6.6
	T19-DB	E79933-9	11/1/2000	1-2	12.1	12.1	6.6
	T19-DC	E79933-10	11/1/2000	2-3	6.5	6.5	5.9
T19-E	T19-EA	E79933-4	11/01/00	0-0.5	166	166	6.2
	TDUP-7/T19-EA	E79933-7	11/1/2000	0-0.5	185	185	6.2
	T19-EB	E79933-5	11/1/2000	1-2	9.9	9.9	6.7
	T19-EC	E79933-6	11/1/2000	2-3	9.3	9.3	6.9
T20-A	T20-AA	E79931-10	11/2/2000	0-0.5	104	104	5.8
	T20-AB	E79932-1	11/2/2000	1-2	178	178	6.2
	T20-AC	E79932-2	11/2/2000	2-3	220	220	6.1
T20-B	T20-BA	E79932-3	11/2/2000	0-0.5	88.1	88.1	6.6
	T20-BB	E79932-4	11/2/2000	1-2	57.4	57.4	6
	T20-BC	E79932-5	11/2/2000	2-3	119	119	6.2
T20-C	T20-CA	E79932-17	11/2/2000	0-0.5	21.2	21.2	6.1
	TDUP-8/T20-CA	E79932-20	11/2/2000	0-0.5	25.9	25.9	6.2
	T20-CB	E79932-18	11/2/2000	1-2	72	72	6.5
	T20-CC	E79932-19	11/2/2000	2-3	24.4	24.4	6.3
T20-D	T20-DA	E79932-14	11/2/2000	0-0.5	120	120	6.5
	T20-DB	E79932-15	11/2/2000	1-2	177	177	6.3
	T20-DC	E79932-16	11/2/2000	2-3	153	153	6.3
T20-E	T20-EA	E79932-11	11/02/00	0-0.5	87.9	87.9	5.5
	T20-EB	E79932-12	11/2/2000	1-2	165	165	6
	T20-EC	E79932-13	11/2/2000	2-3	116	116	6.2
T21-A	T21-AA	E80047-14	11/03/00	0-0.5	231	231	6.3
	T21-AB	E80047-15	11/3/2000	1-2	110	110	6.6
	T21-AC	E80047-16	11/3/2000	2-3	100	100	6.5
T21-B	T21-BA*	E80157-17	11/6/2000	0-3	160	160	6.8
T21-C	T21-CB*	E80047-17	11/3/2000	0-3	6.9	6.9	7.3
T21-D	T21-DA	E80047-11	11/3/2000	0-0.5	20.3	20.3	6.6
	T21-DB	E80047-12	11/3/2000	1-2	11.8	11.8	6.4
	T21-DC	E80047-13	11/3/2000	2-3	15.7	15.7	6.5
T21-E	T21-EA	E80048-7	11/3/2000	0-0.5	11.7	11.7	6
	TDUP11/T21-EA	E80048-10	11/3/2000	0-0.5	9.3	9.3	6.8
	T21-EB	E80048-8	11/3/2000	1-2	9.7	9.7	6.4
	T21-EC	E80048-9	11/3/2000	2-3	2.9	2.9	5.9
T22-A	T22-AA	E80556-9	11/9/2000	0-0.5	37.6	37.6	6
	TDUP-16/T22-AA	E80556-19	11/9/2000	0-0.5	96.3	96.3	5.5
	T22-AB	E80556-10	11/9/2000	1-2	189	189	5.8
	T22-AC	E80554-11	11/9/2000	2-3	151	151	6
T22-B	T22-BA	E80554-12	11/9/2000	0-0.5	80.4	80.4	6
	T22-BB	E80554-13	11/9/2000	1-2	48.3	48.3	6
	T22-BC	E80554-14	11/9/2000	2-3	21.1	21.1	6.2
T22-C	T22-CA	E80721-2	11/14/2000	0-0.5	9	9	6.5
	T22-CB	E80721-3	11/14/2000	2-3	7.7	7.7	6.3
	T22-CC	E80721-4	11/14/2000	2-3	14.1	14.1	6.1
T22-D	T22-DA	E80554-15	11/9/2000	0-0.5	12.1	12.1	6
	T22-DB	E80554-16	11/9/2000	1-2	11.5	11.5	6.1
	T22-DC	E80554-17	11/9/2000	2-3	12.7	12.7	5.8
T22-E	T22-EA	E80556-6	11/09/00	0-0.5	98.2	98.2	5.5
	T22-EB	E80556-7	11/9/2000	1-2	126	126	5
	T22-EC	E80556-8	11/9/2000	2-3	157	157	5.5
T23-A	T23-AA	E81102-1	11/17/2000	0-0.5	51.7	51.7	5.9
	T23-AB	E81102-2	11/17/2000	1-2	85.5	85.5	6.4
	T23-AC	E81102-3	11/17/2000	2-3	109	109	6.4
T23-B	T23-BA	E81102-4	11/17/2000	0-0.5	8.8	8.8	7
	TDUP-22/T23-BA	E81102-7	11/17/2000	0-0.5	10.6	10.6	7.1
	T23-BB	E81102-5	11/17/2000	1-2	11.3	11.3	7
	T23-BC	E81102-6	11/17/2000	2-3	11.7	11.7	6.6
T23-C	T23-CA	E81102-8	11/17/2000	0-0.5	41.6	41.6	6.8
T23-C	T23-CB*	E81102-9	11/17/2000	0-3	38.8	38.8	5.6
T23-D	T23-DA	E81102-10	11/17/2000	0-0.5	93.3	93.3	6.8
	T23-DB	E81103-1	11/17/2000	1-2	10.8	10.8	6.3
	T23-DC	E81103-2	11/17/2000	2-3	9.1	9.1	6.1
T23-E	T23-EA	E81103-3	11/17/00	0-0.5	98.3	98.3	5
	T23-EB	E81103-4	11/17/2000	1-2	54.3	54.3	5.8
T24-A	T24-AA	E80318-7	11/8/2000	0-0.5	35.6	35.6	6.4
	T24-AB	E80318-8	11/8/2000	1-2	28.8	28.8	6.3
	T24-AC	E80318-9	11/8/2000	2-3	17.1	17.1	6.1
T24-B	T24-BA	E80318-10	11/8/2000	0-0.5	8.7	8.7	5.8
	TDUP14/T24-BA	E80318-13	11/8/2000	0-0.5	9.3	9.3	6.1
	T24-BB	E80318-11	11/8/2000	1-2	9.5	9.5	5.8
	T24-BC	E80318-12	11/8/2000	2-3	9.1	9.1	5.5
T24-D	T24-DA	E80318-14	11/8/2000	0-0.5	148	148	6.2
	T24-DB	E80318-15	11/8/2000	1-2	197	197	6.3
	T24-DC	E80318-16	11/8/2000	2-3	158	158	6.5
T24-E	T24-EA	E80556-3	11/09/00	0-0.5	15.3	15.3	5.4
	T24-EB	E80556-4	11/9/2000	1-2	285	285	5.2
	T24-EC	E80556-5	11/9/2000	2-3	9.9	9.9	5.2
T25-A	T25-AA	E80556-1	11/9/2000	0-0.5	33.2	33.2	6.1
	T25-AB	E80556-2	11/9/2000	1-2	15.7	15.7	5.8

TABLE 5-26
Matteo Iron and Metal
Sediment Sample Results: Lead

Sample Location	Sample ID	Lab ID	Date	Depth (ft)	Lead-Low Level (31 mg/kg)	Lead-High Level (250 mg/kg)	pH (su)
T25-B	T25-BA	E80554-9	11/9/2000	0-0.5	137	137	6.9
	T25-BB*	E80554-10	11/9/2000	0-3	28.7	28.7	6.9
T25-C	T25-CA	E80554-8	11/9/2000	0-0.5	61.9	61.9	6.7
	T25-CB*	E80554-7	11/9/2000	0-3	55.8	55.8	6.4
T25-D	T25-DA	E80554-4	11/9/2000	0-0.5	37.9	37.9	6.6
	T25-DB	E80554-5	11/9/2000	1-2	41.4	41.4	6.5
	T25-DC	E80554-6	11/9/2000	2-3	30.8	30.8	6.5
T25-E	T25-EA	E80554-1	11/09/00	0-0.5	51	51	5.3
	TDUP-15/T25-EA	E80554-18	11/9/2000	0-0.5	86.6	86.6	6.1
	T25-EB	E80554-2	11/9/2000	1-2	11.8	11.8	5.7
	T25-EC	E80554-3	11/9/2000	2-3	10.9	10.9	6.3
T26-A	T26-AA	E80047-1	11/3/2000	0-0.5	117	117	6.7
	TDUP-10/T26-AA	E80047-4	11/3/2000	0-0.5	92	92	6.1
	T26-AB	E80047-2	11/3/2000	1-2	162	162	5.7
	T26-AC	E80047-3	11/3/2000	2-3	175	175	6
T26-B	T26-BA	E80048-4	11/3/2000	0-0.5	78.8	78.8	6.3
	T26-BB	E80048-5	11/3/2000	1-2	199	199	6.3
	T26-BC	E80048-6	11/3/2000	2-3	164	164	6.4
T26-C	T26-CA	E80048-1	11/3/2000	0-0.5	8.6	8.6	6.8
	T26-CB	E80048-2	11/3/2000	1-2	8.4	8.4	6.3
	T26-CC	E80048-3	11/3/2000	2-3	9.5	9.5	6.8
T26-D	T26-DA	E80047-8	11/3/2000	0-0.5	35.6	35.6	6.8
	T26-DB	E80047-9	11/3/2000	1-2	15	15	6.7
	T26-DC	E80047-10	11/3/2000	2-3	11.8	11.8	6.6
T26-E	T26-EA	E80047-5	11/3/2000	0-0.5	186	186	5.5
	T26-EB	E80047-6	11/3/2000	1-2	204	204	6.1
	T26-EC	E80047-7	11/3/2000	2-3	80.3	80.3	6.8
T27-A	T27-AA	E81103-18	11/17/2000	0-0.5	66	66	5.8
	T27-AB	E81103-19	11/17/2000	1-2	79.8	79.8	5.6
	T27-AC	E81103-20	11/17/2000	2-3	75.6	75.6	5.7
T27-B	T27-BA	E81103-15	11/17/2000	0-0.5	76.9	76.9	5.5
	T27-BB	E81103-16	11/17/2000	1-2	191	191	6.1
	T27-BC	E81103-17	11/17/2000	2-3	149	149	6.2
T27-C	T27-CA	E81103-11	11/17/2000	0-0.5	164	164	6
	TDUP-23/T27-CA	E81103-14	11/17/2000	0-0.5	154	154	6
	T27-CB	E81103-12	11/17/2000	1-2	116	116	6
	T27-CC	E81103-13	11/17/2000	2-3	11.3	11.3	6.5
T27-D	T27-DA	E81103-8	11/17/2000	0-0.5	46.3	46.3	5.4
	T27-DB	E81103-9	11/17/2000	1-2	204	204	6
	T27-DC	E81103-10	11/17/2000	2-3	117	117	5.6
T27-E	T27-EA	E81103-5	11/17/2000	0-0.5	64	64	5.8
	T27-EB	E81103-6	11/17/2000	1-2	136	136	5.6
	T27-EC	E81103-7	11/17/2000	2-3	180	180	5.5
T28-A	T28-AA	E80157-11	11/6/2000	0-0.5	93.5	93.5	5.7
	T28-AB	E80157-12	11/6/2000	1-2	153	153	5.9
	T28-AC	E80157-13	11/6/2000	2-3	238	238	5.8
T28-B	T28-BA	E80157-7	11/6/2000	0-0.5	85.5	85.5	5.9
	TDUP12/T28-BA	E80157-10	11/6/2000	0-0.5	98.3	98.3	5.9
	T28-BB	E80157-8	11/6/2000	1-2	141	141	6.1
	T28-BC	E80157-9	11/6/2000	2-3	159	159	6.3
T28-C	T28-CA	E80157-14	11/6/2000	0-0.5	24.4	24.4	6.6
	T28-CB	E80157-15	11/6/2000	1-2	14.1	14.1	6.8
	T28-CC	E80157-16	11/6/2000	2-3	8.1	8.1	5.2
T28-D	T28-DA	E80157-4	11/6/2000	0-0.5	185	185	5.5
	T28-DB	E80157-5	11/6/2000	1-2	150	150	5.8
	T28-DC	E80157-6	11/6/2000	2-3	162	162	6.3
T28-E	T28-EA	E80157-1	11/6/2000	0-0.5	102	102	8.3
	T28-EB	E80157-2	11/6/2000	1-2	38.5	38.5	5.6
	T28-EC	E80157-3	11/6/2000	2-3	9.5	9.5	5.4
T29-A	T29-AA	E80317-7	11/8/2000	0-0.5	241	241	6.1
	TDUP13/T29-AA	E80317-10	11/8/2000	0-0.5	122	122	5.8
	T29-AB	E80317-8	11/8/2000	1-2	142	142	5.9
	T29-AC	E80317-9	11/8/2000	2-3	199	199	6
T29-B	T29-BA	E80318-1	11/8/2000	0-0.5	90.4	90.4	6.2
	T29-BB	E80318-2	11/8/2000	1-2	101	101	5.9
	T29-BC	E80318-3	11/8/2000	2-3	134	134	6.1
T29-C	T29-CA	E80318-4	11/8/2000	0-0.5	75.3	75.3	6.3
	T29-CB	E80318-5	11/8/2000	1-2	20.3	20.3	6.3
	T29-CC	E80318-6	11/8/2000	2-3	10.6	10.6	6.3
T29-D	T29-DA	E80317-4	11/8/2000	0-0.5	117	117	5.8
	T29-DB	E80317-5	11/8/2000	1-2	190	190	5.6
	T29-DC	E80317-6	11/8/2000	2-3	206	206	6.1
T29-E	T29-EA	E80317-1	11/8/2000	0-0.5	149	149	5.9
	T29-EB	E80317-2	11/8/2000	1-2	159	159	5.7
	T29-EC	E80317-3	11/8/2000	2-3	283	283	5.7
T30-A	T30-AA	E80720-1	11/13/2000	0-0.5	111	111	5.7
	T30-AB	E80720-2	11/13/2000	1-2	227	227	6.1
	T30-AC	E80720-3	11/13/2000	2-3	202	202	6.3

TABLE 5-26
Matteo Iron and Metal
Sediment Sample Results: Lead

Sample Location	Sample ID	Lab ID	Date	Depth (ft)	Lead-Low Level (31 mg/kg)	Lead-High Level (250 mg/kg)	pH (su)
T30-B	T30-BA	E80720-4	11/13/2000	0-0.5	124	124	6
	TDUP-18/T30-BA	E80721-16	11/13/2000	0-0.5	126	126	4.8
	T30-BB	E80720-5	11/13/2000	1-2	270	270	6
	T30-BC	E80720-6	11/13/2000	2-3	116	116	5.8
T30-C	T30-CA	E80721-13	11/13/2000	0-0.5	131	131	6.7
	T30-CB	E80721-14	11/13/2000	1-2	11.7	11.7	6.6
	T30-CC	E80721-15	11/13/2000	2-3	14.6	14.6	5.2
T30-D	T30-DA	E80720-7	11/13/2000	0-0.5	202	202	6
	T30-DB	E80720-8	11/13/2000	1-2	201	201	5.7
	T30-DC	E80720-9	11/13/2000	2-3	204	204	6.2
T30-E	T30-EA	E80720-10	11/13/2000	0-0.5	254	254	5.7
	T30-EB	E80721-11	11/13/2000	1-2	198	198	5.7
	T30-EC	E80721-12	11/13/2000	2-3	17.5	17.5	5.6
S1	S1	E80721-1	11/13/2000	0-0.5	149	149	6.2
S2	S2	E80721-20	11/13/2000	0-0.5	339	339	5.6
S3	S3	E80721-19	11/13/2000	0-0.5	309	309	5.7
S4	S4	E80721-17	11/13/2000	0-0.5	154	154	5.8
S5	S5	E80721-18	11/13/2000	0-0.5	194	194	5.8
S6	S6	E80721-5	11/14/2000	0-0.5	61.7	61.7	5.9
S7	S7-A	E81170-19	11/20/2000	0-0.5	115	115	5.9
	SDUP-1/S7-A	E81104-18	11/20/2000	0-0.5	121	121	5.9
	S7-B	E81170-20	11/20/2000	1-2	202	202	6.1
	S7-C	E81104-17	11/20/2000	2-3	107	107	6.2
S8	S8-A	E81170-16	11/20/2000	0-0.5	269	269	5.6
	S8-B	E81170-17	11/20/2000	1-2	174	174	5.5
	S8-C	E81170-18	11/20/2000	2-3	50.1	50.1	5.9
S9	S9-A	E81170-13	11/20/2000	0-0.5	126	126	5.6
	S9-B	E81170-14	11/20/2000	1-2	151	151	5.6
	S9-C	E81170-15	11/20/2000	2-3	197	197	5.9
S10	S10-A	E81170-10	11/20/2000	0-0.5	108	108	5.9
	S10-B	E81170-11	11/20/2000	1-2	163	163	5.6
	S10-C	E81170-12	11/20/2000	2-3	195	195	6.3
S11	S11-A	E81170-7	11/20/2000	0-0.5	142	142	5.8
	S11-B	E81170-8	11/20/2000	1-2	177	177	6.1
	S11-C	E81170-9	11/20/2000	2-3	177	177	6.2
S12	S12-A	E81170-4	11/20/2000	0-0.5	235	235	5.8
	S12-B	E81170-5	11/20/2000	1-2	188	188	5.9
	S12-C	E81170-6	11/20/2000	2-3	242	242	6.2
S13	S13-A	E81170-1	11/20/2000	0-0.5	58.4	58.4	5.5
	S13-B	E81170-2	11/20/2000	1-2	137	137	5.3
	S13-C	E81170-3	11/20/2000	2-3	254	254	5.8
S13	S14	E81503-1	11/28/00	0-0.5	35.7	35.7	6.1

Notes:
-NJDEP GSQE - NJDEP Guidance For Sediment Quality Evaluations (11/98), Freshwater Sediment Screening Guidelines - Ontario (Persaud et al., 1993)
-Shaded values meet or exceed New Jersey Guidance For Sediment Quality Evalutations - Lowest Effects Level (11/98),
U = Not detected above the Contract Required Quantitation Limit (CRQL).
J = Estimated value.
NA = Not Available
* = Composite Sample

TABLE 5-27
Matteo Iron and Metal
Sediment Sample Results: PCBs

Sample Location	Sample ID	Lab ID	Date	Depth (ft)	Aroclor 1248			Aroclor 1254			Aroclor 1260			Total PCB			pH (su)	TOC
					Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria		
T1-A	T1-AA	E81104-1	11/16/2000	0-0.5	0.060 U	0.03	3.33	0.060 U	0.06	0.755	0.060 U	0.005	0.533	0.060 U	0.07	11.766	6	22,200
	T1-AB	E81104-2	11/16/2000	1-2	0.054 U	0.03	2.325	0.054 U	0.06	0.527	0.054 U	0.005	0.372	0.054 U	0.07	8.215	5.2	15,500
	T1-AC	E81104-3	11/16/2000	2-3	0.042 U	0.03	1.89	0.042 U	0.06	0.428	0.042 U	0.005	0.302	0.042 U	0.07	6.678	5	12,600
T1-B	T1-BA	E81104-4	11/16/2000	0-0.5	0.093 U	0.03	15	0.093 U	0.06	3.4	0.093 U	0.005	2.4	0.093 U	0.07	53	5.2	108,000
	T1-BB	E81104-5	11/16/2000	1-2	0.092 U	0.03	15	0.092 U	0.06	3.4	0.092 U	0.005	2.4	0.092 U	0.07	53	5.5	101,000
	T1-BC	E81104-6	11/16/2000	2-3	0.088 U	0.03	13.47	0.088 U	0.06	3.053	0.088 U	0.005	2.155	0.088 U	0.07	47.594	5.5	89,800
T1-C	T1-CA	E81104-11	11/16/2000	0-0.5	0.038 U	0.03	5.445	0.038 U	0.06	1.234	0.038 U	0.005	0.871	0.038 U	0.07	19.239	6.2	36,300
	T1-CB	E81104-12	11/16/2000	1-2	0.043 U	0.03	6.69	0.043 U	0.06	1.516	0.043 U	0.005	1.070	0.043 U	0.07	23.638	6.2	44,600
	T1-CC	E81104-13	11/16/2000	2-3	0.046 U	0.03	3.48	0.046 U	0.06	0.789	0.046 U	0.005	0.557	0.046 U	0.07	12.296	4.8	23,200
T1-D	T1-DA	E81104-7	11/16/2000	0-0.5	0.034 U	0.03	3.84	0.034 U	0.06	0.870	0.034 U	0.005	0.614	0.034 U	0.07	13.568	6.4	25,600
	TDUP-21/ T1-DA	E81104-10	11/16/2000	0-0.5	0.180 U	0.03	15	0.180 U	0.06	3.4	0.180 U	0.005	2.4	0.180 U	0.07	53	6.4	171,000
	T1-DB	E81104-8	11/16/2000	1-2	0.120 U	0.03	15	0.120 U	0.06	3.4	0.120 U	0.005	2.4	0.120 U	0.07	53	4.9	133,000
	T1-DC	E81104-9	11/16/2000	2-3	0.067 U	0.03	7.86	0.067 U	0.06	1.782	0.067 U	0.005	1.258	0.067 U	0.07	27.772	4.9	52,400
T1-E	T1-EA	E81104-14	11/16/2000	0-0.5	0.04 U	0.03	6.7	0.04 U	0.06	1.5	0.04 U	0.005	1.1	0.04 U	0.07	23.7	6	44,700
	T1-EB	E81104-15	11/16/2000	1-2	0.054 U	0.03	3.525	0.054 U	0.06	0.799	0.054 U	0.005	0.564	0.054 U	0.07	12.455	5.8	23,500
	T1-EC	E81104-16	11/16/2000	2-3	0.043 U	0.03	1.5	0.043 U	0.06	0.34	0.043 U	0.005	0.24	0.043 U	0.07	5.3	5.7	2,820
T2-A	T2-AA	E79744-13	10/31/2000	0-0.5	0.120 U	0.03	1.74	0.120 U	0.06	0.394	0.120 U	0.005	0.278	0.120 U	0.07	6.148	5.4	11,600
	T2-AB	E79744-14	10/31/2000	1-2	0.140 U	0.03	15	0.140 U	0.06	3.4	0.140 U	0.005	2.4	0.140 U	0.07	53	5.7	118,000
	T2-AC	E79744-15	10/31/2000	2-3	0.140 U	0.03	18.6	0.140 U	0.06	4.216	0.140 U	0.005	2.976	0.140 U	0.07	65.72	5.4	124,000
T2-B	T2-BA	E79745-10	10/31/2000	0-0.5	0.140 U	0.03	5.55	0.140 U	0.06	1.258	0.140 U	0.005	0.888	0.140 U	0.07	19.61	6.7	37,000
	T2-BB	E79745-11	10/31/2000	1-2	0.080 U	0.03	5.7	0.180 J	0.06	1.292	0.080 U	0.005	0.912	0.180 J	0.07	20.140	5.7	38,000
	T2-BC	E79744-12	10/31/2000	2-3	0.090 U	0.03	11.58	0.090 U	0.06	2.625	0.090 U	0.005	1.853	0.090 U	0.07	40.916	5.5	77,200
T2-C	T2-CA	E79745-7	10/31/2000	0-0.5	0.044 U	0.03	1.65	0.044 U	0.06	0.374	0.044 U	0.005	0.264	0.044 U	0.07	5.83	6.3	11,000
	T2-CB	E79745-8	10/31/2000	1-2	0.058 U	0.03	2.7	0.058 U	0.06	0.612	0.058 U	0.005	0.432	0.058 U	0.07	9.54	6.3	18,000
	T2-CC	E79745-9	10/31/2000	2-3	0.056 U	0.03	3.75	0.056 U	0.06	0.85	0.056 U	0.005	0.6	0.056 U	0.07	13.25	5.6	25,000
T2-D	T2-DA	E79745-4	10/31/2000	0-0.5	0.067 U	0.03	2.1	0.067 U	0.06	0.476	0.067 U	0.005	0.336	0.067 U	0.07	7.42	5.3	14,000
	T2-DB	E79745-5	10/31/2000	1-2	0.072 U	0.03	6	0.072 U	0.06	1.36	0.072 U	0.005	0.96	0.072 U	0.07	21.2	5.8	40,000
	T2-DC	E79745-6	10/31/2000	2-3	0.053 U	0.03	1.95	0.053 U	0.06	0.442	0.053 U	0.005	0.312	0.053 U	0.07	6.89	5.5	13,000
T2-E	T2-EA	E79745-1	10/31/2000	0-0.5	0.1 U	0.03	6.5	0.1 U	0.06	1.5	0.1 U	0.005	1.0	0.1 U	0.07	22.8	5.8	43,000
	T2-EB	E79745-2	10/31/2000	1-2	0.084 U	0.03	4.95	0.084 U	0.06	1.122	0.084 U	0.005	0.792	0.084 U	0.07	17.49	5.6	33,000
	T2-EC	E79745-3	10/31/2000	2-3	0.058 U	0.03	2.55	0.058 U	0.06	0.578	0.058 U	0.005	0.408	0.058 U	0.07	9.01	5.5	17,000
T3-A	T3-AA	E80832-1	11/15/2000	0-0.5	0.150 U	0.03	12.405	0.150 U	0.06	2.812	0.150 U	0.005	1.985	0.150 U	0.07	43.831	7.5	82,700
	T3-AB	E80832-2	11/15/2000	1-2	0.074 U	0.03	8.505	0.270 J	0.06	1.928	0.150 J	0.005	1.361	0.420 J	0.07	30.051	6	56,700
	T3-AC	E80832-3	11/15/2000	2-3	0.078 U	0.03	9.15	0.520 J	0.06	2.074	0.130 J	0.005	1.464	0.650 J	0.07	32.330	6	61,000
T3-B	T3-BA	E80832-4	11/15/2000	0-0.5	0.080 U	0.03	7.605	0.080 U	0.06	1.724	0.080 U	0.005	1.217	0.080 U	0.07	26.871	6.3	50,700
	T3-BB	E80832-5	11/15/2000	1-2	0.072 U	0.03	7.11	0.077 J	0.06	1.612	0.072 U	0.005	1.138	0.077 J	0.07	25.122	5.8	47,400
	T3-BC	E80832-6	11/15/2000	2-3	0.073 U	0.03	8.025	0.096 J	0.06	1.819	0.080 J	0.005	1.284	0.176 J	0.07	28.355	6.3	53,500
T3-C	T3-CA	E80833-8	11/15/2000	0-0.5	0.072 U	0.03	8.655	0.530 J	0.06	1.962	0.075 J	0.005	1.385	0.605 J	0.07	30.581	5.8	57,700
	T3-CB	E80833-9	11/15/2000	1-2	0.061 U	0.03	8.925	0.061 U	0.06	2.023	0.061 U	0.005	1.428	0.061 U	0.07	31.535	6.4	59,500
	T3-CC	E80833-10	11/15/2000	2-3	0.087 U	0.03	10.98	0.087 U	0.06	2.489	0.087 U	0.005	1.757	0.087 U	0.07	38.796	5.6	73,200
T3-D	T3-DA	E80831-5	11/15/2000	0-0.5	0.080 U	0.03	7.8	0.080 U	0.06	1.768	0.080 U	0.005	1.248	0.080 U	0.07	27.56	6.2	52,000
	T3-DB	E80831-6	11/15/2000	1-2	0.072 U	0.03	7.005	0.140 J	0.06	1.588	0.072 U	0.005	1.121	0.140 J	0.07	24.751	5.3	46,700
	T3-DC	E80831-7	11/15/2000	2-3	0.062 U	0.03	7.41	0.310 J	0.06	1.680	0.076 J	0.005	1.186	0.386 J	0.07	26.182	6	49,400
T3-E	T3-EA	E80832-7	11/15/2000	0-0.5	0.063 U	0.03	6.2	0.063 U	0.06	1.4	0.063 U	0.005	1.0	0.063 U	0.07	21.8	5.4	41,200
	TDUP-20/ T3-EA	E80832-10	11/15/2000	0-0.5	0.072 U	0.03	7.7	0.093 J	0.06	1.8	0.072 U	0.005	1.2	0.093 J	0.07	27.3	6.7	51,500
	T3-EB	E80832-8	11/15/2000	1-2	0.076 U	0.03	6.93	0.076 U	0.06	1.571	0.076 U	0.005	1.109	0.076 U	0.07	24.486	6.1	46,200
	T3-EC	E80832-9	11/15/2000	2-3	0.079 U	0.03	7.71	0.079 U	0.06	1.748	0.079 U	0.005	1.234	0.079 U	0.07	27.242	5.9	51,400
T4-C	T4-CA	E79744-16	10/30/2000	0-0.5	0.059 U	0.03	3.59	0.059 U	0.06	0.81	0.059 U	0.005	0.57	0.059 U	0.07	12.67	6.5	23,900
	TDUP5/ T4 CA	E79744-19	10/30/2000	0-0.5	0.051 U	0.03	1.50	0.051 U	0.06	0.34	0.051 U	0.005	0.24	0.051 U	0.07	5.30	6.7	3,720
	T4-CB	E79744-17	10/30/2000	1-2	0.066 U	0.03	2.175	0.074 J	0.06	0.493	0.066 U	0.005	0.348	0.074 J	0.07	7.685	6.3	14,500
	T4-CC	E79744-18	10/30/2000	2-3	0.076 U	0.03	10.275	0.076 U	0.06	2.329	0.076 U	0.005	1.644	0.076 U	0.07	36.305	6.1	68,500
T4-D	T4-DA	E79744-20	10/30/2000	0-0.5	0.140 U	0.03	12.765	0.140 U	0.06	2.893	0.140 U	0.005	2.042	0.140 U	0.07	45.103	5	85,100
	T4-DB	E79744-21	10/30/2000	1-2	0.140 U	0.03	11.385	0.140 U	0.06	2.581	0.140 U	0.005	1.822	0.140 U	0.07	40.227	5.4	75,900
	T4-DC	E79744-22	10/30/2000	2-3	0.088 U	0.03	8.625	0.088 U	0.06	1.955	0.088 U	0.005	1.38	0.088 U	0.07	30.475	5.6	57,500
T4-E	T4-EA	E79744-1	10/30/2000	0-0.5	0.083 U	0.03	11.1	0.11 J	0.06	2.5	0.083 U	0.005	1.8	0.11 J	0.07	39.3	6.2	74,200
	T4-EB	E79744-2	10/30/2000	1-2	0.180 U	0.03	2.355	0.180 U	0.06	0.534	0.180 U	0.005	0.377	0.180 U	0.07	8.321	4.9	15,700
	T4-EC	E79744-3	10/30/2000	2-3	0.120 U	0.03	14.085	0.120 U	0.06	3.193	0.120 U	0.005	2.254	0.120 U	0.07	49.767	5.5	93,900
T5-C	T5-CA	E79743-8	10/31/2000	0-0.5	0.068 U	0.03	3.945	0.068 U	0.06	0.894	0.068 U	0.005	0.631	0.068 U	0.07	13.939	6.9	26,300
	T5-CB	E79743-9	10/31/2000	1-2	0.076 U	0.03	8.055	0.076 U	0.06	1.826	0.076 U	0.005	1.289	0.076 U	0.07	28.461	5.9	53,700
	T5-CC	E79743-10	10/31/2000	2-3	0.066 U	0.03	6.39	0.066 U	0.06	1.448	0.066 U	0.005	1.022	0.066 U	0.07	22.578	5.8	42,600
T5-D	T5-DA	E79743-5	10/30/2000	0-0.5	0.091 U	0.03	8.04	0.120 J	0.06	1.822	0.091 U	0.005	1.286	0.120 J	0.07	28.408	5.5	53,600
	T5-DB	E79743-6	10/30/2000	1-2	0.070 U	0.03	9.36	0.200 J	0.06	2.122	0.078 J	0.005	1.498	0.278 J	0.07	33.072	5.8	62,400
	T5-DC	E79743-7	10/30/2000	2-3	0.082 U	0.03	7.59	0.082 U	0.06	1.720	0.082 U	0.005	1.214	0.082 U	0.07	26.818	5.8	50,600
T5-E	T5-EA	E79743-2	10/30/2000	0-0.5	0.049 U	0.03	1.3	0.049 U	0.06	0.3	0.049 U	0.005	0.2	0.049 U	0.07	4.7	5.8	8,930
	T5-EB	E79743-3	10/30/2000	1-2	0.057 U	0.03	1.5	0.057 U	0.06	0.34	0.057 U	0.005	0.24	0.057 U	0.07	5.3	5.7	9,100
	T5-EC	E79743-4	10/30/2000	2-3	0.047 U	0.03	1.5	0.047 U	0.06	0.34	0.047 U	0.005	0.24	0.047 U	0.07	5.3	5.1	6,130
T6-C	T6-CA	E79744-10	10/30/2000	0-0.5	0.069 U	0.03	7.215	0.069 U	0.06	1.635	0.069 U	0.005	1.154	0.069 U	0.07	25.493	5.4	48,100
	T6-CB	E79744-11	10/30/2000	1-2	0.072 U	0.03	8.22	0.088 J	0.06	1.863	0.072 U	0.005	1.315	0.160 J	0.07	29.044	5.8	54,800
	T6-CC	E79743-1	10/30/2000	2-3	0.071 U	0.03	8.28	0.071 U	0.06	1.877	0.071 U	0.005	1.325	0.071 U	0.07	29.256	5.6	55,200
T6-D	T6-DA	E79744-7	10/30/2000	0-0.5	0.130 U	0.03	9.54	0.130 U	0.06	2.162	0.130 U	0.005	1.526	0.130 U	0.07	33.708	6	63,600
	T6-DB	E79744-8	10/30/2000	1-2	0.082 U	0.03	8.31	0.082 U	0.06	1.884	0.082 U	0.005	1.330	0.082 U	0.07	29.362	5.9	55,400
	T6-DC	E79744-9	10/30/2000	2-3	0.076 U	0.03	8.205	0.076 U	0.06	1.860	0.076 U	0.005	1.313	0.076 U	0.07	28.991	5.8	54,700
T6-E	T6-EA	E79744-4	10/30/2000	0-0.5	0.17 U	0.03	11.8	0.17 U	0.06	2.7	0.17 U	0.005	1.9	0.17 U	0.07	41.8	5.8	78,800
	T6-EB	E79744-5	10/30/2000	1-2	0.084 U	0.03	7.05	0.084 U	0.06	1.598	0.084 U	0.005	1.128	0.084 U	0.07	24.91	6	47,000
	T6-EC	E79744-6	10/30/2000	2-3	0.078 U	0.03	13.5	0.078 U	0.06	3.06	0.078 U	0.005	2.16	0.078 U	0.07	47.7	5.8	90,000
T7-C	T7-CA	E79745-13	10/31/2000	0-0.5	0.074 U	0.03	2.40	0.074 U	0.06	0.54	0.074 U	0.005	0.38	0.074 U	0.07	8.48	6.1	16,000
	T7-CB	E79745-14	10/31/2000	1-2	0.056 U	0.03	2.25	0.056 U	0.06	0.51	0.056 U	0.005	0.36	0.056 U	0.07	7.95	5.6	15,000
	T7-CC	E79745-15	10/31/2000	2-3	0.066 U	0.03	2.7	0.066 U	0.06	0.612	0.066 U	0.005	0.432	0.066 U	0.07	9.54	5.9	18,000
T7-D	T7-DA	E79745-16	10/31/2000	0-0.5	0.093 U	0.03	5.4	0.310 J	0.06	1.224	0.098 J	0.005	0.864	0.408 J	0.07	19.08	5.8	36,000
	T7-DB	E79745-17	10/31/2000	1-2	0.069 U	0.03	7.35	0.069 U	0.06	1.666	0.069 U	0.005	1.176	0.069 U	0.07	25.97	5.8	49,000
	T7-DC	E79745-18	10/31/2000	2-3	0.072 U	0.03	3.6	0.072 U	0.06	0.816	0.072 U	0.005	0.576	0.072 U	0.07	12.72	5.9	24,000
T7-E	T7-EA	E79743-11	10/31/2000	0-0.5	0.12 U	0.03	14.1	0.12 U	0.06	3.2	0.12 U	0.005	2.3	0.12 U	0.07	49.7	5.1	93,800
	T7-EB	E79743-12	10/31/2000	1-2	0.046 U	0.03	2.175	0.130 J	0.06	0.493	0.060 J	0.005	0.348	0.190 J	0.07	7.685	5.2	14,500
	T7-EC	E79743-13	10/31/2000	2-3	0.055 U	0.03	7.65	0.055 U	0.06	1.734	0.055 U	0.005	1.224	0.055 U	0.07	27.03	5.5	51,000
T8-C	T8-CA	E79743-20	10/31/2000	0-0.5	0.054 U	0.03	3.21	0.054 U	0.06	0.728	0.054 U	0.005	0.514	0.054 U	0.07	11.342	6	21,400
	TDUP6/ T8 CA	E79745-12	10/31/2000	0-0.5	0.084 U	0.03	2.1	0.084 U	0.06	0.476	0.084 U	0.005	0.336	0.084 U	0.07	7.42	6.2	14,000
	T8-CB	E79743-21	10/31/2000	1-2	0.120 U	0.03	8.58	0.120 U	0.06	1.945	0.120 U	0.005	1.373	0.120 U	0.07	30.316	6.6	57,200
	T8-CC	E79743-22	10/31/2000	2-3	0.055 U	0.03	4.29	0.055 U	0.06	0.972	0.055 U	0.005	0.686	0.055 U	0.07	15.158	5.6	28,600
T8-D	T8-DA	E79743-17	10/31/2000	0-0.5	0.056 U	0.03	3.3	0.056 U	0.06	0.748	0.056 U	0.005	0.528	0.056 U	0.07	11.66	5.8	22,000
	T8-DB	E79743-18	10/31/2000	1-2	0.074 U	0.03	10.5	0.074 U	0.06	2.38	0.074 U	0.005	1.68	0.074 U	0.07	37.1	6.1	70,000
	T8-DC	E79743-19	10/31/2000	2-3	0.055 U	0.03	1.74	0.055 U	0.06	0.394	0.055 U	0.005	0.278	0.055 U	0.07	6.148	6.2	11,600
T8-E	T8-EA	E79743-14	10/31/2000	0-0.5	0.21 U	0.03	15.0	0.24 J	0.06	3.4	0.21 U	0.005	2.4	0.24 J	0.07	53.0	5.8	147,000
	T8-EB	E79743-15	10/31/2000	1-2	0.051 U	0.03	4.77	0.051 U	0.06	1.081	0.051 U	0.005	0.763	0.051 U	0.07	16.854	5.5	31,800
	T8-EC	E79743-16	10/31/2000	2-3	0.059 U	0.03	4.89	0.059 U	0.06	1.108	0.059 U	0.005	0.782	0.059 U	0.07	17.278	5.2	32,600

TABLE 5-27
Matteo Iron and Metal
Sediment Sample Results: PCBs

Sample Location	Sample ID	Lab ID	Date	Depth (ft)	Aroclor 1248			Aroclor 1254			Aroclor 1260			Total PCB			pH (su)	TOC
					Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria		
T9-A	T9-AA	E80555-7	11/10/2000	0-0.5	0.069 U	0.03	7.86	0.069 U	0.06	1.78	0.069 U	0.005	1.26	0.069 U	0.07	27.77	5.6	52,400
	TDUP-17/ T9-AA	E80555-7	11/10/2000	0-0.5	0.1 U	0.03	9.51	0.1 U	0.06	2.16	0.1 U	0.005	1.52	0.1 U	0.07	33.60	5.6	63,400
	T9-AB	E80555-8	11/10/2000	1-2	0.076 U	0.03	8.55	0.076 U	0.06	1.938	0.076 U	0.005	1.368	0.076 U	0.07	30.21	5.7	57,000
	T9-AC	E80555-9	11/10/2000	2-3	0.70 U	0.03	8.175	0.100	0.06	1.853	0.070 U	0.005	1.308	0.100	0.07	28.885	6	54,500
T9-B	T9-BA	E80555-11	11/10/2000	0-0.5	0.077 U	0.03	7.68	0.077 U	0.06	1.741	0.077 U	0.005	1.229	0.077 U	0.07	27.136	5.6	51,200
	T9-BB	E80555-12	11/10/2000	1-2	0.079 U	0.03	7.47	0.079 U	0.06	1.693	0.079 U	0.005	1.195	0.079 U	0.07	26.394	6.2	49,800
	T9-BC	E80555-13	11/10/2000	2-3	0.079 U	0.03	7.74	0.079 U	0.06	1.754	0.079 U	0.005	1.238	0.079 U	0.07	27.348	5.8	51,600
T9-C	T9-CA	E80555-4	11/10/2000	0-0.5	0.076 U	0.03	13.17	0.076 U	0.06	2.985	0.076 U	0.005	2.107	0.076 U	0.07	46.534	6	87,800
	T9-CB	E80555-5	11/10/2000	1-2	0.069	0.03	7.695	0.130	0.06	1.744	0.067 U	0.005	1.231	0.199	0.07	27.189	6.4	51,300
	T9-CC	E80555-6	11/10/2000	2-3	0.069 U	0.03	8.01	0.069 U	0.06	1.816	0.069 U	0.005	1.282	0.069 U	0.07	28.302	6.5	53,400
T9-D	T9-DA	E80555-1	11/10/2000	0-0.5	0.081 U	0.03	12.63	0.081 U	0.06	2.863	0.081 U	0.005	2.021	0.081 U	0.07	44.626	6.7	84,200
	T9-DB	E80555-2	11/10/2000	1-2	0.072 U	0.03	13.455	0.072 U	0.06	3.050	0.072 U	0.005	2.153	0.072 U	0.07	47.541	6.2	89,700
	T9-DC	E80555-3	11/10/2000	2-3	0.072 U	0.03	10.125	0.072 U	0.06	2.295	0.072 U	0.005	1.62	0.072 U	0.07	35.775	6.2	67,500
T9-E	T9-EA	E80555-14	11/10/2000	0-0.5	0.079U	0.03	15.0	4.3 DS	0.06	3.4	4 DS	0.005	2.45	8.3	0.07	53.0	6.1	104,000
	T9-EB	E80555-15	11/10/2000	1-2	0.089 U	0.03	11.91	1.300	0.06	2.700	1.700	0.005	1.906	3	0.07	42.082	5.8	79,400
	T9-EC	E80555-16	11/10/2000	2-3	0.062 U	0.03	9.48	0.970	0.06	2.149	0.200 J	0.005	1.517	0.970	0.07	33.496	5.7	63,200
T11-A	T11-AA	E79555-11	10/27/2000	0-0.5	0.480 U	0.03	8.895	0.480 U	0.06	2.016	0.480 U	0.005	1.423	0.480 U	0.07	31.429	5.3	59,300
	T11-AB	E79555-12	10/27/2000	1-2	0.370 U	0.03	7.62	0.590	0.06	1.727	0.480	0.005	1.219	1.070	0.07	26.924	5.6	50,800
	T11-AC	E79555-13	10/27/2000	2-3	0.410 U	0.03	8.655	0.680	0.06	1.962	0.510	0.005	1.385	1.190	0.07	30.581	5.6	57,700
T11-B	T11-BA	E79555-14	10/27/2000	0-0.5	0.510 U	0.03	7.995	0.510 U	0.06	1.812	0.510 U	0.005	1.279	0.510 U	0.07	28.249	5.9	53,300
	T11-BB	E79555-15	10/27/2000	1-2	0.410 U	0.03	7.35	0.480 J	0.06	1.666	0.410 U	0.005	1.176	0.480	0.07	25.970	5.6	49,000
	T11-BC	E79555-16	10/27/2000	2-3	0.430 U	0.03	7.5	0.560	0.06	1.700	0.430 U	0.005	1.2	0.560	0.07	26.500	5.5	50,000
T11-C	T11-CA	E79555-8	10/27/2000	0-0.5	0.480 U	0.03	8.295	0.480 U	0.06	1.880	0.480 U	0.005	1.327	0.480 U	0.07	29.309	5.6	55,300
	T11-CB	E79555-9	10/27/2000	1-2	0.440 U	0.03	7.965	0.440 U	0.06	1.805	0.440 U	0.005	1.274	0.440 U	0.07	28.143	5.8	53,100
	T11-CC	E79555-10	10/27/2000	2-3	0.460 U	0.03	8.955	0.460 U	0.06	2.030	0.460 U	0.005	1.433	0.460 U	0.07	31.641	5.7	59,700
T11-D	T11-DA	E79555-4	10/27/2000	0-0.5	0.64 U	0.03	8.82	0.64 U	0.06	2.00	0.64 U	0.005	1.41	0.64 U	0.07	31.16	5.8	58,800
	TDUP4/ T11-DA	E79555-7	10/27/2000	0-0.5	0.68 U	0.03	10.26	0.68 U	0.06	2.33	0.68 U	0.005	1.64	0.68 U	0.07	36.25	5.8	68,400
	T11-DB	E79555-5	10/27/2000	1-2	0.480 U	0.03	9	0.640	0.06	2.040	0.480 U	0.005	1.44	0.640	0.07	31.800	6.1	60,000
	T11-DC	E79555-6	10/27/2000	2-3	0.400 U	0.03	9.18	0.480 J	0.06	2.081	0.400 U	0.005	1.469	0.480	0.07	32.436	5.7	61,200
T11-E	T11-EA	E79555-1	10/27/2000	0-0.5	0.58 U	0.03	9.9	3.2 S	0.06	2.2	1.6 J	0.005	1.6	4.80	0.07	34.8	5.6	65,700
	T11-EB	E79555-2	10/27/2000	1-2	0.400 U	0.03	6.42	0.890	0.06	1.455	0.480 J	0.005	1.027	1.370	0.07	22.684	5.9	42,800
	T11-EC	E79555-3	10/27/2000	2-3	0.380 U	0.03	14.04	0.380 U	0.06	3.182	0.380 U	0.005	2.246	0.380 U	0.07	49.608	6.2	93,600
T13-A	T13-AA	E79453-3	10/25/2000	0-0.5	0.044 U	0.03	1.5	0.57 S	0.06	0.340	0.044 U	0.005	0.24	0.570	0.07	5.300	5.6	6,430
	T13-AB	E79453-4	10/25/2000	1-2	0.037 U	0.03	4.905	0.160	0.06	1.112	0.037 U	0.005	0.785	0.160	0.07	17.331	5.6	32,700
	T13-AC	E79453-5	10/25/2000	2-3	0.034 U	0.03	6.66	0.034 U	0.06	1.510	0.034 U	0.005	1.066	0.034 U	0.07	23.532	5.7	44,400
T13-BA	T13-BA	E79452-21	10/25/2000	0-0.5	0.050 U	0.03	2.46	0.066	0.06	0.558	0.050 U	0.005	0.394	0.066	0.07	8.692	5.8	16,400
	T13-BB	E79453-1	10/25/2000	1-2	0.034 U	0.03	3.42	0.034 U	0.06	0.775	0.034 U	0.005	0.547	0.034 U	0.07	12.084	5.7	22,800
	T13-BC	E79453-2	10/25/2000	2-3	0.037 U	0.03	3.525	0.037 U	0.06	0.799	0.037 U	0.005	0.564	0.037 U	0.07	12.455	5.4	23,500
T13-C	T13-CA	E79452-15	10/25/2000	0-0.5	0.057 U	0.03	5.82	0.110	0.06	1.319	0.057 U	0.005	0.931	0.110	0.07	20.564	6.5	38,800
	T13-CB	E79452-16	10/25/2000	1-2	0.056 U	0.03	4.05	0.056 U	0.06	0.918	0.056 U	0.005	0.648	0.056 U	0.07	14.31	6.4	27,000
	T13-CC	E79452-17	10/25/2000	2-3	0.056 U	0.03	4.05	0.056 U	0.06	1.367	0.056 U	0.005	0.965	0.056 U	0.07	21.306	6.3	40,200
T13-D	T13-DA	E79452-18	10/25/2000	0-0.5	0.061 U	0.03	13.2	0.061 U	0.06	2.992	0.061 U	0.005	2.112	0.061 U	0.07	46.64	5.8	88,000
	T13-DB	E79452-19	10/25/2000	1-2	0.062 U	0.03	6.69	0.062 U	0.06	1.516	0.062 U	0.005	1.070	0.062 U	0.07	23.638	6.1	44,600
	T13-DC	E79452-20	10/25/2000	2-3	0.047 U	0.03	1.5	0.047 U	0.06	0.34	0.047 U	0.005	0.24	0.047 U	0.07	5.3	6.4	8,800
T13-E	T13-EA	E79452-11	10/25/2000	0-0.5	0.065 U	0.03	10.8	0.12	0.06	2.4	0.088	0.005	1.7	1.01	0.07	38.1	8	71,900
	TDUP2/ T13-EA	E79452-14	10/25/2000	0-0.5	0.06 U	0.03	3.9	0.084	0.06	0.9	0.066	0.005	0.6	0.15	0.07	13.7	6.6	25,800
	T13-EB	E79452-12	10/25/2000	1-2	0.060 U	0.03	6.6	0.290	0.06	1.496	0.210 J	0.005	1.056	0.500	0.07	23.320	6	44,000
	T13-EC	E79452-13	10/25/2000	2-3	0.063 U	0.03	6.825	0.100	0.06	1.547	0.063 U	0.005	1.092	0.100	0.07	24.115	6.2	45,500
T14-A	T14-AA	E78963-7	10/18/2000	0-0.5	0.088 U	0.03	8.175	0.088 U	0.06	1.853	0.088 U	0.005	1.308	0.088 U	0.07	28.885	5.8	54,500
	T14-AB	E78963-8	10/18/2000	1-2	0.080 U	0.03	8.085	0.080 U	0.06	1.833	0.080 U	0.005	1.294	0.080 U	0.07	28.567	5.7	53,900
	T14-AC	E78963-9	10/18/2000	2-3	0.070 U	0.03	8.73	0.070 U	0.06	1.979	0.070 U	0.005	1.397	0.070 U	0.07	30.846	5.8	58,200
T14-B	T14-BA	E78963-4	10/18/2000	0-0.5	0.120 U	0.03	8.1	0.120 U	0.06	1.836	0.120 U	0.005	1.296	0.120 U	0.07	28.62	6.7	54,000
	T14-BB	E78963-5	10/18/2000	1-2	0.093 U	0.03	8.655	0.093 U	0.06	1.962	0.093 U	0.005	1.385	0.093 U	0.07	30.581	6.2	57,700
	T14-BC	E78963-6	10/18/2000	2-3	0.089 U	0.03	9.165	0.110	0.06	2.077	0.089 U	0.005	1.466	0.110	0.07	32.383	6	61,100
T14-C	T14-CA	E78964-6	10/18/2000	0-0.5	0.050 U	0.03	1.56	0.050 U	0.06	0.354	0.050 U	0.005	0.250	0.050 U	0.07	5.512	6.2	10,400
	T14-CB	E78964-7	10/18/2000	1-2	0.060 U	0.03	4.83	0.060 U	0.06	1.095	0.060 U	0.005	0.773	0.060 U	0.07	17.066	5.4	32,200
	T14-CC	E78964-8	10/18/2000	2-3	0.064 U	0.03	5.4	0.064 U	0.06	1.224	0.064 U	0.005	0.864	0.064 U	0.07	19.08	5.3	36,000
T14-D	T14-DA	E78963-1	10/18/2000	0-0.5	0.080 U	0.03	9.135	0.080 U	0.06	2.071	0.080 U	0.005	1.462	0.080 U	0.07	32.277	6.5	60,900
	T14-DB	E78963-2	10/18/2000	1-2	0.054 U	0.03	1.5	0.054 U	0.06	0.34	0.054 U	0.005	0.24	0.054 U	0.07	5.3	6.4	6,700
	T14-DC	E78963-3	10/18/2000	2-3	0.067 U	0.03	6.255	0.067 U	0.06	1.418	0.067 U	0.005	1.001	0.067 U	0.07	22.101	6	41,700
T14-E	T14-EA	E78964-9	10/18/2000	0-0.5	0.074 U	0.03	7.6	0.17	0.06	1.7	0.115	0.005	1.2	0.28	0.07	26.7	5.5	50,400
	T14-EB	E78964-10	10/18/2000	1-2	0.068 U	0.03	7.32	0.070	0.06	1.659	0.068 U	0.005	1.171	0.070	0.07	25.864	5.7	48,800
	T14-EC	E78964-11	10/18/2000	2-3	0.057 U	0.03	5.115	0.220	0.06	1.159	0.079 J	0.005	0.818	0.299	0.07	18.073	5.5	34,100
T15-A	T15-AA	E78963-18	10/17/2000	0-0.5	0.080 U	0.03	8.775	0.080 U	0.06	1.989	0.080 U	0.005	1.404	0.080 U	0.07	31.005	5.9	58,500
	T15-AB	E78963-19	10/17/2000	1-2	0.054 U	0.03	1.665	0.054 U	0.06	0.377	0.054 U	0.005	0.266	0.054 U	0.07	5.883	5.9	11,100
	T15-AC	E78963-20	10/17/2000	2-3	0.054 U	0.03	1.5	0.054 U	0.06	0.34	0.054 U	0.005	0.24	0.054 U	0.07	5.3	6	5,440
T15-B	T15-BA	E78963-21	10/17/2000	0-0.5	0.095 U	0.03	9.195	0.120	0.06	2.084	0.095 U	0.005	1.4712	0.120	0.07	32.489	6.5	61,300
	T15-BB	E78964-1	10/17/2000	1-2	0.096	0.03	7.62	0.230	0.06	1.727	0.100	0.005	1.219	0.426	0.07	26.924	5.7	50,800
	T15-BC	E78964-2	10/17/2000	2-3	0.054 U	0.03	1.605	0.054 U	0.06	0.364	0.054 U	0.005	0.257	0.054 U	0.07	5.671	5.4	10,700
T15-C	T15-CA	E78964-3	10/18/2000	0-0.5	0.054 U	0.03	1.875	0.054 U	0.06	0.425	0.054 U	0.005	0.3	0.054 U	0.07	6.625	5.9	12,500
	T15-CB	E78964-4	10/18/2000	1-2	0.059 U	0.03	3.795	0.059 U	0.06	0.860	0.059 U	0.005	0.607	0.059 U	0.07	13.409	5.6	25,300
	T15-CC	E78964-5	10/18/2000	2-3	0.061 U	0.03	4.575	0.061 U	0.06	1.037	0.061 U	0.005	0.732	0.061 U	0.07	16.165	5.8	30,500
T15-D	T15-DA	E78963-15	10/17/2000	0-0.5	0.051 U	0.03	1.5	0.051 U	0.06	0.34	0.051 U	0.005	0.24	0.051 U	0.07	5.3	6.5	5,830
	T15-DB	E78963-16	10/17/2000	1-2	0.052 U	0.03	1.5	0.052 U	0.06	0.34	0.052 U	0.005	0.24	0.052 U	0.07	5.3	6.4	8,320
	T15-DC	E78963-17	10/17/2000	2-3	0.053 U	0.03	2.25	0.053 U	0.06	0.51	0.053 U	0.005	0.36	0.053 U	0.07	7.95	6.2	15,000
T15-E	T15-EA	E78963-11	10/17/2000	0-0.5	0.069 U	0.03	5.3	0.75	0.06	1.2	0.47 J	0.005	0.8	1.22	0.07	18.7	6.1	35,200
	TDUP-1/ T15-EA	E78963-14	10/17/2000	0-0.5	0.074 U	0.03	6.5	0.61	0.06	1.5	0.31 J	0.005	1.0	0.92	0.07	23.1	5.4	43,600
	T15-EB	E78963-12	10/17/2000	1-2	0.064 U	0.03	4.89	0.180	0.06	1.108	0.076	0.005	0.782	0.256	0.07	17.278	5.7	32,600
	T15-EC	E78963-13	10/17/2000	2-3	0.150	0.03	3.480	0.067	0.06	0.789	0.056 U	0.005	0.557	0.217	0.07	12.296	6.1	23,200
T16-A	T16-AA	E79452-1	10/26/2000	0-0.5	0.67 U	0.03	9.825	0.067 U	0.06	2.227	0.067 U	0.005	1.572	0.067 U	0.07	34.715	6.8	65,500
	T16-AB	E79452-2	10/26/2000	1-2	0.061 U	0.03	11.685	0.061 U	0.06	2.649	0.061 U	0.005	1.870	0.061 U	0.07	41.287	5.9	77,900
	TDUP3/ T16-AB	E79452-4	10/26/2000	1-2	0.064 U	0.03	11.28	0.064 U	0.06	2.557	0.064 U	0.005	1.805	0.064 U	0.07	39.856	6	75,200
	T16-AC	E79452-3	10/26/2000	2-3	0.047 U	0.03	1.5	0.047 U	0.06	0.34	0.047 U	0.005	0.24	0.047 U	0.07	5.3	6.1	8,810
T16-B	T16-BA	E79452-8	10/26/2000	0-0.5	0.055 U	0.03	5.76	0.069	0.06	1.306	0.055 U	0.005	0.922	0.069	0.07	20.352	6.9	38,400
	T16-BB	E79452-9	10/26/2000	1-2	0.063 U	0.03	11.265	0.063 U	0.06	2.553	0.063 U	0.005	1.802	0.063 U	0.07	39.803	6.6	75,100
	T16-BC	E79452-10	10/26/2000	2-3	0.057 U	0.03	4.515	0.057 U	0.06	1.023	0.057 U	0.005	0.722	0.057 U	0.07	15.953	5.7	30,100
T16-C	T16-CA	E79452-5	10/26/2000	0-0.5	0.053 U	0.03	3.615	0.160	0.06	0.819	0.062	0.005	0.578	0.222	0.07	12.773	6.8	24,100
	T16-CB	E79452-6	10/26/2000	1-2	0.057 U	0.03	3.975	0.057 U	0.06	0.901	0.057 U	0.005	0.636	0.057 U	0.07	14.045	7	26,500
	T16-CC	E79452-7	10/26/2000	2-3	0.059 U	0.03	8.175	0.059 U	0.06	1.853	0.059 U	0.005	1.305	0.059 U	0.07	28.885	6	54,500
T16-D	T16-DA	E79453-6	10/26/2000	0-0.5	0.06	0.03	4.38	0.17	0.06	0.99	0.069 J	0.005	0.70	0.299	0.07	15.48	5.6	29,200
	T16-DB	E79453-7	10/26/2000	1-2	0.036 U	0.03	6.33	0.036 U	0.06	1.435	0.036 U	0.005	1.013	0.036 U	0.07	22.366	5.9	42,200
	T16-DC	E79453-8	10/26/2000	2-3	0.035 U	0.03	1.5	0.035 U	0.06	0.34	0.035 U	0.005	0.24	0.035 U	0.07	5.3	6.1	8,770
T16-E	T16-EA	E79453-9	10/26/2000	0-0.5	0.06 U	0.03	8.6	0.097	0.06	1.9	0.06 U	0.005	1.4	0.097	0.07	30.2	5.1	57,000
	T16-EB	E79453-10	10/26/2000	1-2	0.040 U	0.03	3.885	0.170	0.06	0.881	0.110	0.005	0.622	0.280	0.07	13.727	5.2	25,900
	T16-EC	E79453-11	10/26/2000	2-3	0.043 U	0.03	4.545	0.043 U	0.06	1.030	0.043 U	0.005	0.727	0.043 U	0.07	16.059	5.3	30,300

TABLE 5-27
Matteo Iron and Metal
Sediment Sample Results: PCBs

Sample Location	Sample ID	Lab ID	Date	Depth (ft)	Aroclor 1248			Aroclor 1254			Aroclor 1260			Total PCB			pH (su)	TOC
					Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria		
T17-A	T17-AA	E79931-16	11/2/2000	0-0.5	0.140 U	0.03	13.32	0.140 U	0.06	3.019	0.140 U	0.005	2.131	0.140 U	0.07	47.064	5.8	88,800
	T17-AB	E79931-17	11/2/2000	1-2	0.065 U	0.03	15	0.082 J	0.06	3.4	0.065 U	0.005	2.4	0.082 J	0.07	53	6.1	120,000
	T17-AC	E79931-18	11/2/2000	2-3	0.740 U	0.03	15	0.740 U	0.06	3.4	0.740 U	0.005	2.4	0.740 U	0.07	53	6.5	1,020,000
T17-B	T17-BA	E79931-13	11/2/2000	0-0.5	0.068 U	0.03	7.995	0.120 J	0.06	1.812	0.076 J	0.005	1.279	0.196	0.07	28.249	6	53,300
T17-B	T17-BB	E79931-14	11/2/2000	1-2	0.390 U	0.03	15	0.390 U	0.06	3.4	0.390 U	0.005	2.4	0.390 U	0.07	53	5.9	504,000
	T17-BC	E79931-15	11/2/2000	2-3	0.064 U	0.03	9.675	0.064 U	0.06	2.193	0.064 U	0.005	1.548	0.064 U	0.07	34.185	5.9	64,500
T17-C	T17-CA	E79932-6	11/2/2000	0-0.5	0.051 U	0.03	1.5	0.051 U	0.06	0.34	0.051 U	0.005	0.24	0.051 U	0.07	5.3	6.4	5,400
	T17-CB	E79932-7	11/2/2000	1-2	0.052 U	0.03	1.5	0.052 U	0.06	0.34	0.052 U	0.005	0.24	0.052 U	0.07	5.3	6.5	8,100
	T17-CC	E79932-8	11/2/2000	2-3	0.053 U	0.03	1.65	0.053 U	0.06	0.374	0.053 U	0.005	0.264	0.053 U	0.07	5.83	5.9	11,000
T17-D	T17-DA	E79932-9	11/2/2000	0-0.5	0.094 U	0.03	4.05	0.094 U	0.06	0.92	0.094 U	0.005	0.65	0.094 U	0.07	14.31	6.1	27,000
	TDUP-9/ T17-DA	E79932-10	11/2/2000	0-0.5	0.084 U	0.03	4.50	0.11 J	0.06	1.02	0.11 J	0.005	0.72	0.21	0.07	15.90	6.1	30,000
	T17-DB	E79931-11	11/2/2000	1-2	0.076 U	0.03	10.335	0.076 U	0.06	2.343	0.076 U	0.005	1.654	0.076 U	0.07	36.517	6	68,900
	T17-DC	E79931-12	11/2/2000	2-3	0.160 U	0.03	15	0.160 U	0.06	3.4	0.160 U	0.005	2.4	0.160 U	0.07	53	5.8	219,000
T17-E	T17-EA	E79931-7	11/1/2000	0-0.5	0.05 U	0.03	8.1	0.05 U	0.06	1.8	0.05 U	0.005	1.3	0.05 U	0.07	28.7	6.4	54,200
	T17-EB	E79931-8	11/1/2000	1-2	0.048 U	0.03	4.62	0.048 U	0.06	1.047	0.048 U	0.005	0.739	0.048 U	0.07	16.324	6.5	30,800
	T17-EC	E79931-9	11/1/2000	2-3	0.040 U	0.03	1.5	0.040 U	0.06	0.34	0.040 U	0.005	0.24	0.040 U	0.07	5.3	6.3	6,410
T18-A	T18-AA	E80833-1	11/15/2000	0-0.5	0.070 U	0.03	9.255	0.360	0.06	2.098	0.110	0.005	1.481	0.970	0.07	32.701	5.9	61,700
	T18-AB	E80833-2	11/15/2000	1-2	0.067 U	0.03	9.705	0.520	0.06	2.200	0.085	0.005	1.553	0.605	0.07	34.291	6	64,700
	T18-AC	E80833-3	11/15/2000	2-3	0.046 U	0.03	1.5	0.046 U	0.06	0.34	0.046 U	0.005	0.24	0.046 U	0.07	5.3	7.1	5,980
T18-B	T18-BA	E80833-4	11/15/2000	0-0.5	0.034 U	0.03	2.73	0.034 U	0.06	0.619	0.034 U	0.005	0.437	0.034 U	0.07	9.646	6.7	18,200
	TDUP-19/ T18-BA	E80833-7	11/15/2000	0-0.5	0.095 U	0.03	9.03	0.140	0.06	2.047	0.095 U	0.005	1.445	0.140	0.07	31.906	7	60,200
	T18-BB	E80833-5	11/15/2000	1-2	0.044 U	0.03	4.215	0.044 U	0.06	0.955	0.044 U	0.005	0.674	0.044 U	0.07	14.893	6.2	28,100
	T18-BC	E80833-6	11/15/2000	2-3	0.048 U	0.03	1.5	0.048 U	0.06	0.34	0.048 U	0.005	0.24	0.048 U	0.07	5.3	6.9	4,190
T18-C	T18-CA	E80720-12	11/13/2000	0-0.5	0.054 U	0.03	4.08	0.054 U	0.06	0.925	0.054 U	0.005	0.653	0.054 U	0.07	14.416	6.6	27,200
	T18-CB	E80720-13	11/13/2000	1-2	0.048 U	0.03	2.13	0.048 U	0.06	0.483	0.048 U	0.005	0.341	0.048 U	0.07	7.526	6.7	14,200
	T18-CC	E80720-14	11/13/2000	2-3	0.059 U	0.03	5.325	0.059 U	0.06	1.207	0.059 U	0.005	0.852	0.059 U	0.07	18.815	6	35,500
T18-D	T18-DA	E80721-9	11/14/2000	0-0.5	0.052 U	0.03	3.945	0.740	0.06	0.894	0.052 U	0.005	0.631	0.740	0.07	13.939	6.6	26,300
	T18-DB	E80721-10	11/14/2000	1-2	0.096 U	0.03	2.955	0.096 U	0.06	0.670	0.096 U	0.005	0.473	0.096 U	0.07	10.441	6.7	19,700
	T18-DC	E80720-11	11/13/2000	2-3	0.052 U	0.03	5.64	0.076	0.06	1.278	0.052 U	0.005	0.902	0.076	0.07	19.928	6.7	37,600
T18-E	T18-EA	E80721-6	11/14/2000	0-0.5	0.074 U	0.03	13.5	0.074 U	0.06	3.1	0.074 U	0.005	2.2	0.074 U	0.07	47.8	5.9	90,200
	T18-EB	E80721-7	11/14/2000	1-2	0.042 U	0.03	12.555	0.042 U	0.06	2.846	0.042 U	0.005	2.009	0.042 U	0.07	44.361	7.1	83,700
	T18-EC	E80721-8	11/14/2000	2-3	0.081 U	0.03	14.22	0.160	0.06	3.223	0.081 U	0.005	2.275	0.160	0.07	5.300	6	94,800
T19-A	T19-AA	E79931-4	11/1/2000	0-0.5	0.076 U	0.03	4.815	0.120	0.06	1.091	0.076 U	0.005	0.770	0.120	0.07	17.013	6.3	32,100
	T19-AB	E79931-5	11/1/2000	1-2	0.063 U	0.03	11.19	0.420	0.06	2.536	0.063 U	0.005	1.790	0.420	0.07	39.538	6.1	74,600
	T19-AC	E79931-6	11/1/2000	2-3	0.066 U	0.03	10.89	0.066 U	0.06	2.468	0.066 U	0.005	1.742	0.066 U	0.07	38.478	5.9	72,600
T19-B	T19-BA	E79931-1	11/1/2000	0-0.5	0.090 U	0.03	3.075	0.090 U	0.06	0.697	0.090 U	0.005	0.492	0.090 U	0.07	10.865	6.6	20,500
	T19-BB	E79931-2	11/1/2000	1-2	0.047 U	0.03	3.945	0.047 U	0.06	0.894	0.047 U	0.005	0.631	0.047 U	0.07	13.939	6.7	26,300
	T19-BC	E79931-3	11/1/2000	2-3	0.053 U	0.03	1.5	0.053 U	0.06	0.34	0.053 U	0.005	0.24	0.053 U	0.07	5.3	6.3	7,620
T19-C	T19-CA	E79933-1	11/1/2000	0-0.5	0.110 U	0.03	15	0.110 U	0.06	3.4	0.110 U	0.005	2.4	0.110 U	0.07	53	7	153,000
	T19-CB	E79933-2	11/1/2000	1-2	0.130 U	0.03	15	0.130 U	0.06	3.4	0.130 U	0.005	2.4	0.130 U	0.07	53	6.7	130,000
	T19-CC	E79933-3	11/1/2000	2-3	0.180 U	0.03	15	0.180 U	0.06	3.4	0.180 U	0.005	2.4	0.180 U	0.07	53	6.5	240,000
T19-D	T19-DA	E79933-8	11/1/2000	0-0.5	0.050 U	0.03	6.33	0.200	0.06	1.435	0.050 U	0.005	1.013	0.200	0.07	22.366	6.6	42,200
	T19-DB	E79933-9	11/1/2000	1-2	0.066 U	0.03	8.58	0.066 U	0.06	1.945	0.066 U	0.005	1.373	0.066 U	0.07	30.316	6.6	57,200
	T19-DC	E79933-10	11/1/2000	2-3	0.110 U	0.03	6.555	0.110 U	0.06	1.486	0.110 U	0.005	1.049	0.110 U	0.07	23.161	5.9	43,700
T19-E	T19-EA	E79933-4	11/1/2000	0-0.5	0.088	0.03	9.0	0.23	0.06	2.1	0.099 J	0.005	1.4	0.417	0.07	32.0	6.2	60,300
	TDUP-7/ T19-EA	E79933-7	11/1/2000	0-0.5	0.068 U	0.03	1.5	0.12	0.06	0.3	0.068	0.005	0.2	0.188	0.07	5.4	6.2	10,100
	T19-EB	E79933-5	11/1/2000	1-2	0.045 U	0.03	1.5	0.045 U	0.06	0.34	0.045 U	0.005	0.24	0.045 U	0.07	5.3	6.7	5,660
	T19-EC	E79933-6	11/1/2000	2-3	0.046 U	0.03	1.5	0.046 U	0.06	0.34	0.046 U	0.005	0.24	0.046 U	0.07	5.3	6.9	6,050
T20-A	T20-AA	E79931-10	11/2/2000	0-0.5	0.08 U	0.03	6.66	0.08 U	0.06	1.51	0.08 U	0.005	1.07	0.08 U	0.07	23.53	5.8	44,400
	T20-AB	E79932-1	11/2/2000	1-2	0.130 J	0.03	5.25	0.230 J	0.06	1.19	0.150	0.005	0.840	0.510	0.07	18.550	6.2	35,000
	T20-AC	E79932-2	11/2/2000	2-3	0.120	0.03	5.250	0.190 J	0.06	1.19	0.140 J	0.005	0.84	0.450	0.07	18.550	6.1	35,000
T20-B	T20-BA	E79932-3	11/2/2000	0-0.5	0.079 U	0.03	4.05	0.079 U	0.06	0.918	0.079 U	0.005	0.648	0.079 U	0.07	14.31	6.6	27,000
	T20-BB	E79932-4	11/2/2000	1-2	0.060 U	0.03	3.15	0.060 U	0.06	0.714	0.060 U	0.005	0.504	0.060 U	0.07	11.13	6	21,000
	T20-BC	E79932-5	11/2/2000	2-3	0.080 U	0.03	4.05	0.080 U	0.06	0.918	0.080 U	0.005	0.648	0.080 U	0.07	14.31	6.2	27,000
T20-C	T20-CA	E79932-17	11/2/2000	0-0.5	0.092 U	0.03	9.6	0.092 U	0.06	2.176	0.092 U	0.005	1.536	0.092 U	0.07	33.92	6.1	64,000
	TDUP-8/ T20-CA	E79932-20	11/2/2000	0-0.5	0.170 U	0.03	15	0.170 U	0.06	3.4	0.170 U	0.005	2.4	0.170 U	0.07	53	6.2	220,000
	T20-CB	E79932-18	11/2/2000	1-2	0.094 U	0.03	3.75	0.094 U	0.06	0.85	0.094 U	0.005	0.6	0.094 U	0.07	13.25	6.5	25,000
	T20-CC	E79932-19	11/2/2000	2-3	0.062 U	0.03	5.55	0.062 U	0.06	1.258	0.062 U	0.005	0.888	0.062 U	0.07	19.61	6.3	37,000
T20-D	T20-DA	E79932-14	11/2/2000	0-0.5	0.060 U	0.03	4.35	0.390	0.06	0.986	0.060 U	0.005	0.696	0.390	0.07	15.37	6.5	29,000
	T20-DB	E79932-15	11/2/2000	1-2	0.078 U	0.03	7.65	0.078 U	0.06	1.734	0.078 U	0.005	1.224	0.078 U	0.07	27.03	6.3	51,000
	T20-DC	E79932-16	11/2/2000	2-3	0.068 U	0.03	8.1	0.068 U	0.06	1.836	0.068 U	0.005	1.296	0.068 U	0.07	28.62	6.3	54,000
T20-E	T20-EA	E79932-11	11/2/2000	0-0.5	0.083 U	0.03	5.3	0.15	0.06	1.2	0.083 U	0.005	0.8	0.15	0.07	18.6	5.5	35,000
	T20-EB	E79932-12	11/2/2000	1-2	0.061 U	0.03	9.6	0.061 U	0.06	2.176	0.061 U	0.005	1.536	0.061 U	0.07	33.92	6	64,000
	T20-EC	E79932-13	11/2/2000	2-3	0.067 U	0.03	10.2	0.067 U	0.06	2.312	0.067 U	0.005	1.632	0.067 U	0.07	36.04	6.2	68,000
T21-A	T21-AA	E80047-14	11/3/2000	0-0.5	0.062 U	0.03	14.8	0.062 U	0.06	3.4	0.062 U	0.005	2.4	0.062 U	0.07	52.4	6.3	98,800
	T21-AB	E80047-15	11/3/2000	1-2	0.063 U	0.03	5.58	0.063 U	0.06	1.265	0.063 U	0.005	0.893	0.063 U	0.07	19.716	6.6	37,200
	T21-AC	E80047-16	11/3/2000	2-3	0.064 U	0.03	5.07	0.064 U	0.06	1.149	0.064 U	0.005	0.811	0.064 U	0.07	17.914	6.5	33,800
T21-B	T21-BA*	E80157-17	11/6/2000	0-3	0.065 U	0.03	10.71	0.063 U	0.06	2.428	0.063 U	0.005	1.714	0.063 U	0.07	37.842	6.8	71,400
T21-C	T21-CB*	E80047-17	11/3/2000	0-3	0.043 U	0.03	1.5	0.043 U	0.06	0.34	0.043 U	0.005	0.24	0.043 U	0.07	5.3	7.3	514
T21-D	T21-DA	E80047-11	11/3/2000	0-0.5	0.064 U	0.03	8.25	0.064 U	0.06	1.87	0.064 U	0.005	1.32	0.064 U	0.07	29.15	6.6	55,000
	T21-DB	E80047-12	11/3/2000	1-2	0.084 U	0.03	9.555	0.084 U	0.06	2.166	0.084 U	0.005	1.529	0.084 U	0.07	33.761	6.4	63,700
	T21-DC	E80047-13	11/3/2000	2-3	0.110 U	0.03	11.94	0.110 U	0.06	2.706	0.110 U	0.005	1.910	0.110 U	0.07	42.188	6.5	79,600
T21-E	T21-EA	E80048-7	11/3/2000	0-0.5	0.049 U	0.03	9.525	0.049 U	0.06	2.159	0.049 U	0.005	1.524	0.049 U	0.07	33.655	6	63,500
	TDUP11/ T21-EA	E80048-10	11/3/2000	0-0.5	0.052 U	0.03	12.42	0.052 U	0.06	2.815	0.052 U	0.005	1.987	0.052 U	0.07	43.884	6.8	82,800
	T21-EB	E80048-8	11/3/2000	1-2	0.056 U	0.03	13.8	0.056 U	0.06	3.128	0.056 U	0.005	2.208	0.056 U	0.07	48.76	6.4	92,000
	T21-EC	E80048-9	11/3/2000	2-3	0.054 U	0.03	8.91	0.054 U	0.06	2.020	0.054 U	0.005	1.426	0.054 U	0.07	31.482	5.9	59,400
T22-A	T22-AA	E80556-9	11/9/2000	0-0.5	0.23 U	0.03	2.79	0.23 U	0.06	0.63	0.23 U	0.005	0.45	0.23 U	0.07	9.86	6	18,600
	TDUP-16/ T22-AA	E80556-19	11/9/2000	0-0.5	0.096 U	0.03	10.50	0.096 U	0.06	2.38	0.096 U	0.005	1.68	0.096 U	0.07	37.10	5.5	70,000
	T22-AB	E80556-10	11/9/2000	1-2	0.410 U	0.03	12.705	3.6 S	0.06	2.880	0.800	0.005	2.033	4.400	0.07	44.891	5.8	84,700
	T22-AC	E80554-11	11/9/2000	2-3	0.065 U	0.03	1.5	0.065 U	0.06	0.34	0.065 U	0.005	0.24	0.065 U	0.07	5.3	6	4,340
T22-B	T22-BA	E80554-12	11/9/2000	0-0.5	0.057 U	0.03	8.685	0.057 U	0.06	1.969	0.057 U	0.005	1.390	0.057 U	0.07	30.687	6	57,900
	T22-BB	E80554-13	11/9/2000	1-2	0.056 U	0.03	7.38	0.056 U	0.06	1.673	0.056 U	0.005	1.181	0.056 U	0.07	26.076	6	49,200
	T22-BC	E80554-14	11/9/2000	2-3	0.055 U	0.03	3.075	0.055 U	0.06	0.697	0.055 U	0.005	0.492	0.055 U	0.07	10.865	6.2	20,500
T22-C	T22-CA	E80721-2	11/14/2000	0-0.5	0.038 U	0.03	1.5	0.038 U	0.06	0.34	0.038 U	0.005	0.24	0.038 U	0.07	5.3	6.5	6,130
	T22-CB	E80721-3	11/14/2000	1-2	0.062 U	0.03	13.32	0.062 U	0.06	3.019	0.062 U	0.005	2.131	0.062 U	0.07	47.064	6.3	88,800
	T22-CC	E80721-4	11/14/2000	2-3	0.056 U	0.03	12.9	0.056 U	0.06	2.924	0.056 U	0.005	2.064	0.056 U	0.07	45.58	6.1	86,000
T22-D	T22-DA	E80554-15	11/9/2000	0-0.5	0.120 U	0.03	15	0.120 U	0.06	3.4	0.120 U	0.005	2.4	0.120 U	0.07	53	6	112,000
	T22-DB	E80554-16	11/9/2000	1-2	0.160 U	0.03	15	0.160 U	0.06	3.4	0.160 U	0.005	2.4	0.160 U	0.07	53	6.1	193,000
	T22-DC	E80554-17	11/9/2000	2-3	0.098 U	0.03	15	0.098 U	0.06	3.4	0.098 U	0.005	2.4	0.098 U	0.07	53	5.8	118,000
T22-E	T22-EA	E80556-6	11/9/2000	0-0.5	0.45 U	0.03	8.6	0.45 U	0.06	1.9	0.45 U	0.005	1.4	0.45 U	0.07	30.3	5.5	57,100
	T22-EB	E80556-7	11/9/2000	1-2	0.380 U	0.03	7.05	0.380 U	0.06	1.598	0.380 U	0.005	1.128	0.380 U	0.07	24.91	5	47,000
	T22-EC	E80556-8	11/9/2000	2-3	0.370 U	0.03	7.395	0.370 U	0.06	1.676	0.370 U	0.005	1.183	0.370 U	0.07	26.129	5.5	49,300
T23-A	T23-AA	E81102-1	11/17/2000	0-0.5	0.037 U	0.03	6	0.037 U	0.06	1.36	0.037 U	0.005	0.96	0.037 U	0.07	21.2	5.9	40,000
	T23-AB	E81102-2	11/17/2000	1-2	0.040 U	0.03	3.855	0.040 U	0.06	0.874	0.040 U	0.005	0.617	0.040 U	0.07	13.621	6.4	25,700
	T23-AC	E81102-3	11/17/2000	2-3	0.052 U	0.03	4.155	0.052 U	0.06	0.942	0.052 U	0.005	0.665	0.052 U	0.07	14.681	6.4	27,700

TABLE 5-27
Matteo Iron and Metal
Sediment Sample Results: PCBs

Sample Location	Sample ID	Lab ID	Date	Depth (ft)	Aroclor 1248			Aroclor 1254			Aroclor 1260			Total PCB			pH (su)	TOC
					Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria		
T23-B	T23-BA	E81102-4	11/17/2000	0-0.5	0.046 U	0.03	1.5	0.046 U	0.06	0.34	0.046 U	0.005	0.24	0.046 U	0.07	5.3	7	4,650
	TDUP-22/ T23-BA	E81102-7	11/17/2000	0-0.5	0.044 U	0.03	1.5	0.044 U	0.06	0.34	0.044 U	0.005	0.240	0.044 U	0.07	5.3	7.1	4,500
	T23-BB	E81102-5	11/17/2000	1-2	0.045 U	0.03	1.5	0.045 U	0.06	0.34	0.045 U	0.005	0.24	0.045 U	0.07	5.3	7	7,530
	T23-BC	E81102-6	11/17/2000	2-3	0.057 U	0.03	2.655	0.057 U	0.06	0.602	0.057 U	0.005	0.425	0.057 U	0.07	9.381	6.6	17,700
T23-C	T23-CA	E81102-8	11/17/2000	0-0.5	0.061 U	0.03	4.395	0.061 U	0.06	0.996	0.061 U	0.005	0.703	0.061 U	0.07	15.529	6.8	29,300
T23-C	T23-CB*	E81102-9	11/17/2000	0-3	0.062 U	0.03	4.41	0.062 U	0.06	1.000	0.062 U	0.005	0.706	0.062 U	0.07	15.582	5.6	29,400
T23-D	T23-DA	E81102-10	11/17/2000	0-0.5	0.044 U	0.03	5.085	0.044 U	0.06	1.153	0.044 U	0.005	0.814	0.044 U	0.07	17.967	6.8	33,900
	T23-DB	E81103-1	11/17/2000	1-2	0.056 U	0.03	2.04	0.056 U	0.06	0.462	0.056 U	0.005	0.326	0.056 U	0.07	7.208	6.3	13,600
	T23-DC	E81103-2	11/17/2000	2-3	0.057 U	0.03	4.5	0.057 U	0.06	1.02	0.057 U	0.005	0.72	0.057 U	0.07	15.9	6.1	30,000
T23-E	T23-EA	E81103-3	11/17/2000	0-0.5	0.071 U	0.03	8.3	0.071 U	0.06	1.9	0.071 U	0.005	1.3	0.071 U	0.07	29.5	5	55,600
	T23-EB	E81103-4	11/17/2000	1-2	0.067 U	0.03	8.01	0.067 U	0.06	1.816	0.067 U	0.005	1.282	0.067 U	0.07	28.302	5.8	53,400
T24-A	T24-AA	E80318-7	11/8/2000	0-0.5	0.057 U	0.03	3.735	0.057 U	0.06	0.847	0.057 U	0.005	0.598	0.057 U	0.07	13.197	6.4	24,900
	T24-AB	E80318-8	11/8/2000	1-2	0.051 U	0.03	2.445	0.051 U	0.06	0.554	0.051 U	0.005	0.391	0.051 U	0.07	8.639	6.3	16,300
	T24-AC	E80318-9	11/8/2000	2-3	0.056 U	0.03	1.98	0.056 U	0.06	0.449	0.056 U	0.005	0.317	0.056 U	0.07	6.996	6.1	13,200
T24-B	T24-BA	E80318-10	11/8/2000	0-0.5	0.052 U	0.03	1.95	0.052 U	0.06	0.442	0.052 U	0.005	0.312	0.052 U	0.07	6.89	5.8	13,000
	TDUP14/ T24-BA	E80318-13	11/8/2000	0-0.5	0.058 U	0.03	5.19	0.058 U	0.06	1.176	0.058 U	0.005	0.830	0.058 U	0.07	18.338	6.1	34,600
	T24-BB	E80318-11	11/8/2000	1-2	0.054 U	0.03	2.97	0.054 U	0.06	0.673	0.054 U	0.005	0.475	0.054 U	0.07	10.494	5.8	19,800
	T24-BC	E80318-12	11/8/2000	2-3	0.057 U	0.03	3.495	0.057 U	0.06	0.792	0.057 U	0.005	0.559	0.057 U	0.07	12.349	5.5	23,300
T24-D	T24-DA	E80318-14	11/8/2000	0-0.5	0.070 U	0.03	9.6	0.070 U	0.06	2.176	0.070 U	0.005	1.536	0.070 U	0.07	33.92	6.2	64,000
	T24-DB	E80318-15	11/8/2000	1-2	0.068 U	0.03	13.26	0.068 U	0.06	3.006	0.068 U	0.005	2.122	0.068 U	0.07	46.852	6.3	88,400
	T24-DC	E80318-16	11/8/2000	2-3	0.063 U	0.03	10.47	0.063 U	0.06	2.373	0.063 U	0.005	1.675	0.063 U	0.07	36.994	6.5	69,800
T24-E	T24-EA	E80556-3	11/9/2000	0-0.5	0.064 U	0.03	4.4	0.064 U	0.06	1.0	0.064 U	0.005	0.7	0.064 U	0.07	15.6	5.4	29,500
	T24-EB	E80556-4	11/9/2000	1-2	0.340 U	0.03	3.96	0.340 U	0.06	0.898	0.340 U	0.005	0.634	0.340 U	0.07	13.992	5.2	26,400
	T24-EC	E80556-5	11/9/2000	2-3	0.240 U	0.03	1.5	0.240 U	0.06	0.34	0.240 U	0.005	0.24	0.240 U	0.07	5.3	5.2	9,590
T25-A	T25-AA	E80556-1	11/9/2000	0-0.5	0.300 U	0.03	1.5	0.300 U	0.06	0.34	0.300 U	0.005	0.24	0.300 U	0.07	5.3	6.1	8,330
	T25-AB	E80556-2	11/9/2000	1-2	0.046 U	0.03	1.5	0.046 U	0.06	0.34	0.046 U	0.005	0.24	0.046 U	0.07	5.3	5.8	2,160
T25-B	T25-BA	E80554-9	11/9/2000	0-0.5	0.047 U	0.03	1.5	0.047 U	0.06	0.34	0.047 U	0.005	0.24	0.047 U	0.07	5.3	6.9	4,660
	T25-BB*	E80554-10	11/9/2000	0-3	0.045 U	0.03	1.5	0.045 U	0.06	0.34	0.045 U	0.005	0.24	0.045 U	0.07	5.3	6.9	2,570
T25-C	T25-CA	E80554-8	11/9/2000	0-0.5	0.052 U	0.03	3.75	0.052 U	0.06	0.85	0.052 U	0.005	0.6	0.052 U	0.07	13.25	6.7	25,000
	T25-CB*	E80554-7	11/9/2000	0-3	0.058 U	0.03	1.56	0.058 U	0.06	0.354	0.058 U	0.005	0.250	0.058 U	0.07	5.512	6.4	10,400
T25-D	T25-DA	E80554-4	11/9/2000	0-0.5	0.064 U	0.03	4.335	0.064 U	0.06	0.983	0.064 U	0.005	0.694	0.064 U	0.07	15.317	6.6	28,900
	T25-DB	E80554-5	11/9/2000	1-2	0.054 U	0.03	4.515	0.054 U	0.06	1.023	0.054 U	0.005	0.722	0.054 U	0.07	15.953	6.5	30,100
	T25-DC	E80554-6	11/9/2000	2-3	0.056 U	0.03	4.125	0.056 U	0.06	0.935	0.056 U	0.005	0.66	0.056 U	0.07	14.575	6.5	27,500
T25-E	T25-EA	E80554-1	11/9/2000	0-0.5	0.049 U	0.03	1.7	0.049 U	0.06	0.4	0.049 U	0.005	0.3	0.049 U	0.07	6.1	5.3	11,500
	TDUP-15/ T25-EA	E80554-18	11/9/2000	0-0.5	0.057 U	0.03	3.6	0.057 U	0.06	0.8	0.057 U	0.005	0.6	0.057 U	0.07	12.8	6.1	24,100
	T25-EB	E80554-2	11/9/2000	1-2	0.046 U	0.03	1.83	0.046 U	0.06	0.415	0.046 U	0.005	0.293	0.046 U	0.07	6.466	5.7	12,200
	T25-EC	E80554-3	11/9/2000	2-3	0.062 U	0.03	6.72	0.062 U	0.06	1.523	0.062 U	0.005	1.075	0.062 U	0.07	23.744	6.3	44,800
T26-A	T26-AA	E80047-1	11/3/2000	0-0.5	0.098 U	0.03	8.15	0.098 U	0.06	1.85	0.098 U	0.005	1.30	0.098 U	0.07	28.78	6.7	54,300
	TDUP-10/ T26-AA	E80047-4	11/3/2000	0-0.5	0.092 U	0.03	7.28	0.092 U	0.06	1.65	0.092 U	0.005	1.16	0.092 U	0.07	25.71	6.1	48,500
	T26-AB	E80047-2	11/3/2000	1-2	0.065 U	0.03	10.605	0.065 U	0.06	2.404	0.065 U	0.005	1.697	0.065 U	0.07	37.471	5.7	70,700
	T26-AC	E80047-3	11/3/2000	2-3	0.068 U	0.03	11.43	0.068 U	0.06	2.591	0.068 U	0.005	1.829	0.068 U	0.07	40.386	6	76,200
T26-B	T26-BA	E80048-4	11/3/2000	0-0.5	0.077 U	0.03	15	0.077 U	0.06	3.4	0.077 U	0.005	2.4	0.077 U	0.07	53	6.3	403,000
	T26-BB	E80048-5	11/3/2000	1-2	0.071 U	0.03	15	0.071 U	0.06	3.4	0.071 U	0.005	2.4	0.071 U	0.07	53	6.3	> 900,000
	T26-BC	E80048-6	11/3/2000	2-3	0.064 U	0.03	15	0.064 U	0.06	3.4	0.064 U	0.005	2.4	0.064 U	0.07	53	6.4	296,000
T26-C	T26-CA	E80048-1	11/3/2000	0-0.5	0.058 U	0.03	15	0.058 U	0.06	3.4	0.058 U	0.005	2.4	0.058 U	0.07	53	6.8	256,000
	T26-CB	E80048-2	11/3/2000	1-2	0.064 U	0.03	15	0.064 U	0.06	3.4	0.064 U	0.005	2.4	0.064 U	0.07	53	6.3	212,000
	T26-CC	E80048-3	11/3/2000	2-3	0.048 U	0.03	15	0.048 U	0.06	3.4	0.048 U	0.005	2.4	0.048 U	0.07	53	6.8	446,000
T26-D	T26-DA	E80047-8	11/3/2000	0-0.5	0.048 U	0.03	1.5	0.048 U	0.06	0.34	0.048 U	0.005	0.24	0.048 U	0.07	5.3	6.8	7,950
	T26-DB	E80047-9	11/3/2000	1-2	0.050 U	0.03	1.5	0.050 U	0.06	0.34	0.050 U	0.005	0.24	0.050 U	0.07	5.3	6.7	9,390
	T26-DC	E80047-10	11/3/2000	2-3	0.049 U	0.03	1.92	0.049 U	0.06	0.435	0.049 U	0.005	0.307	0.049 U	0.07	6.784	6.6	12,800
T26-E	T26-EA	E80047-5	11/3/2000	0-0.5	0.089 U	0.03	9.5	0.18	0.06	2.2	0.094 J	0.005	1.5	0.274	0.07	33.7	5.5	63,500
	T26-EB	E80047-6	11/3/2000	1-2	0.072 U	0.03	8.775	0.072 U	0.06	1.989	0.072 U	0.005	1.404	0.072 U	0.07	31.005	6.1	58,500
	T26-EC	E80047-7	11/3/2000	2-3	0.070 U	0.03	13.92	0.070 U	0.06	3.155	0.070 U	0.005	2.227	0.070 U	0.07	49.184	6.8	92,800
T27-A	T27-AA	E81103-18	11/17/2000	0-0.5	0.071 U	0.03	7.23	0.071 U	0.06	1.639	0.071 U	0.005	1.157	0.071 U	0.07	25.546	5.8	48,200
	T27-AB	E81103-19	11/17/2000	1-2	0.056 U	0.03	7.185	0.056 U	0.06	1.629	0.056 U	0.005	1.150	0.056 U	0.07	25.387	5.6	47,900
	T27-AC	E81103-20	11/17/2000	2-3	0.066 U	0.03	11.13	0.120	0.06	2.523	0.066 U	0.005	1.781	0.120	0.07	39.326	5.7	74,200
T27-B	T27-BA	E81103-15	11/17/2000	0-0.5	0.065 U	0.03	9.495	0.065 U	0.06	2.152	0.065 U	0.005	1.519	0.065 U	0.07	33.549	5.5	63,300
	T27-BB	E81103-16	11/17/2000	1-2	0.067 U	0.03	12.54	0.067 U	0.06	2.842	0.067 U	0.005	2.006	0.067 U	0.07	44.308	6.1	83,600
	T27-BC	E81103-17	11/17/2000	2-3	0.069 U	0.03	9.585	0.069 U	0.06	2.173	0.069 U	0.005	1.534	0.069 U	0.07	33.867	6.2	63,900
T27-C	T27-CA	E81103-11	11/17/2000	0-0.5	0.072 U	0.03	12.195	0.072 U	0.06	2.764	0.072 U	0.005	1.951	0.072 U	0.07	43.089	6	81,300
	TDUP-23/ T27-CA	E81103-14	11/17/2000	0-0.5	0.069 U	0.03	13.11	0.140	0.06	2.972	0.069 U	0.005	2.098	0.140	0.07	46.322	6	87,400
	T27-CB	E81103-12	11/17/2000	1-2	0.052 U	0.03	4.83	0.052 U	0.06	1.095	0.052 U	0.005	0.773	0.052 U	0.07	17.066	6	32,200
	T27-CC	E81103-13	11/17/2000	2-3	0.052 U	0.03	1.62	0.052 U	0.06	0.367	0.052 U	0.005	0.259	0.052 U	0.07	5.724	6.5	10,800
T27-D	T27-DA	E81103-8	11/17/2000	0-0.5	0.041 U	0.03	4.035	0.041 U	0.06	0.915	0.041 U	0.005	0.646	0.041 U	0.07	14.257	5.4	26,900
	T27-DB	E81103-9	11/17/2000	1-2	0.074 U	0.03	7.875	0.074 U	0.06	1.785	0.074 U	0.005	1.26	0.074 U	0.07	27.825	6	52,500
	T27-DC	E81103-10	11/17/2000	2-3	0.076 U	0.03	7.92	0.140	0.06	1.795	0.076 U	0.005	1.267	0.140	0.07	27.984	5.6	52,800
T27-E	T27-EA	E81103-5	11/17/2000	0-0.5	0.064 U	0.03	9.0	0.064 U	0.06	2.0	0.064 U	0.005	1.4	0.064 U	0.07	31.6	5.8	59,700
	T27-EB	E81103-6	11/17/2000	1-2	0.070 U	0.03	8.19	0.070 U	0.06	1.856	0.070 U	0.005	1.310	0.070 U	0.07	28.938	5.6	54,600
	T27-EC	E81103-7	11/17/2000	2-3	0.068 U	0.03	8.64	0.089	0.06	1.958	0.068 U	0.005	1.382	0.089	0.07	30.528	5.5	57,600
T28-A	T28-AA	E80157-11	11/6/2000	0-0.5	0.090 U	0.03	7.725	0.090 U	0.06	1.751	0.090 U	0.005	1.236	0.090 U	0.07	27.295	5.7	51,500
	T28-AB	E80157-12	11/6/2000	1-2	0.084 U	0.03	7.755	0.084 U	0.06	1.758	0.084 U	0.005	1.241	0.084 U	0.07	27.401	5.9	51,700
	T28-AC	E80157-13	11/6/2000	2-3	0.110	0.03	8.535	0.120 J	0.06	1.935	0.098 J	0.005	1.366	0.328	0.07	30.157	5.8	56,900
T28-B	T28-BA	E80157-7	11/6/2000	0-0.5	0.099 U	0.03	7.82	0.099 U	0.06	1.77	0.099 U	0.005	1.25	0.099 U	0.07	27.61	5.9	52,100
	TDUP12/ T28-BA	E80157-10	11/6/2000	0-0.5	0.087 U	0.03	8.51	0.087 U	0.06	1.93	0.087 U	0.005	1.36	0.087 U	0.07	30.05	5.9	56,700
	T28-BB	E80157-8	11/6/2000	1-2	0.074 U	0.03	8.07	0.140 J	0.06	1.829	0.081	0.005	1.291	0.221	0.07	28.514	6.1	53,800
	T28-BC	E80157-9	11/6/2000	2-3	0.130	0.03	9.645	0.170 J	0.06	2.186	0.100	0.005	1.543	0.400	0.07	34.079	6.3	64,300
T28-C	T28-CA	E80157-14	11/6/2000	0-0.5	0.071 U	0.03	12.615	0.071 U	0.06	2.859	0.071 U	0.005	2.018	0.071 U	0.07	44.573	6.6	84,100
	T28-CB	E80157-15	11/6/2000	1-2	0.056 U	0.03	1.995	0.056 U	0.06	0.452	0.056 U	0.005	0.319	0.056 U	0.07	7.049	6.8	13,300
	T28-CC	E80157-16	11/6/2000	2-3	0.098 U	0.03	15	0.098 U	0.06	3.4	0.098 U	0.005	2.4	0.098 U	0.07	53	5.2	298,000
T28-D	T28-DA	E80157-4	11/6/2000	0-0.5	0.090 U	0.03	8.22	0.090 U	0.06	1.863	0.090 U	0.005	1.315	0.090 U	0.07	29.044	5.5	54,800
	T28-DB	E80157-5	11/6/2000	1-2	0.067 U	0.03	7.665	0.390	0.06	1.737	0.079	0.005	1.226	0.469	0.07	27.083	5.8	51,100
	T28-DC	E80157-6	11/6/2000	2-3	0.067 U	0.03	10.275	0.067 U	0.06	2.329	0.067 U	0.005	1.644	0.067 U	0.07	36.305	6.3	68,500
T28-E	T28-EA	E80157-1	11/6/2000	0-0.5	0.25 U	0.03	15.0	0.25 U	0.06	3.4	0.23 U	0.005	2.4	0.23 U	0.07	53.0	8.3	111,000
	T28-EB	E80157-2	11/6/2000	1-2	0.046 U	0.03	2.205	0.120	0.06	0.500	0.046 U	0.005	0.353	0.120	0.07	7.791	5.6	14,700
	T28-EC	E80157-3	11/6/2000	2-3	0.045 U	0.03	1.845	0.045 U	0.06	0.418	0.045 U	0.005	0.295	0.045 U	0.07	6.519	5.4	12,300
T29-A	T29-AA	E80317-7	11/8/2000	0-0.5	0.130 U	0.03	11.82	0.130 U	0.06	2.679	0.130 U	0.005	1.891	0.130 U	0.07	41.764	6.1	78,800
	TDUP13/ T29-AA	E80317-10	11/8/2000	0-0.5	0.095 U	0.03	8.385	0.095 U	0.06	1.901	0.095 U	0.005	1.342	0.095 U	0.07	29.627	5.8	55,900
	T29-AB	E80317-8	11/8/2000	1-2	0.089 U	0.03	8.115	0.089 U	0.06	1.839	0.089 U	0.005	1.294	0.089 U	0.07	28.620	5.9	54,100
	T29-AC	E80317-9	11/8/2000	2-3	0.067 U	0.03	7.515	0.100	0.06	1.703	0.067 U	0.005	1.202	0.100	0.07	26.553	6	50,100
T29-B	T29-BA	E80318-1	11/8/2000	0-0.5	0.091 U	0.03	8.505	0.091 U	0.06	1.924	0.091 U	0.005	1.361	0.091 U	0.07	30.093	6.2	56,700
	T29-BB	E80318-2	11/8/2000	1-2	0.084 U	0.03	7.725	0.084 U	0.06	1.751	0.084 U	0.005	1.236	0.084 U	0.07	27.295	5.9	51,500
	T29-BC	E80318-3	11/8/2000	2-3	0.074 U	0.03	7.23	0.074 U	0.06	1.635	0.074 U	0.005	1.157	0.074 U	0.07	25.546	6.1	48,200

TABLE 5-27
Matco Iron and Metal
Sediment Sample Results: PCBs

Sample Location	Sample ID	Lab ID	Date	Depth (ft)	Aroclor 1248			Aroclor 1254			Aroclor 1260			Total PCB			pH (su)	TOC
					Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria	Result	Low Criteria	Severe Criteria		
T29-C	T29-CA	E80318-4	11/8/2000	0-0.5	0.053 U	0.03	3.075	0.053 U	0.06	0.697	0.053 U	0.005	0.492	0.053 U	0.07	10.865	6.3	20,500
	T29-CB	E80318-5	11/8/2000	1-2	0.047 U	0.03	1.5	0.047 U	0.06	0.34	0.047 U	0.005	0.24	0.047 U	0.07	5.3	6.3	7,660
	T29-CC	E80318-6	11/8/2000	2-3	0.053 U	0.03	2.415	0.053 U	0.06	0.547	0.053 U	0.005	0.386	0.053 U	0.07	8.533	6.3	16,100
T29-D	T29-DA	E80317-4	11/8/2000	0-0.5	0.09 U	0.03	8.07	0.09 U	0.06	1.83	0.09 U	0.005	1.29	0.09 U	0.07	28.51	5.8	53,800
	T29-DB	E80317-5	11/8/2000	1-2	0.088 U	0.03	8.445	0.088 U	0.06	1.914	0.088 U	0.005	1.351	0.088 U	0.07	29.839	5.6	56,300
	T29-DC	E80317-6	11/8/2000	2-3	0.072 U	0.03	7.995	0.097	0.06	1.812	0.072 U	0.005	1.279	0.097	0.07	28.249	6.1	53,300
T29-E	T29-EA	E80317-1	11/8/2000	0-0.5	0.087 U	0.03	7.9	0.087 U	0.06	1.8	0.087 U	0.005	1.3	0.087 U	0.07	27.9	5.9	52,700
	T29-EB	E80317-2	11/8/2000	1-2	0.094 U	0.03	8.715	0.094 U	0.06	1.975	0.094 U	0.005	1.394	0.094 U	0.07	30.793	5.7	58,100
	T29-EC	E80317-3	11/8/2000	2-3	0.082 U	0.03	7.965	0.082 U	0.06	1.805	0.082 U	0.005	1.274	0.082 U	0.07	28.143	5.7	53,100
T30-A	T30-AA	E80720-1	11/13/2000	0-0.5	0.11 U	0.03	15.0	0.11 U	0.06	3.4	0.11 U	0.005	2.4	0.11 U	0.07	53.0	5.7	134,000
	T30-AB	E80720-2	11/13/2000	1-2	0.079 U	0.03	12.585	0.089	0.06	2.853	0.079 U	0.005	2.014	0.089	0.07	44.467	6.1	83,900
	T30-AC	E80720-3	11/13/2000	2-3	0.074 U	0.03	10.125	0.100	0.06	2.295	0.074 U	0.005	1.62	0.100	0.07	35.775	6.3	67,500
T30-B	T30-BA	E80720-4	11/13/2000	0-0.5	0.099 U	0.03	15	0.099 U	0.06	3.4	0.099 U	0.005	2.4	0.099 U	0.07	53	6	115,000
	TDUP-18/ T30-BA	E80721-16	11/13/2000	0-0.5	0.100 U	0.03	15	0.100 U	0.06	3.4	0.100 U	0.005	2.4	0.100 U	0.07	53	4.8	123,000
	T30-BB	E80720-5	11/13/2000	1-2	0.086 U	0.03	13.275	0.120	0.06	3.009	0.086 U	0.005	2.124	0.120	0.07	46.905	6	88,500
	T30-BC	E80720-6	11/13/2000	2-3	0.068 U	0.03	12.975	0.068 U	0.06	2.941	0.068 U	0.005	2.076	0.068 U	0.07	45.845	5.8	86,500
T30-C	T30-CA	E80721-13	11/13/2000	0-0.5	0.059 U	0.03	4.62	0.059 U	0.06	1.047	0.059 U	0.005	0.739	0.059 U	0.07	16.324	6.7	30,800
	T30-CB	E80721-14	11/13/2000	1-2	0.048 U	0.03	2.505	0.048 U	0.06	0.568	0.048 U	0.005	0.401	0.048 U	0.07	8.851	6.6	16,700
	T30-CC	E80721-15	11/13/2000	2-3	0.065 U	0.03	8.715	0.065 U	0.06	1.975	0.065 U	0.005	1.394	0.065 U	0.07	30.793	5.2	58,100
T30-D	T30-DA	E80720-7	11/13/2000	0-0.5	0.110 J	0.03	12.285	0.290	0.06	2.785	0.200	0.005	1.966	0.600	0.07	43.407	6	81,900
	T30-DB	E80720-8	11/13/2000	1-2	0.078 U	0.03	11.52	0.980	0.06	2.611	0.18	0.005	1.843	1.16	0.07	40.704	5.7	76,800
	T30-DC	E80720-9	11/13/2000	2-3	0.070 U	0.03	12.48	0.070 U	0.06	2.829	0.070 U	0.005	1.997	0.070 U	0.07	44.096	6.2	83,200
T30-E	T30-EA	E80720-10	11/13/2000	0-0.5	0.086 U	0.03	12.555	0.300	0.06	2.846	0.120	0.005	2.009	0.420	0.07	44.361	5.7	83,700
	T30-EB	E80721-11	11/13/2000	1-2	0.071 U	0.03	12.06	0.170	0.06	2.734	0.071 U	0.005	1.930	0.170	0.07	42.612	5.7	80,400
	T30-EC	E80721-12	11/13/2000	2-3	0.058 U	0.03	4.575	0.058 U	0.06	1.037	0.058 U	0.005	0.732	0.058 U	0.07	16.165	5.6	30,500
S1	S1	E80721-1	11/13/2000	0-0.5	0.041 U	0.03	11.28	0.240	0.06	2.557	0.055 J	0.005	1.805	0.295	0.07	39.856	6.2	75,200
S2	S2	E80721-20	11/13/2000	0-0.5	0.120 U	0.03	15	0.120 U	0.06	3.4	0.120 U	0.005	2.4	0.120 U	0.07	53	5.6	123,000
S3	S3	E80721-19	11/13/2000	0-0.5	0.100 U	0.03	13.53	0.440 J	0.06	3.067	0.12	0.005	2.165	0.56	0.07	47.806	5.7	90,200
S4	S4	E80721-17	11/13/2000	0-0.5	0.099 U	0.03	15	0.099 U	0.06	3.4	0.099 U	0.005	2.4	0.099 U	0.07	53	5.8	101,000
S5	S5	E80721-18	11/13/2000	0-0.5	0.140 U	0.03	15	0.140 U	0.06	3.4	0.140 U	0.005	2.4	0.140 U	0.07	53	5.8	143,000
S6	S6	E80721-5	11/14/2000	0-0.5	0.061 U	0.03	12.495	0.061 U	0.06	2.832	0.061 U	0.005	1.999	0.061 U	0.07	44.149	5.9	83,300
S7	S7-A	E81170-19	11/20/2000	0-0.5	0.075 U	0.03	6.09	0.075 U	0.06	1.380	0.075 U	0.005	0.974	0.075 U	0.07	21.518	5.9	40,600
	SDUP-1/ S7-A	E81104-18	11/20/2000	0-0.5	0.039 U	0.03	3.69	0.074 J	0.06	0.836	0.050 J	0.005	0.590	0.124	0.07	13.038	5.9	24,600
	S7-B	E81170-20	11/20/2000	1-2	0.210	0.03	6.780	0.260	0.06	1.537	0.150 J	0.005	1.085	0.620	0.07	23.956	6.1	45,200
	S7-C	E81104-17	11/20/2000	2-3	0.042 U	0.03	3.555	0.100 J	0.06	0.806	0.05	0.005	0.569	0.150	0.07	12.561	6.2	23,700
S8	S8-A	E81170-16	11/20/2000	0-0.5	0.110	0.03	8.955	0.150 J	0.06	2.030	0.100 J	0.005	1.433	0.360	0.07	31.641	5.6	59,700
	S8-B	E81170-17	11/20/2000	1-2	0.75 U	0.03	13.86	0.075 U	0.06	3.142	0.075 U	0.005	2.218	0.075 U	0.07	48.972	5.5	92,400
	S8-C	E81170-18	11/20/2000	2-3	0.060 U	0.03	1.98	0.060 U	0.06	0.449	0.060 U	0.005	0.317	0.060 U	0.07	6.996	5.9	13,200
S9	S9-A	E81170-13	11/20/2000	0-0.5	0.068 U	0.03	5.775	0.120 J	0.06	1.309	0.068 U	0.005	0.924	0.120	0.07	20.405	5.6	38,500
	S9-B	E81170-14	11/20/2000	1-2	0.080 U	0.03	7.2	0.080 U	0.06	1.632	0.080 U	0.005	1.152	0.080 U	0.07	25.44	5.6	48,000
	S9-C	E81170-15	11/20/2000	2-3	0.120	0.03	7.320	0.250	0.06	1.659	0.110 J	0.005	1.171	0.480	0.07	25.864	5.9	48,800
S10	S10-A	E81170-10	11/20/2000	0-0.5	0.081 U	0.03	7.05	0.081 U	0.06	1.598	0.081 U	0.005	1.128	0.081 U	0.07	24.91	5.9	47,000
	S10-B	E81170-11	11/20/2000	1-2	0.078 U	0.03	6.81	0.078 U	0.06	1.544	0.078 U	0.005	1.090	0.078 U	0.07	24.062	5.6	45,400
	S10-C	E81170-12	11/20/2000	2-3	0.090 J	0.03	7.74	0.220	0.06	1.754	0.110	0.005	1.238	0.420	0.07	27.348	6.3	51,600
S11	S11-A	E81170-7	11/20/2000	0-0.5	0.068 U	0.03	6.06	0.100 J	0.06	1.374	0.068 U	0.005	0.970	0.100	0.07	21.412	5.8	40,400
	S11-B	E81170-8	11/20/2000	1-2	0.130	0.03	6.945	0.320	0.06	1.574	0.140	0.005	1.111	0.590	0.07	24.539	6.1	46,300
	S11-C	E81170-9	11/20/2000	2-3	0.075 U	0.03	8.235	1.300	0.06	1.867	0.190	0.005	1.318	1.490	0.07	29.097	6.2	54,900
S12	S12-A	E81170-4	11/20/2000	0-0.5	0.083 U	0.03	7.53	0.200	0.06	1.707	0.110	0.005	1.205	0.310	0.07	26.606	5.8	50,200
	S12-B	E81170-5	11/20/2000	1-2	0.084 U	0.03	6.81	0.093 J	0.06	1.544	0.084 U	0.005	1.090	0.093	0.07	24.062	5.9	45,400
	S12-C	E81170-6	11/20/2000	2-3	0.150	0.03	7.605	0.200 J	0.06	1.724	0.150 J	0.005	1.217	0.500	0.07	26.871	6.2	50,700
S13	S13-A	E81170-1	11/20/2000	0-0.5	0.047 U	0.03	4.38	0.047 U	0.06	0.993	0.047 U	0.005	0.701	0.047 U	0.07	15.476	5.5	29,200
	S13-B	E81170-2	11/20/2000	1-2	0.076 U	0.03	6.51	0.076 U	0.06	1.476	0.076 U	0.005	1.042	0.076 U	0.07	23.002	5.3	43,400
	S13-C	E81170-3	11/20/2000	2-3	0.130	0.03	7.305	0.190 J	0.06	1.656	0.100 J	0.005	1.169	0.420	0.07	25.811	5.8	48,700
S14	S14	E81503-1	11/28/2000	0-0.5	0.042 U	0.03	3.3	0.042 U	0.06	0.7	0.042 U	0.005	0.5	0.042 U	0.07	11.6	6.1	21,800

Notes:
NJDEP GSQE - NJDEP Guidance For Sediment Quality Evaluations (11/98), Freshwater Sediment Screening Guidelines - Ontario (Persaud et al., 1993)
Shaded values meet or exceed New Jersey Guidance For Sediment Quality Evalutations - Lowest Effects Level (11/98).
U = Not detected above the Contract Required Quantitation Limit (CRQL).
J = Estimated value.
NA = Not Available
* = Composite Sample
units are mg/kg

TABLE 5-28
Matteo Iron and Metal
Sediment Sample Results: TCL/TAL (Lowest Effects Level)

SAMPLE LOCATION		T1-E	T2-E	T3-E	T3-E	T4-E	T5-E	T6-E	T7-E	T8-E	T9-E	T11-E	T13-E	T13-E	T14-E	T15-E	T15-E	T16-E
SAMPLE ID		T1-EA	T2-EA	T3-EA	TDUP-20/T3-EA	T4-EA	T5-EA	T6-EA	T7-EA	T8-EA	T9-EA	T11-EA	T13-EA	TDUP2/T13-EA	T14-EA	T15-EA	TDUP-1/T15-EA	T16-EA
LAB ID		E81104-14	E79745-1	E80832-7	E80832-10	E79744-1	E79743-2	E79744-4	E79743-11	E79743-14	E80555-14	E79555-1	E79452-11	E79452-14	E78964-9	E78963-11	E78963-14	E79453-9
DATE		11/16/2000	10/31/2000	11/15/2000	11/15/2000	10/30/2000	10/30/2000	10/30/2000	10/31/2000	10/31/2000	11/10/2000	10/27/2000	10/25/2000	10/25/2000	10/18/2000	10/17/2000	10/17/2000	10/26/2000
SAMPLE INTERVAL		0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5
ANALYTE	NJDEP GSQE LOWEST																	
Volatile Organic Compounds																		
Benzene	NC	0.011 U	0.03 U	0.02 U	0.022 U	0.028 U	0.016 U	0.049 U	0.036 U	0.067 U	0.022 U	0.03 U	0.02 U	0.017 U	0.022 U	0.019 U	0.021 U	0.018 U
Chloroform	NC	0.011 U	0.03 U	0.02 U	0.022 U	0.028 U	0.016 U	0.049 U	0.036 U	0.067 U	0.022 U	0.03 U	0.02 U	0.017 U	0.022 U	0.019 U	0.021 U	0.018 U
cis-1,2-Dichloroethene	NC	0.011 U	0.03 U	0.02 U	0.022 U	0.028 U	0.016 U	0.049 U	0.036 U	0.067 U	0.022 U	0.03 U	0.02 U	0.017 U	0.022 U	0.019 U	0.021 U	0.018 U
Ethylbenzene	NC	0.011 U	0.03 U	0.02 U	0.022 U	0.028 U	0.016 U	0.049 U	0.036 U	0.067 U	0.022 U	0.03 U	0.02 U	0.017 U	0.022 U	0.019 U	0.021 U	0.018 U
Vinyl chloride	NC	0.011 U	0.03 U	0.02 U	0.022 U	0.028 U	0.016 U	0.049 U	0.036 U	0.067 U	0.022 U	0.03 U	0.02 U	0.017 U	0.022 U	0.019 U	0.021 U	0.018 U
Xylene (total)	NC	0.011 U	0.03 U	0.02 U	0.022 U	0.028 U	0.016 U	0.049 U	0.036 U	0.067 U	0.022 U	0.03 U	0.02 U	0.017 U	0.022 U	0.019 U	0.021 U	0.018 U
Semi-Volatile Organic Compounds																		
2,4-Dimethylphenol	NC	0.37 U	1 U	0.62 U	0.5 U	0.86 U	0.47 U	1.7 U	1.1 U	2.2 U	0.71 U	1.1 U	0.68 U	0.64 U	0.73 U	0.72 U	0.75 U	0.67 U
Benzo(a)anthracene	0.32	0.087 J	0.099 J	0.049 J	0.027 J	0.057 J	0.47 U	0.11 J	0.07 J	0.13 J	0.096 J	0.056 J	0.045 J	0.64 U	0.13 J	0.26 J	0.18 J	0.67 U
Benzo(a)pyrene	0.37	0.13 J	0.11 J	0.055 J	0.03 J	0.09 J	0.47 U	1.7 U	1.1 U	2.2 U	0.11 J	0.07 J	0.036 J	0.64 U	0.15 J	0.24 J	0.2 J	0.67 U
Benzo(b)fluoranthene	NC	0.16 J	0.14 J	0.052 J	0.041 J	0.087 J	0.47 U	0.14 J	1.1 U	2.2 U	0.084 J	0.07 J	0.03 J	0.64 U	0.14 J	0.36 J	0.24 J	0.67 U
Benzo(k)fluoranthene	0.24	0.12 J	0.091 J	0.05 J	0.029 J	0.066 J	0.47 U	0.095 J	1.1 U	2.2 U	0.11 J	0.062 J	0.042 J	0.64 U	0.13 J	0.25 J	0.2 J	0.67 U
bis(2-Ethylhexyl)phthalate	NC	0.16 J	0.13 J	0.62 U	0.5 U	0.13 J	0.47 U	0.47 J	0.15 J	0.22 U	0.15 J	0.16 J	0.04 J	0.044 J	0.67 J	0.33 J	0.24 J	0.67 U
Dibenz(a,h)anthracene	0.06	0.026 J	1 U	0.62 U	0.5 U	0.86 U	0.47 U	1.7 U	1.1 U	2.2 U	0.71 U	1.1 U	0.68 U	0.64 U	0.73 U	0.72 U	0.75 U	0.67 U
Indeno(1,2,3-cd)pyrene	0.2	0.082 J	1 U	0.032 J	0.02 J	0.86 U	0.47 U	1.7 U	1.1 U	2.2 U	0.067 J	1.1 U	0.68 U	0.64 U	0.074 J	0.094 J	0.098 J	0.67 U
Pesticide & PCB																		
Dieldrin	0.002	0.004 U	0.01 U	0.0063 U	0.0072 U	0.0083 U	0.0049 U	0.017 U	0.012 U	0.021 U	0.0079 U	0.058 U	0.0065 U	0.006 U	0.0074 U	0.0069 U	0.0074 U	0.006 U
Aroclor 1248	0.03	0.04 U	0.1 U	0.063 U	0.072 U	0.083 U	0.049 U	0.17 U	0.12 U	0.21 U	0.079 U	0.58 U	0.065 U	0.06 U	0.074 U	0.069 U	0.074 U	0.06 U
Aroclor 1254	0.06	0.04 U	0.1 U	0.063 U	0.093	0.11	0.049 U	0.17 U	0.12 U	0.24	4.3	3.2	0.12	0.084	0.17	0.75	0.61	0.097
Aroclor 1260	0.005	0.04 U	0.1 U	0.063 U	0.072 U	0.083 U	0.049 U	0.17 U	0.12 U	0.21 U	4	1.6 J	0.088	0.066	0.11	0.47 J	0.31 J	0.06 U
Total Aroclor	0.07	0.04 U	0.1 U	0.063 U	0.093	0.11	0.049 U	0.17 U	0.12 U	0.24	8.3	4.80	1.01 J	0.15	0.28	1.22	0.92	0.097
Metals																		
Aluminum	NC	4,000	10,800	7,710	9,730	10,300	20,300	20,400	12,700	18,100	14,300	12,700	22,500	20,900	19,600	14,600	12,700	10,600
Antimony	NC	1.3 J	2.4 J	1.9 J	2.2 U	3.9 J	0.52 J	5.6 J	6.8 J	11.1 J	37.2	23.4 J	3.1 J	2 J	12.8 J	4.7 J	5.8 J	2.5 J
Arsenic	6	6.5	9.9	8.7	10.7	7.6	104	16.3	17	20.2	20.6	14.2	18.9	13.9	18.2	16.9	17.2	11.3
Barium	NC	40.3 J	113 J	79.2	102	103	23 J	184	125 J	173 J	147	164	156	150	232	139	135	103
Beryllium	NC	0.6 J	0.94 J	0.83 J	1 J	0.98 J	1.5	1.8 J	1.6 J	1.9 J	1.4 J	1.1 J	1.5 J	1.3 J	1.9 J	1.5 J	1.4 J	1.2 J
Cadmium	0.6	0.78 J	1.2 J	1.5 J	2.1 J	3.2	0.08 U	3.2 J	3.2 J	4.9 J	1.2 J	3	1.2 J	0.29 J	2.7	2.4	2 J	2.6
Copper	16	18	46.1	54.5	70.1	80.2	7	109	72.8	102	175	119	109	35.3	195	81.1	80.6	64.3
Iron	NC	8,560	25,600	12,800	16,300	17,900	95,100	39,800	24,500	32,300	112,000	27,300	33,900	34,400	40,900	31,000	31,700	18,400
Lead	31	76.3	177	161	191	381	14.5	2,070	1,940	788	15,300	2,490	788	221	9,970	494	594	274
Manganese	NC	24.5	499	253	339	307	50.2	548	360	436	1,390	403	769	346	518	345	249	254
Mercury	0.2	0.06 J	0.36	0.28	0.3	0.53	0.06 U	0.53	0.27 J	0.28 U	0.26	0.69	0.1 J	0.28	1.1	0.57	0.46	0.71
Nickel	16	10.8	24.2	20.6	25.5	28.8	7.5 J	45.9	32.4	48.5	38	38.7	33.1	26	45.1	32.9	33.6	27.8
Silver	1	0.22 U	0.63 J	0.71 J	0.85 J	1 J	0.18 U	1.7 J	0.73 J	1.7 J	1.5 J	1.4 J	2.3 J	0.75 J	2.6 J	1.3 J	1.1 J	1.7 J
Sodium	NC	128 J	203 J	373 J	478 J	169 J	88.5 J	266 J	211 J	555	242 J	272 J	187 J	192 J	190 J	199 J	163 J	126 J
Thallium	NC	0.74 U	2.1 U	3 U	3.7 U	1.7 U	1 J	3.3 U	2.3 U	4.3 U	3.6 J	2 U	1.3 U	1.4 U	1.5 U	1.4 U	1.5 U	1.2 U
Zinc	120	133	291	241	306	511	66.2	686	1,750	1,210	814	591	591 J	160	542 N	431	431	334
Soil Characteristics																		
pH	NC	6	5.8	5.4	6.7	6.2	5.8	5.8	5.1	5.8	6.1	5.6	8	6.6	5.5	6.1	5.4	5.1
Total Organic Carbon	NC	44,700	43,000	41,200	51,500	74,200	8,930	78,800	93,800	147,000	104,000	65,700	71,900	25,800	50,400	35,200	43,600	57,000

Notes:
NJDEP GSQE - NJDEP Guidance For Sediment Quality Evaluations (11/98), Freshwater Sediment Screening Guidelines Ontario (Persaud et al., 1993)
Shaded values meet or exceed New Jersey Guidance For Sediment Quality Evalutations - Lowest Effects Level(11/98), Freshwater Sediment Screening Guidelines - Ontario (Persaud et al., 1993)
U = Not detected above the Contract Required Quantitation Limit (CRQL).
J = Estimated value.
NA = Not Available

TABLE 5-28

Matteo Iron and Metal

Sediment Sample Results: TCL/TAL (Lowest Effects Level)

SAMPLE ID		T17-E	T18-E	T19-E	T19-E	T20-E	T21-A	T22-E	T23-E	T24-E	T25-E	T25-E	T26-E	T27-E	T28-E	T29-E	T30-A	S14
SAMPLE ID		T17-EA	T18-EA	T19-EA	TDUP-7/T19-EA	T20-EA	T21-AA	T22-EA	T23-EA	T24-EA	T25-EA	TDUP-15/T25-EA	T26-EA	T27-EA	T28-EA	T29-EA	T30-AA	S14
LAB ID		E79931-7	E80721-6	E79933-4	E79933-7	E79932-11	E80047-14	E80556-6	E81103-3	E80556-3	E80554-1	E80554-18	E80047-5	E81103-5	E80157-1	E80317-1	E80720-1	E81503-1
DATE		11/1/2000	11/14/2000	11/1/2000	11/1/2000	11/2/2000	11/3/2000	11/9/2000	11/17/2000	11/9/2000	11/9/2000	11/9/2000	11/3/2000	11/17/2000	11/6/2000	11/8/2000	11/13/2000	11/28/2000
SAMPLE INTERVAL		0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5
ANALYTE	NJDEP GSQE LOWEST																	
Volatile Organic Compounds																		
Benzene	NC	0.015 U	0.022 U	0.021 U	0.022 U	0.028 U	0.021	0.025 U	0.021 U	0.017 U	0.014 U	0.017 U	0.027 U	0.019 U	0.071 U	0.028 U	0.034 U	0.012 U
Chloroform	NC	0.015 U	0.022 U	0.021 U	0.022 U	0.028 U	0.021	0.025 U	0.021 U	0.017 U	0.014 U	0.017 U	0.027 U	0.019 U	0.071 U	0.028 U	0.034 U	0.012 U
cis-1,2-Dichloroethene	NC	0.015 U	0.022 U	0.021 U	0.022 U	0.028 U	0.021	0.025 U	0.021 U	0.017 U	0.014 U	0.017 U	0.027 U	0.019 U	0.071 U	0.028 U	0.034 U	0.012 U
Ethylbenzene	NC	0.015 U	0.022 U	0.021 U	0.022 U	0.028 U	0.021	0.025 U	0.021 U	0.017 U	0.014 U	0.017 U	0.027 U	0.019 U	0.071 U	0.028 U	0.034 U	0.012 U
Vinyl chloride	NC	0.015 U	0.022 U	0.021 U	0.022 U	0.028 U	0.021	0.025 U	0.021 U	0.017 U	0.014 U	0.017 U	0.027 U	0.019 U	0.071 U	0.028 U	0.034 U	0.012 U
Xylene (total)	NC	0.015 U	0.022 U	0.021 U	0.022 U	0.028 U	0.021	0.025 U	0.021 U	0.017 U	0.014 U	0.017 U	0.027 U	0.019 U	0.071 U	0.028 U	0.034 U	0.012 U
Semi-Volatile Organic Compounds																		
2,4-Dimethylphenol	NC	0.54 U	0.73 U	0.66 U	0.71 U	0.77 U	0.68 U	0.79 U	0.7 U	0.58 U	0.51 U	0.51 U	0.79 U	0.66 U	2.6 U	0.89 U	1.1 U	0.39 U
Benzo(a)anthracene	0.32	0.031 J	0.21 J	0.076 J	0.11 J	0.078 J	0.68 U	0.15 J	0.2 J	0.032 J	0.51 U	0.035 J	0.047 J	0.14 J	0.14 J	0.085 J	0.084 J	0.022 J
Benzo(a)pyrene	0.37	0.032 J	0.24 J	0.097 J	0.12 J	0.074 J	0.68 U	0.2 J	0.17 J	0.58 U	0.51 U	0.047 J	0.062 J	0.18 J	0.15 J	0.084 J	0.1 J	0.021 J
Benzo(b)fluoranthene	NC	0.036 J	0.17 J	0.075 J	0.11 J	0.077 J	0.68 U	0.19 J	0.16 J	0.58 U	0.51 U	0.003 J	0.054 J	0.21 J	0.15 J	0.093 J	0.099 J	0.027 J
Benzo(k)fluoranthene	0.24	0.025 J	0.2 J	0.098 J	0.093 J	0.069 J	0.68 U	0.18 J	0.14 J	0.58 U	0.51 U	0.035 J	0.064 J	0.14 J	0.16 J	0.1 J	0.094 J	0.39 U
bis(2-Ethylhexyl)phthalate	NC	0.54 U	0.22 J	0.75	1.1	0.11 J	0.68 U	0.79	0.7 U	0.58 U	0.51 U	0.51 U	0.082 J	0.37 J	0.39 J	0.41 J	0.14 J	0.39 U
Dibenz(a,h)anthracene	0.06	0.54 U	0.05 J	0.66 U	0.71 U	0.77 U	0.68 U	0.042 J	0.049 J	0.58 U	0.51 U	0.51 U	0.79 U	0.042 J	2.6 U	0.89 U	1.1 U	0.39 U
Indeno(1,2,3-cd)pyrene	0.2	0.54 U	0.12 J	0.66 U	0.71 U	0.77 U	0.68 U	0.12 J	0.094 J	0.58 U	0.51 U	0.51 U	0.79 U	0.11 J	2.6 U	0.054 J	0.056 J	0.39 U
Pesticide & PCB																		
Dieldrin	0.002	0.005 U	0.0074 U	0.0068 U	0.0068 U	0.0083 U	0.0062 U	NA	0.0071 U	0.0064 U	0.0049 U	0.0057 U	0.0089 U	0.0064 U	0.023 U	0.0087 U	0.011 U	0.0042 U
Aroclor 1248	0.03	0.05 U	0.074 U	0.088	0.068 U	0.083 U	0.062 U	0.45 U	0.071 U	0.064 U	0.049 U	0.057 U	0.089 U	0.064 U	0.23 U	0.087 U	0.11 U	0.042 U
Aroclor 1254	0.06	0.05 U	0.074 U	0.23	0.12	0.15	0.062 U	0.45 U	0.071 U	0.064 U	0.049 U	0.057 U	0.18	0.064 U	0.23 U	0.087 U	0.11 U	0.042 U
Aroclor 1260	0.005	0.05 U	0.074 U	0.099 J	0.068	0.083 U	0.062 U	0.45 U	0.071 U	0.064 U	0.049 U	0.057 U	0.094 J	0.064 U	0.23 U	0.087 U	0.11 U	0.042 U
Total Aroclor	0.07	0.05 U	0.074 U	0.417	0.188	0.15	0.062 U	0.45 U	0.071 U	0.064 U	0.049 U	0.057 U	0.274	0.064 U	0.23 U	0.087 U	0.11 U	0.042 U
Metals																		
Aluminum	NC	10,500	17,400	13,700	15,800	12,300	17,400	17,200	15,800	12,200	13,000	17,500	22,300	11,900	15,300	19,900	15,700	6,930
Antimony	NC	0.55 U	1.8 J	1 J	1.1 J	0.87 U	2.3 J	0.84 U	0.63 U	0.55 U	1.4 U	1.6 U	3.3 J	0.63 U	6.9 U	3 U	1.1 UN	0.35 U
Arsenic	6	8.3	31.5	21.2	27.4	11.3	32.2	10.3	15.6	5.7 N	22.7	25.6	18.4	8.6	14.6	17.8	8.4	4.6
Barium	NC	84.6	160	170	170	110	196	193	127	101	117	124	208	105	146 J	185	165	60.3
Beryllium	NC	0.88 J	1.7 J	1.8	2	1.1 J	1.3 J	1.4 J	1 J	0.73 J	0.62 J	2.1	1.9 J	0.95 J	1.5 J	3.1	1.3 J	0.52 J
Cadmium	0.6	1 J	6	4.3	4.4	2.2 J	3	1.7 J	0.84 J	0.1 U	0.25 U	0.29 U	4.1	1.9	2.1 J	4.3	2.2 J	1.1
Copper	16	37.8	145	103	109	54.3	122	68.6	49.1	10.1	30.2	43.2	97.8	46.4	66.4	91.5	67.8	26.4
Iron	NC	18,400	27,900	22,400	27,200	23,000	32,300	32,900	23,100	17,800	43,300	34,500	32,800	19,600	28,000	34,500	23,400	10,500
Lead	31	66.8	191	166	185	87.9	231	98.2	98.3	15.3	51	86.6	186	64	102	149	111	35.7
Manganese	NC	570	316	398	473	358	319	694	483	301	1,080	516	561	335	557	617	289	198
Mercury	0.2	0.33	1.7	1.1	1.2	0.36	1.9	0.44	0.63	0.51	0.26	0.79	0.82	0.18	0.28 U	0.68	0.5	0.15
Nickel	16	18.6	44.3	39.1	41	29.2	42	28.8	25.7	16.9	18.8	20	49.7	22.3	32.9 J	41.1	28	13
Silver	1	0.99 J	2.6 J	2.1 J	2.3 J	1 J	1.6 J	1.7 J	0.26 U	0.23 U	0.45 U	0.52 U	2.6 J	0.7 J	1.3 J	2.4 J	1.4 J	0.5 J
Sodium	NC	68.5 J	246 J	138 J	123 J	228 J	314 U	282 J	182 J	277 J	218 U	250 U	340 U	157 J	1090 U	467 U	685 J	87.7 J
Thallium	NC	1.2 U	1.5 U	1.3 U	1.4 U	1.8 U	3.4 U	1.8 U	1.3 U	1.2 U	2.3 U	2.7 U	3.6 U	1.3 U	11.7 U	5 U	2.3 U	0.75 U
Zinc	120	196	873	524	549	400	549	320	208	66.9	181	188	532	311	407	588	404	169
Soil Characteristics																		
Ph	NC	6.4	5.9	6.2	6.2	5.5	6.3	5.5	5	5.4	5.3	6.1	5.5	5.8	8.3	5.9	5.7	6.1
Total Organic Carbon	NC	54,200	90,200	60,300	10,100	35,000	98,800	57,100	55,600	29,500	11,500	24,100	63,500	59,700	111,000	52,700	######	21,800

Notes:

NJDEP GSQE - NJDEP Guidance For Sediment Quality Evaluations (11/98), Freshwater Sediment Screening Guidelines Ontario (Persaud et al., 1993)

Shaded values meet or exceed New Jersey Guidance For Sediment Quality Evalutations - Lowest Effects Level (11/98), Freshwater Sediment Screening Guidelines - Ontario (Persaud et al., 1993)

U = Not detected above the Contact Required Quantitation Limit (CRQL).

J = Estimated value.

NA = Not Available

TABLE 5-29

Matteo Iron and Metal

Sediment Sample Results: TCL/TAL (Severe Effects Level)

SAMPLE LOCATION		T1-E	T2-E	T3-E	T3-E	T4-E	T5-E	T6-E	T7-E	T8-E	T9-E	T11-E	T13-E	T13-E	T14-E	T15-E	T15-E	T16-E
SAMPLE ID		T1-EA	T2-EA	T3-EA	TDUP-20/T3-EA	T4-EA	T5-EA	T6-EA	T7-EA	T8-EA	T9-EA	T11-EA	T13-EA	TDUP2/T13-EA	T14-EA	T15-EA	TDUP-1/T15-EA	T16-EA
LAB ID		E81104-14	E79745-1	E80832-7	E80832-10	E79744-1	E79743-2	E79744-4	E79743-11	E79743-14	E80555-14	E79555-1	E79452-11	E79452-14	E78964-9	E78963-11	E78963-14	E79453-9
DATE		11/16/00	10/31/2000	11/15/2000	11/15/2000	10/30/2000	10/30/2000	10/30/2000	10/31/2000	10/31/2000	11/10/2000	10/27/00	10/25/00	10/25/2000	10/18/00	10/17/00	10/17/2000	10/26/00
SAMPLE INTERVAL		0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	2.0-2.5	0-0.5	1.0-1.5	0-0.5	0-0.5	0-0.5
ANALYTE	NJDEP GSQE SEVERE																	
Volatile Organic Compounds																		
Benzene	NC	0.011 U	0.03 U	0.02 U	0.022 U	0.028 U	0.016 U	0.049 U	0.036 U	0.067 U	0.022 U	0.03 U	0.02 U	0.017 U	0.022 U	0.019 U	0.021 U	0.018 U
Chloroform	NC	0.011 U	0.03 U	0.02 U	0.022 U	0.028 U	0.016 U	0.049 U	0.036 U	0.067 U	0.022 U	0.03 U	0.02 U	0.017 U	0.022 U	0.019 U	0.021 U	0.018 U
cis-1,2-Dichloroethene	NC	0.011 U	0.03 U	0.02 U	0.022 U	0.028 U	0.016 U	0.049 U	0.036 U	0.067 U	0.022 U	0.03 U	0.02 U	0.017 U	0.022 U	0.019 U	0.021 U	0.018 U
Ethylbenzene	NC	0.011 U	0.03 U	0.02 U	0.022 U	0.028 U	0.016 U	0.049 U	0.036 U	0.067 U	0.022 U	0.03 U	0.02 U	0.017 U	0.022 U	0.019 U	0.021 U	0.018 U
Vinyl chloride	NC	0.011 U	0.03 U	0.02 U	0.022 U	0.028 U	0.016 U	0.049 U	0.036 U	0.067 U	0.022 U	0.03 U	0.02 U	0.017 U	0.022 U	0.019 U	0.021 U	0.018 U
Xylene (total)	NC	0.011 U	0.03 U	0.02 U	0.022 U	0.028 U	0.016 U	0.049 U	0.036 U	0.067 U	0.022 U	0.03 U	0.02 U	0.017 U	0.022 U	0.019 U	0.021 U	0.018 U
Semi-Volatile Organic Compounds																		
2,4-Dimethylphenol	NC	0.37 U	1 U	0.62 U	0.5 U	0.86 U	0.47 U	1.7 U	1.1 U	2.2 U	0.71 U	1.1 U	0.68 U	0.64 U	0.73 U	0.72 U	0.75 U	0.67 U
Benzo(a)anthracene	1480	0.087 J	0.099 J	0.049 J	0.027 J	0.057 J	0.47 U	0.11 J	0.07 J	0.13 J	0.096 J	0.056 J	0.045 J	0.64 U	0.13 J	0.26 J	0.18 J	0.67 U
Benzo(a)anthracene - GSQE	1480	66.2	63.6	61.0	76.2	109.8	13.2	116.6	138.8	148.0	148.0	97.2	106.4	38.2	74.6	52.1	64.5	84.4
Benzo(a)pyrene	1440	0.13 J	0.11 J	0.055 J	0.03 J	0.09 J	0.47 U	1.7 U	1.1 U	2.2 U	0.11 J	0.07 J	0.036 J	0.64 U	0.15 J	0.24 J	0.2 J	0.67 U
Benzo(a)pyrene - GSQE	1440	64.4	61.9	59.3	74.2	106.8	12.9	113.5	135.1	144.0	144.0	94.6	103.5	37.2	72.6	50.7	62.8	82.1
Benzo(b)fluoranthene	NC	0.16 J	0.14 J	0.052 J	0.041 J	0.087 J	0.47 U	0.14 J	1.1 U	2.2 U	0.084 J	0.07 J	0.03 J	0.64 U	0.13 J	0.25 J	0.2 J	0.67 U
Benzo(k)fluoranthene	1340	0.12 J	0.091 J	0.05 J	0.029 J	0.066 J	0.47 U	0.095 J	1.1 U	2.2 U	0.11 J	0.062 J	0.042 J	0.64 U	0.13 J	0.25 J	0.2 J	0.67 U
Benzo(k)fluoranthene - GSQE	1340	59.9	57.6	55.2	69.0	99.4	12.0	105.6	125.7	134.0	134.0	88.0	96.3	34.6	67.5	47.2	58.4	76.4
bis(2-Ethylhexyl)phthalate	NC	0.16 J	0.13 J	0.62 U	0.5 U	0.13 J	0.47 U	0.47 J	0.15 J	0.22 U	0.15 J	0.16 J	0.04 J	0.014 J	0.67 J	0.33 J	0.24 J	0.67 U
Dibenz(a,h)anthracene	130	0.026 J	1 U	0.62 U	0.5 U	0.86 U	0.47 U	1.7 U	1.1 U	2.2 U	0.71 U	1.1 U	0.68 U	0.64 U	0.73 U	0.72 U	0.75 U	0.67 U
Dibenz(a,h)anthracene - GSQE	130	5.8	5.6	5.4	6.7	9.6	1.2	10.2	12.2	13.0	13.0	8.5	9.3	3.4	6.6	4.6	5.7	7.4
Indeno(1,2,3-cd)pyrene	320	0.082 J	1 U	0.032 J	0.02 J	0.86 U	0.47 U	1.7 U	1.1 U	2.2 U	0.067 J	1.1 U	0.68 U	0.64 U	0.074 J	0.094 J	0.098 J	0.67 U
Indeno(1,2,3-cd)pyrene - GSQE	320.0	14.3	13.8	13.2	16.5	23.7	2.9	25.2	30.0	32.0	32.0	21.0	23.0	8.3	16.1	11.3	14.0	18.2
Pesticide & PCB																		
Dieldrin	NC	0.004 U	0.01 U	0.0063 U	0.0072 U	0.0083 U	0.0049 U	0.017 U	0.012 U	0.021 U	0.0079 U	0.058 U	0.0065 U	0.006 U	0.0074 U	0.0069 U	0.0074 U	0.006 U
Aroclor 1248	150	0.04 U	0.1 U	0.063 U	0.072 U	0.083 U	0.049 U	0.17 U	0.12 U	0.21 U	0.079 U	0.58 U	0.065 U	0.06 U	0.074 U	0.069 U	0.074 U	0.06 U
Aroclor 1248 - GSQE	150	6.7	6.5	6.2	7.7	11.1	1.3	11.8	14.1	15.0	15.0	9.9	10.8	3.9	7.6	5.3	6.5	8.6
Aroclor 1254	34	0.04 U	0.1 U	0.063 U	0.093	0.11	0.049 U	0.17 U	0.12 U	0.24	4.3	3.2	0.12	0.084	0.17	0.75	0.61	0.097
Aroclor 1254 - GSQE	34	1.5	1.5	1.4	1.8	2.5	0.3	2.7	3.2	3.4	3.4	2.2	2.4	0.9	1.7	1.2	1.5	1.9
Aroclor 1260	24	0.04 U	0.1 U	0.063 U	0.072 U	0.083 U	0.049 U	0.17 U	0.12 U	0.21 U	4.4	1.6 J	0.088	0.066	0.11	0.47 J	0.31 J	0.06 U
Aroclor 1260 - GSQE	24	1.1	1.0	1.0	1.2	1.8	0.2	1.9	2.3	2.4	2.4	1.6	1.7	0.6	1.2	0.8	1.0	1.4
Total Aroclor	530	0.04 U	0.1 U	0.063 U	0.093	0.11	0.049 U	0.17 U	0.12 U	0.24	8.3	4.80	1.01	0.15	0.28	1.22	0.92	0.097
Total Aroclor - GSQE	530	23.7	22.8	21.8	27.3	39.3	4.7	41.8	49.7	53.0	53.0	34.8	38.1	13.7	26.7	18.7	23.1	30.2
Metals																		
Aluminum	NC	4,000	10,800	7,710	9,730	10,300	20,300	20,400	12,700	18,100	14,300	12,700	22,500	20,900	19,600	14,600	12,700	10,600
Antimony	NC	1.3 J	2.4 J	1.9 J	2.2 U	3.9 J	0.52 J	5.6 J	6.8 J	11.1 J	37.2	23.4 J	3.1 J	2 J	12.8 J	4.7 J	5.8 J	2.5 J
Arsenic	33	6.5	9.9	8.7	10.7	7.1	104	16.3	17	20.2	20.6	14.2	18.9	13.9	18.2	16.9	17.1	11.3
Barium	NC	40.3 J	113 J	79.2	102	103	23 J	184	125 J	173 J	147	164	156	150	232	139	135	103
Beryllium	NC	0.6 J	0.94 J	0.83 J	1 J	0.98 J	1.5	1.8 J	1.6 J	1.9 J	1.4 J	1.1 J	1.5 J	1.3 J	1.9 J	1.5 J	1.4 J	1.2 J
Cadmium	10	0.78 J	1.2 J	1.5 J	2.1 J	3.2	0.08 U	3.2 J	3.2 J	4.9 J	1.2 J	3	1.2 J	0.29 J	2.7	2.4	2 J	2.6
Copper	110	18	46.1	54.5	70.1	80.2	7	109	72.8	102	175	119	109	35.3	195	81.1	80.6	64.3
Iron	NC	8,560	25,600	12,800	16,300	17,900	95,100	39,800	24,500	32,300	112,000	27,300	33,900	34,400	40,900	31,000	31,700	18,400
Lead	250	76.3	177	161	191	381	14.5	2,070	1,940	788	15,100	2,490	788	221	9,970	494	265	594	274
Manganese	NC	24.5	499	253	339	307	50.2	548	360	436	1,390	403	769	346	518	345	249	254
Mercury	2	0.06 J	0.36	0.28	0.3	0.53	0.06 U	0.53	0.27 J	0.28 U	0.26	0.69	0.1 J	0.28	1.1	0.57	0.46	0.71
Nickel	75	10.8	24.2	20.6	25.5	28.8	7.5 J	45.9	32.4	48.5	38	38.7	33.1	26	45.1	32.9	33.6	27.8
Silver	NC	0.22 U	0.63 J	0.71 J	0.85 J	1 J	0.18 U	1.7 J	0.73 J	1.7 J	1.5 J	1.4 J	2.3 J	0.75 J	2.6 J	1.3 J	1.1 J	1.7 J
Sodium	NC	128 J	203 J	373 J	478 J	169 J	88.5 J	266 J	211 J	555	242 J	272 J	187 J	192 J	190 J	199 J	163 J	126 J
Thallium	NC	0.74 U	2.1 U	3 U	3.7 U	1.7 U	1 J	3.3 U	2.3 U	4.3 U	3.6 J	2 U	1.3 U	1.4 U	1.5 U	1.4 U	1.5 U	1.2 U
Zinc	820	133	291	241	306	511	66.2	686	1,750	1,210	814	591	591	160	549	431	431	334
Soil Characteristics																		
pH	NC	6	5.8	5.4	6.7	6.2	5.8	5.8	5.1	5.8	6.1	5.6	8	6.6	5.5	6.1	5.4	5.1
Total Organic Carbon	NC	44,700	43,000	41,200	51,500	74,200	8,930	78,800	93,800	147,000	104,000	65,700	71,900	25,800	50,400	35,200	43,600	57,000

Notes:

NJDEP GSQE - NJDEP Guidance For Sediment Quality Evaluations (11/98), Freshwater Sediment Screening Guidelines - Ontario (Persaud et al., 1993)

The SEL criteria for non-polar organics is dependent on the %TOC obtained for each sample. %TOC can range from 1% to 10%. The sample SEL equals the table SEL value multipled by %TOC.

Shaded values meet or exceed New Jersey Guidance For Sediment Quality Evalutations - Severe Effects Level(11/98), Freshwater Sediment Screening Guidelines - Ontario (Ppersaud et al., 1993)

U = Not detected above the Contact Required Quantitation Limit (CRQL).

J = Estimated value.

NA = Not Available

TABLE 5-29

Matteo Iron and Metal

Sediment Sample Results: TCL/TAL (Severe Effects Level)

SAMPLE ID		T17-E	T18-E	T19-E	T19-E	T20-E	T21-A	T22-E	T23-E	T24-E	T25-E	T25-E	T26-E	T27-E	T28-E	T29-E	T30-A	S14
SAMPLE ID		T17-EA	T18-EA	T19-EA	TDUP-7/T19-EA	T20-EA	T21-AA	T22-EA	T23-EA	T24-EA	T25-EA	TDUP-15/T25-EA	T26-EA	T27-EA	T28-EA	T29-EA	T30-AA	S14
LAB ID		E79931-7	E80721-6	E79933-4	E79933-7	E79932-11	E80047-14	E80556-6	E81103-3	E80556-3	E80554-1	E80554-18	E80047-5	E81103-5	E80157-1	E80317-1	E80720-1	E81503-1
DATE		11/01/00	11/14/00	11/01/00	11/1/2000	11/02/00	11/03/00	11/09/00	11/17/00	11/09/00	11/09/00	11/9/2000	11/3/2000	11/17/2000	11/6/2000	11/8/2000	11/13/2000	11/29/00
SAMPLE INTERVAL		0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5
ANALYTE	NJDEP GSQE SEVERE																	
Volatile Organic Compounds																		
Benzene	NC	0.015 U	0.022 U	0.021 U	0.022 U	0.028 U	0.021	0.025 U	0.021 U	0.017 U	0.014 U	0.017 U	0.027 U	0.019 U	0.071 U	0.028 U	0.034 U	0.012 U
Chloroform	NC	0.015 U	0.022 U	0.021 U	0.022 U	0.028 U	0.021	0.025 U	0.021 U	0.017 U	0.014 U	0.017 U	0.027 U	0.019 U	0.071 U	0.028 U	0.034 U	0.012 U
cis-1,2-Dichloroethene	NC	0.015 U	0.022 U	0.021 U	0.022 U	0.028 U	0.021	0.025 U	0.021 U	0.017 U	0.014 U	0.017 U	0.027 U	0.019 U	0.071 U	0.028 U	0.034 U	0.012 U
Ethylbenzene	NC	0.015 U	0.022 U	0.021 U	0.022 U	0.028 U	0.021	0.025 U	0.021 U	0.017 U	0.014 U	0.017 U	0.027 U	0.019 U	0.071 U	0.028 U	0.034 U	0.012 U
Vinyl chloride	NC	0.015 U	0.022 U	0.021 U	0.022 U	0.028 U	0.021	0.025 U	0.021 U	0.017 U	0.014 U	0.017 U	0.027 U	0.019 U	0.071 U	0.028 U	0.034 U	0.012 U
Xylene (total)	NC	0.015 U	0.022 U	0.021 U	0.022 U	0.028 U	0.021	0.025 U	0.021 U	0.017 U	0.014 U	0.017 U	0.027 U	0.019 U	0.071 U	0.028 U	0.034 U	0.012 U
Semi-Volatile Organic Compounds																		
2,4-Dimethylphenol	NC	0.54 U	0.73 U	0.66 U	0.71 U	0.77 U	0.68 U	0.79 U	0.7 U	0.58 U	0.51 U	0.51 U	0.79 U	0.66 U	2.6 U	0.89 U	1.1 U	0.39 U
Benzo(a)anthracene	1480	0.031 J	0.21 J	0.076 J	0.11 J	0.078 J	0.68 U	0.15 J	0.2 J	0.032 J	0.51 U	0.035 J	0.047 J	0.14 J	0.14 J	0.085 J	0.084 J	0.022 J
Benzo(a)anthracene - GSQE	1480	80.2	133.5	89.2	14.9	51.8	146.2	84.5	82.3	43.7	17.0	35.7	94.0	88.4	148.0	78.0	148.0	31.3
Benzo(a)pyrene	1440	0.032 J	0.24 J	0.097 J	0.12 J	0.074 J	0.68 U	0.2 J	0.17 J	0.58 U	0.51 U	0.047 J	0.062 J	0.18 J	0.15 J	0.084 J	0.1 J	0.021 J
Benzo(a)pyrene - GSQE	1440	78.0	129.9	86.8	14.5	50.4	142.3	82.2	80.1	42.5	16.6	34.7	91.4	86.0	144.0	75.9	144.0	30.4
Benzo(b)fluoranthene	NC	0.036 J	0.17 J	0.075 J	0.11 J	0.077 J	0.68 U	0.19 J	0.16 J	0.58 U	0.51 U	0.003 J	0.054 J	0.21 J	0.15 J	0.093 J	0.099 J	0.027 J
Benzo(k)fluoranthene	1340	0.025 J	0.2 J	0.098 J	0.093 J	0.069 J	0.68 U	0.18 J	0.14 J	0.58 U	0.51 U	0.035 J	0.064 J	0.14 J	0.16 J	0.1 J	0.094 J	0.39 U
Benzo(k)fluoranthene - GSQE	1340	72.6	120.9	80.8	13.5	46.9	132.4	76.5	74.5	39.5	15.4	32.3	85.1	80.0	134.0	70.6	134.0	29.2
bis(2-Ethylhexyl)phthalate	NC	0.54 U	0.22 J	0.75	1.1	0.11 J	0.68 U	0.79	0.7 U	0.58 U	0.51 U	0.51 U	0.082 J	0.37 J	0.39 J	0.41 J	0.14 J	0.39 U
Dibenz(a,h)anthracene	130	0.54 U	0.05 J	0.66 U	0.71 U	0.77 U	0.68 U	0.042 J	0.049 J	0.58 U	0.51 U	0.51 U	0.79 U	0.042 J	2.6 U	0.89 U	1.1 U	0.39 U
Dibenz(a,h)anthracene - GSQE	130	7.0	11.7	7.8	1.3	4.6	12.8	7.4	7.2	3.8	1.5	3.1	8.3	7.8	13.0	6.9	13.0	2.8
Indeno(1,2,3-cd)pyrene	320	0.54 U	0.12 J	0.66 U	0.71 U	0.77 U	0.68 U	0.12 J	0.094 J	0.58 U	0.51 U	0.51 U	0.79 U	0.11 J	2.6 U	0.054 J	0.056 J	0.39 U
Indeno(1,2,3-cd)pyrene - GSQE	320	17.3	28.9	19.3	3.2	11.2	31.6	18.3	17.8	9.4	3.7	7.7	20.3	19.1	32.0	16.9	32.0	7.0
Pesticide & PCB																		
Dieldrin	NC	0.005 U	0.0074 U	0.0068 U	0.0068 U	0.0083 U	0.0062 U	NA	0.0071 U	0.0064 U	0.0049 U	0.0057 U	0.0089 U	0.0064 U	0.023 U	0.0087 U	0.011 U	0.0042 U
Aroclor 1248	150	0.05 U	0.074 U	0.088	0.068 U	0.083 U	0.062 U	0.45 U	0.071 U	0.064 U	0.049 U	0.057 U	0.089 U	0.064 U	0.23 U	0.087 U	0.11 U	0.042 U
Aroclor 1248 - GSQE	150	8.1	13.5	9.0	1.5	5.3	14.8	8.6	8.3	4.4	1.7	3.6	9.5	9.0	15.0	7.9	15.0	3.3
Aroclor 1254	34	0.05 U	0.074 U	0.23	0.12	0.15	0.062 U	0.45 U	0.071 U	0.064 U	0.049 U	0.057 U	0.18	0.064 U	0.23 U	0.087 U	0.11 U	0.042 U
Aroclor 1254 - GSQE	34	1.8	3.1	2.1	0.3	1.2	3.4	1.9	1.9	1.0	0.4	0.8	2.2	2.0	3.4	1.8	3.4	0.7
Aroclor 1260	24	0.05 U	0.074 U	0.099 J	0.068	0.083 U	0.062 U	0.45 U	0.071 U	0.064 U	0.049 U	0.057 U	0.094 J	0.064 U	0.23 U	0.087 U	0.11 U	0.042 U
Aroclor 1260 - GSQE	24	1.3	2.2	1.4	0.2	0.8	2.4	1.4	1.3	0.7	0.3	0.6	1.5	1.4	2.4	1.3	2.4	0.5
Total Aroclor	530	0.05 U	0.074 U	0.417	0.188	0.15	0.062 U	0.45 U	0.071 U	0.064 U	0.049 U	0.057 U	0.274	0.064 U	0.23 U	0.087 U	0.11 U	0.042 U
Total Aroclor - GSQE	530	28.7	47.8	32.0	5.4	18.6	52.4	30.3	29.5	15.6	6.1	12.8	33.7	31.6	53.0	27.9	53.0	11.6
Metals																		
Aluminum	NC	10,500	17,400	13,700	15,800	12,300	17,400	17,200	15,800	12,200	13,000	17,500	22,300	11,900	15,300	19,900	15,700	6,930
Antimony	NC	0.55 U	1.8 J	1 J	1.1 J	0.87 U	2.3 J	0.84 U	0.63 U	0.55 U	1.4 U	1.6 U	3.3 J	0.63 U	6.9 U	3 U	1.1 U	0.35 U
Arsenic	33	8.3	31.5	21.2	27.4	11.3	32.2	10.3	15.6	5.7	22.7	25.6	18.4	8.6	14.6	17.8	8.4	4.6
Barium	NC	84.6	160	170	170	110	196	193	127	101	117	124	208	105	146 J	185	165	60.3
Beryllium	NC	0.88 J	1.7 J	1.8	2	1.1 J	1.3 J	1.4 J	1 J	0.73 J	0.62 J	2.1	1.9 J	0.95 J	1.5 J	3.1	1.3 J	0.52 J
Cadmium	10	1 J	6	4.3	4.4	2.2 J	3	1.7 J	0.84 J	0.1 U	0.25 U	0.29 U	4.1	1.9	2.1 J	4.3	2.2 J	1.1
Copper	110	37.8	145	103	109	54.3	122	68.6	49.1	10.1	30.2	43.2	97.8	46.4	66.4	91.5	67.8	26.4
Iron	NC	18,400	27,900	22,400	27,200	23,000	32,300	32,900	23,100	17,800	43,300	34,500	32,800	19,600	28,000	34,500	23,400	10,500
Lead	250	66.8	191	166	185	87.9	231	98.2	98.3	15.3	51	86.6	186	64	102	149	111	35.7
Manganese	NC	570	316	398	473	358	319	694	483	301	1,080	516	561	335	557	617	289	198
Mercury	2	0.33	1.7	1.1	1.2	0.36	1.9	0.44	0.63	0.51	0.26	0.79	0.82	0.18	0.28 U	0.68	0.55	0.15
Nickel	75	18.6	44.3	39.1	41	29.2	42	28.8	25.7	16.9	18.8	20	49.7	22.3	32.9 J	41.1	28.5	13
Silver	NC	0.99 J	2.6 J	2.1 J	2.3 J	1 J	1.6 J	1.7 J	0.26 U	0.23 U	0.45 U	0.52 U	2.6 J	0.7 J	1.3 J	2.4 J	1.4 J	0.5 J
Sodium	NC	68.5 J	246 J	138 J	123 J	228 J	314 U	282 J	182 J	277 J	218 U	250 U	340 U	157 J	1090 U	467 U	685 J	87.7 J
Thallium	NC	1.2 U	1.5 U	1.3 U	1.4 U	1.8 U	3.4 U	1.8 U	1.3 U	1.2 U	2.3 U	2.7 U	3.6 U	1.3 U	11.7 U	5 U	2.3 U	0.75 U
Zinc	820	196	873	524	549	400	549	320	208	66.9	181	188	532	311	407	588	404	169
Soil Characteristics																		
pH	NC	6.4	5.9	6.2	6.2	5.5	6.3	5.5	5	5.4	5.3	6.1	5.5	5.8	8.3	5.9	5.7	6.1
Total Organic Carbon	NC	54,200	90,200	60,300	10,100	35,000	98,800	57,100	55,600	29,500	11,500	24,100	63,500	59,700	111,000	52,700	134,000	21,800

Notes:

NJDEP GSQE - NJDEP Guidance For Sediment Quality Evaluations (11/98), Freshwater Sediment Screening Guidelines - Ontario (Persaud et al., 1993)

The SEL criteria for non-polar organics is dependent on the %TOC obtained for each sample. %TOC can range from 1% to 10%. The sample SEL equals the table SEL value multipled by %TOC.

Shaded values meet or exceed New Jersey Guidance For Sediment Quality Evalutations - Lowest Effects Level (11/98), Freshwater Sediment Screening Guidelines - Ontario (Ppersaud et al., 1993)

U = Not detected above the Contact Required Quantitation Limit (CRQL).

J = Estimated value.

NA = Not Available

TABLE 5-30
Matteo Iron and Metal
Sediment Sample Results: PCBs and Metals (Lowest Effects Level)

Sample Location		T4-C	T4-C	T7-C	T9-A	T9-A	T11-D	T11-D	T16-D	T17-D	T17-D	T20-A	T22-A	T22-A	T26-A	T26-A	T28-B	T28-B	T29-D
Sample ID		T4-CA	TDUP5/T4-CA	T7-CA	T9-AA	TDUP-17/T9-AA	T11-DA	TDUP4/T11-DA	T16-DA	T17-DA	TDUP-9/T17-DA	T20-AA	T22-AA	TDUP-16/T22-AA	T26-AA	TDUP-10/T26-AA	T28-BA	TDUP12/T28-BA	T29-DA
Lab ID		E79744-16	E79744-19	E79745-13	E80555-7	E80555-7	E79555-4	E79555-7	E79453-6	E79932-9	E79932-10	E79931-10	E80556-9	E80556-19	E80047-1	E80047-4	E80157-7	E80157-10	E80317-4
Date		10/30/2000	10/30/2000	10/31/2000	11/10/2000	11/10/2000	10/27/2000	10/27/2000	10/26/2000	11/2/2000	11/2/2000	11/2/2000	11/9/2000	11/9/2000	11/3/2000	11/3/2000	11/6/2000	11/6/2000	11/8/2000
Depth		0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5
Analyte	*NJDEP GSQE LOWEST*																		
PCB																			
Aroclor 1248	0.030	0.059 U	0.051 U	0.074 U	0.069 U	0.1 U	0.64 U	0.68 U	0.06	0.094 U	0.084 U	0.08 U	0.23 U	0.096 U	0.098 U	0.092 U	0.099 U	0.087 U	0.09 U
Aroclor 1254	0.060	0.059 U	0.051 U	0.074 U	0.069 U	0.1 U	0.64 U	0.68 U	0.17	0.094 U	0.11	0.08 U	0.23 U	0.096 U	0.098 U	0.092 U	0.099 U	0.087 U	0.09 U
Aroclor 1260	0.005	0.059 U	0.051 U	0.074 U	0.069 U	0.1 U	0.64 U	0.68 U	0.069 J	0.094 U	0.1 J	0.08 U	0.23 U	0.096 U	0.098 U	0.092 U	0.099 U	0.087 U	0.09 U
Total Aroclor	0.070	0.059 U	0.051 U	0.074 U	0.069 U	0.1 U	0.64 U	0.68 U	0.299	0.094 U	0.21	0.08 U	0.23 U	0.096 U	0.098 U	0.092 U	0.099 U	0.087 U	0.09 U
Metals																			
Aluminum	NC	3,530	N/A	20,300	17,900	N/A	18,000	N/A	11,300	16,500	N/A	15,900	5,580	N/A	21,300	N/A	17,400	N/A	18,800
Antimony	NC	0.71 J	N/A	0.65 U	0.72 U	N/A	3.1 J	N/A	2.6 J	1.7 J	N/A	1.3 J	0.67 J	N/A	2.6 U	N/A	3 U	N/A	2.6 U
Arsenic	6	4.1	N/A	3.7 J	18.9	N/A	15.1	N/A	12.5	14.2	N/A	10.9	4.1	N/A	15.8	N/A	13.2	N/A	15.9
Barium	NC	46.6 J	N/A	131	177	N/A	175	N/A	111	157	N/A	163	61.9	N/A	184	N/A	145	N/A	173
Beryllium	NC	0.4 J	N/A	1.1 J	1.7 J	N/A	1.7 J	N/A	1.3	1.5 J	N/A	1.4 J	0.5 J	N/A	1.5 J	N/A	1.5 J	N/A	2.7
Cadmium	0.6	0.82 J	N/A	0.11 U	4.6	N/A	4	N/A	3.2	3	N/A	2.9	0.95 J	N/A	2.9	N/A	2.2 J	N/A	2.8
Copper	16	25.1	N/A	14	104	N/A	88.9	N/A	69.3	76.2	N/A	71.7	27.2	N/A	78	N/A	63.6	N/A	71.3
Iron	NC	9,080	N/A	24,500	28,700	N/A	30,700	N/A	17,500	32,000	N/A	26,000	10,300	N/A	39,000	N/A	30,200	N/A	40,900
Lead	31	2,860	1,570	25.5	172	137	232	274	152	141	146	104	37.6	96.3	117	92	85.5	98.3	117
Manganese	NC	152	N/A	255	394	N/A	456	N/A	225	758	N/A	561	184	N/A	1120	N/A	736	N/A	1120
Mercury	0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nickel	16	10 J	N/A	25.8	40.7	N/A	40.4	N/A	27.9	33.2	N/A	30.6	12.1	N/A	39.2	N/A	32.1	N/A	35.3
Silver	1	0.41 J	N/A	0.27 U	2.3 J	N/A	2.1 J	N/A	1.8 J	1.6 J	N/A	1.7 J	0.59 J	N/A	1.4 J	N/A	1.4 J	N/A	1.9 J
Sodium	NC	92.8 J	N/A	132 J	229 J	N/A	258 J	N/A	92.1 J	135 J	N/A	86.9 J	108 J	N/A	415 U	N/A	470 U	N/A	410 U
Thallium	NC	1.1 U	N/A	1.4 U	1.7 J	N/A	2 U	N/A	0.79 U	1.9 U	N/A	1.8 U	0.74 U	N/A	4.4 U	N/A	5 U	N/A	4.4 U
Zinc	120	161	N/A	101	581	N/A	530	N/A	392	489	N/A	375	168	N/A	484	N/A	397	N/A	455
Soil Characteristics																			
Total Organic Carbon	NC	23,900	3,720	16,000	52,400	63,400	58,800	68,400	29,200	27,000	30,000	44,400	18,600	70,000	54,300	48,500	52,100	56,700	53,800
pH	NC	6.5	6.7	6.1	5.6	5.6	5.8	5.8	5.6	6.1	6.1	5.8	6	5.5	6.7	6.1	5.9	5.9	5.8

Notes:
NJDEP GSQE - NJDEP Guidance For Sediment Quality Evaluations (11/98), Freshwater Sediment Screening Guidelines Ontario (Persaud et al., 1993)
Shaded values meet or exceed New Jersey Guidance For Sediment Quality Evalutations - Lowest Effects Level (11/98), Freshwater Sediment Screening Guidelines - Ontario (Ppersaud et al., 1993)
U = Not detected above the Contract Required Quantitation Limit (CRQL).
J = Estimated value.
N/A = Not Available

TABLE 5-31

Matteo Iron and Metal

Sediment Sample Results: PCBs and Metals (Severe Effects Levels)

Sample Location		T4-C	T4-C	T7-C	T9-A	T9-A	T11-D	T11-D	T16-D	T17-D	T17-D	T20-A	T22-A	T22-A	T26-A	T26-A	T28-B	T28-B	T29-D
Sample ID		T4-CA	TDUP5/T4-CA	T7-CA	T9-AA	TDUP-17/T9-AA	T11-DA	TDUP4/T11-DA	T16-DA	T17-DA	TDUP-9/T17-DA	T20-AA	T22-AA	TDUP-16/T22-AA	T26-AA	TDUP-10/T26-AA	T28-BA	TDUP12/T28-BA	T29-DA
Lab ID		E79744-16	E79744-19	E79745-13	E80555-7	E80555-10	E79555-4	E79555-7	E79453-6	E79932-9	E79932-10	E79931-10	E80556-9	E80556-19	E80047-1	E80047-4	E80157-7	E80157-10	E80317-4
Date		10/30/2000	10/30/2000	10/31/2000	11/10/2000	11/10/2000	10/27/2000	10/27/2000	10/26/2000	11/2/2000	11/2/2000	11/2/2000	11/9/2000	11/9/2000	11/3/2000	11/3/2000	11/6/2000	11/6/2000	11/8/2000
Depth		0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5
Analyte	*NJDEP GSQE*																		
PCB	*SEVERE*																		
Aroclor 1248	150	0.059 U	0.051 U	0.074 U	0.069 U	0.100 U	0.64 U	0.68 U	0.06	0.094 U	0.084 U	0.08 U	0.23 U	0.096 U	0.098 U	0.092 U	0.099 U	0.087 U	0.09 U
Aroclor 1248 - GSQE	150	3.59	1.50	2.40	7.86	9.51	8.82	10.26	4.38	4.05	4.50	6.66	2.79	10.50	8.15	7.28	7.82	8.51	8.07
Aroclor 1254	34	0.059 U	0.051 U	0.074 U	0.069 U	0.100 U	0.64 U	0.68 U	0.17	0.094 U	0.11	0.08 U	0.23 U	0.096 U	0.098 U	0.092 U	0.099 U	0.087 U	0.09 U
Aroclor 1254 - GSQE	34	0.81	0.34	0.54	1.78	2.16	2.00	2.33	0.99	0.92	1.02	1.51	0.63	2.38	1.85	1.65	1.77	1.93	1.83
Aroclor 1260	24	0.059 U	0.051 U	0.074 U	0.069 U	0.100 U	0.64 U	0.68 U	0.069 J	0.094 U	0.1 J	0.08 U	0.23 U	0.096 U	0.098 U	0.092 U	0.099 U	0.087 U	0.09 U
Aroclor 1260 - GSQE	24	0.57	0.24	0.38	1.26	1.52	1.41	1.64	0.70	0.65	0.72	1.07	0.45	1.68	1.30	1.16	1.25	1.36	1.29
Total Aroclor	530	0.059 U	0.051 U	0.074 U	0.069 U	0.100 U	0.64 U	0.68 U	0.299	0.094 U	0.21	0.08 U	0.23 U	0.096 U	0.098 U	0.092 U	0.099 U	0.087 U	0.09 U
PCB Total - GSQE	530	12.67	5.30	8.48	27.77	33.60	31.16	36.25	15.48	14.31	15.90	23.53	9.86	37.10	28.78	25.71	27.61	30.05	28.51
Metals																			
Aluminum	NC	3,530	NT	20,300	17,900	NT	18,000	NT	11,300	16,500	NT	15,900	5,580	NT	21,300	NT	17,400	NT	18,800
Antimony	NC	0.71 J	NT	0.65 U	0.72 U	NT	3.1 J	NT	2.6 J	1.7 J	NT	1.3 J	0.67 J	NT	2.6 U	NT	3 U	NT	2.6 U
Arsenic	33	4.1	NT	3.7 J	18.9	NT	15.1	NT	12.5	14.2	NT	10.9	4.1	NT	15.8	NT	13.2	NT	15.9
Barium	NC	46.6 J	NT	131	177	NT	175	NT	111	157	NT	163	61.9	NT	184	NT	145	NT	173
Beryllium	NC	0.4 J	NT	1.1 J	1.7 J	NT	1.7 J	NT	1.3	1.5 J	NT	1.4 J	0.5 J	NT	1.5 J	NT	1.5 J	NT	2.7
Cadmium	10	0.82 J	NT	0.11 U	4.6	NT	4	NT	3.2	3	NT	2.9	0.95 J	NT	2.9	NT	2.2 J	NT	2.8
Copper	110	25.1	NT	14	104	NT	88.9	NT	69.3	76.2	NT	71.7	27.2	NT	78	NT	63.6	NT	71.3
Iron	NC	9,080	NT	24,500	28,700	NT	30,700	NT	17,500	32,000	NT	26,000	10,300	NT	39,000	NT	30,200	NT	40,900
Lead	250	69.4	57.2	25.5 N	172	137	232	274	152	141	146	104	37.6	96.3	117	92	85.5	98.3	117
Mercury	0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Manganese	NC	152	NT	255	394	NT	456	NT	225	758	NT	561	184	NT	1120	NT	736	NT	1120
Nickel	75	10 J	NT	25.8	40.7	NT	40.4	NT	27.9	33.2	NT	30.6	12.1	NT	39.2	NT	32.1	NT	35.3
Silver	NC	0.41 J	NT	0.27 U	2.3 J	NT	2.1 J	NT	1.8 J	1.6 J	NT	1.7 J	0.59 J	NT	1.4 J	NT	1.4 J	NT	1.9 J
Thallium	NC	1.1 U	NT	1.4 U	1.7 J	NT	2 U	NT	0.79 U	1.9 U	NT	1.8 U	0.74 U	NT	4.4 U	NT	5 U	NT	4.4 U
Zinc	820	161	NT	101	581	NT	530	NT	392	489	NT	375	168	NT	484	NT	397	NT	455
Soil Characteristics																			
Total Organic Carbon	NC	23,900	3,720	16,000	52,400	63,400	58,800	68,400	29,200	27,000	30,000	44,400	18,600	70,000	54,300	48,500	52,100	56,700	53,800
pH	NC	6.5	6.7	6.1	5.6	5.6	5.8	5.8	5.6	6.1	6.1	5.8	6	5.5	6.7	6.1	5.9	5.9	5.8

Notes:

NJDEP GSQE - NJDEP Guidance For Sediment Quality Evaluations (11/98), Freshwater Sediment Screening Guidelines Ontario (Persaud et al., 1993)

Shaded values meet or exceed New Jersey Guidance For Sediment Quality Evalutations - Lowest Effects Level (11/98), Freshwater Sediment Screening Guidelines - Ontario (Ppersaud et al., 1993)

U = Not detected above the Contract Required Quantitation Limit (CRQL).

J = Estimated value.

N/A = Not Available

TABLE 5-32
Matteo Iron and Metal
Surface Water Sample Results

Sample Location	Sample ID	Lab ID	Date	Lead (ug/l) Corrected	Lead (ug/l) Filtered	Lead (ug/l) Unfiltered	Hardness (mg/l)	Salinity	pH	Dissolved Oxygen (mg/l)
T1-C	T1-CHF	E81101-7	11/17/2000	2.46	5.6 U H		N/T	0.00	7.16	3.00
	T1-CHU	E81101-6	11/17/2000			26 H	98	0.00	7.16	3.00
T1-C	T1-CLF	E81101-9	11/17/2000	2.46	2.3 U		N/T	0.00	6.47	3.86
	T1-CLU	E81101-8	11/17/2000			14.1 H	98	0.00	6.47	3.86
T1-D	T1-DHF	E81101-5	11/17/2000	3.01	2.4 J		N/T	0.00	7.09	1.95
	T1-DHU	E81101-4	11/17/2000			49.5 H	118	0.00	7.09	1.95
T1-D	T1-DLF	E81101-3	11/17/2000	6.86	2.3 U		N/T	0.00	5.41	4.04
	T1-DLU	E81101-2	11/17/2000			71.4 H	255	0.00	5.41	4.04
T3-C	T3-CHF	E80831-1	11/15/2000	2.36	1.3 U		N/T	0.00	7.09	7.52
	T3-CHU	E80830-10	11/15/2000			6.2 H	94.1	0.00	7.09	7.52
T3-C	T3-CLF	E80830-7	11/15/2000	2.60	2.3 U		N/T	0.00	6.93	7.32
	T3-CLU	E80830-6	11/15/2000			34.4 H	103	0.00	6.93	7.32
T3-D	T3-DHF	E80831-3	11/15/2000	2.68	1.3 U		N/T	0.00	7.06	7.66
	T3-DHU	E80831-2	11/15/2000			72.7 H	106	0.00	7.06	7.66
	T3-DHU - SWDUP-3	E80831-4	11/15/2000			74.7 H	N/T	0.00	7.06	7.66
T3-D	T3-DLF	E80830-9	11/15/2000	2.63	2.3 U		N/T	0.00	7.20	7.24
	T3-DLU	E80830-8	11/15/2000			67.1 H	104	0.00	7.20	7.24
T9-C	T9CHF	E80583-18	11/10/2000	2.46	1.3 U		N/T	N/A	N/A	N/A
	T9CHU	E80583-19	11/10/2000			1.4 J	98	N/A	N/A	N/A
T9-C	T9-CLF	E80722-3	11/13/2000	3.01	1.3 U		N/T	0.00	5.85	4.54
	T9-CLU	E80722-4	11/13/2000			69 H	118	0.00	5.85	4.54
T9-D	T9DHF	E80583-16	11/10/2000	2.25	1.8 J		N/T	N/A	N/A	N/A
	T9DHU	E80583-17	11/10/2000			5 H	90.2	N/A	N/A	N/A
T9-D*	T9-DLF	E80722-1	11/13/2000	2.90	1.3 U		N/T	0.00	6.65	7.21
	T9-DLU	E80722-2	11/13/2000			28.5 H	114	0.00	6.65	7.21
T18-C	T18-CHF	E80722-16	11/14/2000	2.52	1.3 U		N/T	N/A	N/A	N/A
	T18-CHU	E80722-15	11/14/2000			5 H	100	N/A	N/A	N/A
T18-C	T18-CLF	E80830-2	11/15/2000	2.46	2.6 J		N/T	0.00	5.93	6.40
	T18-CLU	E80830-1	11/15/2000			14.5 H	98	0.00	5.93	6.40
	T18-CLU - SWDUP-2	E80830-3	11/15/2000			13.9 H	94.1	0.00	5.93	6.40
T18-D	T18-DHF	E80722-14	11/14/2000	2.57	1.3 U		N/T	N/A	N/A	N/A
	T18-DHU	E80722-13	11/14/2000			1.9 J	102	N/A	N/A	N/A
T18-D	T18-DLF	E80830-5	11/15/2000	2.46	2.3 U		N/T	0.00	6.48	7.73
	T18-DLU	E80830-4	11/15/2000			87.4 H	98	0.00	6.48	7.73
T25-C	T25CHF	E80583-4	11/9/2000	2.36	1.8 J		N/T	0.00	6.85	7.55
	T25CHU	E80583-5	11/9/2000			3.7	N/T	0.00	6.85	7.55
	T25CHH	E80583-6	11/9/2000				94.1	0.00	6.85	7.55
T25-C	T25CHF - TDUPF1	E80583-13	11/9/2000	2.46	1.3 U		N/T	0.00	6.85	7.55
	T25CHU - TDUPU1	E80583-14	11/9/2000			4.3	N/T	0.00	6.85	7.55
	T25CHH - TDUPH1	E80583-15	11/9/2000				98	0.00	6.85	7.55
T25-C	T25CLF	E80583-10	11/9/2000	2.46	1.3 U		N/T	0.00	7.11	8.07
	T25CLU	E80583-11	11/9/2000			2.3 J	N/T	0.00	7.11	8.07
	T25CLH	E80583-12	11/9/2000				98	0.00	7.11	8.07
T25-D	T25DHF	E80583-1	11/9/2000	2.36	1.8 J		N/T	0.00	6.55	7.24
	T25DHU	E80583-2	11/9/2000			2.6 J	N/T	0.00	6.55	7.24
	T25DHH	E80583-3	11/9/2000				94.1	0.00	6.55	7.24
T25-D	T25DLF	E80583-7	11/9/2000	2.25	1.3 U		N/T	0.00	6.97	8.12
	T25DLU	E80583-8	11/9/2000			4.6	N/T	0.00	6.97	8.12
	T25DLH	E80583-9	11/9/2000				90.2	0.00	6.97	8.12
T30-B	T90-BHF	E80722-12	11/13/2000	2.36	1.3 U		N/T	0.00	7.52	6.23
	T30-BHU	E80722-11	11/13/2000			3.3	94.1	0.00	7.52	6.23
T30-B	T30-BLF	E80722-8	11/13/2000	2.74	1.3 U		N/T	N/A	N/A	N/A
	T30-BLU	E80722-7	11/13/2000			41.6 H	108	N/A	N/A	N/A
T30-C	T30-CHF	E80722-9	11/13/2000	2.46	1.3 U		N/T	0.01	7.46	8.10
	T30-CHU	E80722-10	11/13/2000			1.8 J	98	0.01	7.46	8.10
T30-C	T30-CLF	E80722-6	11/13/2000	2.68	1.3 U		N/T	0.00	7.15	7.53
	T30-CLU	E80722-5	11/13/2000			24.3 H	106	0.00	7.15	7.53

Notes:
NJDEP Surface Water Quality Standards (N.J.A.C. 5/00)
Aquatic SWQS for Lead is 2.5 ug/l (total)
Aquatic SWQS for Lead (dissolved) is dependent on hardness. The following equations will provide the new criteria.
Chronic criterion (dissolved) = WER x $e^{(m[C(\ln(\text{hardness}))]+b[C])}$ x chronic CF
chronic CF = 1.46203 - ((ln hardness)(0.145712))
Human health SWQS for Lead is 5 ug/l.
SWQS for pH ranges from 6.5 to 8.5.
SWQS for Dissolved Oxygen (mg/L) not less than 4.0 at any time.
Shaded values meet or exceed New Jersey Surface Water Quality Standards - Aquatic (N.J.A.C. 5/00).
Shaded and an H meet or exceed human health (N.J.A.C. 5/00)
Delaware River Basin Commission - Administrative Manual - Part III (October 23, 1995) TABLE 5: Stream Quality Objectives for Toxic Pollutants for the Protection of Aquatic Life in the Delaware River Estuary - Lead is 16 ug/l.
Due to the low tide no water was available on the mud flat, T9-DL was collected from a small seep draining into the Hessian Run.
U = Not detected above the Contract Required Quantitation Limit (CRQL).
J = Estimated value.
N/T = Not Tested
N/A = Not Available

TABLE 5-33
Matteo Iron and Metal
OBSERVED VEGETATION

Scientific Name	Common Name	Regional Indicator Status
Acer negundo	boxelder	FAC+
Acer rubrum	red maple	FAC
Acer saccharinum	silver maple	FACW
Achillea millefolium	yarrow	FACU
Agrostis hyemalis	tickle grass	FAC
Ailanthus altissima	tree of heaven	NI
Allium stellatum	wild onion	UPL
Andropogon virginicus	broom sedge	FACU
Artemeisia sp.	mugwort	--
Aster vimineus	small white aster	FAC
Betula alba	white birch	FAC+
Betula alleghaniensis	yellow birch	FAC
Betula nigra	black birch	FACW
Brassica rapa	mustard	UPL
Carex stricta	tussock sedge	OBL
Carya ovata	shagbark hickory	FACU-
Catalpa bignonioides	catalpa	UPL
Cornus stolonifera	red-osier dogwood	FACW+
Daucus carota	Queen Ann's lace	UPL
Fraxinus pennsylvanica	green ash	FACW
Geditsia triancanthos	honey locust	UPL
Geranium sp.	geranium	--
Gymnocladus dioica	coffee tree	UPL
Ilex opaca	American holly	FACU+
Impatiens capensis	jewelweed	FACW
Juniperus virginiana	red cedar	FACU
Lactuca canadensis	wild lettuce	FACU-
Lespendeza virginica	slender bush clover	--
Liquidambar styraciflua	sweet gum	FAC
Liriodendron tulipifera	tulip popular	FACU
Lonicera japonica	Japanese honeysuckle	FAC-
Morus rubra	mulberry	FACI
Panicum clandestinum	deer tongue	NI
Panicum dichotomiflorum	fall panicum	FACW-
Paulownia tomentosa	princess tree	UPL
Phragmities australis	common reed	FACW
Phytolacca americanna	pokeweed	FACU+
Pinus strobus	white pine	FACU
Pinus virginiana	scrub pine	UPL
Peltandra virginica	arrow arum	OBL
Plantanus occidentalis	sycamore	FACW-

Table 5-33 (Continued)

Scientific Name	Common Name	Regional Indicator Status
Pontederia sp.	pickerel weed	OBL
Populus deltoides	cottonwood	FAC
Populus tremula	quaking aspen	FACU
Potentilla sp.	cinquefoil	--
Prunus serotina	black cherry	FACU
Pycnanthemum sp.	mountain mint	--
Pyrus malus	apple	UPL
Quercus alba	white oak	FACU-
Quercus palustris	pin oak	FACW
Quercus phellos	willow oak	FAC+
Quercus rubra	red oak	--
Quercus stellata	post oak	UPL
Rhus copallinum	winged sumac	NI
Rhus typhina	staghorn sumac	UPL
Rosa multiflora	multi-flora rose	FACU
Rubus allegheniensis	blackberry	FACU-
Rubus hispidus	dewberry	FACW
Rubus idaeus	raspberry	FAC-
Sagittaria sp.	arrow-head	OBL
Salix bebbiana	Bebb willow	FACW
Sambucus canadensis	elderberry	FACW-
Saponaria officinalis	bouncing bet	FACU-
Sassafras albidum	sassafras	FACU-
Smilax rotundifolia	green briar	FAC
Solidago spp.	goldenrod	--
Sphagnum sp.	sphagnum	OBL
Spirea sp.	spirea	--
Tilia americana	basswood	FACU
Toxicodendron radicans	poison ivy	FAC
Trifolium sp.	clover	--
Typha latifolia	cattails	OBL
Ulmus americana	American elm	FACW-
Verbascum thapsus	mullen	UPL
Vernonia noveboracensis	New York ironweed	FACW+
Viburnum lentago	nannyberry	FAC
Viburnum recognitum	northern arrowwood	FACW-
Vitis labrusca	fox grape	FACU

Key to indicator categories:

OBL: Obligate Wetland, occur almost always (estimated probability >99%) under natural conditions in wetlands

FACW: Facultative Wetland, usually occur in wetlands (estimated probability 67%-99%); occasionally found in non-wetlands

FAC: Facultative, equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%)

FACU: Facultative Upland, usually occur in non-wetlands (estimated probability 67%-99%), but occasionally found in wetlands (estimated probability 1%-33%)

(+) Following an indicator indicates a frequency toward the higher end of a category

(-) Following an indicator indicates a frequency toward the lower end of a category

Source: *National List of Plant Species that Occur in Wetlands: Northeast (Region 1)*, US Fish and Wildlife Service, May 1988.

TABLE 5-34
Matteo Iron and Metal
OBSERVED BIRDS

Common Name	Scientific name
American crow	*Corvus brachyrhynchos*
belted kingfisher	*Ceryle alcyon*
blue jay	*Cyanocitta cristata*
Canada Goose	*Branta canadensis*
Carolina chickadee	*Poecile carolinesis*
downy woodpecker	*Dicoides pubescens*
great horned owl	*Bubo virginianus*
herring gull	*Larus argentatus*
house sparrow	*Passer domesticus*
killdeer	*Charadrius vocifeerus*
mallard	*Anas platyrhychos*
mockingbird	*Minus dolyglottos*
mourning dove	*Zenaida macroura*
northern cardinal	*Cardinalis cardinalis*
red-tailed hawk	*Buteo jamaicensis*
red-winged blackbird	*Agelaius phoeniceus*
song sparrow	*Maelospiza melodia*
white-breasted nuthatch	*Sitta carolinensis*

Source: The Louis Berger Group, December 2000.

TABLE 5-35
Matteo Iron and Metal
POTENTIAL BREEDING BIRDS

Common Name	Scientific Name
American crow	*Corvus brachyrhynchos*
American goldfinch	*Carduelis tristis*
American robin	*Turdus migratorius*
Baltimore oriole	*Icterus galbula*
barn swallow	*Hirundo rustica*
blue jay	*Cyanocitta cristata*
brown thrasher	*Toxostoma rufum*
brown-headed cowbird	*Molothrus aler*
Canada goose	*Branta canadensis*
Carolina chickadee	*Poecile caolinensis*
cedar waxwing	*Bombycilla cedrorum*
chimney swift	*Chaetura pelagica*
common grackle	*Quiscalus quiscula*
common yellowthroat	*Geothypis*
downy woodpecker	*Dicoides pubescens*
eastern kingbird	*Tyrannus tyrannus*
European starling	*Sturnus vulgaris*
gray catbird	*Dumetella carolinesis*
great crested flycatcher	*Myiarchus crinitus*
great horned owl	*Bubo virginianus*
house finch	*Carpodacus mexicanus*
house sparrow	*Passer domesticus*
house wren	*Troglodytes aedon*
killdeer	*Charadrius vociferus*
mallard	*anas platyrhychos*
marsh wren	*Cistothorus palustris*
mourning dove	*Zehaida macroura*
northern cardinal	*cardinalis cardinalis*
northern flicker	*Colaples auratus*
northern mockingbird	*Minus polyglottos*
orchard oriole	*Icterus spurius*
purple martin	*Progne subis*
red-eyed vireo	*Vireo olivaceus*
red-tail hawk	*Buteo jamaicensis*
red-winged blackbird	*Agelaius phoeniceus*
rock dove	*Columba livia*
song sparrow	*Melospiza melodia*
tree swallow	*Tachyccnets bicolor*
tufted titmouse	*Baeolophus bicolor*
yellow warbler	*Dendroica petechia*

Source: Birds of New Jersey, New Jersey Audubon Society, 1999.

TABLE 5-36
Matteo Iron and Metal
POTENTIAL WETLAND DEPENDENT BIRD SPECIES

Common Name	Scientific Name
American bittern	*Botaurus lentiginosus*
Belted Kingfisher	*Ceryle alcyon*
Black crowned night heron	*Nycticorax nycticorax*
Black duck	*Anas rubripes*
Canada goose	*Branta canadensis*
Great blue heron	*Ardea herodias*
Greater yellow legs	*Tringa melanoleuca*
Green heron	*Butorides virescens*
Least bittern	*Ixobrychus exilis*
Lesser yellow legs	*Tringa flavipes*
Mallard	*Anas platyrhynchos*
Marsh wren	*Cistothorus palustris*
Ospery	*Pandion haliaetus*
Red winged blackbird	*Agelaius phoeniceus*
Snowy egret	*Egretta thula*
Spotted sandpiper	*Actitis macularia*
Swamp sparrow	*Melospiza georgiana*
Tundra swan	*Cygnus columbianus*
Virginia rail	*Rallus limicola*
Great egret	*Ardea alba*
Wood duck	*Aix sponsa*

Source: Birds of New Jersey, New Jersey Audubon Society, 1999.

TABLE 5-37
Matteo Iron and Metal
FISH SPECIES OF WOODBURY CREEK AND HESSIAN RUN

Common Name	Scientific Name
Mummichog	*Fundulus heteroclitus*
Banded killifish	*Fundulus diaphanus*
Silvery minnow	*Hybognathus nuchalis*
Alewife	*Alsoa pseudoharengus*
Blueback herring	*Alsoa aestivalis*
Pumpkinseed	*Lepomis gibbosus*
Brown bullhead	*Ictalurus nebulosus*
White perch	*Morone americana*
American eel	*Anguilla rostrata*
Goldfish	*Carrasius auratus*
Spottail shiner	*Notropis hudsonius*
Carp	*Cyprinus carpio*
Bluntnose minnow	*Pimephales notatus*
Black crappie	*Pomoxis nigromaculatus*
Gizzard shad	*Dorosoma cepedianum*
Eastern mudminnow	*Umbra pygmaea*
Golden shiner	*Notemigonus crysoleucas*

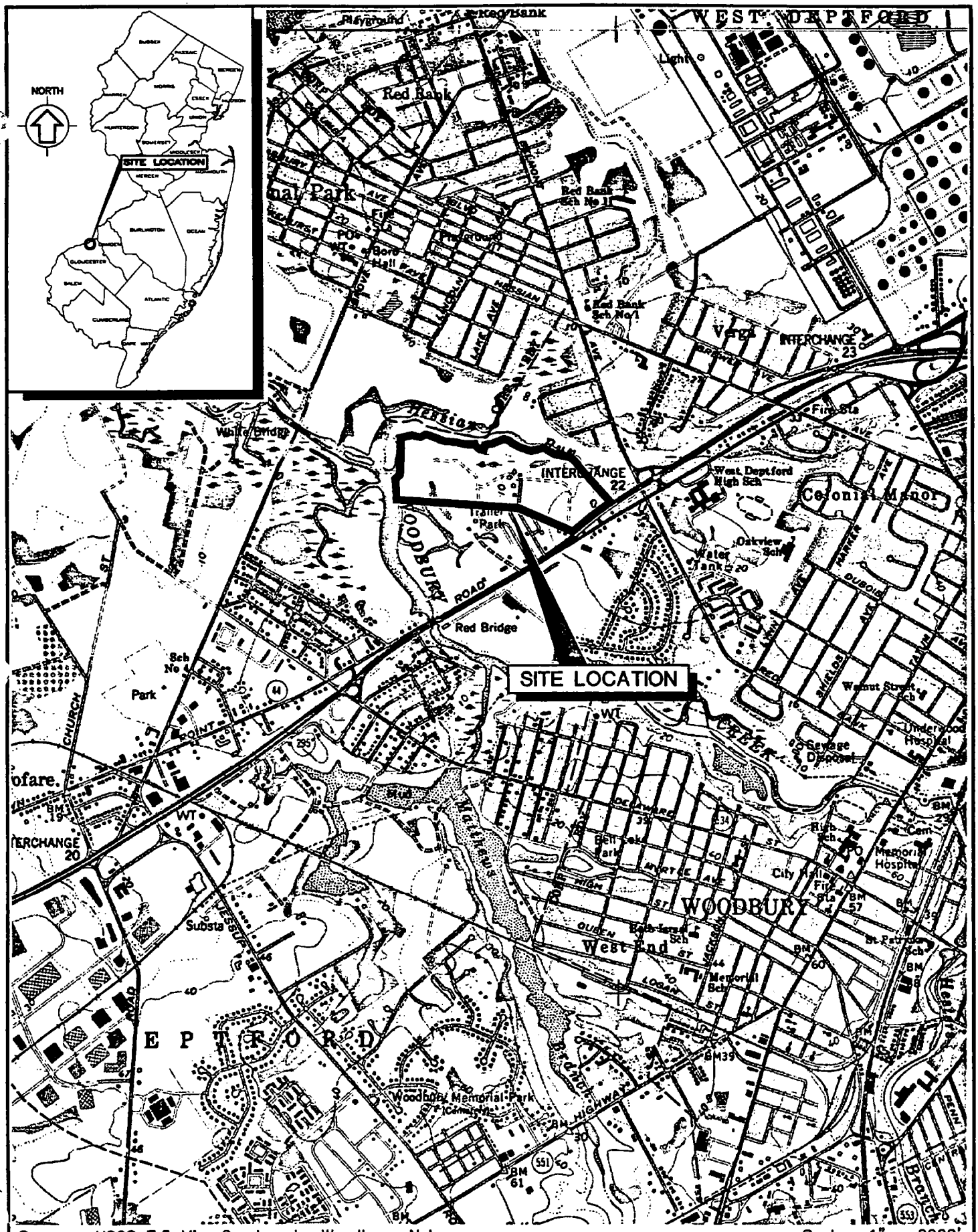
Table 5-38
Matteo Iron and Metal
Well Search Results

MAP NO.	RI SAMPLE ID	OWNER'S NAME	ADDRESS	BLOCK / LOT	PERMIT NO.	WELL USE	TOTAL DEPTH	SCREEN ZONE
1	PW-3	Grover Riehl	Crown Point Rd., West Deptford	325 / 8	31-52940	Dom.	103	93-103
2 *	PW-1	Linda Sabatini	West Deptford	128 / 2.01	N/A	Dom.	N/A	N/A
3 *	PW-2	Matteo Iron and Metal	West Deptford	128 / 2	N/A	Dom.	N/A	N/A
4	-	Coastal Eagle Point Oil Co.	West Deptford	N/A	31-17788	Prod.	335	N/A
5	-	Coastal Eagle Point Oil Co.	West Deptford	N/A	31-06834	Prod.	306	N/A
6	-	West Deptford Water Dept.	West Deptford	N/A	51-00063	Prod.	366	N/A
7	-	National Park Borough	National Park	N/A	31-02555	Prod.	282	N/A
8	-	National Park Borough	National Park	N/A	31-17938	Prod.	275	N/A

Notes:

Depth and screen zone reported in feet
N/A = Data not available
Dom. = Domestic Well
Prod. = Production Well
* No well record found, but potable well identified

FIGURES



N.J. Department of Environmental Protection

MATTEO IRON AND METALS – GLOUCESTER COUNTY, NEW JERSEY

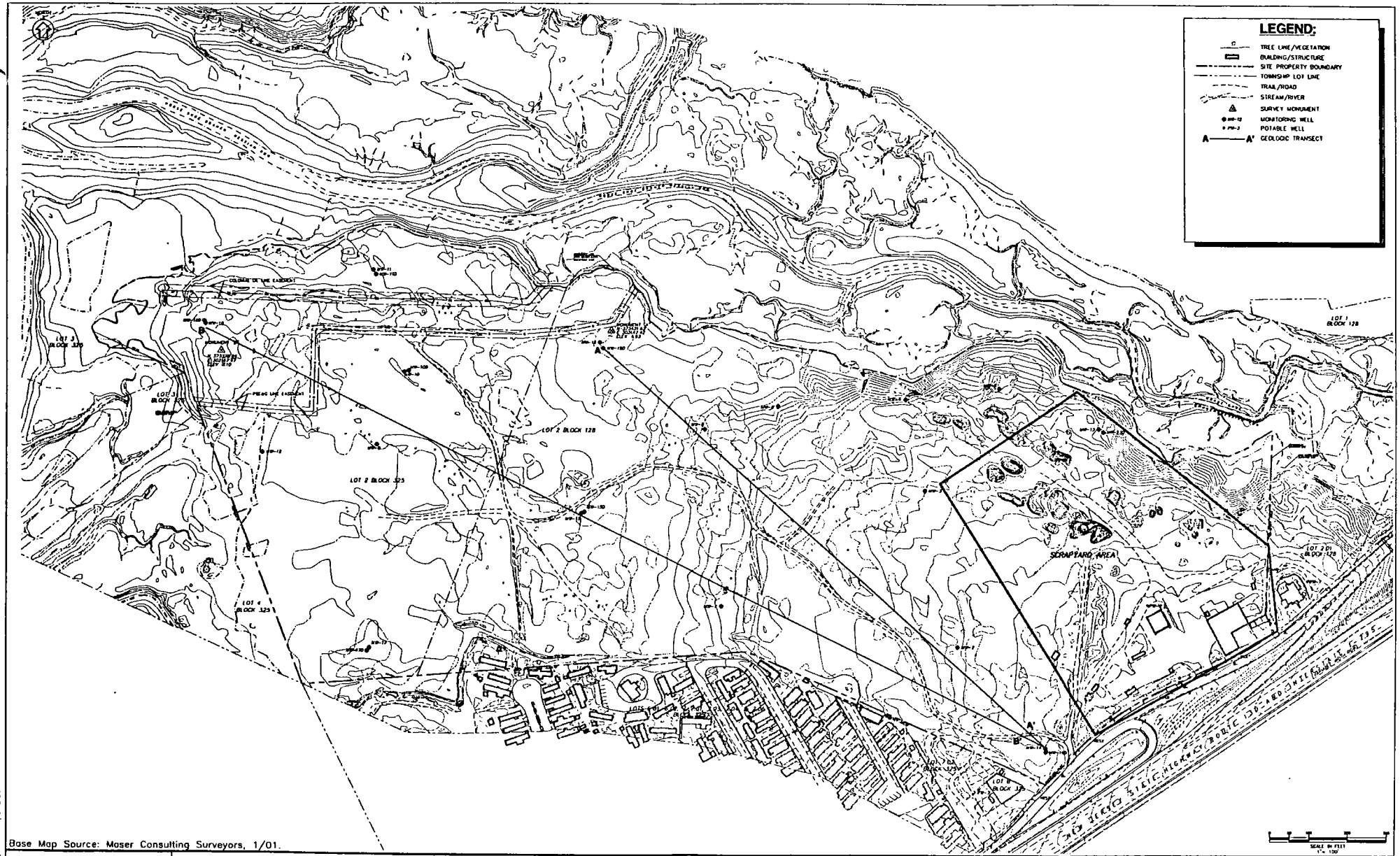
SITE LOCATION MAP

NJDEP CONTRACT No. A-85149

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 1-1

MA-LOC/26N +/U4-SLM



Base Map Source: Maser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

SITE PLAN

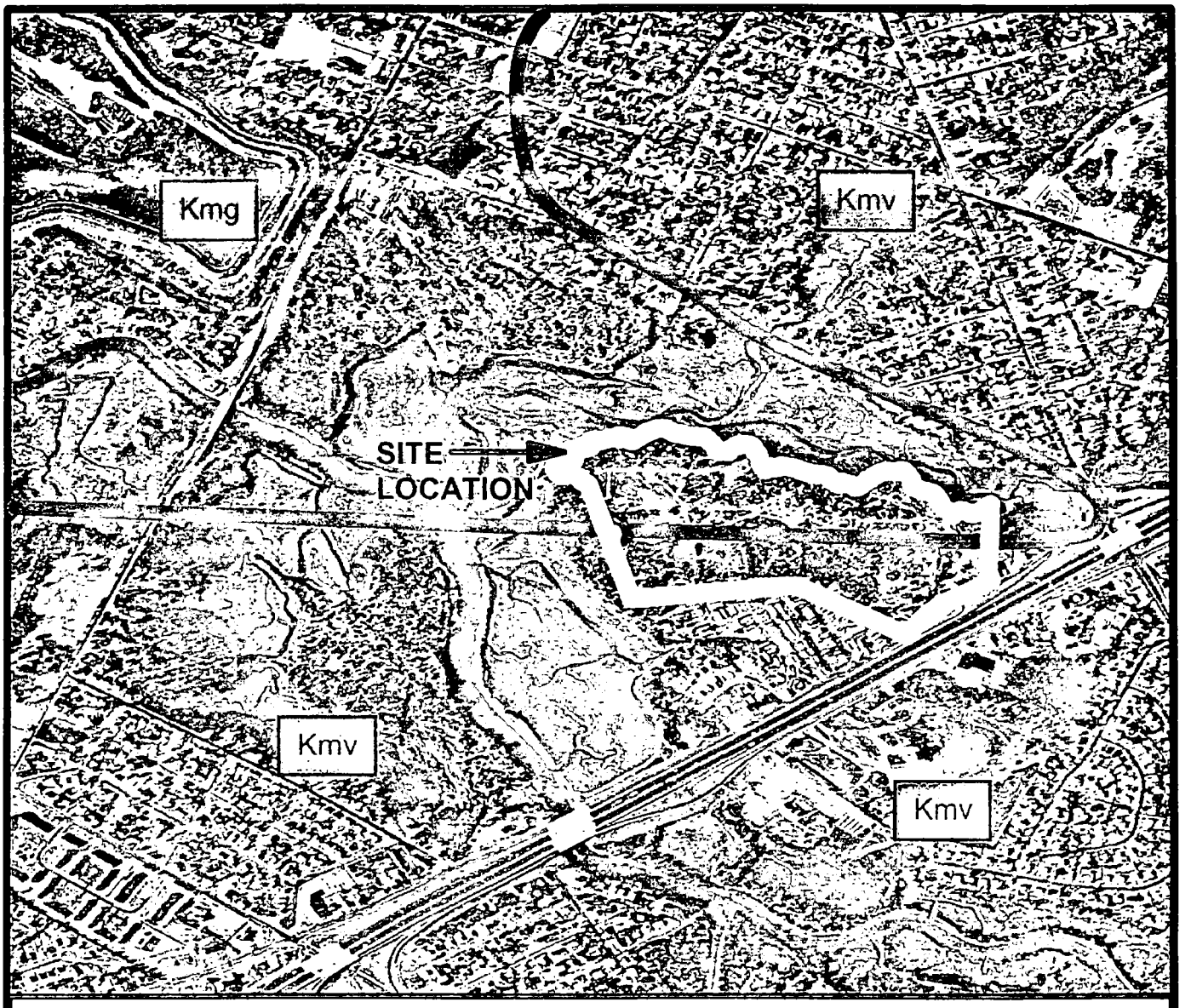
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 2-1

FRIR/MA-SP1/28MAY04/...SCR



GEOLOGIC UNITS

Kmv **Merchantville Formation** - Black, glaucontic, micaceous clay, silty clay, and sandy clay. It is massive in structure and greasy in appearance, and weathers to a coherent pale yellow-brown material. (Hardt and Hilton, 1969; Zapecza, 1990; Owens et al, 1995)

Kmg **Magothy Formation** - Light colored, fine to coarse grained beach sand with local beds of dark colored (dark grey to black) lignitic clay (Hardt and Hilton, 1969; Zepecza, 1990; Owens et al, 1995

SOURCE: 1195/97 Color Infrared Digital Imagery, Plate No. 1142.

SCALE: N.T.S

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY NEW JERSEY

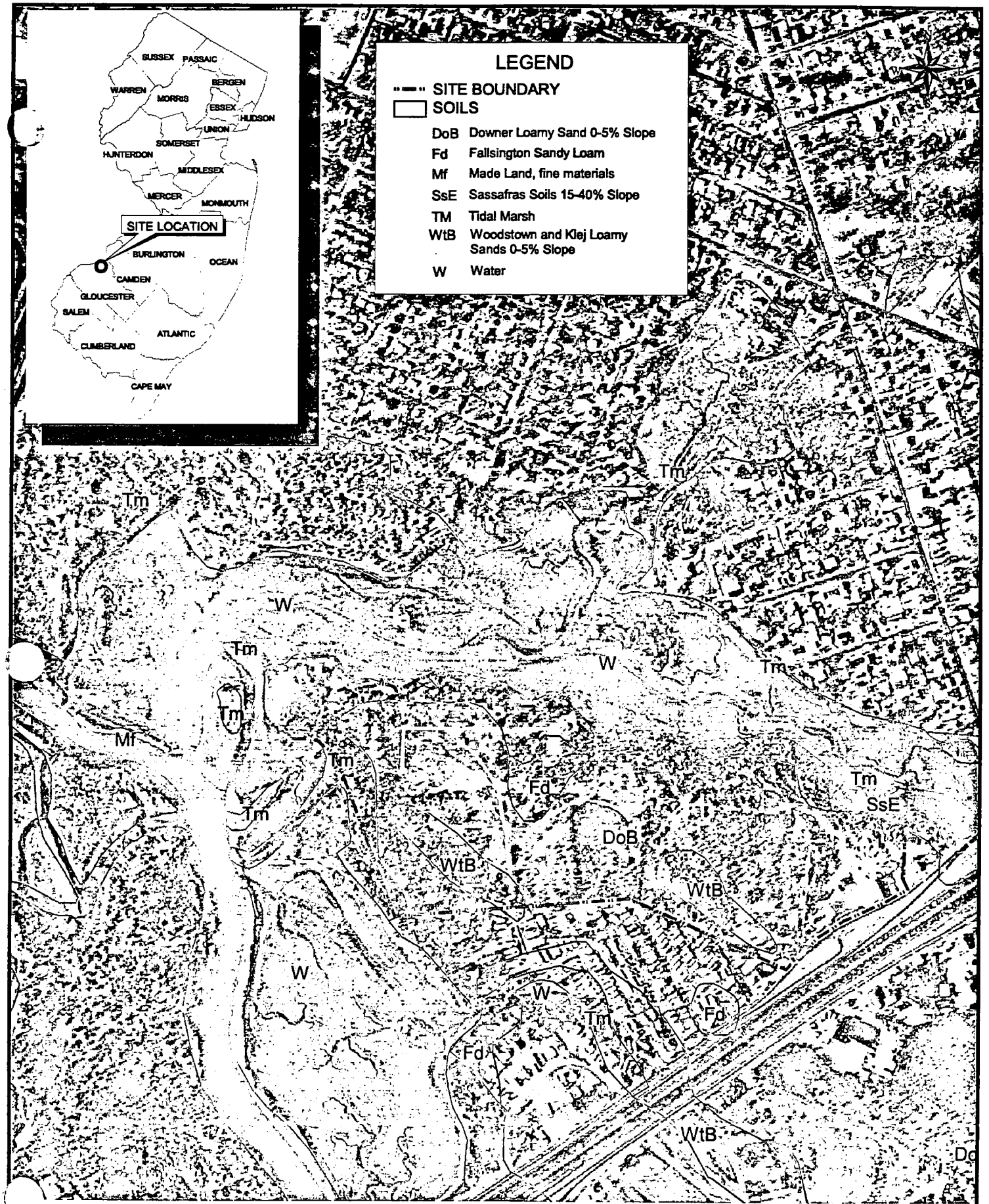
GEOLOGIC MAP

NJDEP CONTRACT No. A-85149

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 3-2

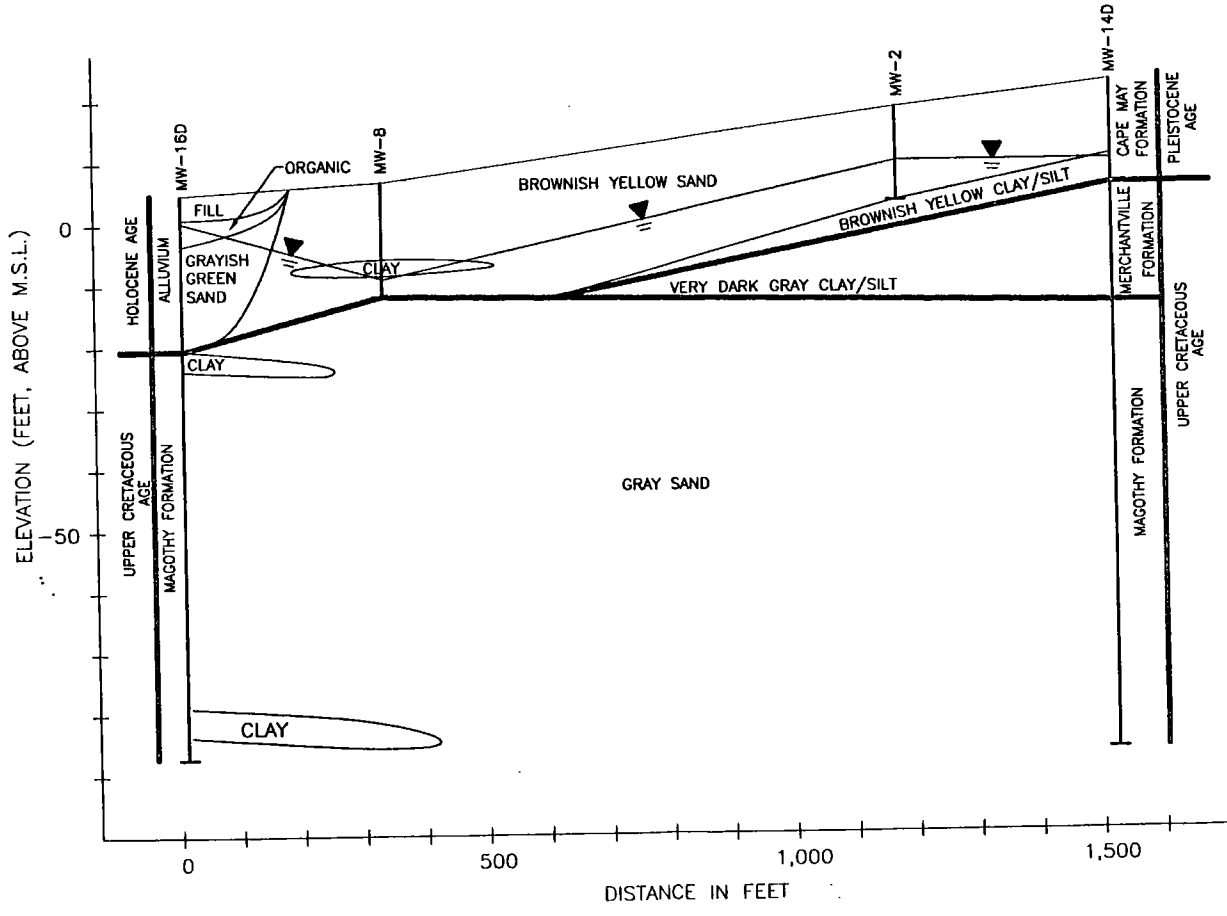
FRIR/MAT-GUS.PRZ/29MAY04



Source: Gloucester County Soil Survey

Scale: 1" = 600'

N.J. Department of Environmental Protection	Matteo Iron and Metals, Gloucester County, New Jersey **SOILS MAP** NJDEP CONTRACT No. A-85149	Louis Berger & Assoc. 30 Vreeland Road Florham Park, NJ	**FIGURE 3-1**



Scale: 1" = 200'

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

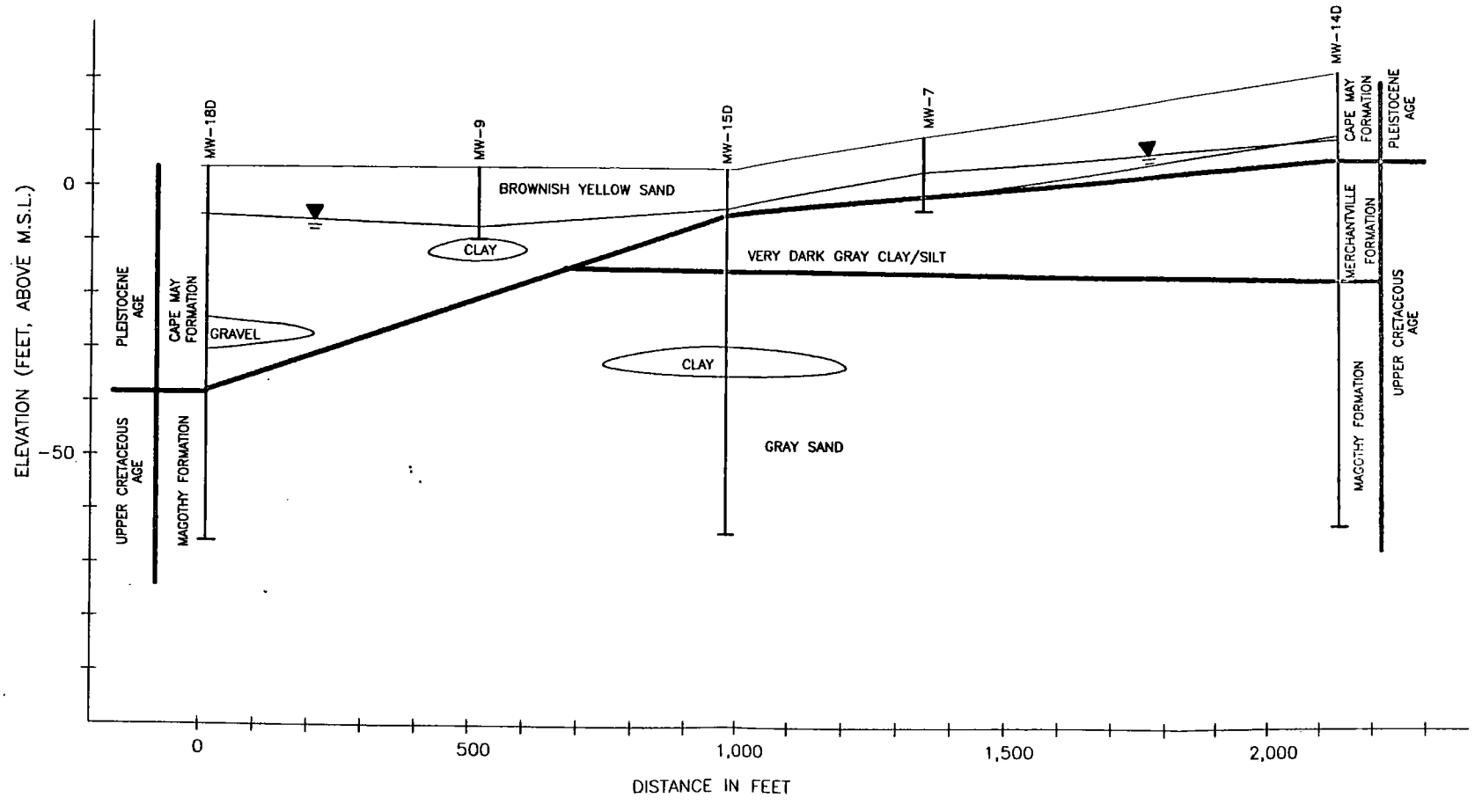
GEOLOGICAL CROSS SECTION A-A'

NJDEP CONTRACT No. A-85149

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 3-3

FRIR/MAT-GCS/28MAY04/U4



Scale: 1" = 200'

N.J. Department of Environmental Protection

MATTEO IRON AND METALS – GLOUCESTER COUNTY, NEW JERSEY

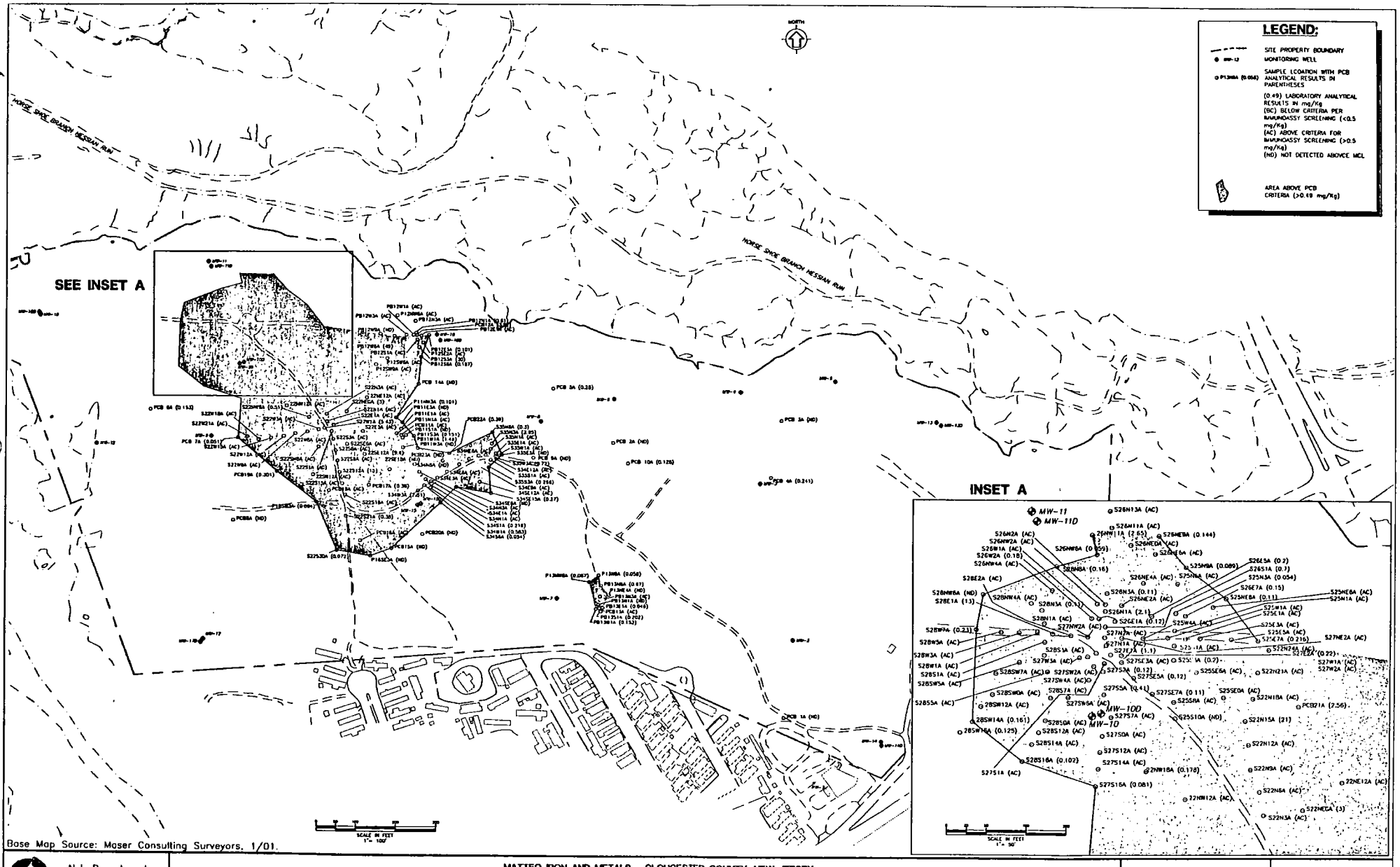
GEOLOGICAL CROSS SECTION B-B'

NJDEP CONTRACT No. A-85149

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 3-4

FRIR/MAT-GCS/25MAY04/LJ4



Base Map Source: Maser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

SOIL - EXTENT OF PCB CONTAMINATION (0-6")

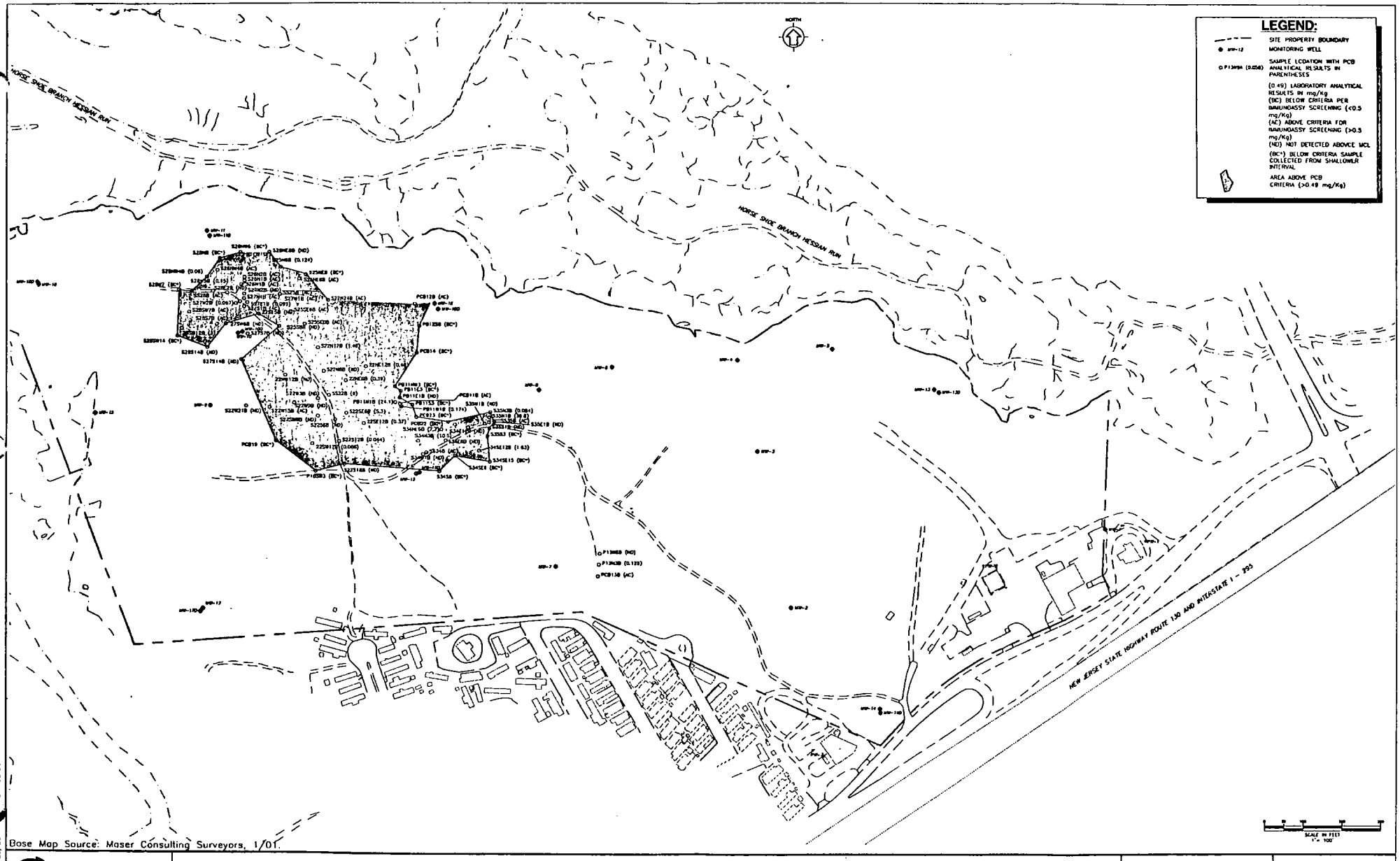
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-1

FRR/MA-SOILS/28MAY01_JIL-PCB.SCR



Base Map Source: Maser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

SOIL - EXTENT OF PCB CONTAMINATION (12-18")

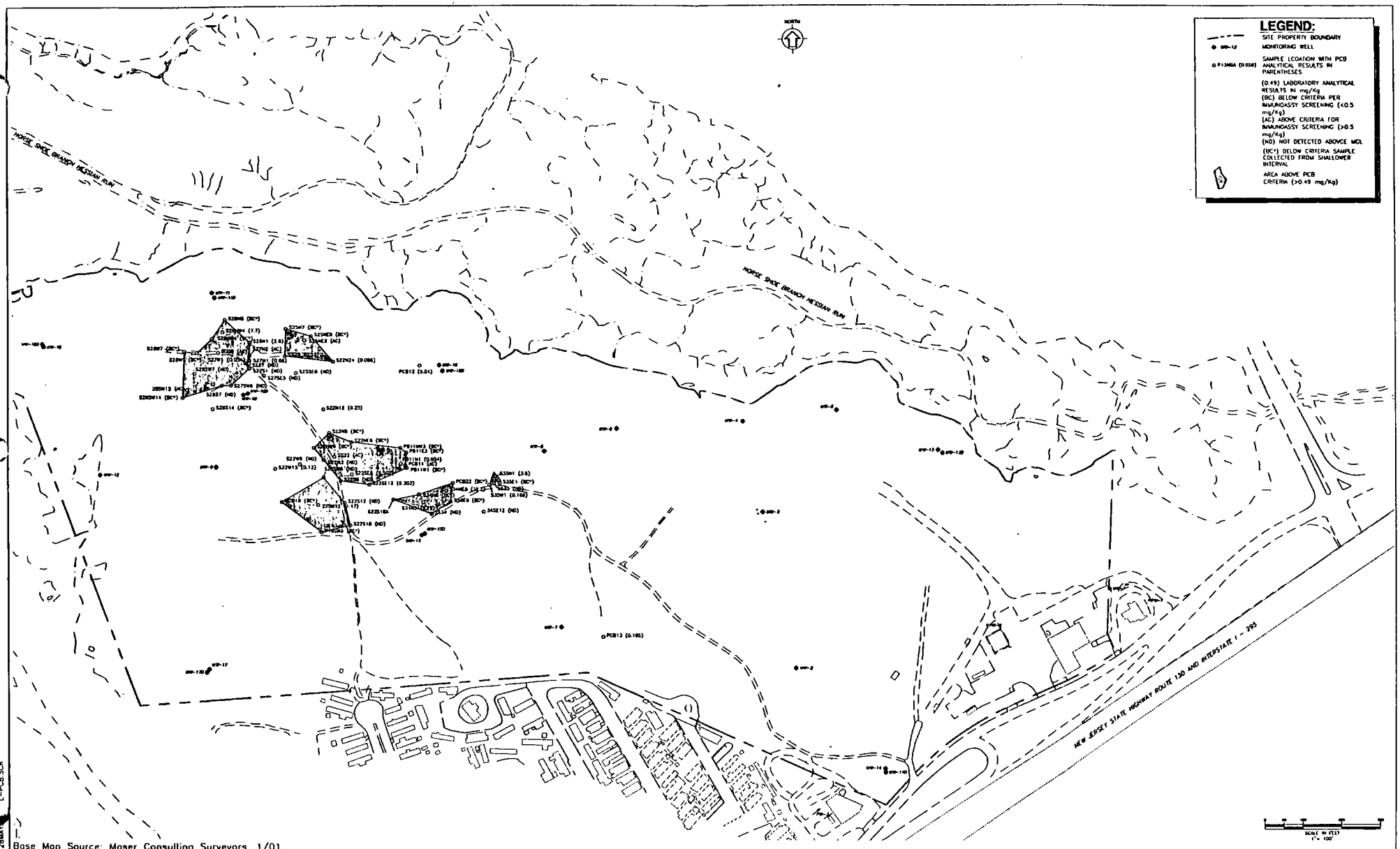
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-2

FRR/MA-SOILS/28MAY01-PCB.SCR



Base Map Source: Maser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

SOIL - EXTENT OF PCB CONTAMINATION (24-30")

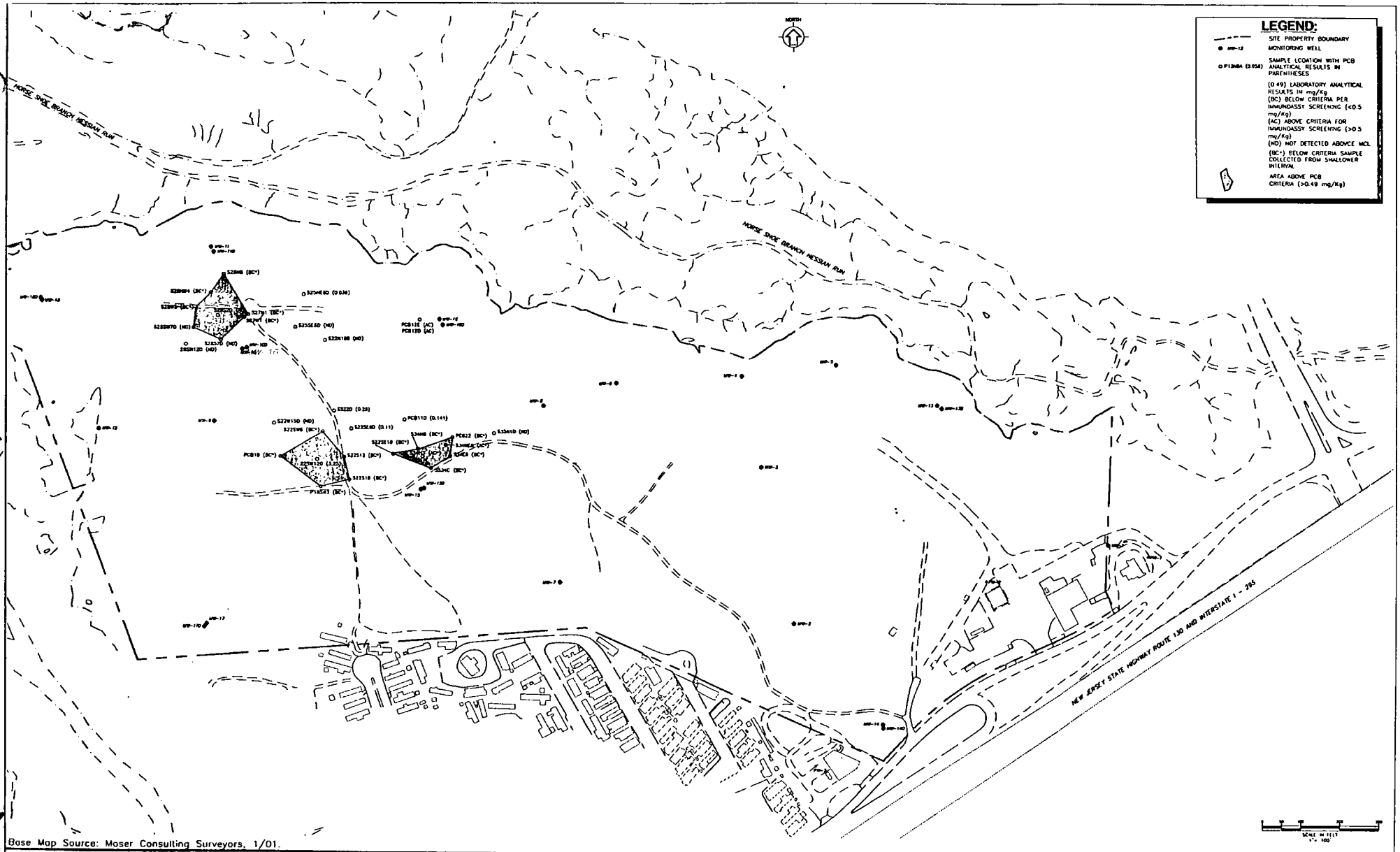
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-3

FRR/MA-SOILS/2BMAY L-PCB.SCR



Base Map Source: Moser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

SOIL - EXTENT OF PCB CONTAMINATION (36-42")

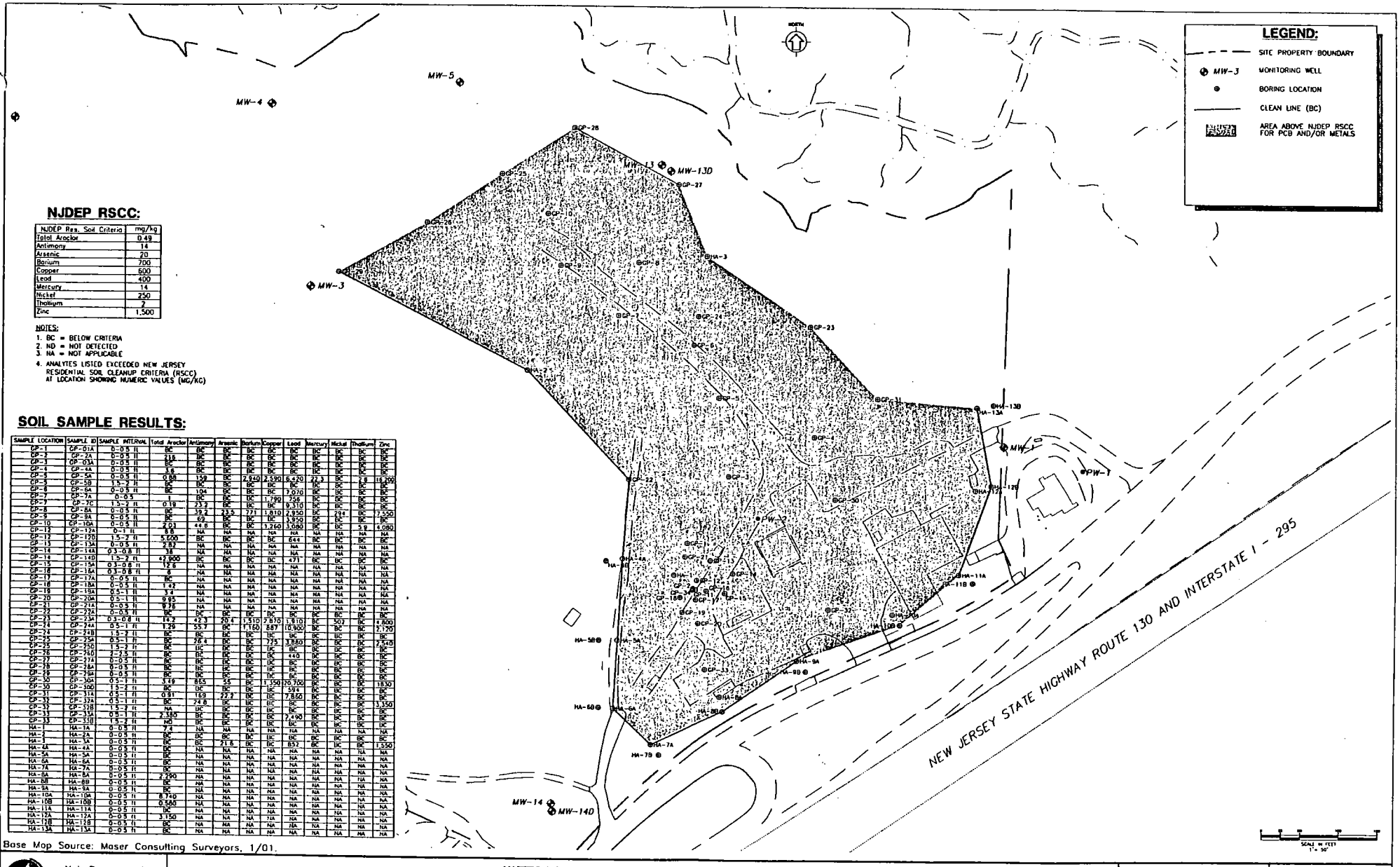
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-4

FRIR/MA-SOILS/128MA OIL-PCB.SCR



NJDEP RSCC:

NJDEP Res. Soil Criteria	mg/kg
Total Aroclor	0.49
Antimony	14
Arsenic	20
Barium	700
Copper	600
Lead	400
Mercury	14
Nickel	250
Thallium	2
Zinc	1,500

NOTES:

1. BC = BELOW CRITERIA
2. ND = NOT DETECTED
3. NA = NOT APPLICABLE
4. ANALYTES LISTED EXCEEDED NEW JERSEY RESIDENTIAL SOIL CLEANUP CRITERIA (RSCC) AT LOCATION SHOWING NUMERIC VALUES (MG/KG)

SOIL SAMPLE RESULTS:

SAMPLE LOCATION	SAMPLE ID	SAMPLE INTERVAL	Total Aroclor	Antimony	Arsenic	Barium	Copper	Lead	Mercury	Nickel	Thallium	Zinc
GP-1	GP-01A	0-0.5 ft	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC
GP-2	GP-2A	0-0.5 ft	0.18	BC	BC	BC	BC	BC	BC	BC	BC	BC
GP-3	GP-03A	0-0.5 ft	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC
GP-4	GP-4A	0-0.5 ft	3.6	BC	BC	BC	BC	BC	BC	BC	BC	BC
GP-5	GP-5A	0-0.5 ft	0.88	159	BC	2,040	2,590	6,420	22.3	BC	2.8	15,200
GP-5	GP-5B	1.5-2 ft	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC
GP-6	GP-6A	0-0.5 ft	BC	104	BC	BC	BC	7,070	BC	BC	BC	BC
GP-7	GP-7A	0-0.5	1	BC	BC	BC	1,790	758	BC	BC	BC	BC
GP-7	GP-7B	1.5-2 ft	0.19	23.2	BC	BC	BC	9,310	BC	BC	BC	BC
GP-8	GP-8A	0-0.5 ft	BC	39.2	23.5	721	1,810	2,950	BC	24	BC	7,500
GP-9	GP-9A	0-0.5 ft	BC	69	BC	BC	BC	3,950	BC	BC	BC	BC
GP-10	GP-10A	0-0.5 ft	2.01	44.8	BC	BC	1,960	3,080	BC	BC	5.9	4,080
GP-12	GP-12A	0-1 ft	8.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-12	GP-12B	1.5-2 ft	5,600	BC	BC	BC	BC	644	BC	BC	BC	BC
GP-13	GP-13A	0-0.5 ft	2.82	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-14	GP-14A	0.3-0.8 ft	38	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-14	GP-14B	1.5-2 ft	42,900	BC	BC	BC	BC	471	BC	BC	BC	BC
GP-15	GP-15A	0.3-0.8 ft	12.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-16	GP-16A	0.3-0.8 ft	5	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-17	GP-17A	0-0.5 ft	BC	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-18	GP-18A	0-0.5 ft	1.42	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-19	GP-19A	0.5-1 ft	3.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-20	GP-20A	0.5-1 ft	9.85	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-21	GP-21A	0-0.5 ft	9.78	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-22	GP-22A	0-0.5 ft	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC
GP-23	GP-23A	0.3-0.8 ft	14.2	42.3	20.4	1,510	7,810	1,810	BC	503	BC	4,800
GP-24	GP-24A	0.5-1 ft	1.25	55.7	BC	1,160	887	10,900	BC	BC	BC	3,190
GP-24	GP-24B	1.5-2 ft	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC
GP-25	GP-25A	0.5-1 ft	BC	28.4	BC	BC	775	3,880	BC	BC	BC	7,540
GP-25	GP-25B	1.5-2 ft	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC
GP-26	GP-26B	2-2.5 ft	BC	BC	BC	BC	BC	440	BC	BC	BC	BC
GP-27	GP-27A	0-0.5 ft	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC
GP-28	GP-28A	0-0.5 ft	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC
GP-29	GP-29A	0-0.5 ft	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC
GP-30	GP-30A	0.5-1 ft	3.19	865	55	BC	1,150	20,700	BC	BC	BC	1830
GP-30	GP-30B	1.5-2 ft	BC	BC	BC	BC	BC	581	BC	BC	BC	BC
GP-31	GP-31A	0.5-1 ft	0.91	169	22.2	BC	BC	7,860	BC	BC	BC	BC
GP-32	GP-32A	0.5-1 ft	BC	74.8	BC	BC	BC	BC	BC	BC	BC	3,350
GP-32	GP-32B	1.5-2 ft	NA	UC	BC	BC	BC	BC	BC	BC	BC	BC
GP-33	GP-33A	0.5-1 ft	2.580	BC	BC	BC	BC	12,490	BC	BC	BC	BC
GP-33	GP-33B	1.5-2 ft	ND	BC	BC	BC	BC	BC	BC	BC	BC	BC
HA-1	HA-1A	0-0.5 ft	7.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-2	HA-2A	0-0.5 ft	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC
HA-3	HA-3A	0-0.5 ft	BC	BC	21.6	BC	BC	852	BC	BC	BC	1,550
HA-4A	HA-4A	0-0.5 ft	BC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-5A	HA-5A	0-0.5 ft	BC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-6A	HA-6A	0-0.5 ft	BC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-7A	HA-7A	0-0.5 ft	BC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-8A	HA-8A	0-0.5 ft	2.290	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-8B	HA-8B	0-0.5 ft	BC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-9A	HA-9A	0-0.5 ft	BC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-10A	HA-10A	0-0.5 ft	8.740	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-10B	HA-10B	0-0.5 ft	0.580	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-11A	HA-11A	0-0.5 ft	BC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-12A	HA-12A	0-0.5 ft	3.150	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-12B	HA-12B	0-0.5 ft	BC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HA-13A	HA-13A	0-0.5 ft	BC	NA	NA	NA	NA	NA	NA	NA	NA	NA

Base Map Source: Maser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

SURFACE SOIL SAMPLE RESULTS IN SCRAPYARD (0 Ft - 2 Ft)

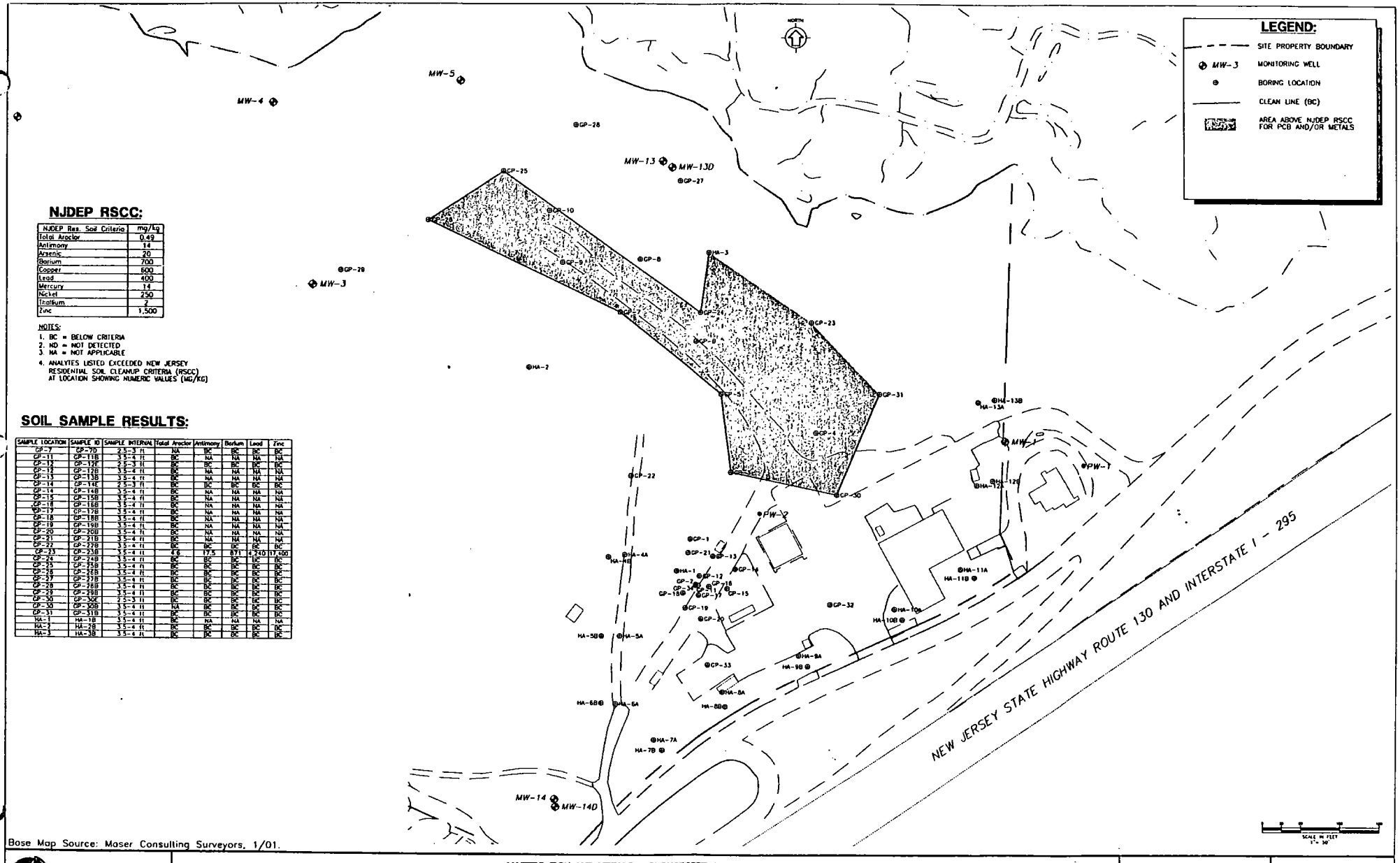
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-5

FRIR/MA-SOILS/28MAY
L-SAMP-SURF.SCR



NJDEP RSCC:

NJDEP Res. Soil Criteria	mg/kg
Total Aroclor	0.49
Antimony	14
Arsenic	20
Barium	700
Copper	600
Lead	400
Mercury	14
Nickel	250
Thallium	2
Zinc	1,500

NOTES:
1. BC = BELOW CRITERIA
2. ND = NOT DETECTED
3. NA = NOT APPLICABLE
4. ANALYTES LISTED EXCEEDED NEW JERSEY RESIDENTIAL SOIL CLEANUP CRITERIA (RSCC) AT LOCATION SHOWING NUMERIC VALUES (MG/KG)

SOIL SAMPLE RESULTS:

SAMPLE LOCATION	SAMPLE ID	SAMPLE INTERVAL	Total Aroclor	Antimony	Barium	Lead	Zinc
GP-7	GP-7D	2.5-3 ft	NA	BC	BC	BC	BC
GP-11	GP-11B	3.5-4 ft	BC	NA	NA	NA	NA
GP-12	GP-12E	2.5-3 ft	BC	BC	BC	BC	BC
GP-12	GP-12B	3.5-4 ft	BC	NA	NA	NA	NA
GP-13	GP-13B	3.5-4 ft	BC	NA	NA	NA	NA
GP-14	GP-14E	2.5-3 ft	BC	BC	BC	BC	BC
GP-14	GP-14B	3.5-4 ft	BC	NA	NA	NA	NA
GP-15	GP-15B	3.5-4 ft	BC	NA	NA	NA	NA
GP-16	GP-16B	3.5-4 ft	BC	NA	NA	NA	NA
GP-17	GP-17B	3.5-4 ft	BC	NA	NA	NA	NA
GP-18	GP-18B	3.5-4 ft	BC	NA	NA	NA	NA
GP-19	GP-19B	3.5-4 ft	BC	NA	NA	NA	NA
GP-20	GP-20B	3.5-4 ft	BC	NA	NA	NA	NA
GP-21	GP-21B	3.5-4 ft	BC	NA	NA	NA	NA
GP-22	GP-22B	3.5-4 ft	BC	BC	BC	BC	BC
GP-23	GP-23B	3.5-4 ft	4.6	17.5	871	4,240	17,400
GP-24	GP-24B	3.5-4 ft	BC	BC	BC	BC	BC
GP-25	GP-25B	3.5-4 ft	BC	BC	BC	BC	BC
GP-26	GP-26B	3.5-4 ft	BC	BC	BC	BC	BC
GP-27	GP-27B	3.5-4 ft	BC	BC	BC	BC	BC
GP-28	GP-28B	3.5-4 ft	BC	BC	BC	BC	BC
GP-29	GP-29B	3.5-4 ft	BC	BC	BC	BC	BC
GP-30	GP-30E	2.5-3 ft	BC	BC	BC	BC	BC
GP-30	GP-30B	3.5-4 ft	NA	BC	BC	BC	BC
GP-31	GP-31B	3.5-4 ft	BC	BC	BC	BC	BC
HA-1	HA-1B	3.5-4 ft	BC	NA	NA	NA	NA
HA-2	HA-2B	3.5-4 ft	BC	BC	BC	BC	BC
HA-3	HA-3B	3.5-4 ft	BC	BC	BC	BC	BC

Base Map Source: Maser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

INTERMEDIATE SOIL SAMPLE RESULTS IN SCRAPYARD (2 Ft - 4 Ft)

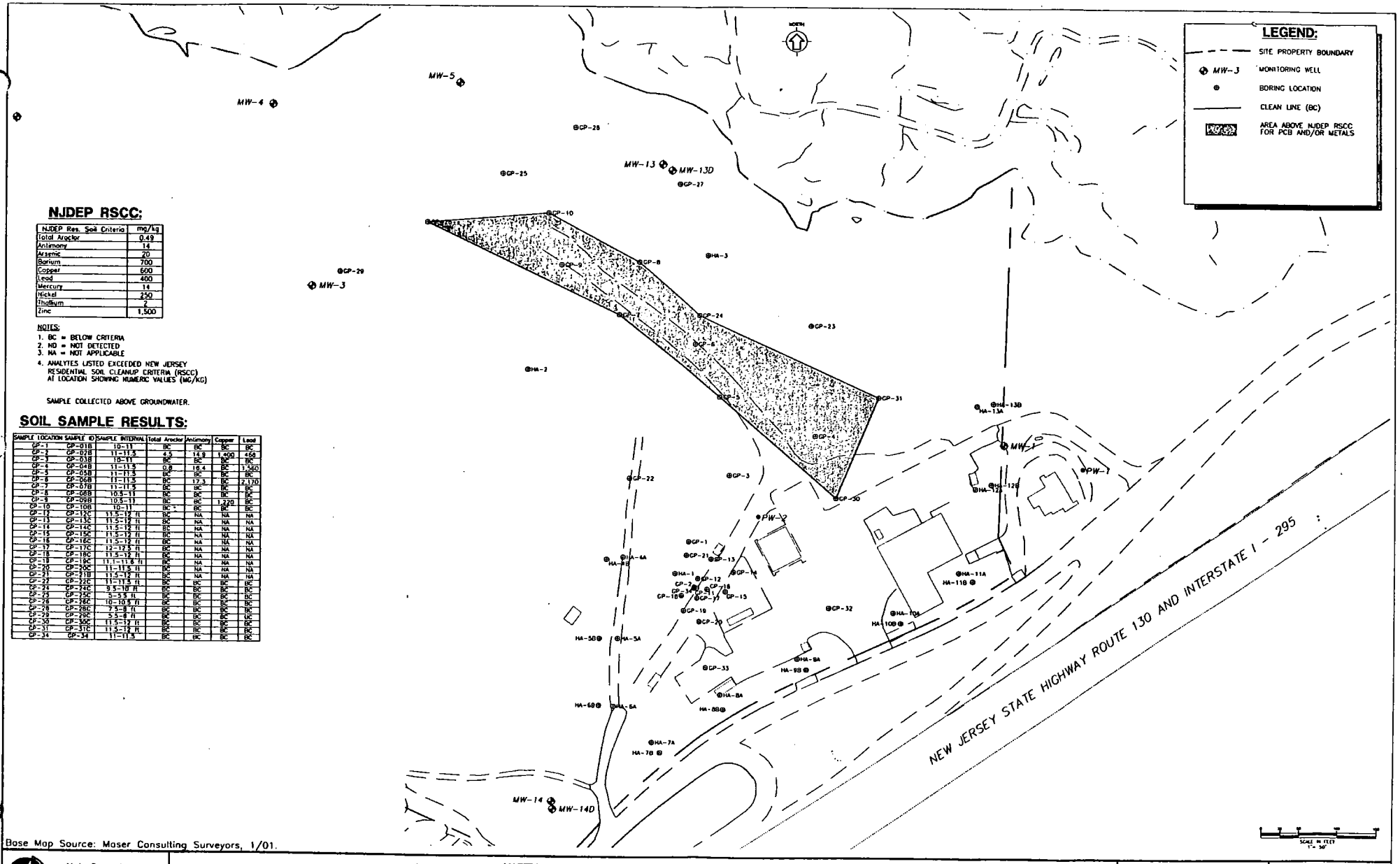
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-6

FRIR/MA-SOILS/30JUL -- SAMP-INTER.SCR



NJDEP RSCC:

NJDEP Res. Soil Criteria	mg/kg
Total Aroclor	0.49
Antimony	14
Arsenic	20
Barium	700
Copper	600
Lead	400
Mercury	14
Nickel	250
Thallium	2
Zinc	1,500

NOTES:

1. BC = BELOW CRITERIA
2. ND = NOT DETECTED
3. NA = NOT APPLICABLE
4. ANALYTES LISTED EXCEEDED NEW JERSEY RESIDENTIAL SOIL CLEANUP CRITERIA (RSCC) AT LOCATION SHOWING NUMERIC VALUES (MG/KG)

SAMPLE COLLECTED ABOVE GROUNDWATER.

SOIL SAMPLE RESULTS:

SAMPLE LOCATION	SAMPLE ID	SAMPLE INTERVAL	Total Aroclor	Antimony	Copper	Lead
GP-1	GP-01B	10-11	BC	BC	BC	BC
GP-2	GP-02B	11-11.5	4.5	14.9	1,400	468
GP-3	GP-03B	10-11	BC	BC	BC	BC
GP-4	GP-04B	11-11.5	0.8	16.4	BC	1,560
GP-5	GP-05B	11-11.5	BC	BC	BC	BC
GP-6	GP-06B	11-11.5	BC	17.3	BC	2,170
GP-7	GP-07B	11-11.5	BC	BC	BC	BC
GP-8	GP-08B	10.5-11	BC	BC	BC	BC
GP-9	GP-09B	10.5-11	BC	BC	1,220	BC
GP-10	GP-10B	10-11	BC *	BC	BC	BC
GP-12	GP-12C	11.5-12 ft	BC	NA	NA	NA
GP-13	GP-13C	11.5-12 ft	BC	NA	NA	NA
GP-14	GP-14C	11.5-12 ft	BC	NA	NA	NA
GP-15	GP-15C	11.5-12 ft	BC	NA	NA	NA
GP-16	GP-16C	11.5-12 ft	BC	NA	NA	NA
GP-17	GP-17C	12-12.5 ft	BC	NA	NA	NA
GP-18	GP-18C	11.5-12 ft	BC	NA	NA	NA
GP-19	GP-19C	11.1-11.6 ft	BC	NA	NA	NA
GP-20	GP-20C	11-11.5 ft	BC	NA	NA	NA
GP-21	GP-21B	11.5-12 ft	BC	NA	NA	NA
GP-22	GP-22C	11-11.5 ft	BC	BC	BC	BC
GP-24	GP-24C	9.5-10 ft	BC	BC	BC	BC
GP-25	GP-25C	5-5.5 ft	BC	BC	BC	BC
GP-26	GP-26C	10-10.5 ft	BC	BC	BC	BC
GP-28	GP-28C	7.5-8 ft	BC	BC	BC	BC
GP-29	GP-29C	5.5-6 ft	BC	BC	BC	BC
GP-30	GP-30C	11.5-12 ft	BC	BC	BC	BC
GP-31	GP-31C	11.5-12 ft	BC	BC	BC	BC
GP-34	GP-34	11-11.5	BC	BC	BC	BC

Base Map Source: Maser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

DEEP SOIL SAMPLE RESULTS IN SCRAPYARD (10 Ft - 12 Ft)

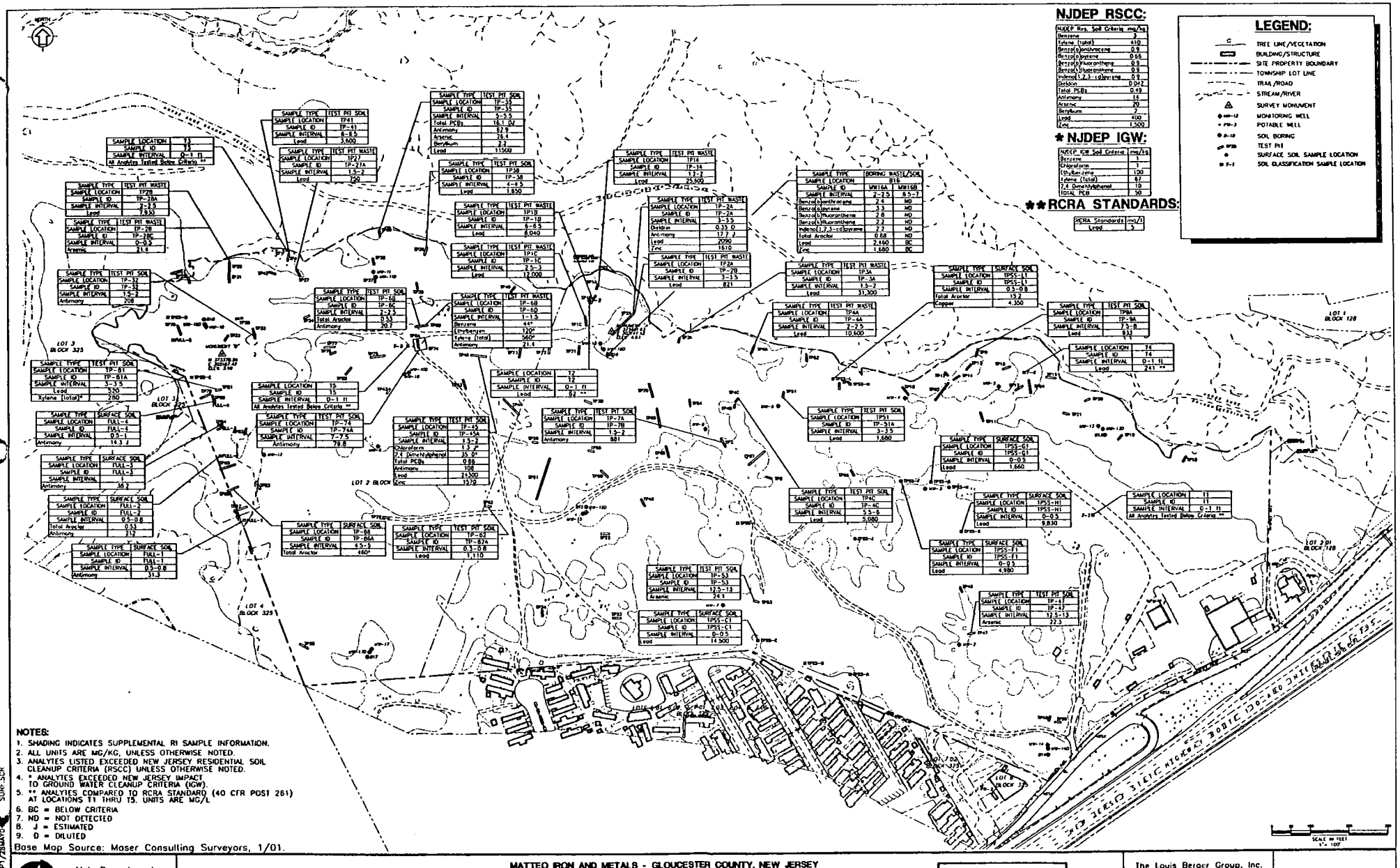
NJDEP CONTRACT No. A-85149

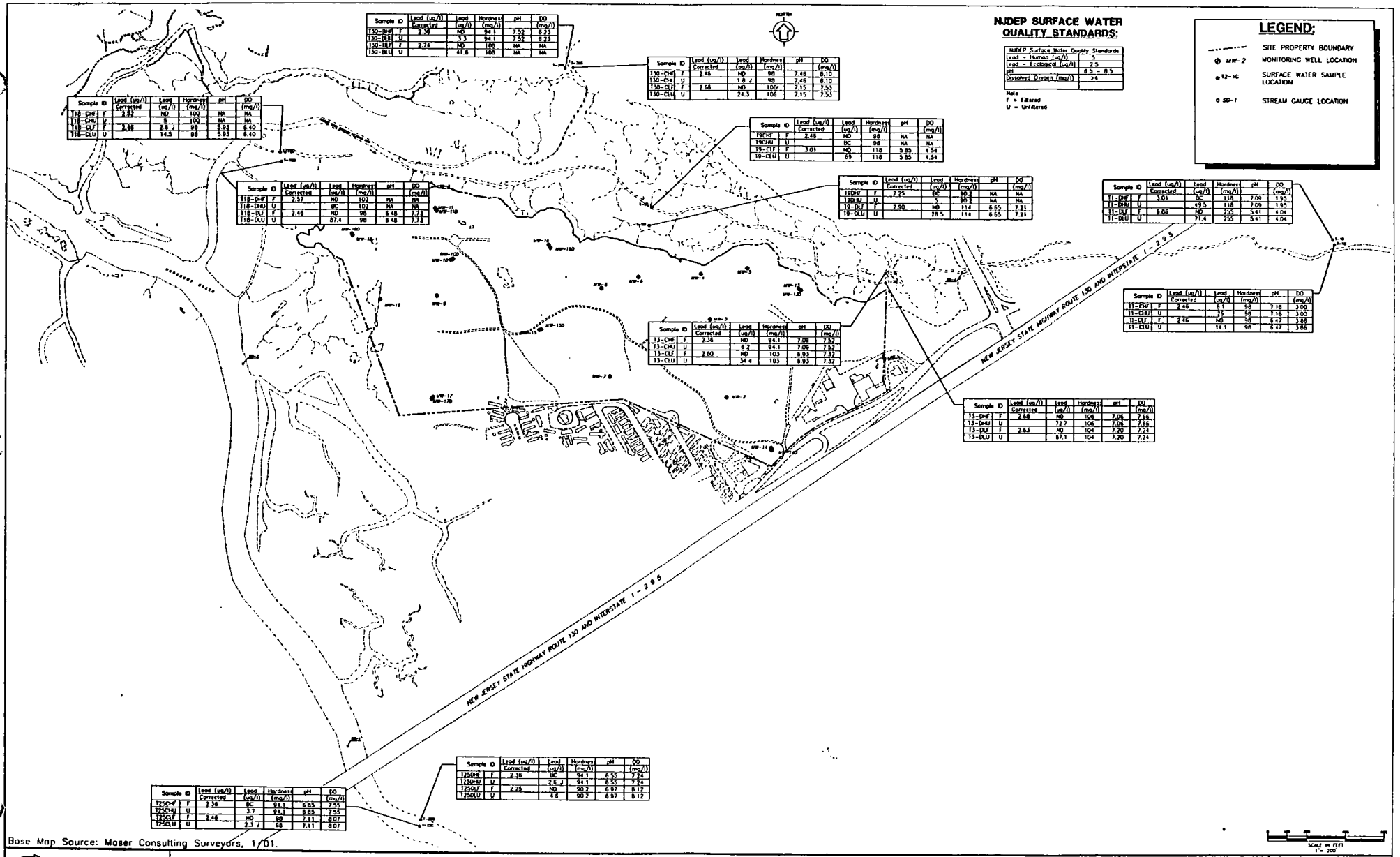
FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-7

FRIR/MA-SOILS/30JUL -SAMP-DEEP.SCR


NJDEP RSCC:
NJDEP IGW:
RCRA STANDARDS:
LEGEND:
TREE LINE/VEGETATION
BUILDING/STRUCTURE
SITE PROPERTY BOUNDARY
TOWNSHIP LOT LINE
TRAIL/ROAD
STREAM/RIVER
SURVEY MONUMENT
MONITORING WELL
POTABLE WELL
SOIL BORING
TEST PIT
SURFACE SOIL SAMPLE LOCATION
SOIL CLASSIFICATION SAMPLE LOCATION
NOTES:
1. SHADING INDICATES SUPPLEMENTAL RI SAMPLE INFORMATION.
2. ALL UNITS ARE MG/KG, UNLESS OTHERWISE NOTED.
3. ANALYTES LISTED EXCEEDED NEW JERSEY RESIDENTIAL SOIL CLEANUP CRITERIA (RSCC) UNLESS OTHERWISE NOTED.
4. * ANALYTES EXCEEDED NEW JERSEY IMPACT TO GROUND WATER CLEANUP CRITERIA (IGW).
5. ** ANALYTES COMPARED TO RCRA STANDARD (40 CFR POST 261) AT LOCATIONS T1 THRU T5. UNITS ARE MG/L
6. BC = BELOW CRITERIA
7. ND = NOT DETECTED
8. J = ESTIMATED
9. D = DILUTED
Base Map Source: Moser Consulting Surveyors, 1/01.
N.J. Department of Environmental Protection
MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY
SITE WIDE SOIL SAMPLE RESULTS
NJDEP CONTRACT No. A-85149
FULL SIZED FIGURE BOUND SEPARATELY
The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ
FIGURE 4-8



Sample ID	Lead (ug/l) Corrected		Lead (ug/l)	Hardness (mg/l)	pH	DO (mg/l)
130-DHF	F	2.36	ND	94.1	7.52	6.23
130-DHU	U		3.3	94.1	7.52	6.23
130-DLF	F	2.76	ND	106	NA	NA
130-DLU	U		41.8	108	NA	NA

Sample ID	Lead (ug/l) Corrected		Lead (ug/l)	Hardness (mg/l)	pH	DO (mg/l)
130-CHF	F	2.46	ND	98	7.46	8.10
130-CHU	U		1.8 J	98	7.46	8.10
130-CLF	F	2.68	ND	109	7.15	7.53
130-CLU	U		24.3	106	7.15	7.53

Sample ID	Lead (ug/l) Corrected		Lead (ug/l)	Hardness (mg/l)	pH	DO (mg/l)
110-DHF	F	2.32	ND	100	NA	NA
110-DHU	U		5	100	NA	NA
110-DLF	F	2.18	2.8 J	98	5.93	8.40
110-DLU	U		14.5	98	5.93	8.40

Sample ID	Lead (ug/l) Corrected		Lead (ug/l)	Hardness (mg/l)	pH	DO (mg/l)
19CHF	F	2.45	ND	98	NA	NA
19CHU	U		BC	98	NA	NA
19-CLF	F	3.01	ND	118	5.85	4.54
19-CLU	U		69	118	5.85	4.54

Sample ID	Lead (ug/l) Corrected		Lead (ug/l)	Hardness (mg/l)	pH	DO (mg/l)
110-DHF	F	2.57	ND	102	NA	NA
110-DHU	U		BC	102	NA	NA
110-DLF	F	2.46	ND	98	8.48	7.73
110-DLU	U		87.4	98	8.48	7.73

Sample ID	Lead (ug/l) Corrected		Lead (ug/l)	Hardness (mg/l)	pH	DO (mg/l)
190HF	F	2.25	BC	90.2	NA	NA
190HU	U		5	90.2	NA	NA
19-DLF	F	2.90	ND	114	6.85	7.21
19-DLU	U		28.5	114	6.85	7.21

Sample ID	Lead (ug/l) Corrected		Lead (ug/l)	Hardness (mg/l)	pH	DO (mg/l)
11-DHF	F	3.01	BC	118	7.06	1.95
11-DHU	U		19.5	118	7.06	1.95
11-DLF	F	5.86	ND	255	5.41	4.04
11-DLU	U		71.4	255	5.41	4.04

Sample ID	Lead (ug/l) Corrected		Lead (ug/l)	Hardness (mg/l)	pH	DO (mg/l)
13-CHF	F	2.36	ND	84.1	7.09	7.52
13-CHU	U		8.2	84.1	7.09	7.52
13-CLF	F	2.60	ND	103	8.93	7.32
13-CLU	U		34.4	103	8.93	7.32

Sample ID	Lead (ug/l) Corrected		Lead (ug/l)	Hardness (mg/l)	pH	DO (mg/l)
11-CHF	F	2.46	6.1	98	7.18	3.00
11-CHU	U		7.6	98	7.18	3.00
11-CLF	F	2.46	ND	98	6.47	3.86
11-CLU	U		16.1	98	6.47	3.86

Sample ID	Lead (ug/l) Corrected		Lead (ug/l)	Hardness (mg/l)	pH	DO (mg/l)
13-DHF	F	2.68	ND	106	7.06	7.66
13-DHU	U		12.7	106	7.06	7.66
13-DLF	F	2.63	ND	104	7.20	7.24
13-DLU	U		87.1	104	7.20	7.24

Sample ID	Lead (ug/l) Corrected		Lead (ug/l)	Hardness (mg/l)	pH	DO (mg/l)
1250HF	F	2.38	BC	94.1	6.55	7.24
1250HU	U		2.5 J	94.1	6.55	7.24
1250LF	F	2.25	ND	90.7	6.97	8.12
1250LU	U		4.6	90.7	6.97	8.12

Sample ID	Lead (ug/l) Corrected		Lead (ug/l)	Hardness (mg/l)	pH	DO (mg/l)
1250HF	F	2.38	BC	94.1	6.55	7.55
1250HU	U		3.7	94.1	6.55	7.55
1250LF	F	2.48	ND	90	7.11	8.07
1250LU	U		2.3 J	90	7.11	8.07

Base Map Source: Maser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

SURFACE WATER SAMPLE RESULTS

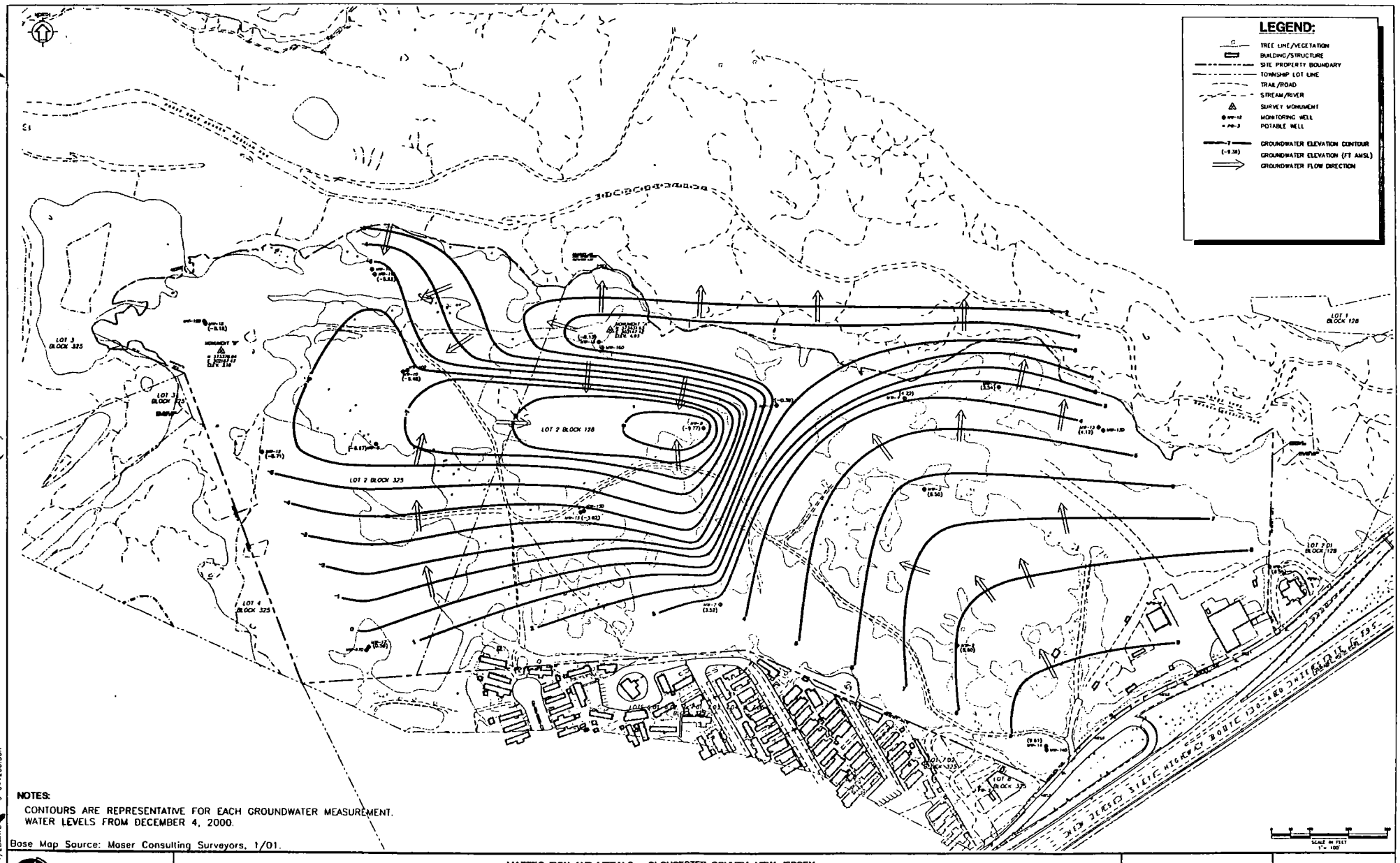
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-9

F:\DR\MA-SDS\28MAY\



NOTES:

CONTOURS ARE REPRESENTATIVE FOR EACH GROUNDWATER MEASUREMENT.
WATER LEVELS FROM DECEMBER 4, 2000.

Base Map Source: Moser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

SHALLOW GROUNDWATER ELEVATION CONTOUR MAP - 12/4/00

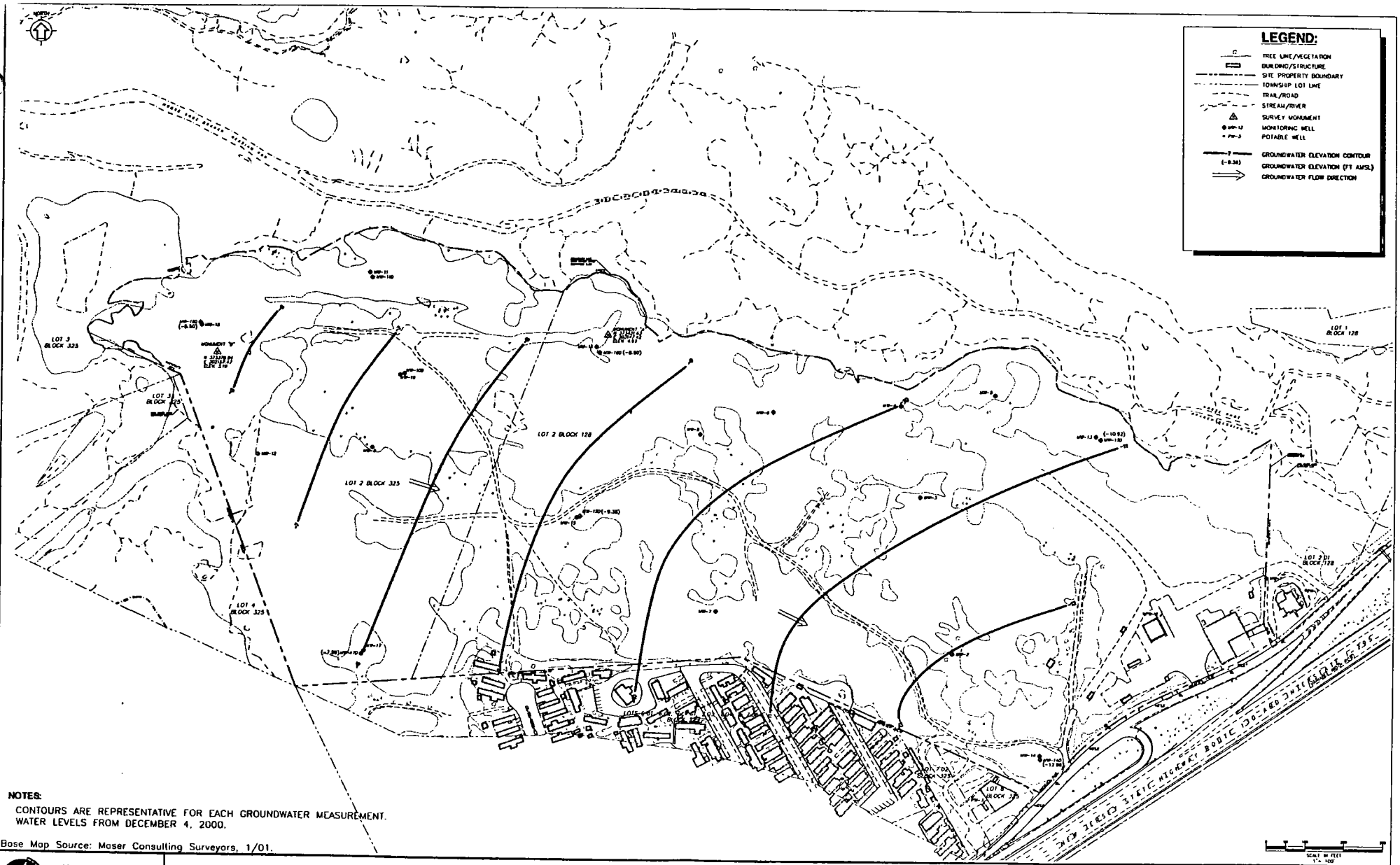
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-10

FRR/MA-SP1/28MAY01 J-041200.SCR



NOTES:

CONTOURS ARE REPRESENTATIVE FOR EACH GROUNDWATER MEASUREMENT. WATER LEVELS FROM DECEMBER 4, 2000.

Base Map Source: Maser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

DEEP GROUNDWATER ELEVATION CONTOUR MAP - 12/4/00

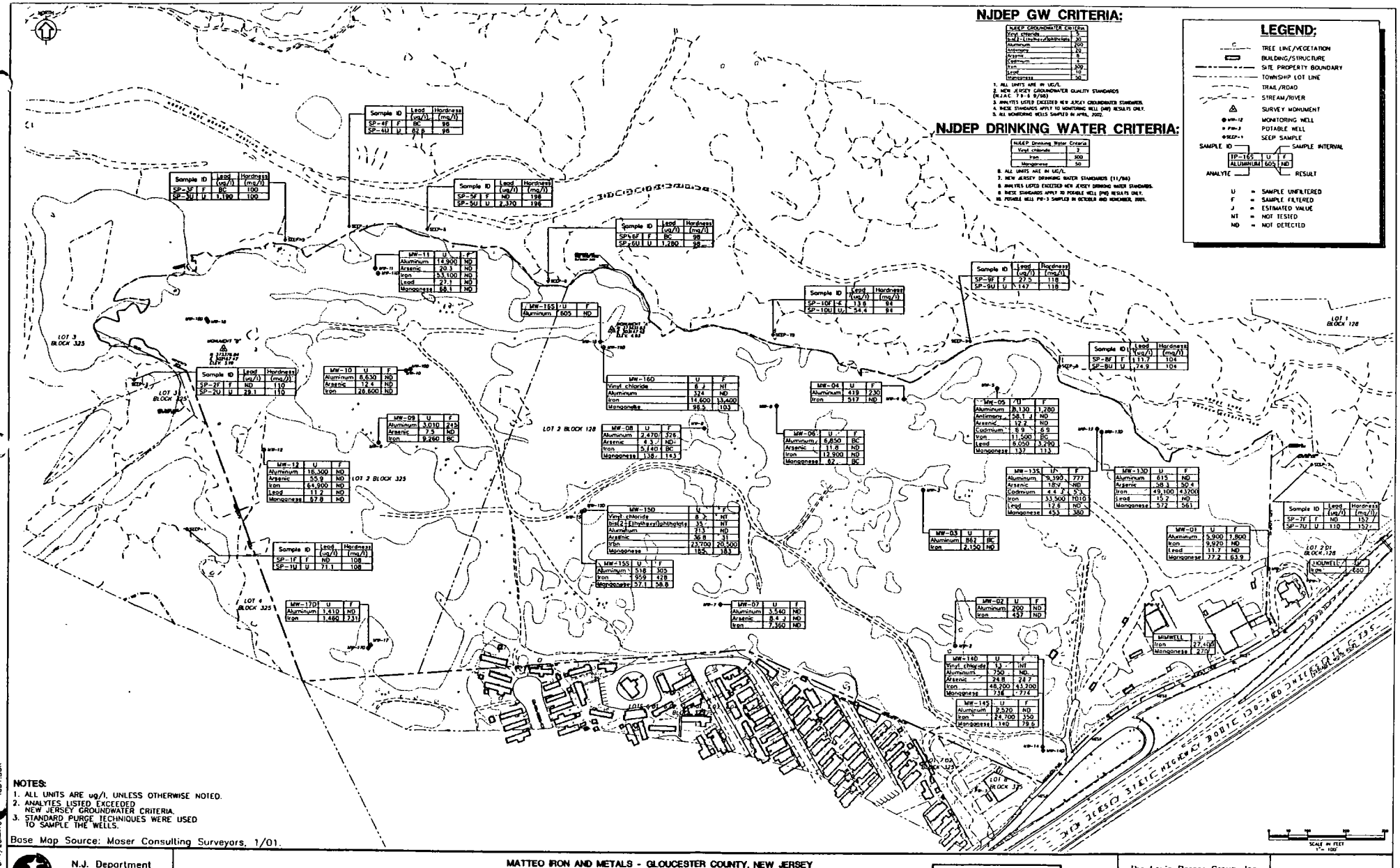
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-11

FRIR/MA-SP1/128MAY01.J-041200.SCR



NOTES:

1. ALL UNITS ARE ug/l, UNLESS OTHERWISE NOTED.
2. ANALYTES LISTED EXCEEDED NEW JERSEY GROUNDWATER CRITERIA.
3. STANDARD PURGE TECHNIQUES WERE USED TO SAMPLE THE WELLS.

Base Map Source: Moser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

GROUNDWATER EXCEEDANCES (ROUND 1: 12/4/00)

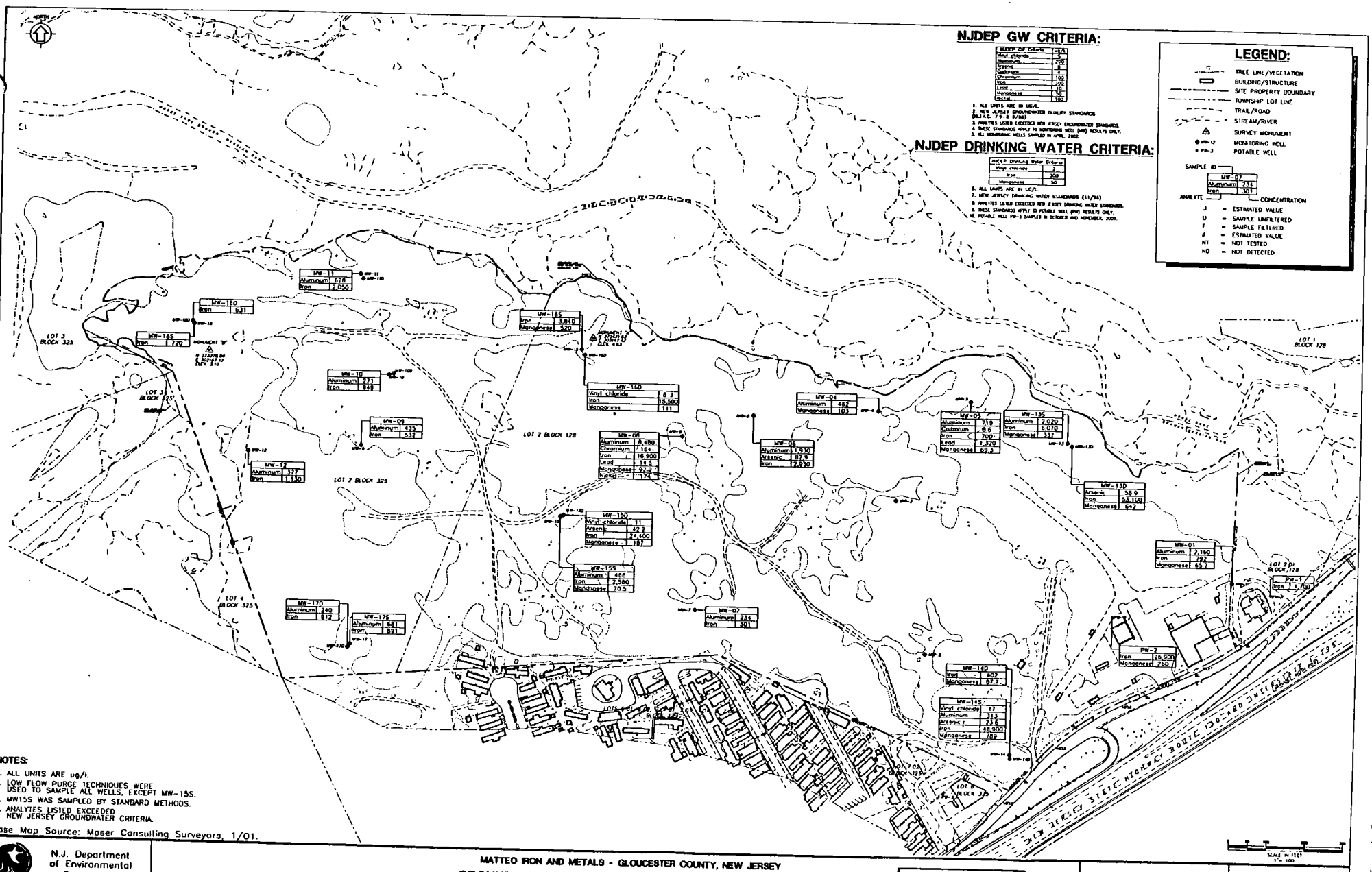
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-12

FRNR/MA-SP1/2BMAY01 (CD1.SCR



NOTES:

1. ALL UNITS ARE ug/l.
2. LOW FLOW PURGE TECHNIQUES WERE USED TO SAMPLE ALL WELLS, EXCEPT MW-15S.
3. MW15S WAS SAMPLED BY STANDARD METHODS.
4. ANALYTES LISTED EXCEEDED NEW JERSEY GROUNDWATER CRITERIA.

Base Map Source: Moser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

GROUNDWATER EXCEEDANCES (ROUND 2: 1/26/01)

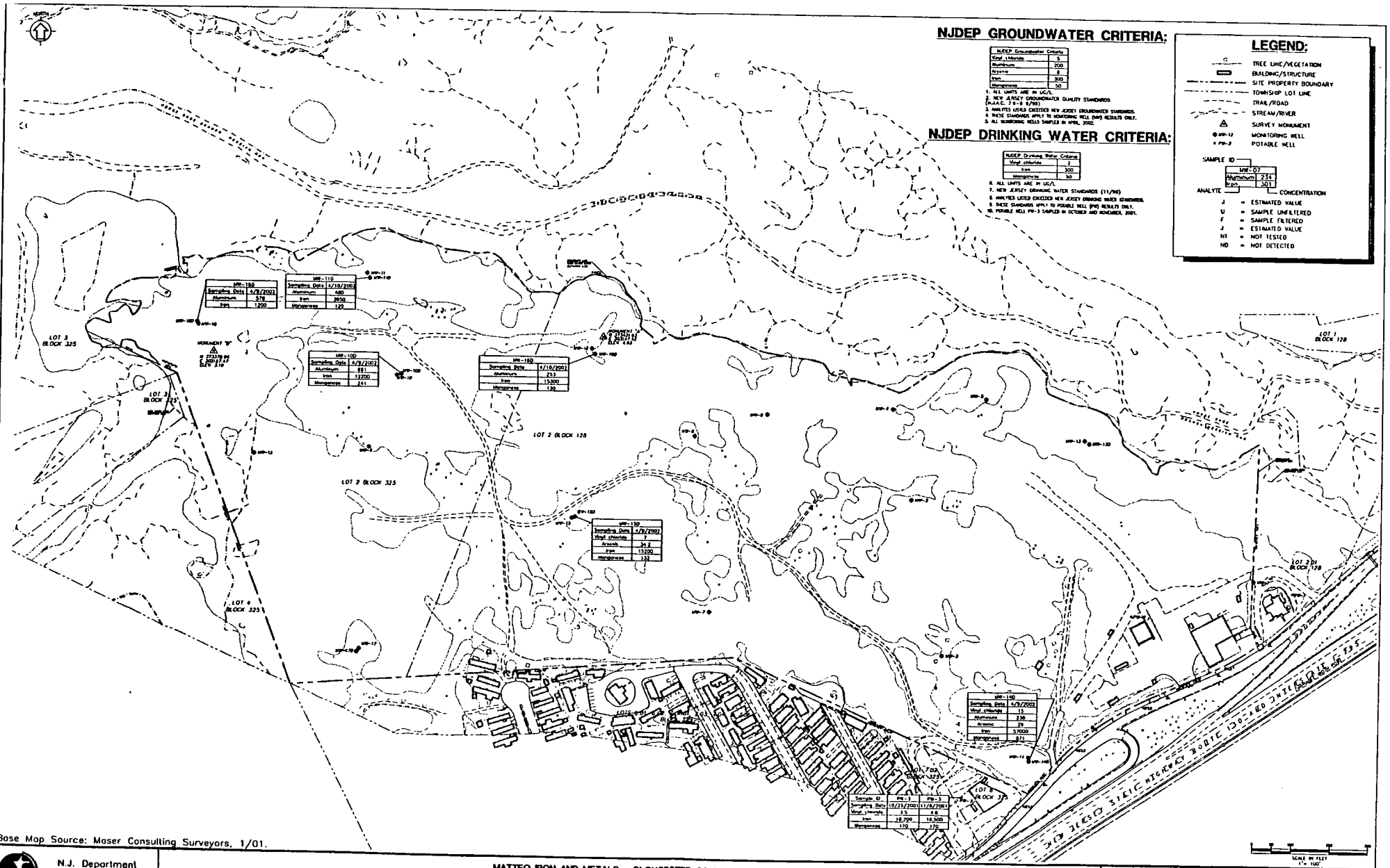
NJDEP CONTRACT No. A-85148

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-13

FRIR/MA-SP1/ZBMATO_4CD2.SCR



Base Map Source: Maser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

GROUNDWATER EXCEEDANCES (ROUND 3: 4/9/04)

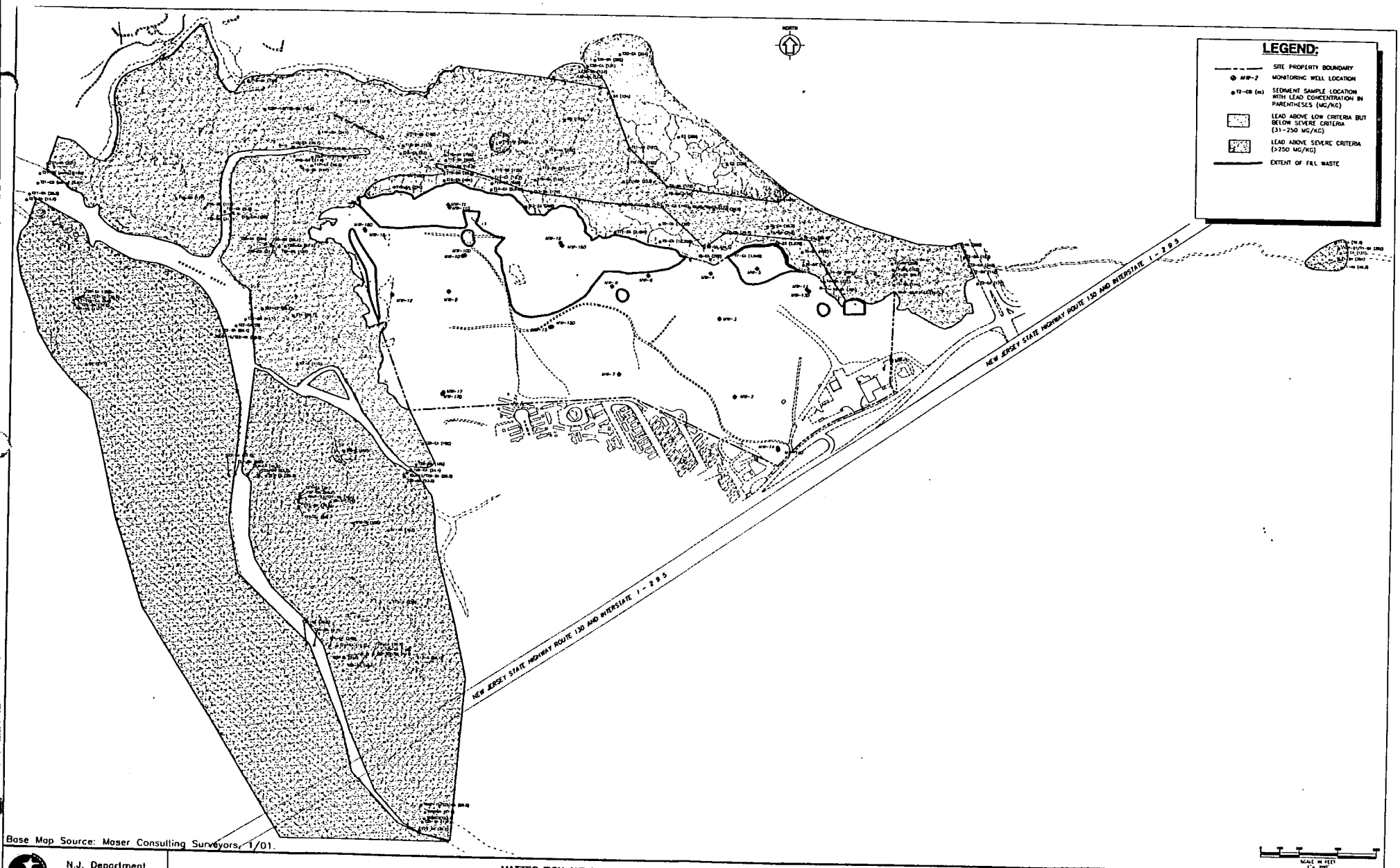
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-14

FRR/NA-SP1/28MAY04_KCD3.SCR



Base Map Source: Maser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

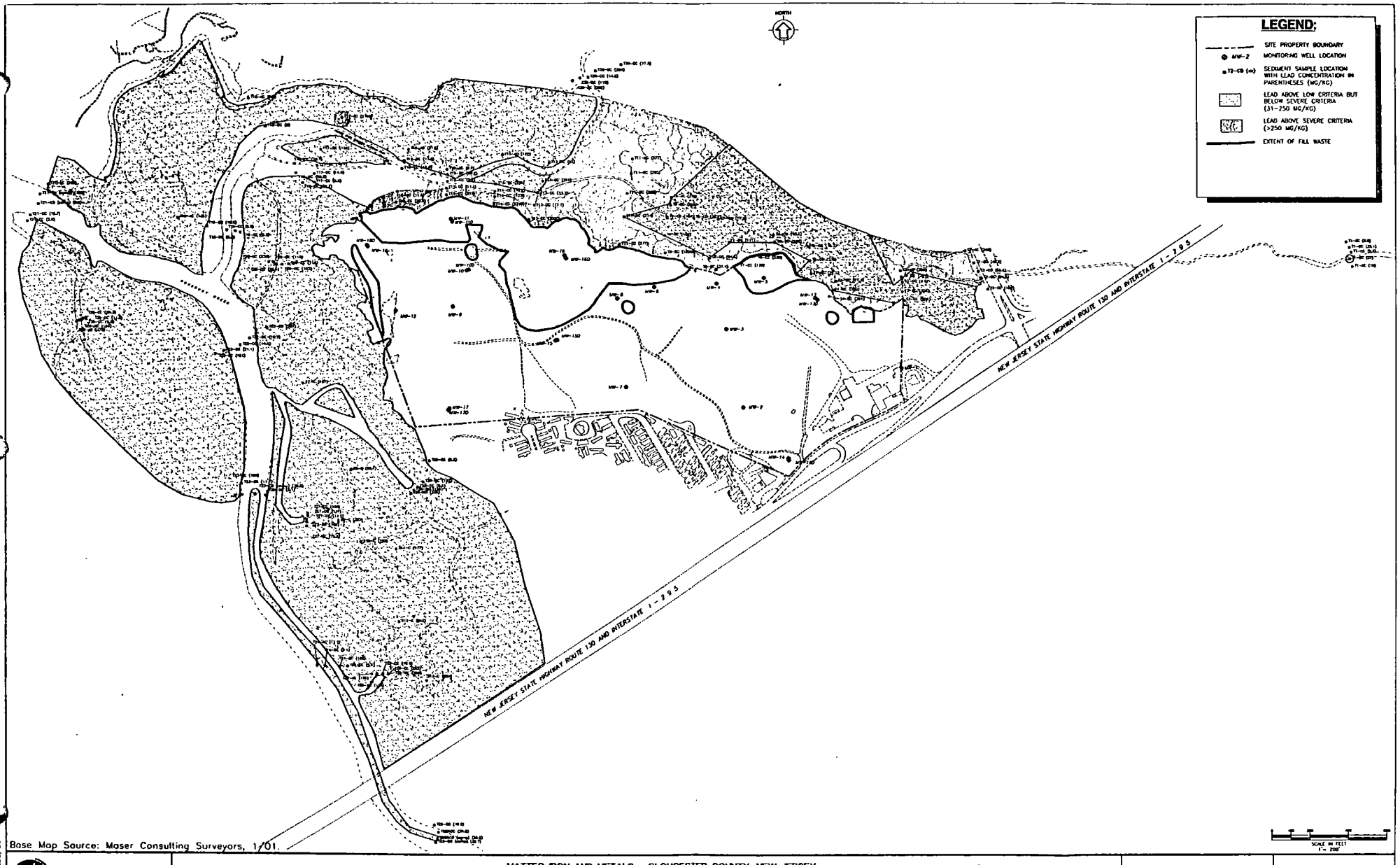
SEDIMENT - EXTENT OF LEAD CONTAMINATION (0-6")

NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-15



Base Map Source: Moser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

SEDIMENT - EXTENT OF LEAD CONTAMINATION (24-36")

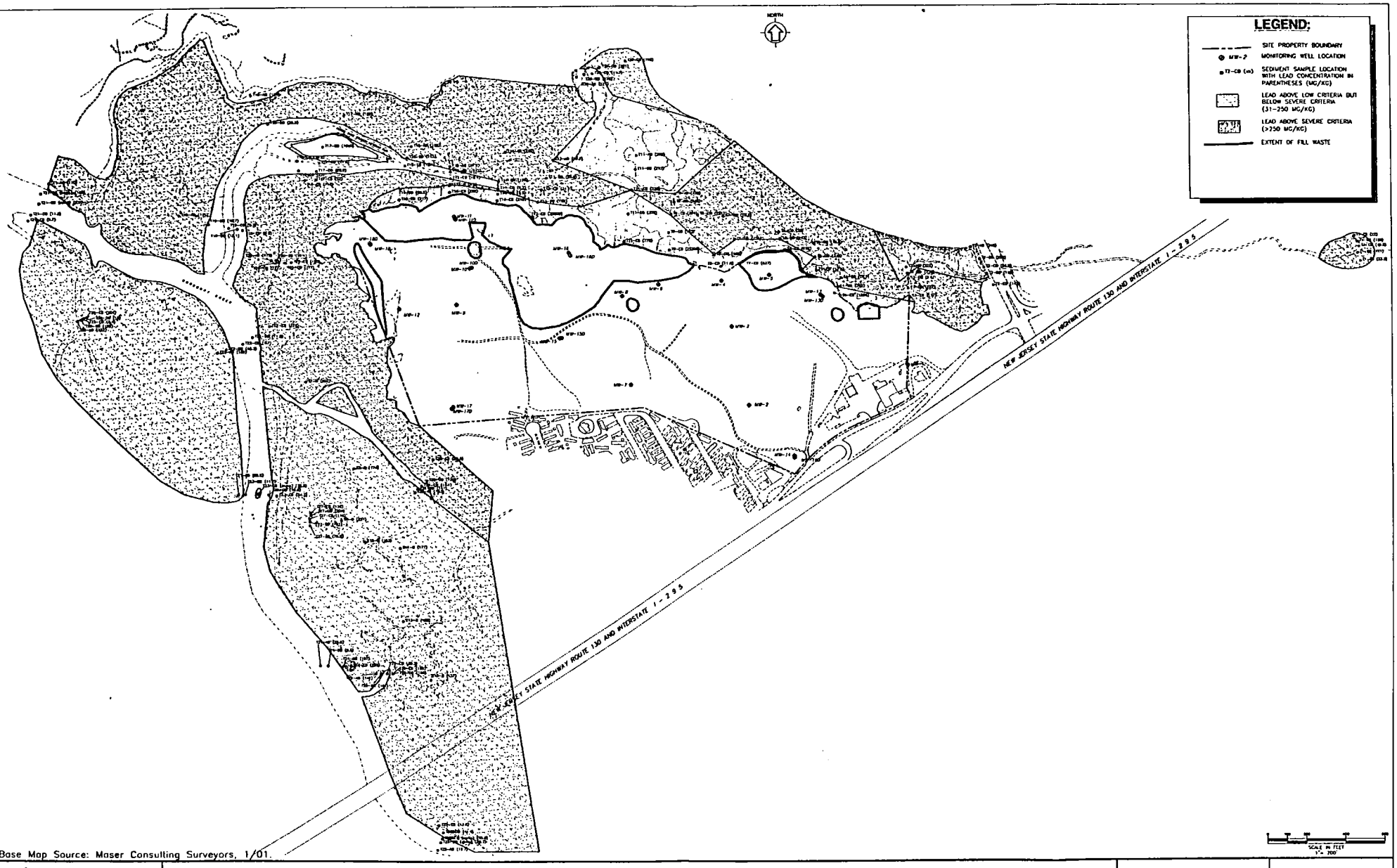
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-17

FRR/MA-SEDS/28MAY



Base Map Source: Maser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

SEDIMENT - EXTENT OF LEAD CONTAMINATION (12-24")

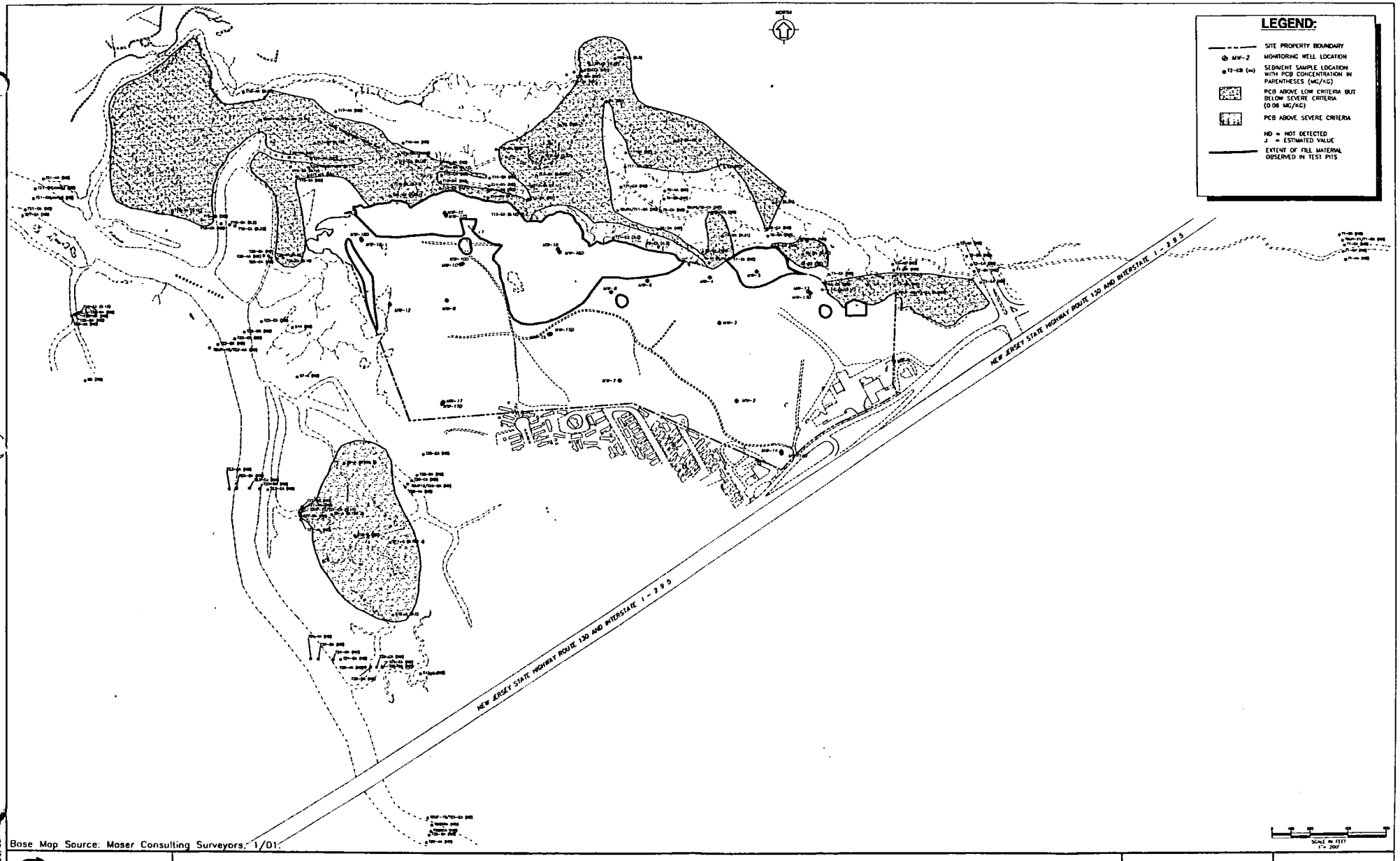
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-16

FRIR/MA-SEDS/28MAY01



Base Map Source: Maser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

SEDIMENT - EXTENT OF PCB AROCLOR 1254 CONTAMINATION (0-6")

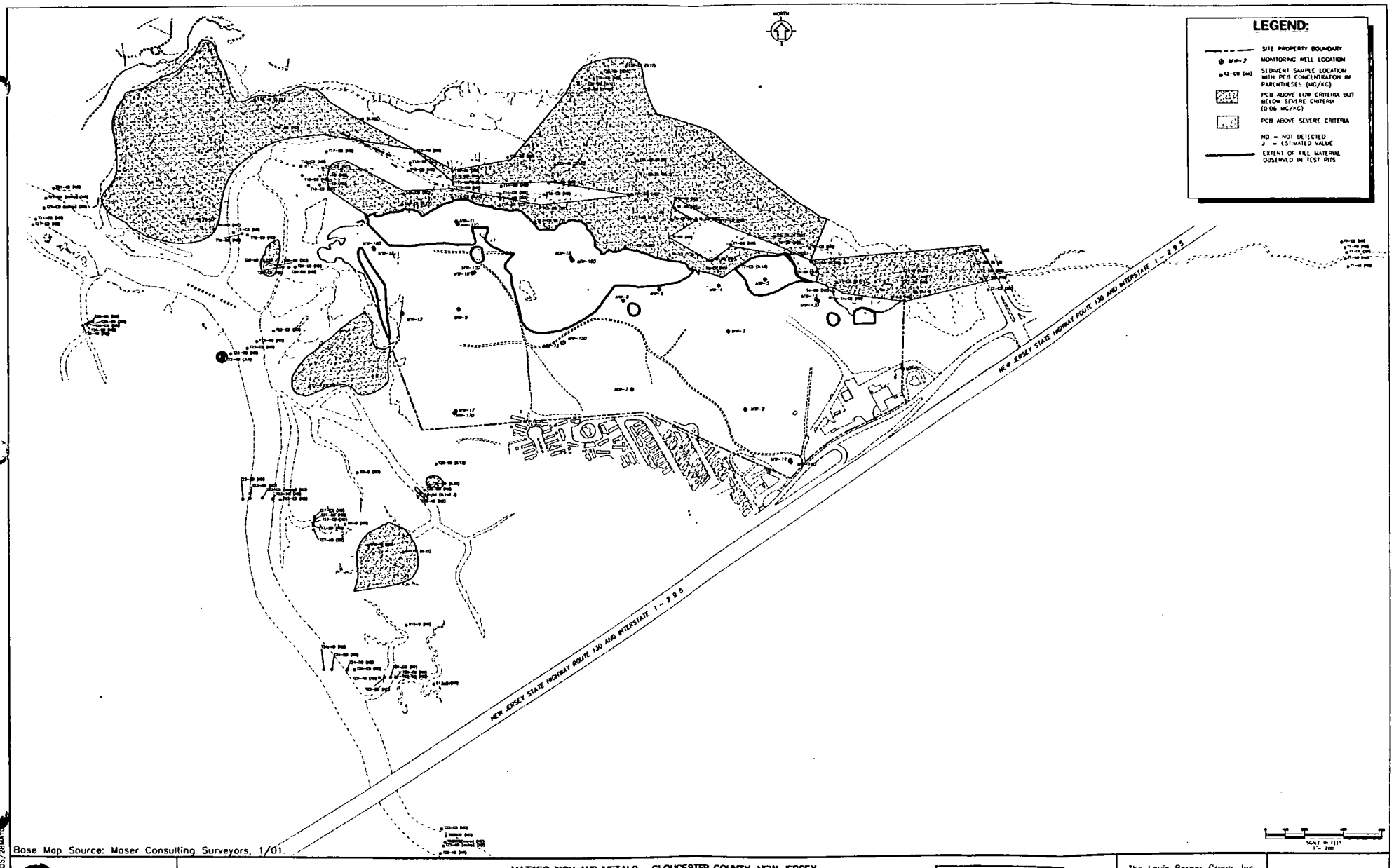
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-18

FRIR/MA-SEDS/28MAY02



Base Map Source: Moser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

SEDIMENT - EXTENT OF PCB AROCLOR 1254 CONTAMINATION (12-24")

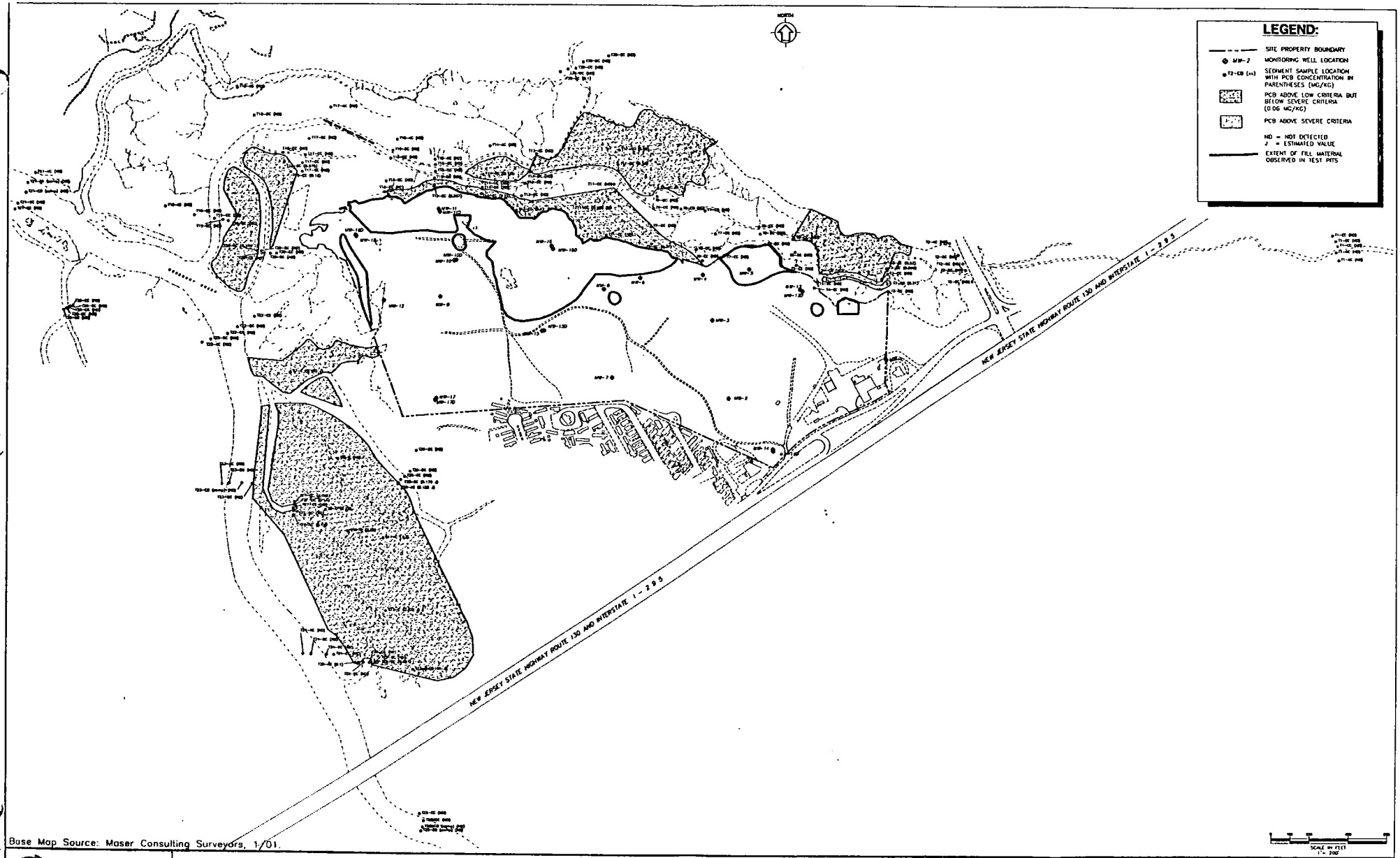
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-19

TRIR/MA-SED5/28MAY



Base Map Source: Maser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

SEDIMENT - EXTENT OF PCB AROCLOR 1254 CONTAMINATION (24-36")

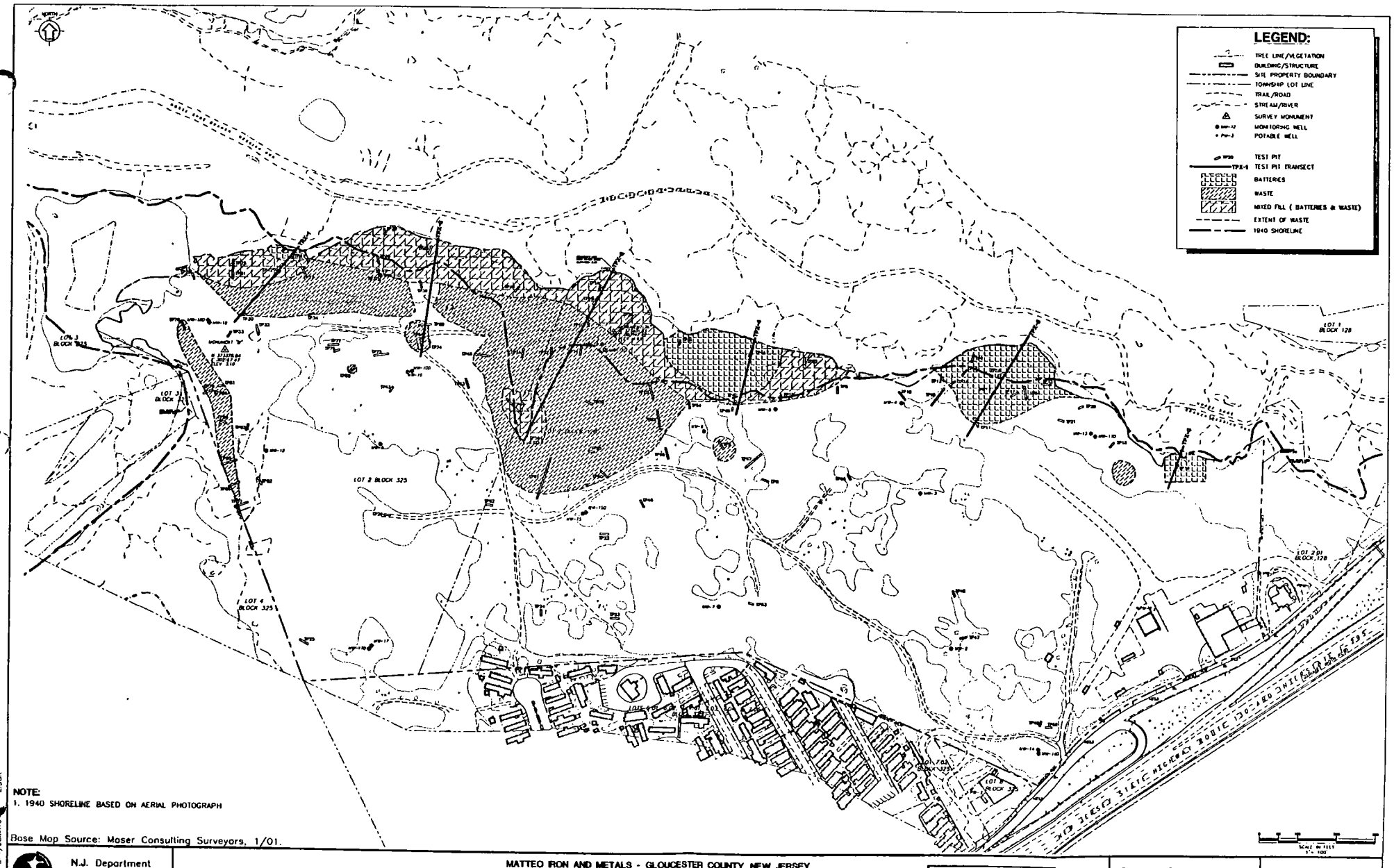
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 4-20

FRIR/MA-SEDS/2MAY01



NOTE:
1. 1940 SHORELINE BASED ON AERIAL PHOTOGRAPH

Base Map Source: Moser Consulting Surveyors, 1/01.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

EXTENT OF WASTE OBSERVED IN TEST PITS

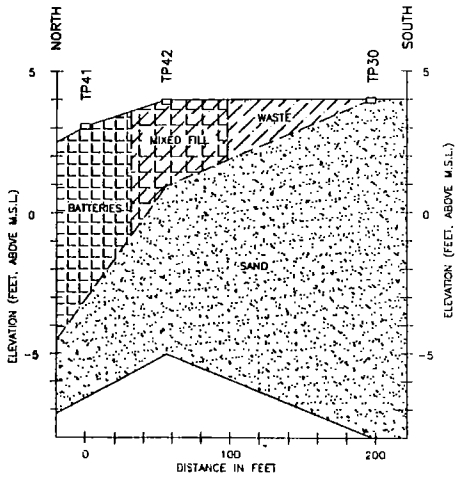
NJDEP CONTRACT No. A-85149

FULL SIZED FIGURE BOUND SEPARATELY

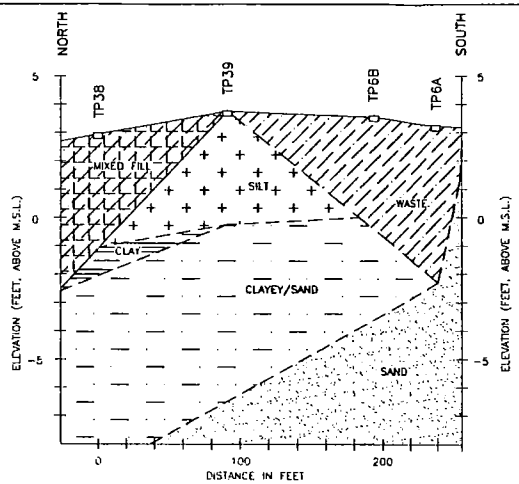
The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 5-1

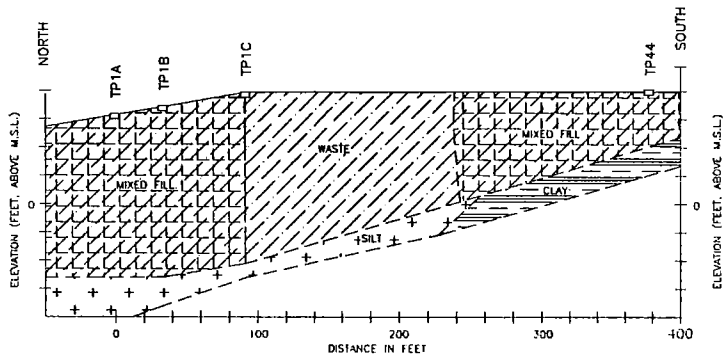
FRIR/MA-SP1/72MAY01 E.SCR



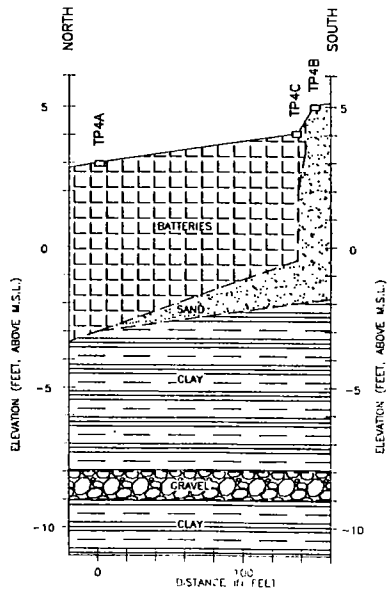
TPX-1



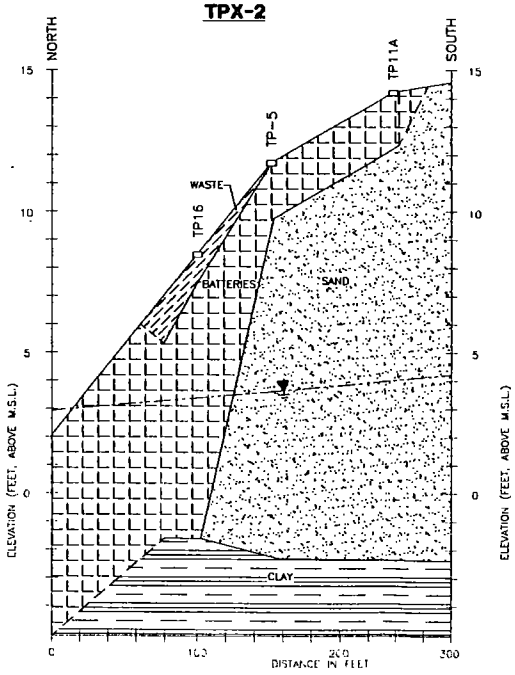
TPX-2



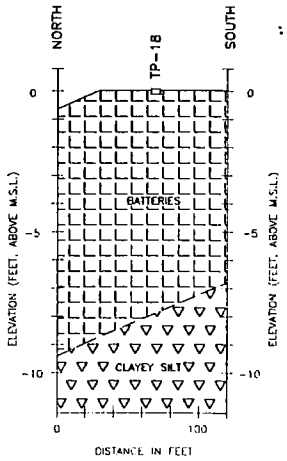
TPX-3



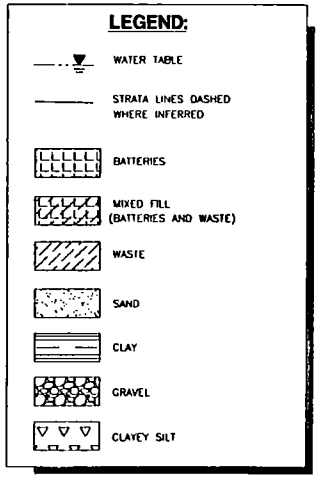
TPX-4



TPX-5



TPX-6



NOTE:
FOR LOCATION OF CROSS SECTION TRANSECTS, SEE FIGURE.

N.J. Department of Environmental Protection

MATTEO IRON AND METALS - GLOUCESTER COUNTY, NEW JERSEY

CROSS SECTIONS OF FILL OBSERVED IN TEST PITS

NJDEP CONTRACT No. A-85149

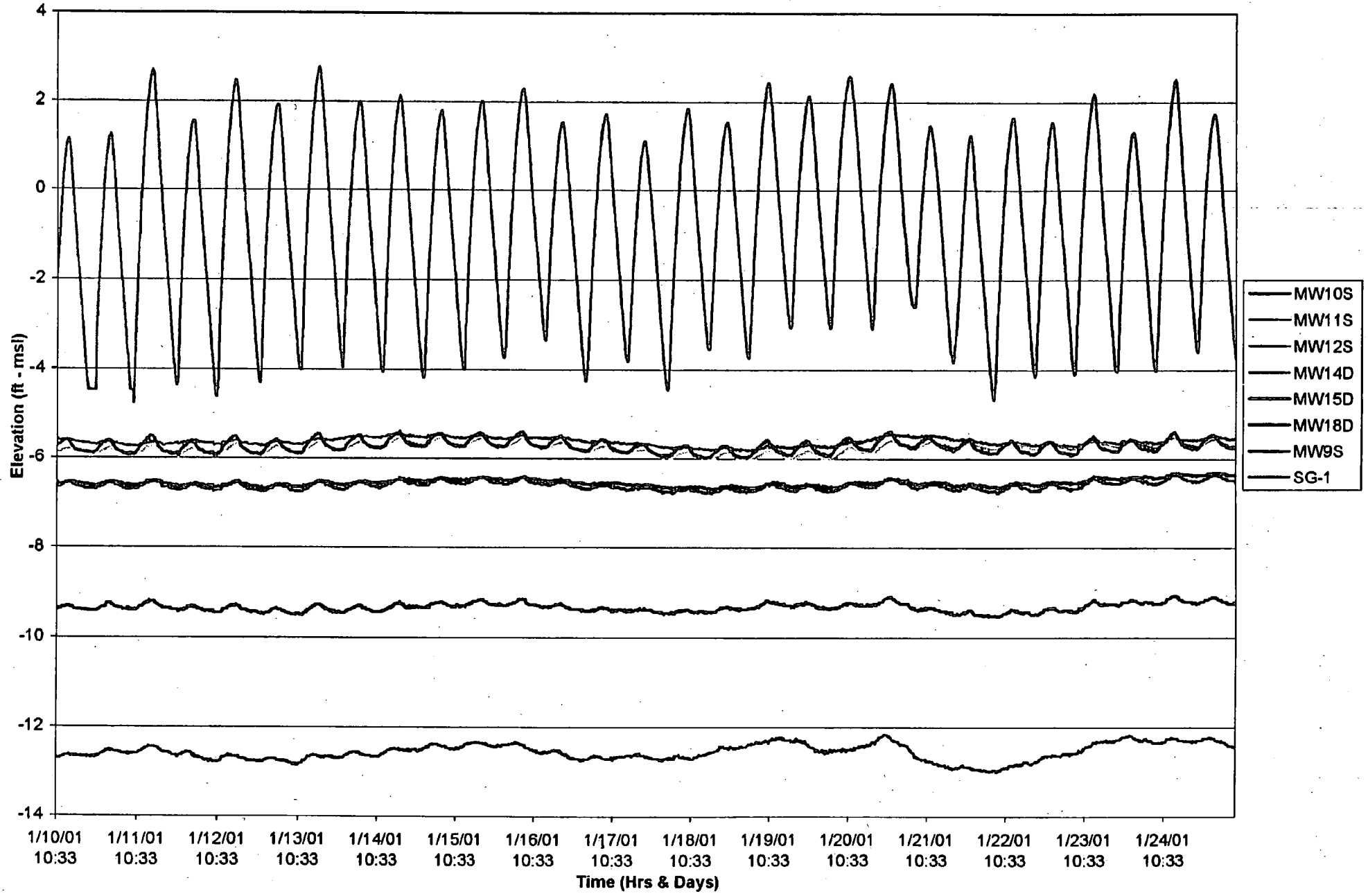
FULL SIZED FIGURE BOUND SEPARATELY

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 5-2

FRIR/MA-SXSEC/2BW

FRIR/MA-TIDE/28MAY04/U4



N.J. Department of Environmental Protection

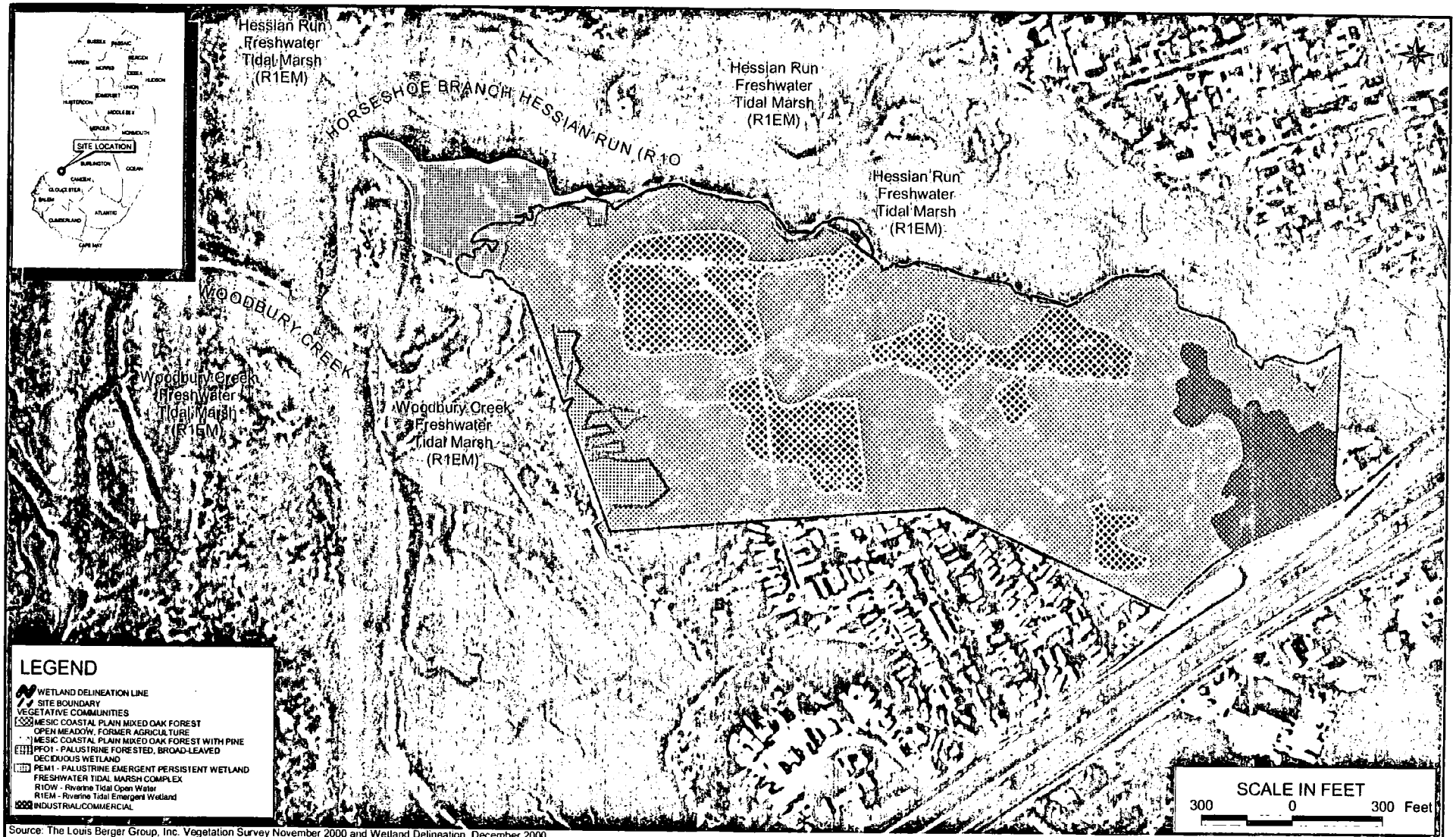
MATTEO IRON AND METALS – GLOUCESTER COUNTY, NEW JERSEY

TIDAL STUDY RESULTS

NJDEP CONTRACT No. A-85149

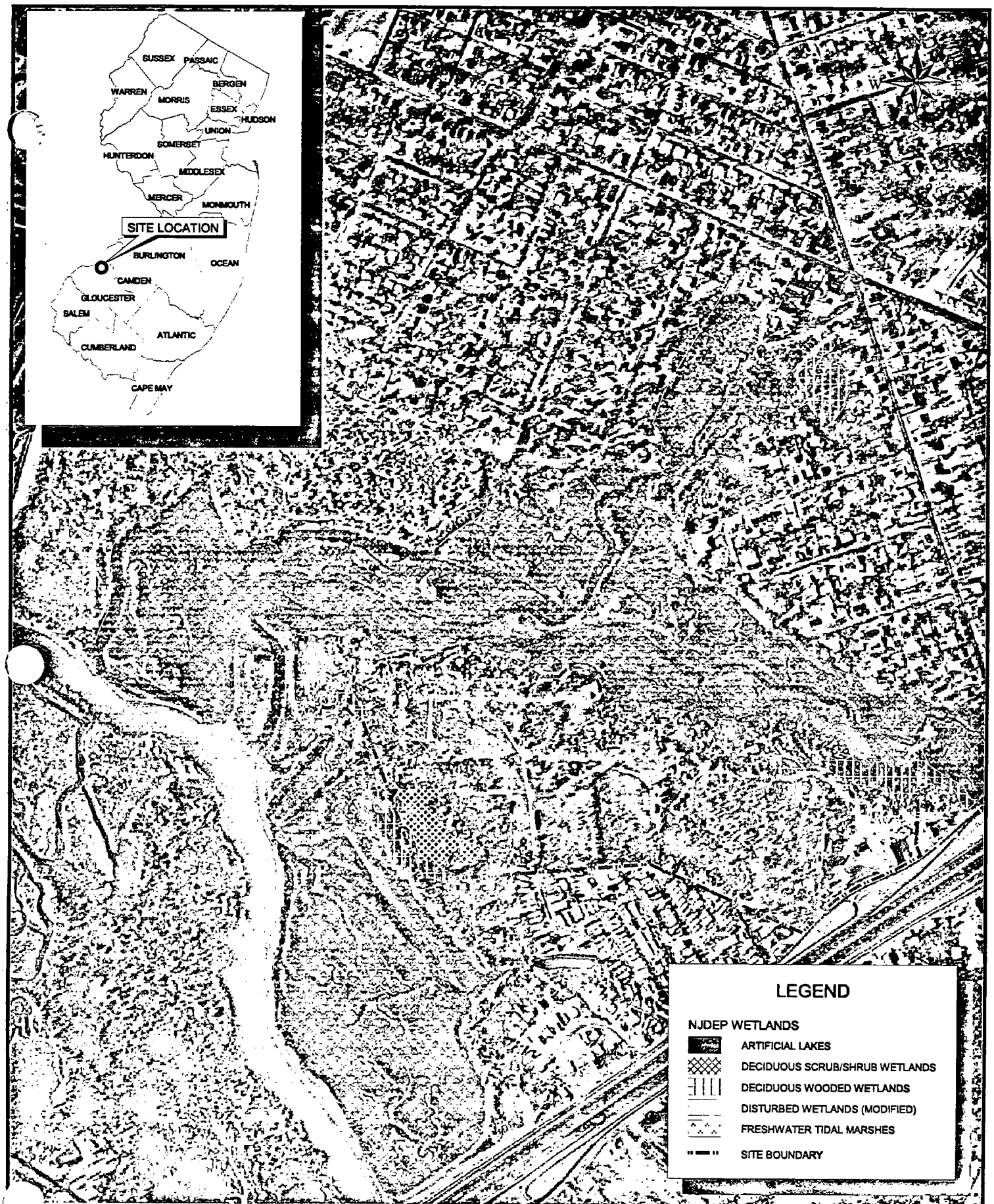
The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 5-3



Source: The Louis Berger Group, Inc. Vegetation Survey November 2000 and Wetland Delineation, December 2000.

N.J. Department of Environmental Protection	Matteo Iron and Metals, Gloucester County, New Jersey **Wetland Delineation and Vegetative Community Map** NJDEP CONTRACT No. A-85149	Louis Berger & Assoc. 30 Vreeland Road Florham Park, NJ	FIGURE 5-4



Source: NJDEP

Scale: 1" = 600'

N.J. Department of Environmental Protection

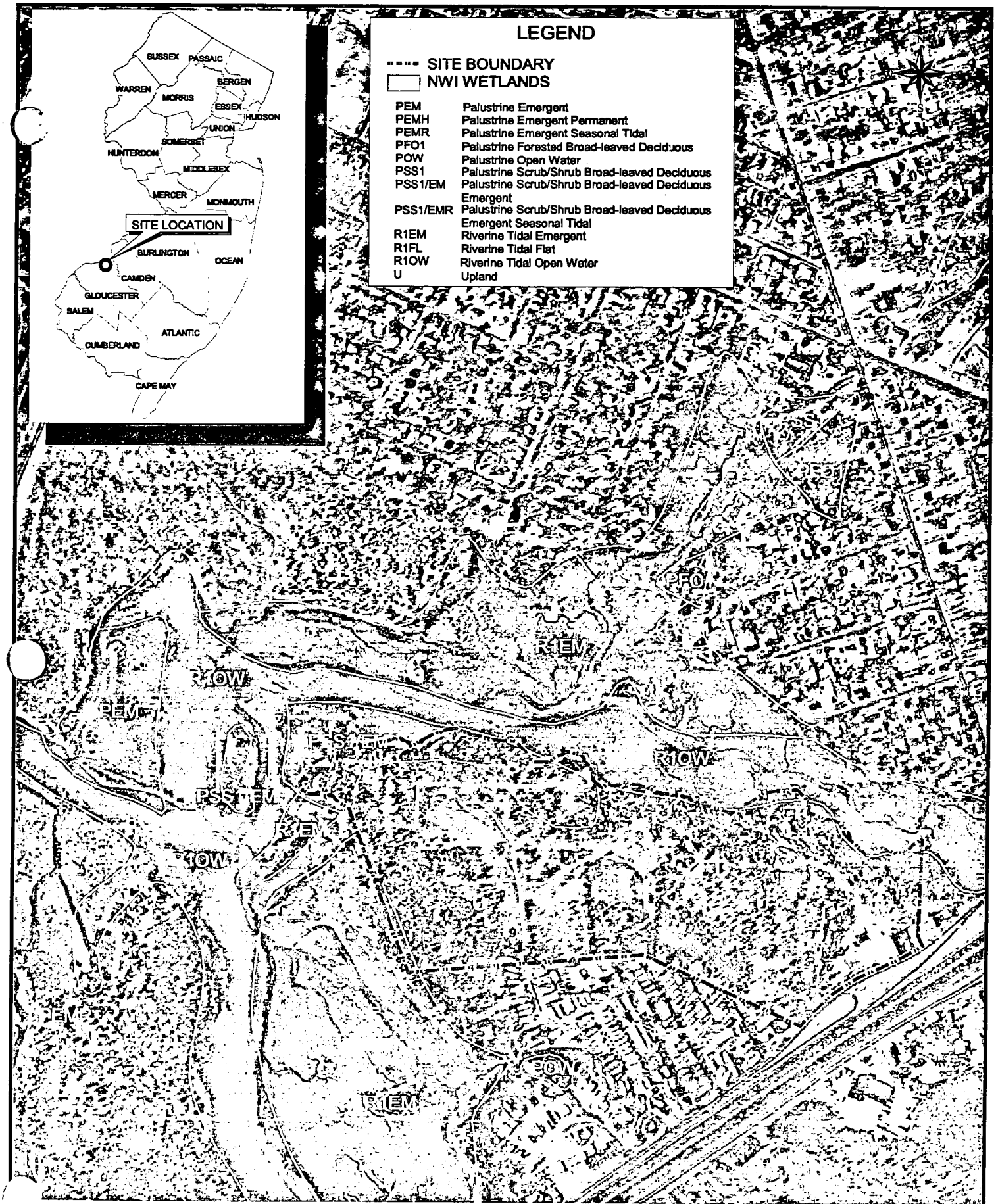
Matteo Iron and Metals, Gloucester County, New Jersey

NJDEP WETLANDS

NJDEP CONTRACT No. A-85149

Louis Berger & Assoc.
30 Vreeland Road
Florham Park, NJ

FIGURE 5-5



Source: US Fish and Wildlife

Scale: 1" = 600'

N.J. Department of Environmental Protection

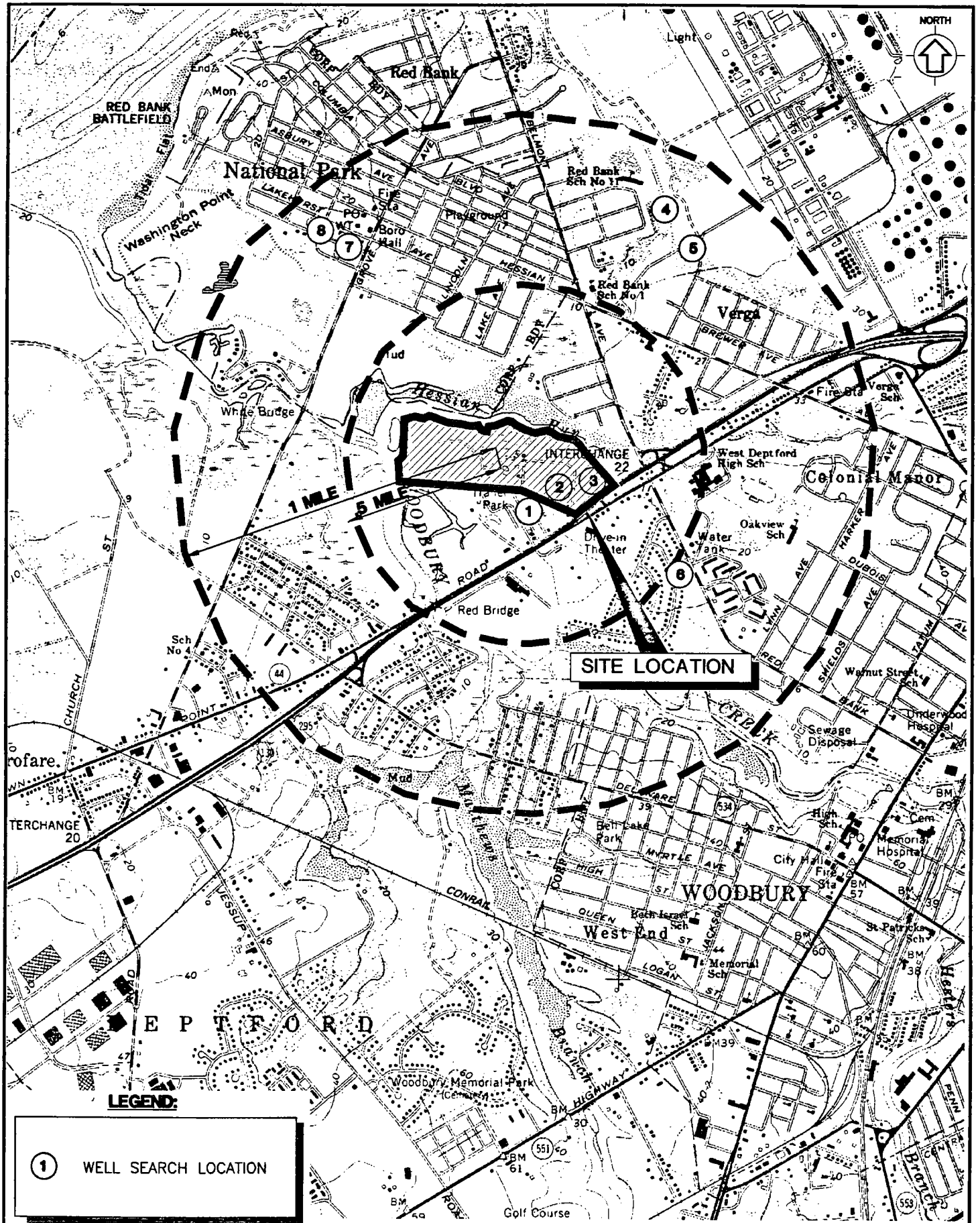
Matteo Iron and Metals, Gloucester County, New Jersey

NWI WETLANDS

NJDEP CONTRACT No. A-85149

Louis Berger & Assoc.
30 Vreeland Road
Florham Park, NJ

FIGURE 5-6



Source: USGS Quadrangle, Woodbury , N.J.

Scale: 1" = 2000'

N.J. Department of Environmental Protection

MATTEO IRON AND METALS – GLOUCESTER COUNTY, NEW JERSEY

WELL SEARCH MAP

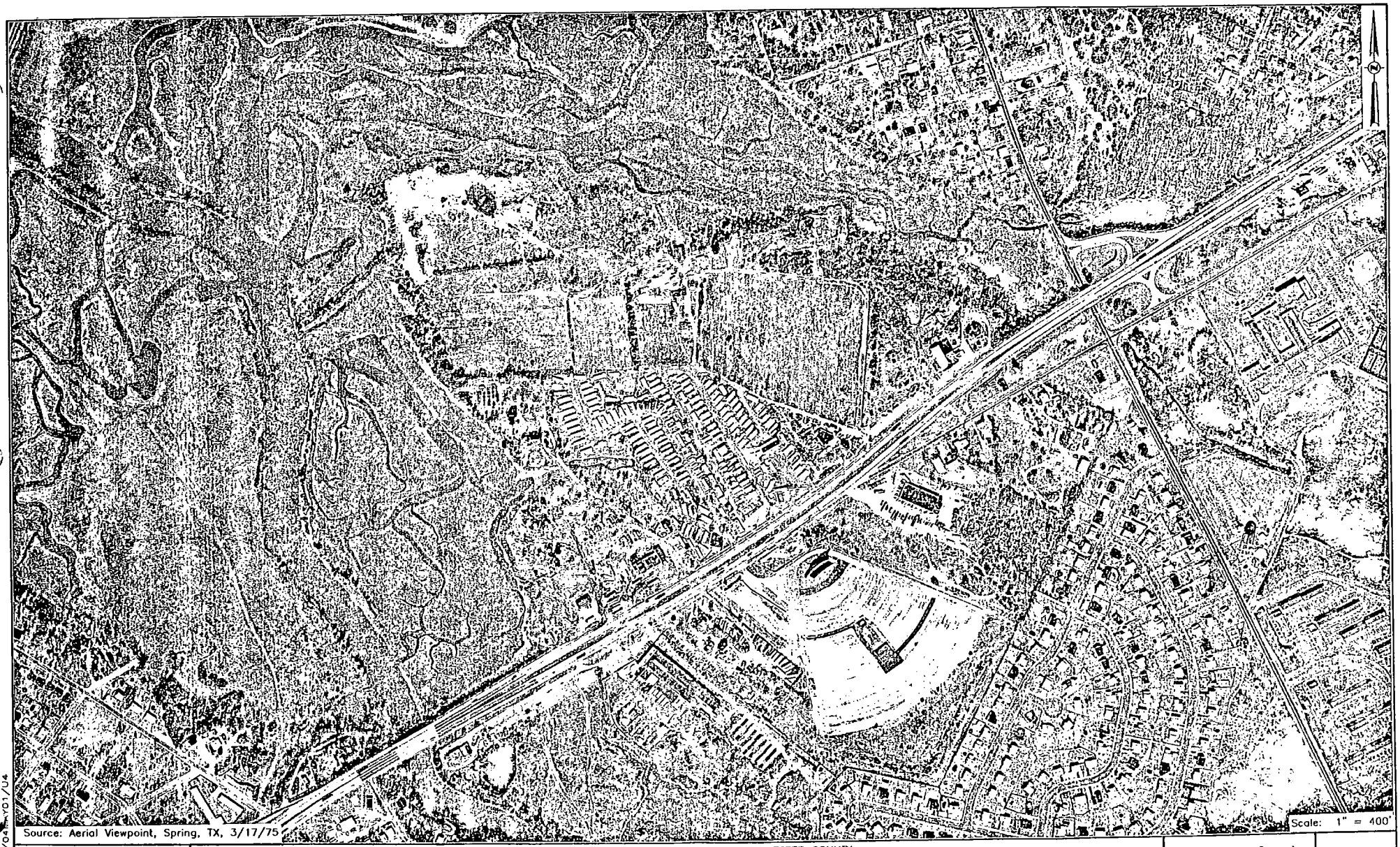
NJDEP CONTRACT No. A–85149

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

FIGURE 5-7

MAT–NW1/26. 04/04

APPENDIX A
Historical Aerial Photographs



Source: Aerial Viewpoint, Spring, TX, 3/17/75

N.J. Department of Environmental Protection

MATTEO IRON AND METALS – GLOUCESTER COUNTY
COUNTY, NEW JERSEY

HISTORICAL AERIAL PHOTOGRAPH - 1975

NJDEP CONTRACT No. A-85149

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

PLATE 6

MAT-APH/04-Y01/U4

Source: Aerial Viewpoint, Spring, TX, 4/4/65

Scale: 1" = 400'

N.J. Department of Environmental Protection

MATTEO IRON AND METALS – GLOUCESTER COUNTY
COUNTY, NEW JERSEY

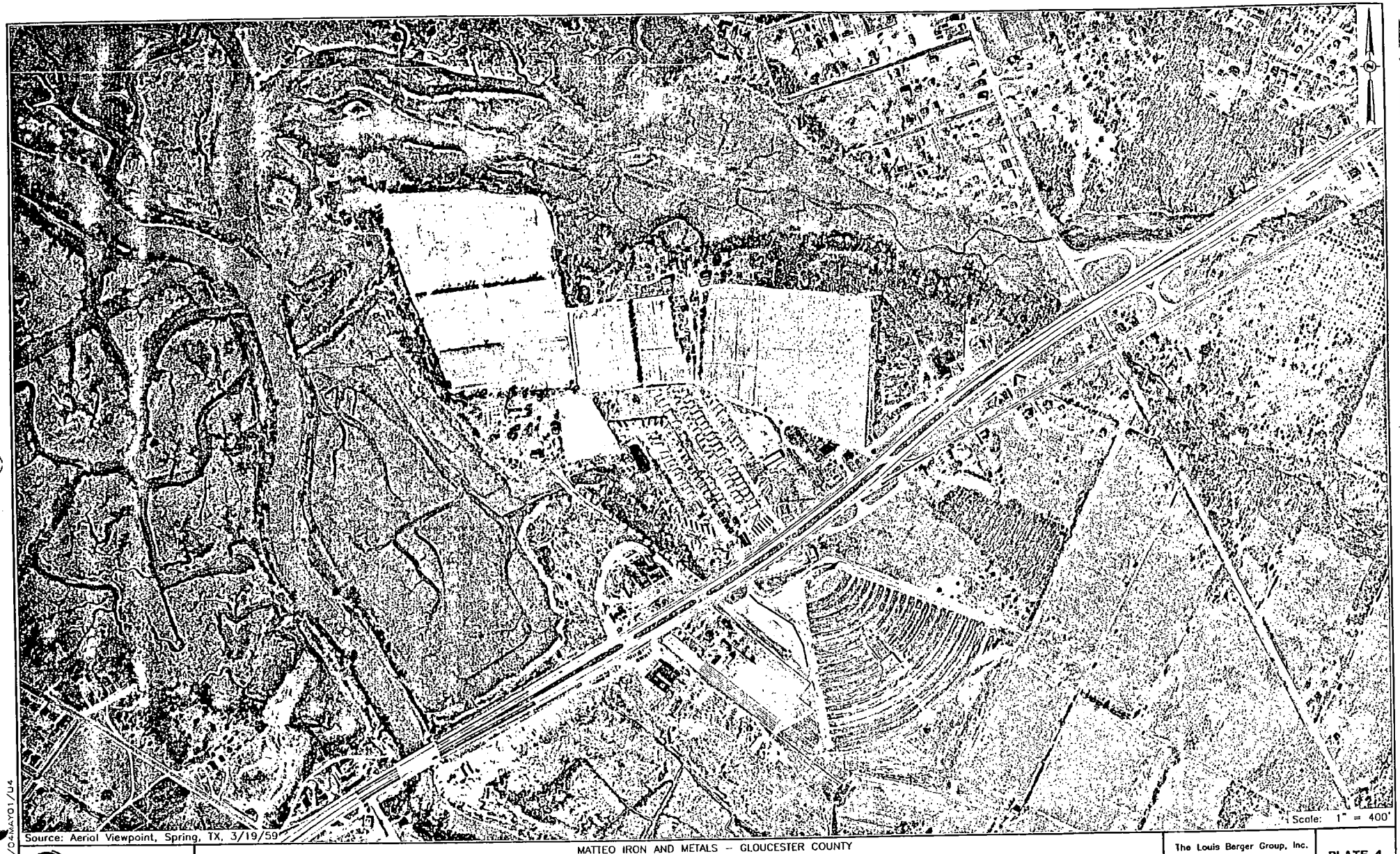
HISTORICAL AERIAL PHOTOGRAPH - 1965

NJDEP CONTRACT No. A-85149

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

PLATE 5

MAT-APH/01/U4



Source: Aerial Viewpoint, Spring, TX, 3/19/59

N.J. Department of Environmental Protection

MATTEO IRON AND METALS – GLOUCESTER COUNTY
COUNTY, NEW JERSEY

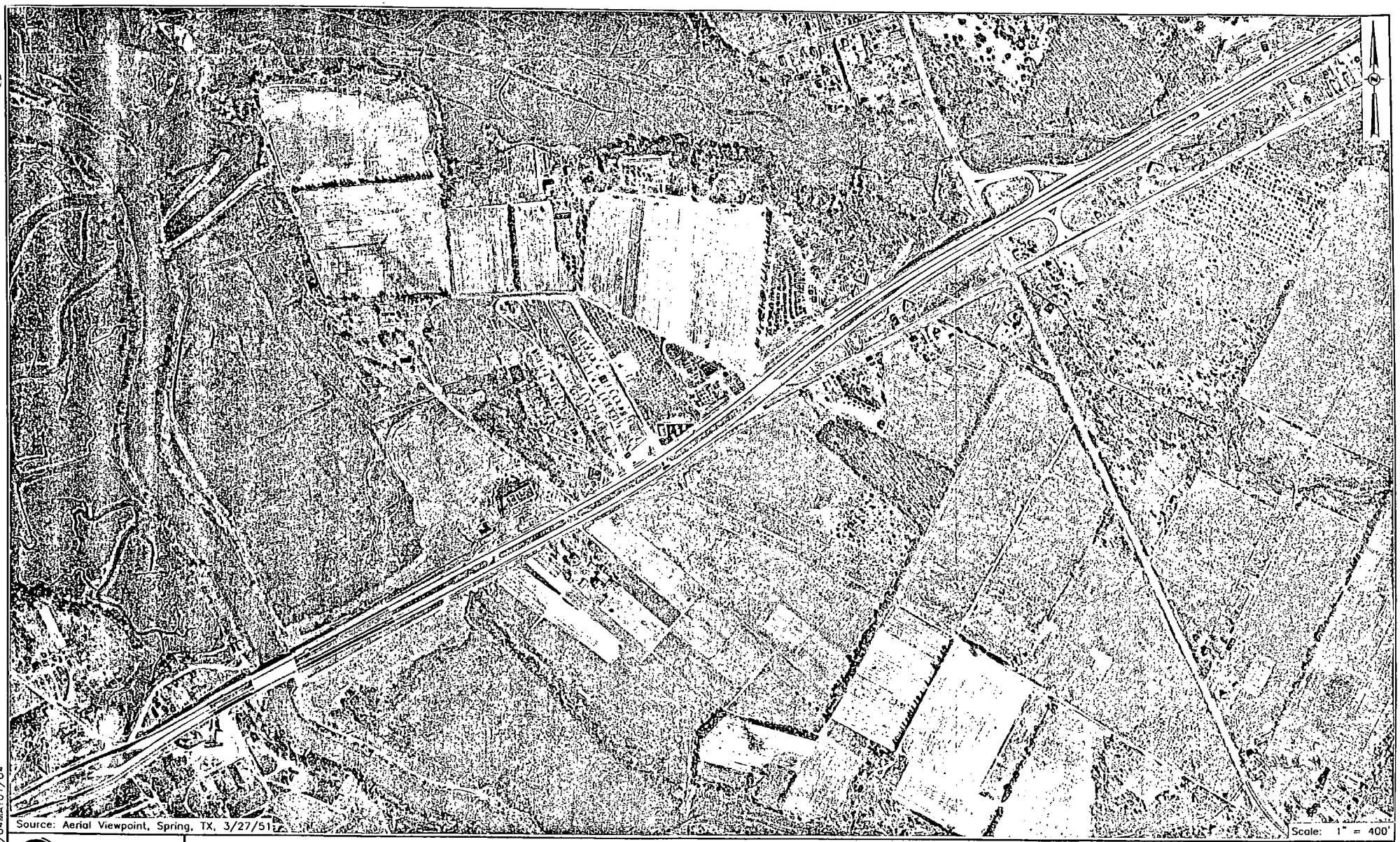
HISTORICAL AERIAL PHOTOGRAPH - 1959

NJDEP CONTRACT No. A-85149

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

PLATE 4

MAT-APH/04MAY01/U4



Source: Aerial Viewpoint, Spring, TX, 3/27/51

Scale: 1" = 400'

N.J. Department of Environmental Protection

MATTEO IRON AND METALS – GLOUCESTER COUNTY
COUNTY, NEW JERSEY

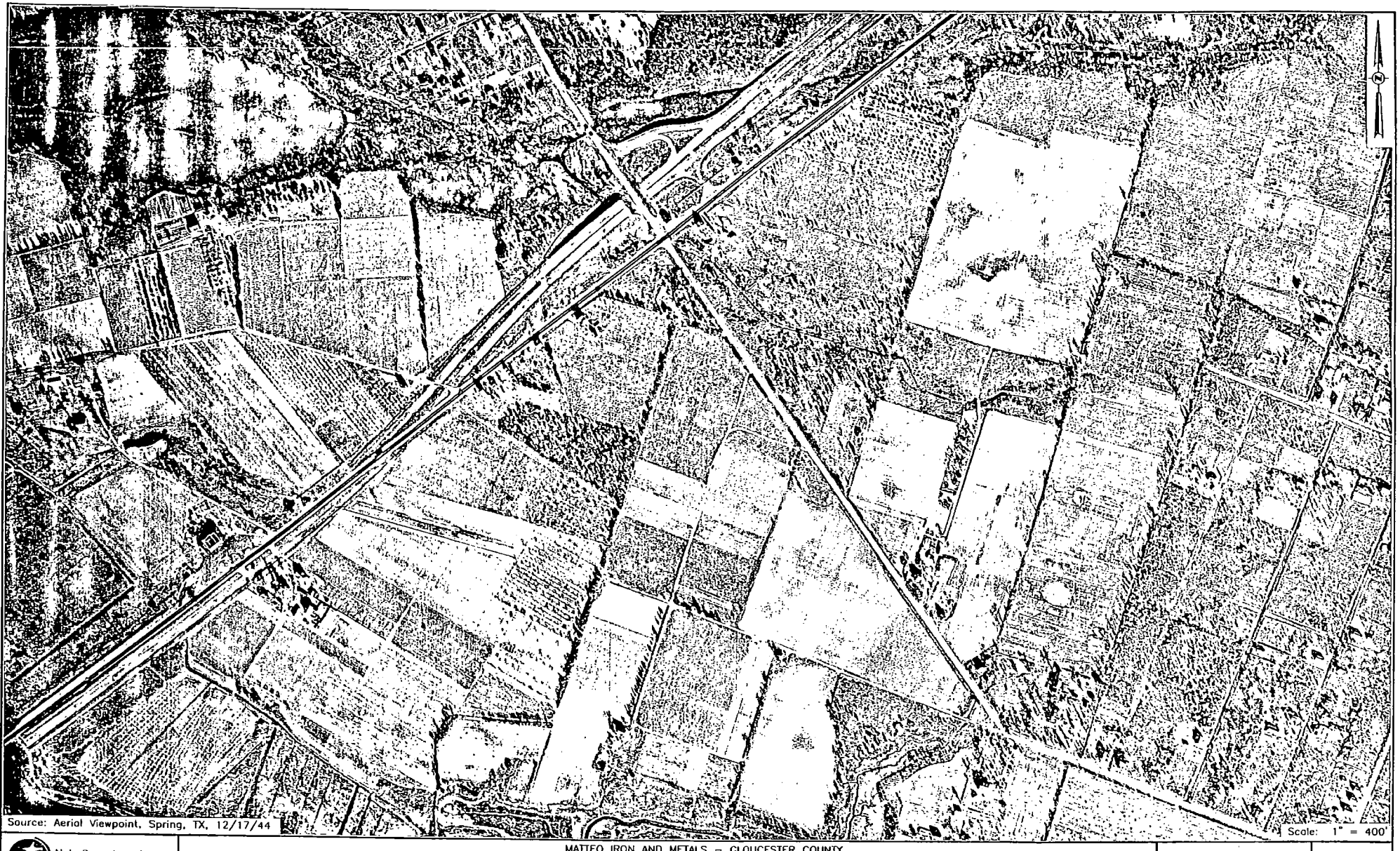
HISTORICAL AERIAL PHOTOGRAPH - 1951

NJDEP CONTRACT No. A-85149

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

PLATE 3

MAT-APH/04MAY01/U4



Source: Aerial Viewpoint, Spring, TX, 12/17/44

Scale: 1" = 400'

N.J. Department of Environmental Protection

MATTEO IRON AND METALS – GLOUCESTER COUNTY
COUNTY, NEW JERSEY

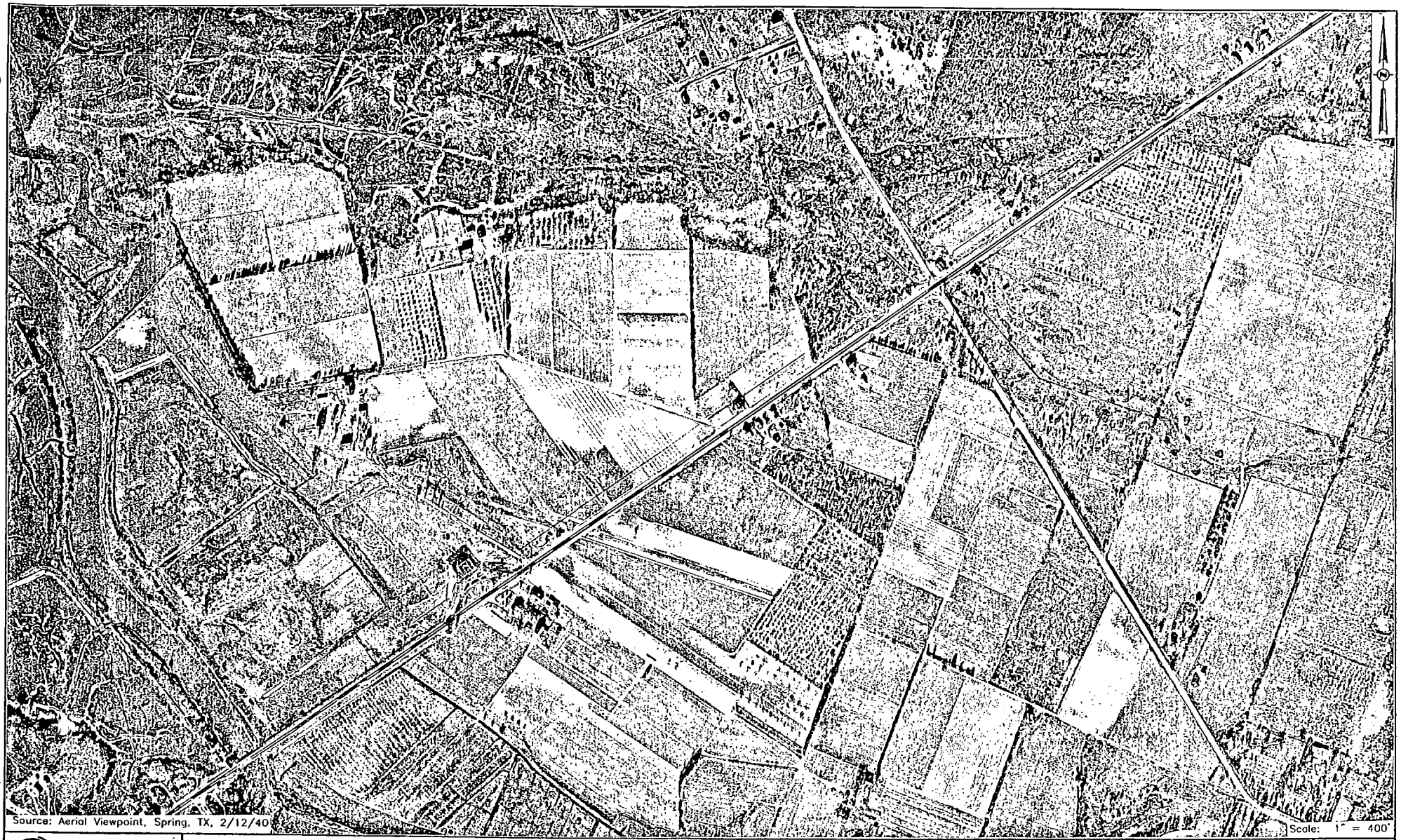
HISTORICAL AERIAL PHOTOGRAPH - 1944

NJDEP CONTRACT No. A-85149

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

PLATE 2

MAT-APH/04MAY01/U4



Source: Aerial Viewpoint, Spring, TX, 2/12/40

Scale: 1" = 400'

N.J. Department of Environmental Protection

MATTEO IRON AND METALS – GLOUCESTER COUNTY
COUNTY, NEW JERSEY

HISTORICAL AERIAL PHOTOGRAPH - 1940

NJDEP CONTRACT No. A-85149

The Louis Berger Group, Inc.
30 Vreeland Road
Florham Park, NJ

PLATE 1

MAT-APH/04-YD1/U4

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** MW1 **WELL NO.:** MW1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/25/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/25/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Flush Mount		**NORTHING:** 372832.96
Total Depth (ft): 18.00	**Total Depth (ft):** 18.00		**EASTING:** 304804.59
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 20.86
Depth to Water (ft): 11.00	**Depth to Water (ft):** 12.30		**TOC ELEVATION:** 19.96
Depth to Rock (ft): N/A	**Permit No.:** 31-58898		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SM			10 11	5	0-12in Dark brown (10YR3/3) fine SAND, and Silt; dry	Silty Sand
			SM			12 12		12-24in Brownish yellow (10YR6/6) fine SAND, and Silt; dry	
			SM			13 12	1.3	Brownish yellow (10YR6/6) fine SAND, and Silt; dry	
						14 16			
			SM			7 11	0.3	Brownish yellow (10YR6/6) fine SAND, and Silt; dry	
	5					15 16			
			SM			13 16	0.3	Brownish yellow (10YR6/6) fine SAND, and Silt; dry	
						18			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: MW1
	Page 2 of 2	WELL NO.: MW1

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
						21			
			SP-SM			6 6 7 7	0	Brownish yellow (10YR6/6) fine SAND, little Silt; dry	Sand
	10		SP-SM			7 8	0	0-10in Brownish yellow (10YR6/6) fine SAND, little Silt; dry	
			ML			12		10-14in Brownish yellow (10YR6/2) SILT, little(+) fine Sand; wet	Silt
			SM			11		14-20in Gray (10YR5/1) fine SAND, and Silt; wet	Silty Sand
			SP-SM			17	0	0-6in Gray (10YR5/1) fine SAND, little Silt; moist	Sand
			SM			21 23 23		6-24in Very pale brown (10YR7/4) fine SAND, and Silt; wet	Silty Sand
			SP-SM			12	0	0-5in Gray (10YR6/1) fine SAND, little Silt; wet	Sand
	15		SP-SM			20 27 30		5-22in Light brownish gray (10YR6/2) medium to fine SAND, little Silt; wet	
			SP-SM			6 15	0	0-12in Light brownish gray (10YR6/2) medium to fine SAND, little (-) Silt; wet	
			SP-SM			10		12-14in Yellowish brown (10YR5/6) fine SAND, little Silt; wet	End of Boring @18'
			CL			17		14-19in Yellowish brown (10YR5/8) CLAY; dry	Clay

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** MW2 **WELL NO.:** MW2

CLIENT: New Jersey Department of Environmental Protection		**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ		**DATE STARTED:**	9/18/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.		**DATE FINISHED:**	9/18/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers		**DRILLER:**	W.Pettley
BOREHOLE DATA	**WELL DATA**	**INSPECTOR:**	R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up	**NORTHING:**	372633.58
Total Depth (ft): 20.00	**Total Depth (ft):** 14.86	**EASTING:**	304015.36
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010	**GROUND ELEVATION:**	18.25
Depth to Water (ft): 9.00	**Depth to Water (ft):** 10.40	**TOC ELEVATION:**	21.09
Depth to Rock (ft): N/A	**Permit No.:** 31-58899		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM			6 3 4 5	0.2	Brownish yellow (10YR6/6) fine SAND, little Silt; dry	Sand
			SP-SM			4 6 10 11	0.4	Brownish yellow (10YR6/6) fine SAND, little Silt; dry	
	5		SP-SM			7 14 21 24	0.3	Brownish yellow (10YR6/6) fine SAND, little Silt; dry	
			SP-SM			23 22 20 21	0.3	0-15in Brownish yellow (10YR6/6) fine SAND, little Silt; dry 5-21in Brownish yellow (10YR6/6) fine SAND; moist	
			SP-SM			7	0.2	0-8in Brownish yellow (10YR6/6) fine SAND, little Silt; dry	
			SM			9		8-12in Pale olive (10Y6/3) fine SAND, and Silt; moist	Silty Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: MW2
	Page 2 of 2	WELL NO.: MW2

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SM			8 11		12-24in Pale yellow (5Y7/3) fine SAND, some Silt; wet	
	10		SP-SM			7 7 12 14	0	Pale yellow (5Y7/3) medium to fine SAND, little Silt; wet	Sand
			SP			16 15 17 13	0	Pale yellowish (5Y7/3) medium to fine SAND, trace Silt; wet	
			SP-SM			13 17 19	0	0-14in Pale yellow (5Y7/3) fine SAND, little Silt; wet	
	15		CL			15		14-18in Pale yellow (5Y7/3) to moderate yellowish brown (10YR5/4) CLAY, trace (-) fine Sand; moist	Clay
			SC			12 14	0	0-12in Pale yellow (5Y7/3) medium to fine SAND, and Clay; moist	Clayey Sand
			CL-ML			24 32		12-24in Dark yellowish brown (10YR4/6) CLAY & SILT; moist	Clay & Silt
			ML			26 28 40	0	0-18in Dark yellowish brown (10YR4/6) Clayey SILT; dry	Clayey Silt
	20		ML			20		18-24in Dark gray (N4) Clayey SILT, moist	End of Boring @20'

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** MW3 **WELL NO.:** MW3

CLIENT: New Jersey Department of Environmental Protection		**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ		**DATE STARTED:** 9/18/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.		**DATE FINISHED:** 9/18/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers		**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**	**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up	**NORTHING:** 373029.61
Total Depth (ft): 16.00	**Total Depth (ft):** 14.17	**EASTING:** 303933.18
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010	**GROUND ELEVATION:** 16.14
Depth to Water (ft): 5.50	**Depth to Water (ft):** 9.70	**TOC ELEVATION:** 18.67
Depth to Rock (ft): N/A	**Permit No.:** 31-58906	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM			1 4 3 2	0	Brownish yellow (10YR6/6) fine SAND, little Silt; dry	Sand
			SP-SM			3 4 6 11	0	Brownish yellow (10YR6/6) fine SAND, little Silt; dry	
	5		SP-SM			9 12 15 17	0	Brownish yellow (10YR6/6) fine SAND, little Silt; dry	▽
			SP-SM			9 12	0	0-12in Brownish yellow (10YR6/6) fine SAND, little Silt; dry	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: MW3
	Page 2 of 2	WELL NO.: MW3

Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
		SP			20		12-23in Brownish yellow (10YR6/6) medium to fine SAND with a 2in clay layer; wet	
					16			
		SP						
10		SP			8	0	Brownish yellow (10YR6/6) medium to fine SAND; wet	
					18			
					29			
					32			
		SP-SM			28	0	0-21in Very pale brown (10YR7/4) medium to fine SAND, little Silt; wet	
					32			
					33			
		SM			50/3"		21-23in Very pale brown (10YR7/4) fine SAND, some Clayey Silt; wet	Silty Sand
		SM			3	0	0-4in Very pale brown (10YR7/4) fine SAND, some Silt; wet	
		SM			6		4-12in Grayish brown (10YR 5/2) fine SAND, some Silt; moist	
15		CL			8		12-24in Dark greenish gray (10Y3/1) CLAY, trace(-) fine Sand; moist	Clay
					9			End of Boring @16'

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** MW4 **WELL NO.:** MW4

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/19/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/19/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 373259.5
Total Depth (ft): 14.00	**Total Depth (ft):** 12.49		**EASTING:** 303884.27
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 12.72
Depth to Water (ft): 8.00	**Depth to Water (ft):** 8.50		**TOC ELEVATION:** 15.27
Depth to Rock (ft): N/A	**Permit No.:** 31-58907		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SM			3 4 8 16	0	Brownish yellow (10YR6/6) fine Sand, some Silt; dry	Silty Sand
			SP-SM			28 50/3"	0	Brownish yellow (10YR6/6) fine SAND, little (+) Silt; dry	Sand
			SC			4	0	0-8in Yellowish red (5YR5/8) fine Sand, some Clay: dry	Clayey Sand
	5		SP-SM			8 16 21		8-17in Brownish yellow (10YR6/6) fine SAND, little Silt; dry	Sand
			SP-SM			8 6	0	Brownish yellow (10YR6/6) fine SAND, little Silt; firm; moist	

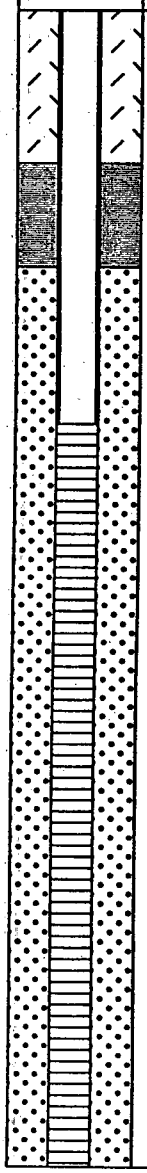
The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: MW4
	Page 2 of 2	WELL NO.: MW4

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SP-SM		9 12	5 5 6	0	0-18in Brownish yellow (10YR6/6) fine SAND, little Silt; wet	▽
	10		ML		7			18-20in Dark yellowish brown (10YR4/4) SILT, some fine Sand; wet	Silt
			ML		6 9 12 11		0	Dark yellowish brown (10YR4/4) SILT & CLAY; with 2in layer of Clayey Silt	Silt & Clay
			ML		10		0	0-4in Dark yellowish brown (10YR4/4) Clayey SILT	Clayey Silt
			CL		9 11 7			4-24in Dark greenish gray (10Y3/1) CLAY, trace fine Sand; dry	Clay End of Boring @14'

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** MW5 **WELL NO.:** MW5

CLIENT: New Jersey Department of Environmental Protection		**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ		**DATE STARTED:** 9/19/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.		**DATE FINISHED:** 9/19/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers		**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**	**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up	**NORTHING:** 373287.53
Total Depth (ft): 16.00	**Total Depth (ft):** 13.96	**EASTING:** 304119.57
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010	**GROUND ELEVATION:** 11.73
Depth to Water (ft): 8.00	**Depth to Water (ft):** 8.10	**TOC ELEVATION:** 14.57
Depth to Rock (ft): N/A	**Permit No.:** 31-58908	

NOTES:



Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
0		FILL-B			3 7 11 24	0	Brownish yellow (10YR6/6) fine SAND, trace Silt, with Waste (battery casings material); dry	**Sand with Waste**
		SP			7 6 6 6	0	Brownish yellow (10YR6/6) fine SAND, trace Silt; dry	**Sand**
		SP			7 6 6 7	N/A	No Recovery	
5		SP			3 3 3 5	0	Brownish yellow (10YR6/6) fine SAND, trace (+) Silt; wet	
		SP			4 3 8 6	0	Brownish yellow (10YR6/6) fine SAND, trace (+) Silt; wet	▽
10		SP-SM			1 0 1 0	0	Brownish yellow (10YR6/6) fine SAND, little Silt; wet	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: MW5
	Page 2 of 2	WELL NO.: MW5

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SP-SM			0 1 1 0 1 0	0	Brownish yellow (10YR6/6) fine SAND, little (+) Silt; wet	
	15		CL			1 4 8 4	0	Dark greenish gray (10Y3/1) CLAY, trace (+) fine Sand; dry	**Clay** **End of Boring @16'**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** MW6 **WELL NO.:** MW6

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/20/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/20/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 373241.5
Total Depth (ft): 12.00	**Total Depth (ft):** 12.00		**EASTING:** 303566.25
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 5.68
Depth to Water (ft): 6.00	**Depth to Water (ft):** 6.10		**TOC ELEVATION:** 7.92
Depth to Rock (ft): N/A	**Permit No.:** 31-58909		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM			2 3 2 4	0	Brownish yellow (10YR6/6) fine Sand, little Silt; moist	Sand
			SP-SM			3 6	0	0-13in Brownish yellow (10YR6/6) fine Sand, little Silt; dry	
			CL			7 5		13-20in Brownish yellow (10YR6/6) CLAY, some fine Sand; dry	Sandy Clay
			SP-SM			2 3	0	0-12in Brownish yellow (10YR6/6) fine SAND, little Clayey Silt; wet	Sand
	5		ML			2 6		12-24in Brownish yellow (10YR6/6) SILT, trace fine Sand; moist	Silt
			ML			3 3 5 7	0	Brownish yellow (10YR6/6) Clayey SILT, little (-) fine Sand; with 3in layer of fine Sand, little Clayey Silt; moist	Clayey Silt
			CL			3	0	Dark greenish gray (10Y3/1) Silty CLAY, trace (+) fine Sand; moist	Silty Clay

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: MW6
	Page 2 of 2	WELL NO.: MW6

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	10		CL			3 5 7 3 5 7 7	0	Dark greenish gray (10Y3/1) Silty CLAY, trace (+) fine Sand; moist	End of Boring @12'

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** MW7 **WELL NO.:** MW7

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/21/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/21/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 372736.76
Total Depth (ft): 14.00	**Total Depth (ft):** 14.00		**EASTING:** 303425.18
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 10.35
Depth to Water (ft): 7.00	**Depth to Water (ft):** 6.80		**TOC ELEVATION:** 12.63
Depth to Rock (ft): N/A	**Permit No.:** 31-58910		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM			1 2 3 4	0	Brownish yellow (10YR6/6) fine SAND, little Silt; dry	Sand
			SP-SM			2 3 6 8	0	Brownish yellow (10YR6/6) fine SAND, little Silt; dry	
	5		SP-SM			2 4 11 22	0	Brownish yellow (10YR6/6) medium to fine SAND, little Silt; dry	
	▽		SP-SM			34 18 24 23	0	Yellowish brown (10YR5/8) fine SAND, little Silt & Clay; wet	▽
			SC			12	0	0-7in Brownish yellow (10YR6/6) fine SAND, some Clay & Silt; moist	Clayey Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: MW7
	Page 2 of 2	WELL NO.: MW7

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SP-SM			32 34		7-16in Yellowish brown (10YR5/8) coarse to fine SAND, little Silt, little (+) fine Gravel; wet	Sand
			SP-SM			41		16- 21in Yellowish brown (10YR5/8) medium to fine SAND, little Silt; wet	
	10		SP-SM			21 25	0	0-18in Yellowish brown (10YR5/8) coarse to fine SAND, little Silt, little (-) fine Gravel; wet	
						7			
			CL-ML			6		18-23in Dark greenish gray (N3/1) CLAY & SILT; wet	Silty Clay
			SP-SM			6	0	0-8in Brownish yellow (10YR 6/6) coarse to fine SAND, little Silt, little (+) fine Gravel; wet	Sand
			CL-ML			6 7		8-24in Greenish gray (10Y 3/1) CLAY & SILT; moist	Clay & Silt
						8			End of Boring @14'

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** MW8 **WELL NO.:** MW8

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/25/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/25/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 373183.83
Total Depth (ft): 20.00	**Total Depth (ft):** 18.56		**EASTING:** 303383.49
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 6.72
Depth to Water (ft): 16.00	**Depth to Water (ft):** 16.50		**TOC ELEVATION:** 9.63
Depth to Rock (ft): N/A	**Permit No.:** 31-58911		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP			10 19 27 7	0	Dark reddish brown (5YR3/2) fine SAND, little fine Gravel; dry	Sand
			SM			27 27 27 11	0	Brownish yellow (10YR6/6) fine SAND, some Silt, trace fine Gravel; dry	Silty Sand
	5		SP-SM			15 21 28 30	0	Brownish yellow (10YR6/6) medium to fine SAND, little Silt, little fine Gravel; dry	Sand
			SP-SM			27 41 29 36	0	Brownish yellow (10YR6/6) fine SAND, little (-) Silt, little (-) fine Gravel; dry	
			SP-SC			17	0	0-8in Brownish yellow (10YR6/6) fine SAND, little Clay & Silt; dry	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: MW8
	Page 2 of 2	WELL NO.: MW8

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SP-SM			15 27 30		8-24in Brownish yellow (10YR6/6) medium to fine SAND, little Silt, little fine Gravel; dry	
	10		SP-SM			4 11 5 7	0	Brownish yellow (10YR6/6) fine SAND, little Silt, trace fine Gravel; dry	
			CL			4 4 5 7	0	Brownish yellow (10YR6/6) CLAY, little (+) fine Sand; wet	Clay
			SP-SM			7	0	0-8in Brownish yellow (10YR6/6) coarse to fine SAND, little Silt; moist	Sand
	15		SP-SM			9 16 12		8-24in Greenish gray (10Y3/1) fine SAND, little Silt, little fine Gravel; moist	
			SM			12 16 19 21	0	Brownish yellow (10YR6/6) fine SAND, some Silt, little (+) fine Gravel; wet	Silty Sand
			SM			7 14 12	0	0-13in Light gray (N7) medium to fine SAND, some Silt; wet	End of Boring@20'
	20		SC			9		13-14in Light gray (N7) fine SAND, some Clay; wet	Clayey Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** MW9 **WELL NO.:** MW9

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/22/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/22/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 373142.97
Total Depth (ft): 14.00	**Total Depth (ft):** 14.00		**EASTING:** 302556.7
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 4.05
Depth to Water (ft): 9.50	**Depth to Water (ft):** 10.70		**TOC ELEVATION:** 6.57
Depth to Rock (ft): N/A	**Permit No.:** 31-58912		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM			4	0	0-6in Dark reddish brown (5YR3/2) fine SAND, little Silt; dry	Sand
			SP-SM			7		6-20in Brownish yellow (10YR6/6) fine SAND, little Silt, trace (-) fine Gravel; dry	
						9			
						13			
			SP-SC			12	0	0-4in Brownish yellow (10YR6/6) fine SAND, little Clay, little(+) fine Gravel; dry	
			SP			17		4-14in Brownish yellow (10YR6/6) fine SAND, trace fine Gravel; dry	
						19			
						21			
			SP-SC			11	0.2	0-4in Brownish yellow (10YR6/6) fine SAND, little Clay, trace fine Gravel;dry	
			SP			19		4-19in Brownish yellow (10YR6/6) medium to fine SAND, trace fine Gravel; dry	
	5					36			
						51			
			SP-SM			47	0	0-4in Brownish yellow (10YR6/6) fine SAND, little Silt, trace (-) fine Gravel; dry	
			SP			50/5"		4-12in Brownish yellow (10YR6/6)medium to fine SAND, trace Silt, trace(+) fine Gravel; dry	
			SP-SM			9	0.1	0-4in Brownish yellow (10YR6/6) fine SAND, little Silt, little Gravel; wet	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: MW9
	Page 2 of 2	WELL NO.: MW9

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SP-SM			17 28 36		4-16in Brownish yellow (10YR6/6) fine SAND, little silt, trace fine Gravel; wet	▽
	10		SP-SC			6 16 28 38	0.2	Brownish yellow (10YR6/6) medium to fine SAND, little (+) Clay, little fine Gravel; wet	
			SP			31 40	0	Brownish yellow (10YR6/6) medium to fine SAND, trace Clay, little fine Gravel; wet	
			CL			19 17		Brownish yellow (10YR6/6) CLAY, and fine Sand, trace fine Gravel; moist	**Sandy Clay** **End of Boring @14'**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** MW10 **WELL NO.:** MW10

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/22/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/22/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 373326.5
Total Depth (ft): 14.00	**Total Depth (ft):** 14.00		**EASTING:** 302625.48
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 3.40
Depth to Water (ft): 8.50	**Depth to Water (ft):** 9.90		**TOC ELEVATION:** 5.80
Depth to Rock (ft): N/A	**Permit No.:** 31-58913		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP			2 6 13 21	0	Brownish yellow (10YR6/6) to dark reddish brown (5YR 3/2) fine SAND, trace fine Gravel; dry	Sand
			SP			13 13	0	0-14in Brownish yellow (10YR6/6) fine SAND, little fine Gravel	
			SP			13 17		14-16in Brownish yellow (10YR6/6) fine SAND; dry	
			SP			4 7 11 13	0	Brownish yellow (10YR6/6) fine SAND, trace fine Gravel; dry	
	5		SP-SM			31 50/5"	0	Brownish yellow (10YR6/6) fine SAND, little Silt, trace fine Gravel; moist	
			SP-SM			7	0	Brownish yellow (10YR6/6) medium to fine SAND, little Silt, trace (-) fine Gravel; wet	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: MW10
	Page 2 of 2	WELL NO.: MW10

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
						18			
						24			
						31			
	10		SP-SM			4	0	Brownish yellow (10YR6/6) medium to fine SAND, little Silt, trace (-) fine Gravel; wet	
						7			
						9			
						9			
			SP-SM			9	0	0-12in Brownish yellow (10YR6/6) medium to fine SAND, little Silt; wet	
						12			
			SP-SM			15		12-24in Brownish yellow (10YR6/6)fine SAND, little (+) Silt; wet	
						17			**End of Boring@14'**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 5	**BORING NO.:** MW-10D **WELL NO.:** MW-10D

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 1/21/2002
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 1/25/2002
DRILLING METHOD: 6-5/8" Hollow Stem Augers			**DRILLER:** W.Petley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly/J.Lottig
Diameter (in): 11.75	**Completion:** 4"/Steel Stick Up		**NORTHING:** 302636.473
Total Depth (ft): 64.71	**Total Depth (ft):** 64.71		**EASTING:** 373329.825
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/0.010		**GROUND ELEVATION:** 3.41
Depth to Water (ft): 4	**Depth to Water (ft):** 13.36		**TOC ELEVATION:** 5.99
Depth to Rock (ft): N/A	**Permit No.:** 3162540		

NOTES: The well was installed first using 6 5/8" ID hollow stem augers. The borehole was completed in a new hole beside the well using a 4" roller bit with mud rotary drilling, the boring was then grouted to surface.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP			2 5 11 11		Brownish yellow (10YR6/6) coarse to fine SAND, some coarse to medium Gravel; moist.	**Gravelly Sand**
	2		SP			7 10 6 8		Brownish yellow (10YR6/6) coarse to fine SAND, some coarse to medium Gravel; moist.	
	4		SP			9 9 8 7		Brownish yellow (10YR6/6) coarse to fine SAND, some coarse to medium Gravel; wet.	▽
	6		SP			12 8 7 5		Brownish yellow (10YR6/6) coarse to fine SAND, trace medium to fine Gravel; wet.	**Sand**
	8		SP			14 17 6 9		Brownish yellow (10YR6/6) coarse to fine SAND, trace medium to fine Gravel; wet.	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: MW-10D
	Page 2 of 5	WELL NO.: MW-10D

Depth	USCS	Interval	Rec.	Blows	PID	Description	Remarks
10	SP			8		Brownish yellow (10YR6/6) coarse to fine SAND, trace medium to fine Gravel; wet.	
				14			
				14			
				12			
12	SP-SM			10		Brownish yellow (10YR6/6) medium to fine SAND, little Silt, trace medium to fine Gravel; wet.	
				13			
				11			
				18			
14	SP-SM			13		Brownish yellow (10YR6/6) medium to fine SAND, little Silt, little medium to fine Gravel; wet.	
				13			
				15			
				17			
16							
18							
20	SP-SM			5		Brownish yellow (10YR6/6) medium to fine SAND, little Silt, trace medium to fine Gravel; wet.	
				9			
				22			
				25			
22							
24							

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: MW-10D
	Page 3 of 5	WELL NO.: MW-10D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SP-SM			9 20		Brownish yellow (10YR6/6) medium to fine SAND, little Silt, trace medium to fine Gravel; wet.	
	26					33 50			
	28								
	30		SP			48 50/5		Medium light gray (N6) medium to fine SAND, trace Silt; wet.	
	32								
	34								
			SP			24 30		Medium light gray (N6) medium to fine SAND, trace Silt; wet.	
	36					20 15			
	38								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: MW-10D
	Page 4 of 5	WELL NO.: MW-10D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	40		SP			50/3		Medium light gray (N6) medium to fine SAND, trace Silt; wet.	
	42								
	44								
			SP			50/3		Medium light gray (N6) medium to fine SAND, trace Silt; wet.	
	46								
	48								
	50		SP			50/4		Medium light gray (N6) medium to fine SAND, trace Silt; wet.	
	52								
	54								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: MW-10D
	Page 5 of 5	WELL NO.: MW-10D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SP			30 50/3		Medium light gray (N6) medium to fine SAND, trace Silt; wet.	
	56								
	58								
	60		SP			32 50/2		Medium light gray (N6) medium to fine SAND, trace Silt; wet.	
	62								
			SP			13 25		Medium light gray (N6) medium to fine SAND, trace Silt, little medium to fine Gravel; wet.	
	64					29			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** MW11 **WELL NO.:** MW11

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/21/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/21/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 373585.7
Total Depth (ft): 14.00	**Total Depth (ft):** 12.25		**EASTING:** 302547.81
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 3.43
Depth to Water (ft): 7.00	**Depth to Water (ft):** 9.00		**TOC ELEVATION:** 6.13
Depth to Rock (ft): N/A	**Permit No.:** 31-58914		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		FILL			3 4 3 3	0	Dark gray (10YR4/1) fine SAND, little Silt; with Waste (plastic fragments); dry	Sand with Waste
			SP			7 11 13 15	0	Brownish yellow (10YR6/6) coarse to fine SAND; wet	Sand
	5		SP-SM			8 14 15 17	0	Brownish yellow (10YR6/6) medium to fine SAND, little Silt; wet	
			SP-SM			7 18 21 20	0	Brownish yellow (10YR6/6) coarse and fine SAND, little (-) Silt, trace fine Gravel; wet	⧖
			SM			7	0	0-6in Brownish yellow (10YR6/6) fine SAND, some Clayey Silt	Silty Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: MW11
	Page 2 of 2	WELL NO.: MW11

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SP			8 15		6-17in Brownish yellow (10YR6/6) medium to fine SAND, trace (+) fine Gravel; wet	Sand
			SP-SM			18		17-21in Brownish yellow (10YR6/6) fine SAND, little Clayey Silt; wet	
	10		SP-SM			12 14 13 19	0	Brownish yellow (10YR6/6) medium to fine SAND, little Silt, trace fine Gravel; wet	
			SP-SM			7 9 11 11	0	Brownish yellow (10YR6/6) medium to fine SAND, little Silt, trace fine Gravel; wet	End of Boring @14'

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 5	**BORING NO.:** MW-11D **WELL NO.:** MW-11D

CLIENT: New Jersey Department of Environmental Protection		**PROJECT NO:**	JG-1691
PROJECT: Matteo, West Deptford, NJ		**DATE STARTED:**	1/21/2002
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.		**DATE FINISHED:**	1/25/2002
DRILLING METHOD: 6-5/8" Hollow Stem Augers		**DRILLER:**	W.Petley
BOREHOLE DATA	**WELL DATA**	**INSPECTOR:**	J.Kelly/J.Lottig
Diameter (in): 11.75	**Completion:** 4" /Steel Stick Up	**NORTHING:**	302554.507
Total Depth (ft): 62.95	**Total Depth (ft):** 62.95	**EASTING:**	373573.113
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/0.010	**GROUND ELEVATION:**	3.21
Depth to Water (ft): 12	**Depth to Water (ft):** 14.21	**TOC ELEVATION:**	5.72
Depth to Rock (ft): N/A	**Permit No.:** 3162539		

NOTES: The well was installed first using 6 5/8" ID hollow stem augers. The borehole was completed in a new hole beside the well using a 4" roller bit with mud rotary drilling, the boring was then grouted to surface.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM			3 2 6 7		Dark gray (N3) fine SAND, little Silt; moist.	**Sand (fill material)**
	2		SP			5 7 7 6		Brownish yellow (10YR 6/6) coarse to fine SAND; wet.	**Sand**
	4		SP-SM			6 4 6 7		Brownish yellow (10YR 6/6) medium to fine SAND, little Silt; wet.	
	6		SP-SM			7 8 11 15		Brownish yellow (10YR 6/6) coarse to fine SAND, little Silt, trace fine Gravel; wet.	
	8		SP			5 6 6 8		Brownish yellow (10YR 6/6) medium to fine SAND, trace fine Gravel; wet.	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: MW-11D
	Page 2 of 5	WELL NO.: MW-11D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	10		SP-SM			4 6 6 5		Brownish yellow (10YR 6/6) medium to fine SAND, little Silt, trace fine Gravel; wet.	
	12		SP-SM			8 7 7 7		Brownish yellow (10YR 6/6) medium to fine SAND, little Silt, trace fine Gravel; wet.	▽
	14 ▼		SP-SM			9 12 12 13		Brownish yellow (10YR 6/6) medium to fine SAND, little Silt, trace fine Gravel; wet.	
	16								
	18								
	20		SP			5 10 17 23		Brownish yellow (10YR 6/6) coarse to medium SAND, trace fine Gravel; wet.	
	22								
	24								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: MW-11D
	Page 3 of 5	WELL NO.: MW-11D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SP-SM			14 9		Medium light gray (N6) coarse to medium SAND, little Silt, trace fine Gravel; wet.	
	26					8 5			
	28								
	30		SP			42 50/5		Medium light gray (N6) medium SAND, trace fine Gravel; wet.	
	32								
	34		SP			7 3		Medium light gray (N6) medium SAND, trace fine Gravel; wet.	
	36					14 26			
	38								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: MW-11D
	Page 4 of 5	WELL NO.: MW-11D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	40		SP			37 50/3		Medium light gray (N6) coarse to medium SAND, trace Silt; wet.	
	42								
	44								
			SP			27 12 49 45		No Recovery	
	46								
	48								
	50		CL			10 19 19 26		Medium dark gray (N4) Silty Clay; wet.	Silty Clay
	52								
	54								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: MW-11D
	Page 5 of 5	WELL NO.: MW-11D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SP-SM					No Recovery	Sand
						50/5			
	56								
	58								
	60		SP-SM			21		Medium light gray (N6) coarse to medium SAND, little Silt, little fine Gravel; wet.	
						12			
						44			
						50/5			
	62								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** MW12 **WELL NO.:** MW12

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/21/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/21/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 373122.72
Total Depth (ft): 14.00	**Total Depth (ft):** 13.13		**EASTING:** 302270.03
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 3.73
Depth to Water (ft): 7.50	**Depth to Water (ft):** 9.50		**TOC ELEVATION:** 5.56
Depth to Rock (ft): N/A	**Permit No.:** 31-58915		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP			4	0	0-7in Dark reddish brown (5YR3/2) fine SAND, trace (-) fine Gravel; dry	Sand
			SP-SM			6		7-11in Brownish yellow (10YR 6/6) fine SAND, little Silt; dry	
						7			
						11			
			SP-SM			5	0	Brownish yellow (10YR6/6) coarse to fine SAND, little (-) Silt, trace (-) fine Gravel; dry	
						5			
						6			
						8			
			SP			8	0	Brownish yellow (10YR6/6) fine SAND, trace (-) fine Gravel; wet	
	5					15			
						18			
						25			
			SW			38	0	Brownish yellow (10YR6/6) coarse to fine SAND, trace Silt, little fine Gravel; wet	
						45			
						50/4"			
			SP			11	0	Brownish yellow (10YR6/6) coarse to fine SAND, trace Silt, little fine Gravel; wet	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: MW12
	Page 2 of 2	WELL NO.: MW12

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SP			17 28 50		Brownish yellow (10YR6/6) fine SAND, trace Silt; wet	
	10		SP			18 30 46 50	0	Yellow (10YR7/6) to brownish yellow (10YR6/6) coarse to fine SAND, trace fine Gravel; with 3in layer of CLAY, and fine SAND, trace (-) fine Gravel; wet	
			SP			10 14 34 40	0	Yellow (10YR7/6) to brownish yellow (10YR6/6) coarse to fine SAND, trace Silt; with 3in layer of fine SAND, and Clay, little fine Gravel; wet	**End of Boring @14'**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 4	**BORING NO.:** B13 **WELL NO.:** MW13D

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/13/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/16/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 373178.2
Total Depth (ft): 100.5	**Total Depth (ft):** 76.50		**EASTING:** 304385.05
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 11.83
Depth to Water (ft): 6.00	**Depth to Water (ft):** 22.70		**TOC ELEVATION:** 14.23
Depth to Rock (ft): N/A	**Permit No.:** 31-58916		

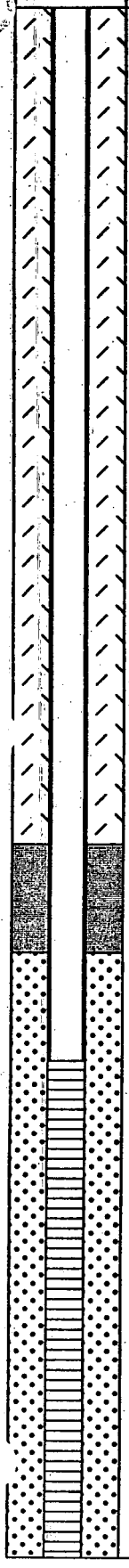
NOTES: All boring information is from oberservations made at B13, which was grouted to the surface upon completion. MW13D was installed adjacent to B13.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		FILL			2 2 2 2	0	Very dark brown (10YR2/2) SILT, little fine Sand; dry	Silt
			FILL			3 4 4 4	0	Yellowish brown (10YR5/6) fine SAND, little Silt; dry	Sand
			FILL			4 6 8 6	0	Yellowish brown (10YR5/6) fine SAND, little Silt; moist	
	5		FILL			5 5 7 9	0	Brownish yellow (10YR5/6) fine SAND, trace Silt; wet	▽
			FILL-W			3 5 6 10	0	Dark brown (10YR3/3) CLAY; moist	Clay with Waste
	10		FILL-W			2 3 4 3	0	Black (N2.5) CLAY, trace (-) fine gravel; with Waste (plastic fragments); moist	
			FILL-W			6 5 6 6	0	Black (N2.5) CLAY, trace (-) fine gravel; with Waste (plastic fragments); moist	
	15		FILL-W			3 5 7 9	0	Black (N2.5) CLAY, trace (-) fine gravel; with Waste (plastic fragments); moist	
			CL			7	0	Dark gray (N4) CLAY	Clay

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B13
	Page 2 of 4	WELL NO.: MW13D

Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
20					12 16 16			
		SP						Sand
25		SP			50/5"	0	Gray (N5) medium to fine SAND, trace (-) Silt; wet	
30		SP			14 13 14 29	0	Gray(N6) coarse to fine SAND, trace Silt; wet	
35		SP			19 32 57/6"	0	Gray(N6) coarse to fine SAND, trace Silt; wet	
40		SP			50/2"	0	No Recovery	
45		SP			50/3"	0	No Recovery	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B13
	Page 3 of 4	WELL NO.: MW13D



Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
50		SP			100/2"	0	No Recovery	
		SP-SM						
55		SP-SM			150/5"	0	Gray (N5) medium to fine SAND, little Silt; wet	
60		SP-SM			100/5"	0	Gray (N5) medium to fine SAND, little Silt; with a 1/2in layer of CLAY, trace (+) fine Gravel; wet	
		SP						Gravelly Sand
65		SP			70 72 60 20	0	Gray (N5) coarse to fine SAND, trace Silt, some medium to fine Gravel; wet	
70		SP			37 76 100/6"	0	Gray (N5) coarse to fine SAND, trace Silt, some medium to fine Gravel; wet	
75					100/3"	0		

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B13
	Page 4 of 4	WELL NO.: MW13D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SP					No Recovery	
			ML					0-2in Dark gray (N4) Clayey SILT, little fine Sand, little medium Gravel; wet	Silt
	80					200/6"	0		
			SP-SM					2-4in Gray (N5) medium to fine SAND, little Silt; wet	Sand
			SP-SM						Gravelly Sand
	85		SP-SM			79 100 85 100/2"	0	Gray (N5) coarse to fine SAND, little Silt, some medium Gravel; wet	
	90		SP-SM			100/3"	0	No Recovery	
	95		SP-SM			100/6"	0	Gray (N5) coarse to fine SAND, little Silt, some medium Gravel; wet	
	100		SP-SM			100/4"	0	No recovery	End of Boring @100'-4"

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** B13 **WELL NO.:** MW13S

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/12/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/16/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 373185.88
Total Depth (ft): 20.00	**Total Depth (ft):** 15.50		**EASTING:** 304373.5
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 11.67
Depth to Water (ft): 6.00	**Depth to Water (ft):** 7.60		**TOC ELEVATION:** 13.73
Depth to Rock (ft): N/A	**Permit No.:** 31-58900		

NOTES: All boring information is from oberservations made at B13, which was grouted to the surface upon completion. MW13S was installed adjacent to B13.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		FILL			2 2 2 2	0	Very dark brown (10YR2/2) SILT, little fine Sand; dry	Silt
			FILL			3 4 4 4	0	Yellowish brown (10YR5/6) fine SAND, little Silt; dry	Sand
			FILL			4 6 8 6	0	Yellowish brown (10YR5/6) fine SAND, little Silt; moist	
	5		FILL			5 5 7 9	0	Brownish yellow (10YR5/6) fine SAND, trace Silt; wet	▽
			FILL			3	0	Dark brown (10YR3/3) CLAY; moist	Clay

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B13
	Page 2 of 2	WELL NO.: MW13S

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
						5 6 10			
	10		FILL-W			2 3 4 3	0	Black (N2.5) CLAY, trace (-) fine gravel; with Waste (plastic fragments); moist	Clay with Waste
			FILL-W			6 5 6 6	0	Black (N2.5) Silty CLAY; with Waste (plastic fragments); moist	Silty Clay with Waste
	15		FILL-W			3 5 7 9	0	Black (N2.5) Silty CLAY; with Waste (plastic fragments); moist	
			CL			7 12 16 16	0	Dark gray (N4) CLAY	Clay End of Boring @20'
	20								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 4	**BORING NO.:** B14 **WELL NO.:** MW14D

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/29/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/2/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 372368.39
Total Depth (ft): 100.5	**Total Depth (ft):** 84.00		**EASTING:** 304239.38
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 22.11
Depth to Water (ft): 10.00	**Depth to Water (ft):** 35.10		**TOC ELEVATION:** 24.19
Depth to Rock (ft): N/A	**Permit No.:** 31-58917		

NOTES: All boring information is from oberservations made at B14, which was grouted to the surface upon completion. MW14D was installed adjacent to B14.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM			7 6 9 8	0	Brownish yellow (10YR6/6) fine SAND, little Silt; dry	Sand
			SP-SM			4 6 5 4	0	Brownish yellow (10YR 6/6) fine SAND, little Silt; dry	
			SP-SM			8 11 10 10	0	Brownish yellow (10YR6/6) fine SAND, little (-) Silt; dry	
	5		SP-SM			14 13 11 11	0	Brownish yellow (10YR6/6) medium to fine SAND, little Silt; wet	
			ML			15 21 20 17	0	Yellow (10YR7/6) to yellowish brown (10YR6/6) SILT; dry	Silt
	10		SP-SM			12 18 7 8	0	Brownish yellow (10YR6/6) fine SAND, little Silt & Clay; wet	Sand
			ML			7 3 21 12	0	Dark yellowish brown (10YR4/6) Clayey SILT; dry	Clayey Silt
			ML			4 4 4 4	0	Dark yellowish brown (10YR4/6) Clayey SILT; dry	
	15		ML			4	0	0-5in Dark yellowish brown (10YR4/6) Clayey SILT; wet	
			CL			6 4 7 7	0	5-10in Very dark gray (N3) CLAY; wet	Clay

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B14
	Page 2 of 4	WELL NO.: MW14D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			CL			9 9 11		Very dark gray (N3) CLAY; wet	
	20								Silty Clay
	25		CL			4 6 14 19	0	Very dark gray (N3)Silty CLAY; dry	
			ML						Silt & Clay
	30		ML			9 15 15 16	0	Very dark Gray (N3) SILT & CLAY; dry	
			ML			9 11 15 11	0.1	Very dark Gray (N3) SILT & CLAY; dry	
			SP						Sand
	40		SP			50/4"	0.1	Light gray (N7) medium to fine SAND; wet	
			SC						Clayey Sand
	45		SC			29 29	0	Light gray (N7) fine SAND, some Clay; wet	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B14
	Page 3 of 4	WELL NO.: MW14D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
						30 50			
			SP						Sand
	50		SP			50/4"	0	Gray (N6) medium to fine SAND; wet	
	55		SP			50/4"	0	No Recovery	
			SP-SM						
	60		SP-SM			50/3"	0	Gray (N5) coarse to fine SAND, little Silt; wet	
	65		SP-SM			65/4"	0	Gray (N5) coarse to fine SAND, little Silt; wet	
	70		SP-SM			63 50/5"	0	Gray (N5) coarse and fine SAND, little (-) Silt; wet	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B14
	Page 4 of 4	WELL NO.: MW14D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	75		SP-SM			79 50/3"	0	Gray (N5) coarse and fine SAND, little (-) Silt; wet	
	80		SP-SM			70/3"	0	Very dark gray (N3) fine SAND, little (-) Silt; wet	
			SP						
	85		SP			80/3"	0	Dark gray (N4) coarse to fine SAND, trace (-) Silt; wet	
	90		SP			90/5"	0	Dark gray (N4) medium to fine SAND, trace (-) Silt; wet	
			SP			85/3"	0	Dark gray (N4) medium to fine SAND, trace (-) Silt; wet	
	95		SP			50/2"	0	Light gray (N7) to gray (N5) medium to fine SAND, trace (-) Silt; wet	
	100		SP			100/5"	0	Light gray (N7) medium to fine SAND; trace(+) fine gravel; wet	**End of Boring @100'-5"**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** B14 **WELL NO.:** MW14S

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/29/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/29/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 372378.13
Total Depth (ft): 20.00	**Total Depth (ft):** 20.00		**EASTING:** 304237.99
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 22.12
Depth to Water (ft): 10.00	**Depth to Water (ft):** 12.50		**TOC ELEVATION:** 24.08
Depth to Rock (ft): N/A	**Permit No.:** 31-58901		

NOTES: All boring information is from oberservations made at B14, which was grouted to the surface upon completion. MW14S was installed adjacent to B14.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM			7 6 9 8	0	Brownish yellow (10YR6/6) fine SAND, little Silt; dry	Sand
			SP-SM			4 6 5 4	0	Brownish yellow (10YR 6/6) fine SAND, little Silt; dry	
	5		SP-SM			8 11 10 10	0	Brownish yellow (10YR6/6) fine SAND, little (-) Silt; dry	
			SP-SM			14 13 11 11	0	Brownish yellow (10YR6/6) medium to fine SAND, little Silt; wet	
			ML			15 21 20 17	0	Yellow (10YR7/6) to yellowish brown (10YR6/6) SILT; dry	Silt

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B14
	Page 2 of 2	WELL NO.: MW14S

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	10		SP-SM			12 18 7 8	0	Brownish yellow (10YR6/6) fine SAND, little Silt & Clay; wet	▽ Sand
			ML			7 3 21 12	0	Dark yellowish brown (10YR4/6) Clayey SILT; dry	Clayey Silt
			ML			4 4 4 4	0	Dark yellowish brown (10YR4/6) Clayey SILT; dry	
	15		ML			4	0	0-5in Dark yellowish brown (10YR4/6) Clayey SILT; wet	
			CL			6 4 7		5-10in Very dark gray (N3) CLAY; wet	Clay
			CL			7 9 9 11	0	Very dark gray (N3) CLAY; wet	End of Boring @20'
	20								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 4	**BORING NO.:** B15 **WELL NO.:** MW15D

CLIENT: New Jersey Department of Environmental Protection		**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ		**DATE STARTED:**	10/3/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.		**DATE FINISHED:**	10/4/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers		**DRILLER:**	W.Pettley
BOREHOLE DATA	**WELL DATA**	**INSPECTOR:**	R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up	**NORTHING:**	372974.39
Total Depth (ft): 100.6	**Total Depth (ft):** 68.00	**EASTING:**	303080.23
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010	**GROUND ELEVATION:**	3.79
Depth to Water (ft): 6.00	**Depth to Water (ft):** 13.20	**TOC ELEVATION:**	5.99
Depth to Rock (ft): N/A	**Permit No.:** 31-58918		

NOTES: All boring information is from oberservations made at B15, which was grouted to the surface upon completion. MW15D was installed adjacent to B15.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM			2 4 5 6	0	Dark grayish brown (10YR4/2) medium to fine SAND, little Silt;dry	Sand
			SP			6 7 5 7	0	Brownish yellow (10YR6/6) medium to fine SAND, trace Silt, trace (-) medium to fine Gravel; moist	
	5		SP			3 8 8 8	0	Brownish yellow (10YR6/6) coarse to fine SAND, trace Silt, trace (-) coarse Gravel; wet	
			SP			4 6 8 12	0	Brownish yellow (10YR6/6) coarse to fine SAND, trace Silt, trace (-) coarse Gravel; wet	▽
			CL-ML			4 2 4 2	0	Very dark gray (N3) CLAY & SILT; moist	Clay & Silt
	10		CL-ML			2 4 6 8	0	Very dark gray (N3) CLAY & SILT; moist	
	▽		CL-ML			9 8 9 9	0	Dark gray (N4) CLAY with Silt partings; moist	Clay with Silt partings
			CL			6 6 14 12	0	Dark greenish gray (5GY4/1) CLAY with 1/2in layers of Silt; moist	Clay with layers of Silt
	15		CL			9 13 15 14	0	Dark greenish gray (5GY4/1) CLAY with Silt partings; moist	Clay with Silt partings
			CL			18 30	0	0-3in Dark greenish gray (5GY4/1) CLAY with Silt partings; moist	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B15
	Page 2 of 4	WELL NO.: MW15D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	20		SP			50/1"		3-9in Light brownish gray (10YR6/2) to Moderate brown (5YR3/4) medium to fine SAND, trace Silt; with 1in layer of medium to fine sand , some Silty Clay; moist	Sand
	25		SP			50 50/5"	0	Dark gray (N4) to Dusky yellowgreen (5GY5/2) medium to fine SAND; trace Silt; wet	
			SP-SM						
	30		SP-SM			28 24 15 18	0	Pale olive (5Y6/4) coarse to fine SAND, little (+) Silt; wet	
			CL						Silty Clay
	35		CL			5 12 14 13	0	Dark gray (5YR4/1) to Light brownish gray (5YR6/1) Silty CLAY; wet	
			SP-SM						Sand
	40		SP-SM			50/5"	0	Light brownish gray (10YR6/2) medium to fine SAND, little (+) Silty Clay; wet	
	45		SP-SM			35 50/2"	0	Dark gray (5YR4/1) medium to fine SAND, little (-) Silt; wet	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B15
	Page 3 of 4	WELL NO.: MW15D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SP						
	50		SP			50/5"	0	Dark gray (5YR4/1) medium to fine SAND, trace Silt; wet	
	55		SP			60/3"	0	Light gray (N7) medium to fine SAND; wet	
	60		SP			50/2"	0	Gray (N5) medium to fine SAND, trace Silt; trace fine Gravel; wet	
			SP						Gravelly Sand
	65		SP			50/4"	0	Gray (N5) medium to fine SAND, some medium to fine Gravel; wet	
	70		SP			50/3"	0	Gray (N5) medium to fine SAND, trace Silt, some fine Gravel; wet	
	75		SP			50/4"	0	Gray (N5) medium to fine SAND, trace Silt, some fine Gravel; wet	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B15
	Page 4 of 4	WELL NO.: MW15D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	80		SP			50/5"	0	Light gray (N7) medium to fine SAND, and fine Gravel; wet	
	85		SP			42 50/2"	0	Light gray (N7) to gray (N5) medium to fine SAND, little coarse to medium Gravel; wet	
	90		SP			70 50/2"	0	Light gray (N7) coarse to fine SAND, some fine Gravel; wet	
	95		SP			50/2"	0	Light gray (N7) to gray (N5) coarse SAND, and fine Gravel; wet	
	100		SP			49	0	Gray (N5) to dark gray (N3) medium to fine SAND, and fine Gravel; wet	**End of Boring @100'-7"**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** B15 **WELL NO.:** MW15S

CLIENT: New Jersey Department of Environmental Protection		**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ		**DATE STARTED:** 10/3/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.		**DATE FINISHED:** 10/4/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers		**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**	**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up	**NORTHING:** 372971.03
Total Depth (ft): 12.00	**Total Depth (ft):** 12.00	**EASTING:** 303072.13
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010	**GROUND ELEVATION:** 3.92
Depth to Water (ft): 6.00	**Depth to Water (ft):** 7.50	**TOC ELEVATION:** 6.53
Depth to Rock (ft): N/A	**Permit No.:** 31-58902	

NOTES: All boring information is from oberservations made at B15, which was grouted to the surface upon completion. MW15S was installed adjacent to B15.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM			2 4 5 6	0	Dark grayish brown (10YR4/2) medium to fine SAND, little Silt; dry	Sand
			SP			6 7 5 7	0	Brownish yellow (10YR6/6) medium to fine SAND, trace Silt, trace (-) medium to fine Gravel; moist	
			SP			3 8 8 8	0	Brownish yellow (10YR6/6) coarse to fine SAND, trace Silt, trace (-) coarse Gravel; wet	
	5		SP			4 6 8 12	0	Brownish yellow (10YR6/6) coarse to fine SAND, trace Silt, trace (-) coarse Gravel; wet	▽
			CL-ML			4 2 4 2	0	Very dark gray (N3) CLAY & SILT; moist	Clay & Silt

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B15
	Page 2 of 2	WELL NO.: MW15S

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	10		CL-ML			2 4 6 8	0	Very dark gray (N3) CLAY & SILT; moist	End of Boring @12'

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 5	**BORING NO.:** B16 **WELL NO.:** MW16D

CLIENT: New Jersey Department of Environmental Protection		**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ		**DATE STARTED:**	10/5/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.		**DATE FINISHED:**	10/5/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers		**DRILLER:**	W.Pettley
BOREHOLE DATA	**WELL DATA**	**INSPECTOR:**	R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up	**NORTHING:**	373387.53
Total Depth (ft): 95.00	**Total Depth (ft):** 70.00	**EASTING:**	303127.25
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010	**GROUND ELEVATION:**	4.89
Depth to Water (ft): 4.00	**Depth to Water (ft):** 13.50	**TOC ELEVATION:**	6.67
Depth to Rock (ft): N/A	**Permit No.:** 31-58919		

NOTES: All boring information is from oberservations made at B16, which was grouted to the surface upon completion. MW16D was installed adjacent to B16.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		FILL			3 5 7 7	0	Brown (10YR4/3) Silt, little (-) fine SAND; dry	Silt
			FILL-W			3 5 6 6	25.3	Black (N1) to brown (10YR4/3) Silt; with Waste (plastic, wood, cinders, glass); dry	Silt with Waste
	5		ML			1 2 3 3	76.3	Black (N1) SILT; wet	Silt
			CL			1	96.3	Black (N1) Silty CLAY; wet	Silty Clay
			PT			1 1 1		Very dark grayish brown (N3/2) PEAT; dry	Peat
			SP			5 6 4 5	0	Grayish Green (5G5/2) fine SAND;wet	Sand
	10		SP-SM			1 1 1 3	0	Grayish Green (5G5/2) fine SAND, little Clayey Silt; wet	
			SP-SM			1 2 4 4	0	Grayish Green (5G5/2) fine SAND, little Clayey Silt, trace (-) fine Gravel; wet	
			SP-SM			4	0	Grayish Green (5G5/2) fine SAND, little Clayey Silt, trace (-)	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B16
	Page 2 of 5	WELL NO.: MW16D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	15					4 6 10		fine Gravel; wet	
			SP-SM			10 16 20 22	0	Grayish Green (5G5/2) fine SAND, little Silt, trace (-) fine Gravel; wet	
			SP-SM			8 10 9 17	0	Light gray (N7) to yellow (10YR7/6) fine SAND, little (+) Clay, trace fine Gravel; wet	
	20								
			SP						
	25		SP			25	0	0-6in Grayish green (5G5/2) medium to fine SAND; wet	
			CL			50/3"		6-8in Light gray (N7) CLAY, and fine Sand; wet	**Sandy Clay**
			SP-SM						**Sand**
	30		SP-SM			50/5"	0	Grayish green (5G5/2) medium to fine SAND, little Silt; wet	
	35		SP			50/4"	0	Light gray (N7) coarse to medium SAND; wet	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B16
	Page 3 of 5	WELL NO.: MW16D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	40		SP			50/3"	0	Light gray (N7) coarse to fine SAND; wet	
	45		SP			18 100/5"	0	Light gray (N7) coarse to medium SAND; wet	
	50		SP			55 50/4"	0	Light gray (N7) coarse to fine SAND, trace fine Gravel; wet	
	55		SP			150/5"	0	No Recovery	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B16
	Page 4 of 5	WELL NO.: MW16D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	60		SP			100 6 100/4"	0	Light gray (N7) coarse to fine SAND, trace Silt, trace fine Gravel; wet	
	65		SP			50/5"	0	Light gray (N7) fine SAND, trace (-) fine Gravel; wet	
	70		SP			50/3"	0	No Recovery	
	75		SP			50/5"	0	Light gray (N7) coarse to fine SAND, trace fine Gravel; wet	
			SP-SM						
	80		SP-SM			30 50/3"	0	Gray (N5) fine SAND, little(-) Silt; wet	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B16
	Page 5 of 5	WELL NO.: MW16D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			CL						Clay
	85		CL			70 100/2"	0	Gray (N5) CLAY, little fine Sand, trace fine Gravel; with lignite; dry	
			SP						Gravelly Sand
	90		SP			36 60 70/2"	0	Gray (N5) medium to fine SAND, some medium to fine Gravel; with lignite; wet	
									End of Boring @95'
	95								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** MW16S **WELL NO.:** MW16S

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/5/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/5/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 373401.79
Total Depth (ft): 12.00	**Total Depth (ft):** 12.00		**EASTING:** 303118.9
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 4.47
Depth to Water (ft): 4.00	**Depth to Water (ft):** 4.60		**TOC ELEVATION:** 6.93
Depth to Rock (ft): N/A	**Permit No.:** 31-58903		

NOTES: All boring information is from oberservations made at B16, which was grouted to the surface upon completion. MW16S was installed adjacent to B16.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		FILL			3 5 7 7	0	Brown (10YR4/3) SILT, little (-) fine Sand; dry	Silt
			FILL-W			3 5 6 6	25.3	Black (N1) to brown (10YR4/3) SILT; with debris (plastic, wood, cinders, glass); dry	Silt with Waste
	5		ML			1 2 3 3	76.3	Black (N1) SILT; wet	Silt
			CL			1	96.3	Black (N1) Silty CLAY; wet	Silt Clay
			PT			1 1 1		Very dark grayish brown (N3/2) PEAT; dry	Peat
			SP			5	0	Grayish Green (5G5/2) fine SAND; wet	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: MW16S
	Page 2 of 2	WELL NO.: MW16S

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
						6 4 5			
	10		SP-SM			1 1 1 3	0	Grayish Green (5G5/2) fine SAND, little Clayey Silt; wet	End of Boring @12'

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 5	**BORING NO.:** B17 **WELL NO.:** MW17D

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/13/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/15/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 372619.78
Total Depth (ft): 86.6	**Total Depth (ft):** 70.00		**EASTING:** 302531.54
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 4.40
Depth to Water (ft): 2.50	**Depth to Water (ft):** 12.30		**TOC ELEVATION:** 6.87
Depth to Rock (ft): N/A	**Permit No.:** 31-58920		

NOTES: All boring information is from oberservations made at B17, which was grouted to the surface upon completion. MW17D was installed adjacent to B17.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP			5 4 3 3	0	Brownish yellow (10YR6/6) medium to fine SAND, trace Silt; dry	Sand
			SP			4 3 2 2	0	Brownish yellow (10YR6/6) medium to fine SAND, trace Silt; wet	▽
	5		SP			5 6 12 13	0	Brownish yellow (10YR6/6) coarse to fine SAND, trace Silt, little fine Gravel; wet	
			SP			17 25 42 50/3"	0	Yellowish brown (10YR 5/6) coarse to fine SAND, trace fine Gravel; wet	
			SP			67 42 35	0	0-18in Yellowish brown (10YR5/6) medium to fine SAND, little fine Gravel; wet	
	10		ML ML			60 2 3 4 6	0	18-24in Very dark gray (N3) Clayey SILT; wet Very dark gray (N3) Clayey SILT; moist	Clayey Silt
	▽		ML			6	0	Very dark gray (N3) Clayey SILT; moist	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B17
	Page 2 of 5	WELL NO.: MW17D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
						16 18 40			
			ML			3	0	0-5in Very dark gray (N3) Clayey SILT; moist	
			ML			6		5-11in Very dark gray (N3) Clayey SILT, little coarse to fine Sand; wet	
	15		ML			6			
			ML			10		11-24in Very dark gray (N3) Clayey SILT; moist	
						10	0	0-4in Very dark gray (N3) Clayey SILT; moist	
			SP-SM			8		4-24in Very dark gray (N4) fine SAND, little Silt; wet	Sand
						12			
						17			
			SP			17	0	Very dark gray (N4) fine SAND, trace (+) Silt; wet	
						40			
	20					50/3			
			ML						Silt & Clay
	25		ML			7	0	Very dark gray (N3) SILT & CLAY; with layers of coarse to fine Sand; wet	
						17			
						23			
						24			
	30		ML			19	0	0-6in Dark gray (N3) SILT & CLAY; wet	
			SP			24		6-24in Gray (10YR6/1) coarse to fine SAND; wet	Sand
						29			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B17
	Page 3 of 5	WELL NO.: MW17D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
						36			
	35		SP			12	0	0-6in Gray (10YR6/1) coarse to fine SAND, trace Silt; wet	
			CL			50/2"		6-8in Dark gray (N3) CLAY, some coarse Sand; wet	Sandy Clay
			SP						Sand
	40		SP			50	0	Light gray (10YR7/1) fine SAND; wet	
						50/2"			
	45		SP			23	0	Light gray (10YR7/1) medium to fine SAND; wet	
						50/3"			
			CL-ML						Clay & Silt
	50		CL-ML			80/6"	0	Dark gray (N3) CLAY & SILT, little (-) fine Sand; moist	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B17
	Page 4 of 5	WELL NO.: MW17D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
			SP						Sand
	55		SP			27 50/2"	0	Light gray (N7) to gray (N6) coarse to fine SAND; wet	
			GP						Sandy Gravel
	60		GP			50/2"	0	Black (N1) to light gray (N7) fine GRAVEL, and medium to coarse Sand; wet	
			CL						Sandy Clay
	65		CL			30 50/5"	0	Dark gray (N3) CLAY, some fine Sand, layers of medium to fine Sand; dry	
			SP						Sand
	70								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B17
	Page 5 of 5	WELL NO.: MW17D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	70		SP			50/5"	0	Light gray (N7) medium to fine SAND, trace (+) fine Gravel; wet	
			SP-SM						
	75		SP-SM			50/4"	0	Gray (N5) to very dark gray (N3) fine SAND, little Silt; wet	
			SP						
	80		SP			57 60 50/4"	0	Light gray (N7) to very dark gray (N3) fine SAND;wet	
			SC						Clayey Sand
	85		SC			26 47 70 50/1"	0	Light gray (N7) fine SAND, and Organic Silt (very high plasticity); dry	End of Boring @86'-7"

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** B17 **WELL NO.:** MW17S

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/13/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/15/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 372627.88
Total Depth (ft): 12.00	**Total Depth (ft):** 12.00		**EASTING:** 302537.9
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 4.14
Depth to Water (ft): 2.50	**Depth to Water (ft):** 3.50		**TOC ELEVATION:** 7.04
Depth to Rock (ft): N/A	**Permit No.:** 31-58904		

NOTES: All boring information is from oberservations made at B17, which was grouted to the surface upon completion. MW17S was installed adjacent to B17.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP			5 4 3 3	0	Brownish yellow (10YR6/6) medium to fine SAND, trace Silt; dry	Sand
			SP			4 3 2 2	0	Brownish yellow (10YR6/6) medium to fine SAND, trace Silt; wet	▽
	5		SP			5 6 12 13	0	Brownish yellow (10YR6/6) coarse to fine SAND, trace Silt, little fine Gravel; wet	
			SP			17 25 42 50/3"	0	Yellowish brown (10YR 5/6) coarse to fine SAND, trace fine Gravel; wet	
			SP			67	0	0-18in Yellowish brown (10YR5/6) medium to fine SAND, little fine Gravel; wet	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B17
	Page 2 of 2	WELL NO.: MW17S

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
						42 35			
	10		ML ML			60 2 3 4 6	0	18-24in Very dark gray (N3) Clayey SILT; wet Very dark gray (N3) Clayey SILT; moist	Clayey Silt End of Boring @12'

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 3	**BORING NO.:** B18 **WELL NO.:** MW18D

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/10/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/11/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 373454.65
Total Depth (ft): 90.50	**Total Depth (ft):** 69.00		**EASTING:** 302125.19
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 3.44
Depth to Water (ft): 6.00	**Depth to Water (ft):** 8.90		**TOC ELEVATION:** 5.73
Depth to Rock (ft): N/A	**Permit No.:** 31-58921		

NOTES: All boring information is from oberservations made at B18, which was grouted to the surface upon completion. MW18D was installed adjacent to B18.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM			12 15 17 19	0	Dark yellowish brown (10YR4/6) fine SAND, little Silt, trace fine Gravel; dry	Sand
			SP			9 17	0	0-11in Light gray (N7) fine SAND; dry	
			SP-SM			20 16		11-14in Light gray (N7) fine SAND, little Silt; moist	
			SP			6 12 15 18	0	Dark yellowish brown (10YR4/6) medium to fine SAND, trace Silt; moist	
	5		SP			5 44 44 47	0	Brown (10YR4/6) medium to fine SAND, trace fine Gravel; wet	▽
			SP			7 6 8 9	0	Dark yellowish brown (10YR4/6) medium to fine SAND, trace fine Gravel; wet	
	10		ML			12 7 12 15	0	Dark yellowish brown (10YR4/6) Clayey SILT; moist	Clayey Silt
			ML			13 9 14 17	0	Dark yellowish brown (10YR4/6) Clayey SILT; with 2" layer of Dark yellowish brown (10YR4/6) fine SAND, little Clayey Silt; moist	
			SP			6 8 2 16	0	Dark yellowish brown (10YR4/6) medium to fine SAND, trace Silt, little fine Gravel; wet	Sand
	15		SP			36 45 50/3"	0	Dark yellowish brown (10YR4/6) medium to fine SAND, trace Clayey Silt; wet	
			SP			44 50/5"	0	Yellowish brown (10YR5/8) medium to fine SAND, trace fine Gravel; wet	
	20								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B18
	Page 2 of 3	WELL NO.: MW18D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	25		SP			33 50/5"	0	Yellowish brown (10YR5/8) medium to fine SAND, trace fine Gravel; wet	
			GP						Gravel
	30		GP			50/4"	0	Yellowish brown (10YR5/8) fine GRAVEL; wet	
			SP						Sand
	35		SP			50/5"	0	Yellowish brown (10YR5/8) fine SAND; wet	
	40		SP			50 50/5"	0	0-5in Gray (N5) fine SAND, little fine Gravel; wet 5-12in Yellowish brown (10YR5/8) fine SAND, little fine Gravel; wet	
	45		SP			100/4"	0	Gray (N5) fine SAND; wet	
	50		SP			57 36 40 50/3"	0	Light gray (N7) fine SAND; wet	
	55		SP			100/5"	0	Gray (N5) fine SAND; wet	
	60		SP			100/5"	0	Gray (N5) coarse to fine SAND, trace fine Gravel; wet	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B18
	Page 3 of 3	WELL NO.: MW18D

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	65		SP			100/4"	0	No Recovery	
	70		SP			62 100/4"	0	Gray (N7) coarse to fine SAND, trace medium to fine Gravel; wet	
	75		SP			70 100 100/2"	0	Gray (N7) coarse to fine SAND, trace medium to fine Gravel; wet	
	80		SP			72 100/4"	0	Gray (N7) coarse to fine SAND, trace medium to fine Gravel; wet	
	85		SP			49 100/1"	0	Gray (N7) coarse to fine SAND, trace medium to fine Gravel; wet	
	90		SP			100/5"		No Recovery	**End of Boring @90'-5"**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** B18 **WELL NO.:** MW18S

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/10/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/11/2000
DRILLING METHOD: 6-5/8" ID Hollow Stem Augers			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** R.Lovett
Diameter (in): 10	**Completion:** 4" PVC/ Stick Up		**NORTHING:** 373448.54
Total Depth (ft): 12.00	**Total Depth (ft):** 12.00		**EASTING:** 302128.76
Sampler: Split Spoon	**Screen Length/Slot:** 10 ft/ 0.010		**GROUND ELEVATION:** 3.33
Depth to Water (ft): 6.00	**Depth to Water (ft):** 8.50		**TOC ELEVATION:** 5.79
Depth to Rock (ft): N/A	**Permit No.:** 31-58905		

NOTES: All boring information is from oberservations made at B18, which was grouted to the surface upon completion. MW18S was installed adjacent to B18.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM			12 15 17 19	0	Dark yellowish brown (10YR4/6) fine SAND, little Silt, trace fine Gravel; dry	Sand
			SP			9 17	0	0-11in Light gray (N7) fine SAND; dry	
			SP-SM			20 16		11-14in Light gray (N7) fine SAND, little Silt; moist	
			SP			6 12 15 18	0	Dark yellowish brown (10YR4/6) medium to fine SAND, trace Silt; moist	
	5								
			SP			5 44 44 47	0	Brown (10YR4/6) medium to fine SAND, trace fine Gravel; wet	▽
			SP			7	0	Dark yellowish brown (10YR4/6) medium to fine SAND, trace fine Gravel; wet	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	BORING NO.: B18
	Page 2 of 2	WELL NO.: MW18S

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
						6 8 9			
	10		ML			12 7 12 15	0	Dark yellowish brown (10YR4/6) Clayey SILT; moist	Clayey Silt End of Boring @12'

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP01 **WELL NO.:** N/A
CLIENT: New Jersey Department of Environmental Protection		**PROJECT NO:** JG-1565
PROJECT: Matteo, West Deptford, NJ		**DATE STARTED:** 9/11/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.		**DATE FINISHED:** 9/11/2000
DRILLING METHOD: Direct Push		**DRILLER:** J.Rausa

BOREHOLE DATA		WELL DATA		
Diameter (in):	2.5	**Completion:**	N/A	**INSPECTOR:** D.Auld
Total Depth (ft):	12.00	**Total Depth (ft):**	N/A	**NORTHING:** N/A
Sampler:	Macrocore	**Screen Length/Slot:**	N/A	**EASTING:** N/A
Depth to Water (ft):	N/A	**Depth to Water (ft):**	N/A	**GROUND ELEVATION:** N/A
Depth to Rock (ft):	N/A	**Permit No.:**	N/A	**TOC ELEVATION:** N/A

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM				0	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt; dry; surface staining	**Sand**
			SM					Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry	**Silty Sand** **Collect GP-01A from 0 to 0.5 ft**
	5		SM				0	Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry	
			SM				0	Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry to moist	
	10								**Collect GP-01B from 11 to 11.5 ft** **Bottom of Boring at 12 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP02 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 9/11/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/11/2000
DRILLING METHOD: Direct Push			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** D.Auld
Diameter (in): 2.5	**Completion:** N/A		**NORTHING:** N/A
Total Depth (ft): 12.00	**Total Depth (ft):** N/A		**EASTING:** N/A
Sampler: Macrocore	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM				0	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt; dry; surface staining	**Sand**
			SM					Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry	**Silty Sand** **Collect GP-02A from 0 to 0.5 ft**
	5		SM				0	Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry	
			SM				0	Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry to moist	
	10								**Collect GP-02B from 11 to 11.5 ft** **Bottom of Boring at 12 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP03 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection	**PROJECT NO:** JG-1565
PROJECT: Matteo, West Deptford, NJ	**DATE STARTED:** 9/11/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.	**DATE FINISHED:** 9/11/2000
DRILLING METHOD: Direct Push	**DRILLER:** J.Rausa

BOREHOLE DATA		**WELL DATA**			
Diameter (in):	2.5	**Completion:**	N/A	**INSPECTOR:**	D.Auld
Total Depth (ft):	12.00	**Total Depth (ft):**	N/A	**NORTHING:**	N/A
Sampler:	Macrocore	**Screen Length/Slot:**	N/A	**EASTING:**	N/A
Depth to Water (ft):	N/A	**Depth to Water (ft):**	N/A	**GROUND ELEVATION:**	N/A
Depth to Rock (ft):	N/A	**Permit No.:**	N/A	**TOC ELEVATION:**	N/A

NOTES:

Well Construction	Depth	Lithology		Sample Interval	Sample Recovery		PID (ppm)	Description	Remarks
	0		SP-SM				0	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt; dry; surface staining	**Sand**
			SM					Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry	**Silty Sand** **Collect GP-03A from 0 to 0.5 ft**
	5		SM				0	Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry	
			SM				0	Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry to moist	
	10								**Collect GP-03B from 11 to 11.5 ft** **Bottom of Boring at 12 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP04 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 9/11/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/11/2000
DRILLING METHOD: Direct Push			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** D.Auld
Diameter (in): 2.5	**Completion:** N/A		**NORTHING:** N/A
Total Depth (ft): 12.00	**Total Depth (ft):** N/A		**EASTING:** N/A
Sampler: Macrocore	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM				0	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt; dry; surface staining	**Sand**
			SM					Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry	**Silty Sand** **Collect GP-04A from 0 to 0.5 ft**
	5		SM				0	Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry	
			SM				0	Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry to moist	
	10								**Collect GP-04B from 11 to 11.5 ft** **Bottom of Boring at 12 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP05 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 9/11/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/11/2000
DRILLING METHOD: Direct Push			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** D.Auld
Diameter (in): 2.5	**Completion:** N/A		**NORTHING:** N/A
Total Depth (ft): 12.00	**Total Depth (ft):** N/A		**EASTING:** N/A
Sampler: Macrocore	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM				0	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt; dry; surface staining	**Sand**
			SM					Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry	**Silty Sand** **Collect GP-05A from 0 to 0.5 ft**
	5		SM				0	Dark yellowish orange (10YR6/6) medium to fine SAND, some Silt, trace fine Gravel; dry	
			SM				0	Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry to moist	
	10								**Collect GP-05B from 11 to 11.5 ft** **Bottom of Boring at 12 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP06 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 9/11/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/11/2000
DRILLING METHOD: Direct Push			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** D.Auld
Diameter (in): 2.5	**Completion:**	N/A	**NORTHING:** N/A
Total Depth (ft): 12.00	**Total Depth (ft):**	N/A	**EASTING:** N/A
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM				0	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt; dry; surface staining	**Sand**
			SM					Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry	**Silty Sand** **Collect GP-06A from 0 to 0.5 ft**
	5		SM				0	Dark yellowish orange (10YR6/6) medium to fine SAND, some Silt, trace fine Gravel; dry	
			SM				0	Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry to moist	
	10								**Collect GP-06B from 11 to 11.5 ft** **Bottom of Boring at 12 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP07 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 9/11/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/11/2000
DRILLING METHOD: Direct Push			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** D.Auld
Diameter (in): 2.5	**Completion:** N/A		**NORTHING:** N/A
Total Depth (ft): 12.00	**Total Depth (ft):** N/A		**EASTING:** N/A
Sampler: Macrocore	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM				0	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt; dry; surface staining	**Sand**
			SM					Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry	**Silty Sand** **Collect GP-07A from 0 to 0.5 ft**
	5		SP-SM				0	Dark yellowish orange (10YR6/6) medium to fine SAND, little Silt, some fine Gravel; dry	**Gravelly Sand**
	10		SM				0	Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry to moist	**Silty Sand** **Collect GP-07B from 11 to 11.5 ft** **Bottom of Boring at 12 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP08 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 9/11/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/11/2000
DRILLING METHOD: Direct Push			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** D.Auld
Diameter (in): 2.5	**Completion:** N/A		**NORTHING:** N/A
Total Depth (ft): 12.00	**Total Depth (ft):** N/A		**EASTING:** N/A
Sampler: Macrocore	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM				0	Dark yellowish brown (10YR4/2) coarse to fine SAND, little Silt; dry; surface staining	**Sand** **Collect GP-08A from 0 to 0.5 ft**
			SM					Dark yellowish orange (10YR6/6) medium to fine SAND, some Silt; dry	**Silty Sand**
	5		SM				0	Dark yellowish orange (10YR6/6) medium to fine SAND, some Silt, trace fine Gravel; dry	
			SM				0	Dark yellowish orange (10YR6/6) coarse to fine SAND, some Silt; dry to moist	
	10								**Collect GP-08B from 10 to 10.5 ft** **Bottom of Boring at 12 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP09 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 9/11/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/11/2000
DRILLING METHOD: Direct Push			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** D.Auld
Diameter (in): 2.5	**Completion:** N/A		**NORTHING:** N/A
Total Depth (ft): 12.00	**Total Depth (ft):** N/A		**EASTING:** N/A
Sampler: Macrocore	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM				0	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt; dry; surface staining	**Sand**
			SM					Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry	**Silty Sand** **Collect GP-08A from 0 to 0.5 ft**
	5		SM				0	Dark yellowish orange (10YR6/6) medium to fine SAND, some Silt, trace fine Gravel; dry	
			SM				0	Dark yellowish orange (10YR6/6) fine SAND, some Silt; dry to moist	
	10								**Collect GP-08B from 10 to 10.5 ft** **Bottom of Boring at 12 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP10 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 9/11/2000
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 9/11/2000
DRILLING METHOD: Direct Push			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** D.Auld
Diameter (in): 2.5	**Completion:**	N/A	**NORTHING:** N/A
Total Depth (ft): 12.00	**Total Depth (ft):**	N/A	**EASTING:** N/A
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM				0	Dusky yellowish brown (10YR2/2) medium to fine SAND, little Silt; dry; surface staining	**Sand**
			SM					Dark yellowish orange (10YR6/6), Pale yellowish orange (10YR6/2) fine SAND, some Silt; dry	**Silty Sand** **Collect GP-10A from 0 to 0.5 ft**
			SM				0	Dark yellowish orange (10YR6/6) medium to fine SAND, some Silt, trace fine Gravel; dry	
	5								
			SM				0	Dark yellowish orange (10YR6/6) coarse to fine SAND, some Silt; dry to moist	
	10								**Collect GP-10B from 10 to 11 ft** **Bottom of Boring at 12 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP-5A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Geoprobe			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 3	**Completion:** N/A		**NORTHING:** 304443.527
Total Depth (ft): 4.00	**Total Depth (ft):** N/A		**EASTING:** 372891.315
Sampler: Macrocore	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES: Soil samples were collected from the 6-12 inch and 30-36 inch intervals.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 2 4		SP-SM					Dusky yellowish brown (10YR2/2) coarse to fine SAND, little Silt; dry	Silty Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP-7A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Geoprobe			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 3	**Completion:**	N/A	**NORTHING:** 304317.081
Total Depth (ft): 4.00	**Total Depth (ft):**	N/A	**EASTING:** 372993.434
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: Soil samples were collected from the 6-12 inch and 30-36 inch intervals.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 2 4		SP-SM					Dusky yellowish brown (10YR2/2) coarse to fine SAND, little Silt; dry	Silty Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-11 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/23/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/23/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 372649.8921
Total Depth (ft): 16.00	**Total Depth (ft):**	N/A	**EASTING:** 304418.133
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 23.36
Depth to Water (ft): 12.2	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 In	PID (ppm)	Description	Remarks
	0		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	Sand
			SP					Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	
			SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	2								
	4		SP					Dark yellowish orange (10YR6/6), Light brown (5YR5/6) medium to fine SAND, trace Silt; dry.	Collect GP-11B at 4 ft
	6		SP					Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; dry.	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-11
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	8		SP					Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; dry.	
			SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	
	10								
	12		SP					Medium light gray (N6) medium to fine SAND, trace Silt; dry.	▽
			ML					Medium light gray (N6) SILT & CLAY, little fine Sand; moist.	**Silt & Clay**
			SM					Pale yellowish brown (10YR6/2) medium to fine SAND, some Silt; wet.	**Silty Sand**
	14								
			SP					Dark yellowish orange (10YR6/6), Moderate brown (10YR5/4) coarse to fine SAND, trace Silt; wet.	**Sand** **Bottom of Boring at 16 ft**
	16								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-12 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/23/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/23/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 372661.696
Total Depth (ft): 16.00	**Total Depth (ft):**	N/A	**EASTING:** 304419.7813
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 23.15
Depth to Water (ft): 12	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP					Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	**Sand, Possible staining, Collect GP-12A at 6 in**
			SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	2								
	4		SP					Dark yellowish orange (10YR6/6), Pale yellowish brown (10YR6/2), Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	**Collect GP-12B at 4 ft**
	6								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-12
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	8		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	
	10								
	12		ML					Medium light gray (N6) SILT& CLAY; moist	Silt & Clay
			ML					Medium light gray (N6) Medium to fine SAND, some Silt & Clay; moist.	Collect GP-12C at 12 ft
	14		SM					Pale yellowish brown (10YR6/2), Dark yellowish orange (10YR6/6) medium to fine SAND; with Silt & Clay partings; wet.	Silty Sand
			SP					Dark yellowish orange (10YR6/6) medium to fine SAND; wet.	Sand
	16								Bottom of Boring at 16 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP-12A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Geoprobe			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 3	**Completion:**	N/A	**NORTHING:** 304421.752
Total Depth (ft): 4.00	**Total Depth (ft):**	N/A	**EASTING:** 372659.818
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: Soil samples were collected from the 6-12 inch and 30-36 inch intervals.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 2 4		SP-SM					Dusky yellowish brown (10YR2/2) coarse to fine SAND, little Silt; dry	Silty Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-13 **WELL NO.:** N/A
CLIENT: New Jersey Department of Environmental Protection		**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ		**DATE STARTED:** 10/23/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.		**DATE FINISHED:** 10/23/2001
DRILLING METHOD: Macrocore		**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**	**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:** N/A	**NORTHING:** 372686.9487
Total Depth (ft): 16.00	**Total Depth (ft):** N/A	**EASTING:** 304437.0256
Sampler: Macrocore	**Screen Length/Slot:** N/A	**GROUND ELEVATION:** 23.37
Depth to Water (ft): 12.5	**Depth to Water (ft):** N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP					Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	Sand, Collect GP-13A at 8 in
			SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	2								
	4		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	Collect GP-13B at 4 ft
	6								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-13
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	8		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	
	10		SP					Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; dry.	
	12		CL-ML					Medium light gray (N6) CLAY & SILT; with 4 in layer of medium to fine SAND, some Clayey Silt; moist.	Clay & Silt ▽ Collect GP-13C at 12 ft
	14		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; wet.	Sand Bottom of Boring at 16 ft
	16								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-14 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/23/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/23/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 372670.5605
Total Depth (ft): 12.00	**Total Depth (ft):**	N/A	**EASTING:** 304465.3009
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 23.88
Depth to Water (ft): 12	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP					Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt, little medium to fine Gravel; dry.	**Sand, Possible staining, Collect GP-14A at 6 in**
	2		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	4		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	**Collect GP-14B at 4 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-14
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	6								
	8		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	
	10								Collect GP-14C at 11.5 ft
			SP					Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; dry.	Bottom of Boring at 12 ft
	12		ML					Medium light gray (N6) SILT & CLAY; moist.	Silt & Clay ▽

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP-14A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Geoprobe			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 3	**Completion:**	N/A	**NORTHING:** 304465.533
Total Depth (ft): 4.00	**Total Depth (ft):**	N/A	**EASTING:** 372670.301
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: Soil samples were collected from the 6-12 inch and 30-36 inch intervals.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 2 4		SP-SM					Dusky yellowish brown (10YR2/2) coarse to fine SAND, little Silt; dry	Silty Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-15 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/23/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/23/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 372645.6175
Total Depth (ft): 12.00	**Total Depth (ft):**	N/A	**EASTING:** 304455.2154
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 23.81
Depth to Water (ft): 12	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		GP					Grayish black (N2) coarse to fine GRAVEL, some coarse to fine Sand; dry.	Sandy Gravel
			SP					Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	Sand, Collect GP-15A at 6 in
	2		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	
	4		SP					Dark yellowish orange (10YR6/6), Ligtht brown (5YR5/6) medium to fine SAND, trace Silt; dry.	Collect GP-15B at 4 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-15
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	6								
	8		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	
	10								Collect GP-15C at 11 ft
	12		ML					Medium light gray (N6) SILT & CLAY, little fine Sand; moist.	Silt & Clay, Bottom of Boring at 12 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-16 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/23/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/23/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:** N/A		**NORTHING:** 372648.3508
Total Depth (ft): 16.00	**Total Depth (ft):** N/A		**EASTING:** 304432.027
Sampler: Macrocore	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** 23.76
Depth to Water (ft): 12.2	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		FILL					Black (N1) Asphalt/Road base.	Asphalt
			SP					Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	Sand, Collect GP-16A at 8 in
			SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt	
	2								
	4		SP					Dark yellowish orange (10YR6/6), Light brown (5YR5/6) medium to fine SAND, trace Silt; dry.	Collect GP-16B at 4 ft
	6								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-16
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	8		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	
	10								
	12		ML					Medium light gray (N6) Clayey SILT; moist.	Clayey Silt
			ML					Medium light gray (N6) Clayey SILT, some medium to fine Sand; wet.	Collect GP-16C at 12 ft
	14		SP					Dark yellowish orange (10YR6/6) coarse to fine SAND, trace Silt; wet.	Sand
	16								Bottom of Boring at 16 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-17 **WELL NO.:** N/A
CLIENT: New Jersey Department of Environmental Protection		**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ		**DATE STARTED:** 10/23/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.		**DATE FINISHED:** 10/23/2001
DRILLING METHOD: Macrocore		**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**	**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:** N/A	**NORTHING:** 372637.2307
Total Depth (ft): 16.00	**Total Depth (ft):** N/A	**EASTING:** 304418.4527
Sampler: Macrocore	**Screen Length/Slot:** N/A	**GROUND ELEVATION:** 23.73
Depth to Water (ft): 12.5	**Depth to Water (ft):** N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		FILL					Black (N1) Asphalt/Road base.	Asphalt
			SP					Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	Sand Collect GP-17A at 8 in
	2		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	4		SP					Dark yellowish orange (10YR6/6), Moderate yellowish brown (10YR5/4), Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; dry.	Collect GP-17B at 4 ft
	6								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-17
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	8		SP					Pale yellowish brown (10YR6/2), Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	
	10								
	12		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	Collect GP-17C at 12.5 ft ⧖
			CL-ML					Medium light gray (N6) CLAY & SILT; moist	Clay & Silt
	14		SC					Medium light gray (N6) medium to fine SAND, and Clay & Silt; wet.	Clayey Sand
			SP					Medium light gray (N6) coarse to fine SAND, trace Silt; wet.	Sand Bottom of Boring at 16 ft
	16								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-18 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/23/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/23/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 372640.182
Total Depth (ft): 12.00	**Total Depth (ft):**	N/A	**EASTING:** 304398.1301
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 23.02
Depth to Water (ft): 12	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM					Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt; dry.	**Sand** **Collect GP-18A at 6 in**
			SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	2								
	4		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	**Collect GP-18B at 4 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-18
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	6								
	8		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	
	10								**Collect GP-18C at 11.5 ft** **Bottom of Boring at 12 ft**
	12		ML					Pale yellowish brown (10YR6/2) Clayey SILT, some fine Sand; moist.	**Sandy Clayey Silt** ▽

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-19 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/23/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/23/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:** N/A		**NORTHING:** 372621.1917
Total Depth (ft): 12.00	**Total Depth (ft):** N/A		**EASTING:** 304401.0886
Sampler: Macrocore	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** 23.69
Depth to Water (ft): 11.5	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		FILL					Black (N1) Asphalt/Road base.	Asphalt
			SP					Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	Sand Collect GP-18A at 9 in
	2		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	4		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	Collect GP-18B at 4 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-19
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	6		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	8		SP					Dark yellowish orange (10YR6/6), Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; dry.	
	10								**Collect GP-19C at 11.3 ft**
			ML					Medium light gray (N6), Light brown (5YR5/6) Clayey SILT, little fine Sand; moist.	**Clayey Silt, Bottom of Boring at 12 ft**
	12								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-20 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/23/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/23/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 372607.2681
Total Depth (ft): 12.00	**Total Depth (ft):**	N/A	**EASTING:** 304421.68
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 23.85
Depth to Water (ft): 11.5	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		FILL					Grayish black (N2) Asphalt/Road base.	**Asphalt**
			SP					Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	**Sand , Stained** **Collect GP-20A at 8 in**
	2		SP					Moderate yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	
	4		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	**Collect GP-20B at 4 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-20
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	6		SP					Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt, dry.	
	8		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	Collect GP-20C at 11.3 ft
	10		ML					Medium light gray (N6), Light brown (5YR5/6) SILT & CLAY, little medium to fine Sand; moist.	Silt & Clay, Bottom of Boring at 12 ft
	12								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-21 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/23/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/23/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 372691.4955
Total Depth (ft): 12.00	**Total Depth (ft):**	N/A	**EASTING:** 304404.4954
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 23.11
Depth to Water (ft): 12	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SM					Dark yellowish brown (10YR4/2) medium to fine SAND, some Silt; with roots; dry.	**Silty Sand** **Collect GP-21A at 4 in**
	2		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	**Sand**
	4		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	**Collect GP-21B at 4 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-21
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	6								
	8		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	
	10								Collect GP-21C at 11.5 ft
	12		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; moist.	Bottom of Boring at 12 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-22 **WELL NO.:** N/A
CLIENT: New Jersey Department of Environmental Protection		**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ		**DATE STARTED:** 10/23/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.		**DATE FINISHED:** 10/23/2001
DRILLING METHOD: Macrocore		**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**	**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:** N/A	**NORTHING:** 372788.5402
Total Depth (ft): 12.00	**Total Depth (ft):** N/A	**EASTING:** 304333.5892
Sampler: Macrocore	**Screen Length/Slot:** N/A	**GROUND ELEVATION:** 21.15
Depth to Water (ft): 11.5	**Depth to Water (ft):** N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM					Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt; with roots; dry.	**Sand** **Collect GP-22A at 3 in**
			SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	2								
	4		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	**Collect GP-22B at 4 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-22
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	6								
	8		SP					Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	
	10								Collect GP-22C at 11.2 ft
	12		CL-ML					Medium light gray (N6) CLAY & SILT, some fine Sand; moist.	Sandy Clay & Silt, Bottom of Boring at 12 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-23 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/24/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/24/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 372982.2261
Total Depth (ft): 16.00	**Total Depth (ft):**	N/A	**EASTING:** 304561.6457
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 20.66
Depth to Water (ft): 12.5	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		ML					Grayish black (N2) SILT, some fine Sand; with wood; moist.	**Sandy Silt, Collect GP-22A at 3 in**
	2		SP					Moderate yellowish brown (10YR5/4), Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt, trace fine Gravel; dry.	**Sand**
	4		SP					Grayish black (N2) medium to fine SAND, little Silt; dry. Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	**Collect GP-22B at 4 ft**
	6								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691 Page 2 of 2	BORING NO.: GP-23 WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	8		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	10								
	12		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	Collect GP-23C at 12.1 ft ▽
			SP					Pale yellowish brown (10YR6/2), Light brown (5YR5/6) medium to fine SAND, trace Silt; wet.	
	14								
	16								Bottom of Boring at 16 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-24 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/24/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/24/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 372994.9636
Total Depth (ft): 12.00	**Total Depth (ft):**	N/A	**EASTING:** 304420.9209
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 19.57
Depth to Water (ft): 10	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 In	PID (ppm)	Description	Remarks
	0		FILL					Light brown (5YR5/6) Waste (Brick); dry.	**Brick**
			SP-SM					White (N9) medium to fine SAND, little Silt; dry.	**Sand**
			SP-SM					Black (N1) medium to fine SAND, little Silt; dry.	**Collect GP-24A at 8 in**
	2		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	4		SP					Moderate yellowish brown (10YR5/4), Light brown (5YR5/6) medium to fine SAND, trace Silt; dry.	**Collect GP-24B at 4 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-24
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	6								
	8		SP					Moderate yellowish brown (10YR5/4), Dark yellowish orange (10YR6/6), Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; dry.	Collect GP-24C at 9.5 ft
	10		ML					Pale yellowish brown (10YR6/2) Clayey SILT, some fine Sand; wet.	Sandy Clayey Silt
			SP					Dark yellowish orange (10YR6/6) coarse to fine SAND, trace Silt; wet.	Sand
	12								Bottom of Boring at 12 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP-24A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Geoprobe			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 3	**Completion:**	N/A	**NORTHING:** 304430.186
Total Depth (ft): 4.00	**Total Depth (ft):**	N/A	**EASTING:** 372980.396
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: Soil samples were collected from the 6-12 inch and 30-36 inch intervals.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 2 4		SP-SM					Dusky yellowish brown (10YR2/2) coarse to fine SAND, little Silt; dry	Silty Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-25 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/24/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/24/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 373173.1953
Total Depth (ft): 8.00	**Total Depth (ft):**	N/A	**EASTING:** 304173.717
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 16.16
Depth to Water (ft): 5.5	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		FILL					Wood Chips	Wood Chips
			SP-SM					Grayish black (N2) medium to fine SAND, little Silt; with wood chips; moist.	Sand, Collect GP-25A at 1 ft
	2		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	4		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	Collect GP-25B at 4 ft
									Collect GP-25C at 5 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-25
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	6		ML					Pale yellowish brown (10YR6/2) Clayey SILT, some fine Sand; wet.	Sandy Clayey Silt
	8		SP					Dark yellowish brown (10YR6/6) medium to fine SAND, trace Silt; wet.	Sand Bottom of Boring at 8 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP-25A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Geoprobe			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 3	**Completion:** N/A		**NORTHING:** 304170.049
Total Depth (ft): 4.00	**Total Depth (ft):** N/A		**EASTING:** 373172.35
Sampler: Macrocore	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES: Soil samples were collected from the 6-12 inch and 30-36 inch intervals.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM					Dusky yellowish brown (10YR2/2) coarse to fine SAND, little Silt; dry	Silty Sand
	2								
	4								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-26 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/24/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/24/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 373111.2252
Total Depth (ft): 12.00	**Total Depth (ft):**	N/A	**EASTING:** 304079.7105
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 17.15
Depth to Water (ft): 10.5	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		FILL					Wood Chips	**Wood Chips**
	2		SM					Dark yellowish brown (10YR4/2) medium to fine SAND, some Silt; dry.	**Silty Sand, Collect GP-25A at 1.8 ft**
			SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	4		SP-SM					Dark yellowish orange (10YR6/6) medium to fine SAND, little Silt; dry.	**Sand, Collect GP-25B at 4 ft**
			ML					Dark yellowish orange (10YR6/6) to Moderate yellowish brown (10YR5/4) Clayey SILT, little fine Sand; dry.	**Clayey Silt**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-26
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	6								
			SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	Sand
	8		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	10		SP-SM					Moderate yellowish brown (10YR5/4) medium to fine SAND, little Silt; with 1/2 in layers of Clayey Silt; wet.	Collect GP-25C at 10 ft ▽
	12								Bottom of Boring at 12 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-27 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/24/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/24/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 373161.3055
Total Depth (ft): 8.00	**Total Depth (ft):**	N/A	**EASTING:** 304395.0134
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 10.85
Depth to Water (ft): 4.1	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 In	PID (ppm)	Description	Remarks
	0		SM					Dark yellowish brown (10YR4/2) fine SAND, some Silt; dry	Silty Sand, Collect GP-27A at 3 in
	2		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	Sand
	4		SP					Moderate yellowish brown (10YR5/4) Dark yellowish brown (10Yr6/6) medium to fine SAND, trace Silt; wet.	▽ Collect GP-27B at 4 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-27
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	6								Bottom of Boring at 8 ft
	8								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-28 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/24/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/24/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 373231.7399
Total Depth (ft): 12.00	**Total Depth (ft):**	N/A	**EASTING:** 304264.399
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 13.61
Depth to Water (ft): 8	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP-SM					Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	**Sand, Collect GP-28A at 3 in**
			SM					Moderate yellowish brown (10YR5/4) fine SAND, some Silt; dry.	**Silty Sand**
	2								
	4		SP-SM					Dark yellowish orange (10YR6/6) medium to fine SAND, little Silt; dry.	**Sand** **Collect GP-28B at 4 ft**
			SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; with 2 in layer of Clayey Silt, little fine Sand; dry.	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-28
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	6		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	Collect GP-28C at 7.5 ft
	8		SP					Dark yellowish orange (10YR6/6) medium to fine SAND; wet.	▽
	10								
	12		CL-ML					Dark yellowish orange (10YR6/6) Silty CLAY; moist.	Silty Clay, Bottom of Boring at 12 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-29 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/24/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/24/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 373047.9717
Total Depth (ft): 8.00	**Total Depth (ft):**	N/A	**EASTING:** 303968.3139
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 15.46
Depth to Water (ft): 6	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 In	PID (ppm)	Description	Remarks
	0		FILL-B					Waste (Battery Casings), little fine Sand; dry.	Battery Casings
			SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	Sand Collect GP-29A at 1 ft
	2								
	4		SP-SM					Moderate yellowish brown (10YR5/4) medium to fine SAND, little Silt; dry.	Collect GP-29B at 4 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-29
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
									Collect GP-29C at 5.5 ft
	6		CL-ML					Moderate yellowish brown (10YR5/4), Medium light gray (N6) CLAY & SILT, little fine Sand; wet.	Clay & Silt, Possible perch zone.
			SP-SM					Medium light gray (N6) medium to fine SAND, little Silt; wet.	Sand Bottom of Boring at 8 ft
	8								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-30 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/24/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/24/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 372764.7938
Total Depth (ft): 12.00	**Total Depth (ft):**	N/A	**EASTING:** 304593.5529
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** 23.07
Depth to Water (ft): 11.8	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		FILL-W					Grayish black (N2) medium to fine SAND, some Silt; with Waste; dry.	**Silty Sand with Waste** **Collect GP-30A at 3 in**
	2		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	**Sand**
	4		SP					Dark yellowish orange (10YR6/6), Light brown (5YR5/6), Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	**Collect GP-30B at 4 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-30
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	6								
	8		SP					Moderate yellowish brown (10YR5/4), Dark yellowish orange (10YR6/6), Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; dry.	
	10								Collect GP-30C at 11.4 ft Bottom of Boring at 12 ft
	12		CL-ML					Pale yellowish brown (10YR6/2) CLAY & SILT, some fine Sand; moist.	Sandy Clay & Silt

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP-30A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Geoprobe			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 3	**Completion:**	N/A	**NORTHING:** 304590.687
Total Depth (ft): 4.00	**Total Depth (ft):**	N/A	**EASTING:** 372766.209
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: Soil samples were collected from the 6-12 inch and 30-36 inch intervals.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 2 4		SP-SM					Dusky yellowish brown (10YR2/2) coarse to fine SAND, little Silt; dry	Silty Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-31 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/24/2001
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 10/24/2001
DRILLING METHOD: Macrocore			**DRILLER:** J.Rausa
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B.Jankauskas
Diameter (in): 2	**Completion:** N/A		**NORTHING:** 372892.0029
Total Depth (ft): 16.00	**Total Depth (ft):** N/A		**EASTING:** 304646.6669
Sampler: Macrocore	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** 21.18
Depth to Water (ft): 12	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP					Moderate yellowish brown (10YR5/4), Grayish black (N2) medium to fine SAND; with trash; dry.	**Sand** **Collect GP-31A at 3 in**
	2		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	4		SP					Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	**Collect GP-31B at 4 ft**
	6								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-31
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	8		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
	10								Collect GP-31C at 11.5 ft
	12		CL-ML					Pale yellowish brown (10YR6/2) CLAY & SILT, little fine Sand; moist.	Clay & Silt
			SP					Pale yellowish brown (10YR6/2), Light brown (5YR5/6) medium to fine SAND, trace Silt; wet.	Sand
	14								
	16								Bottom of Boring at 16 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP-32 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Geoprobe			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 3	**Completion:**	N/A	**NORTHING:** 304585.289
Total Depth (ft): 4.00	**Total Depth (ft):**	N/A	**EASTING:** 372625.825
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: Soil samples were collected from the 6-12 inch and 30-36 inch intervals.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 2 4		SP-SM					Dusky yellowish brown (10YR2/2) coarse to fine SAND, little Silt; dry	Silty Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** GP-33 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Geoprobe			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 3	**Completion:**	N/A	**NORTHING:** 304430.541
Total Depth (ft): 4.00	**Total Depth (ft):**	N/A	**EASTING:** 372548.952
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: Soil samples were collected from the 6-12 inch and 30-36 inch intervals.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 2 4		SP-SM					Dusky yellowish brown (10YR2/2) coarse to fine SAND, little Silt; dry	Silty Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 2	**BORING NO.:** GP-34 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: CT&E Environmental Services, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Geoprobe			**DRILLER:** W.Pettley
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 3	**Completion:**	N/A	**NORTHING:** 304414.309
Total Depth (ft): 11.50	**Total Depth (ft):**	N/A	**EASTING:** 372649.622
Sampler: Macrocore	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: Soil samples were collected from the 6-12 inch and 30-36 inch intervals.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand
	2								
	4		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	
	6								
	8		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1691	BORING NO.: GP-34
	Page 2 of 2	WELL NO.: N/A

Well	Depth	Lith.	USCS	Interval	Rec.	Blows	PID	Description	Remarks
	10								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-1 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 10/23/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 10/23/2002
DRILLING METHOD: Hand Auger			**DRILLER:** B. Jankauskas
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B. Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 372668.2828
Total Depth (ft): 4.00	**Total Depth (ft):**	N/A	**EASTING:** 304390.3385
Sampler: Hand Auger	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SM					Dark yellowish brown (10YR4/2) medium to fine SAND, some Silt; with roots; dry.	**HA-1A from 0 to 0.5 ft.**
	1								
			SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	**Sand, Collect HA-1B from 3.5 to 4 ft.**
	2								
	3								**End of Log 4 ft.**
	4								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-2 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 10/26/02
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 10/26/02
DRILLING METHOD: Hand Auger			**DRILLER:** B. Jankauskas
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B. Jankauskas
Diameter (in): 2	**Completion:** N/A		**NORTHING:** 372925.3126
Total Depth (ft): 4.00	**Total Depth (ft):** N/A		**EASTING:** 304205.779
Sampler: Hand Auger	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES:

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SM					Dark yellowish brown (10YR4/2) medium to fine SAND, some (-) Silt; dry.	**Silty Sand, CollectHA-2A from 0 to 0.5 ft.**
	1		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	**Sand, Collect HA-2B from 3.5 to 4 ft.**
	2								
	3								**End of Log 4 ft.**
	4								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-3 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 10/26/02
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 10/26/02
DRILLING METHOD: Hand Auger			**DRILLER:** B. Jankauskas
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** B. Jankauskas
Diameter (in): 2	**Completion:**	N/A	**NORTHING:** 373070.9163
Total Depth (ft): 4.00	**Total Depth (ft):**	N/A	**EASTING:** 304431.9233
Sampler: Hand Auger	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: A soil sample was collected for chemical analysis from each one foot interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SM					Grayish Black (N2) medium to fine SAND, some Silt; with scrap metal; dry.	**Silty Sand, CollectHA-3A from 0 to 0.5 ft.**
	1		SP					Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	**Sand, Collect HA-3B from 3.5 to 4 ft.**
	2								
	3								
	4								**End of Log 4 ft.**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-4A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 304325.93
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 372688.609
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-4B **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:** N/A		**NORTHING:** 304305.505
Total Depth (ft): 1.00	**Total Depth (ft):** N/A		**EASTING:** 372685.736
Sampler: Trowel (stainless steel)	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-5A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 304319.85
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 372585.287
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-5B **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:** N/A		**NORTHING:** 304296.728
Total Depth (ft): 1.00	**Total Depth (ft):** N/A		**EASTING:** 372585.306
Sampler: Trowel (stainless steel)	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	**Sand**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-6A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 304314.702
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 372499.275
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-6B **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:** N/A		**NORTHING:** 304296.495
Total Depth (ft): 1.00	**Total Depth (ft):** N/A		**EASTING:** 372500.332
Sampler: Trowel (stainless steel)	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	**Sand**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-7A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 304362.274
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 372453.825
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-7B **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 304372.444
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 372440.809
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-8A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 304449.401
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 372514.681
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-8B **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 304453.146
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 372496.164
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-9A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 304546.008
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 372560.977
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-9B **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:** N/A		**NORTHING:** 304557.286
Total Depth (ft): 1.00	**Total Depth (ft):** N/A		**EASTING:** 372547.322
Sampler: Trowel (stainless steel)	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-10A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:** N/A		**NORTHING:** 304665.972
Total Depth (ft): 1.00	**Total Depth (ft):** N/A		**EASTING:** 372619.946
Sampler: Trowel (stainless steel)	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-10B **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:** N/A		**NORTHING:** 304675.371
Total Depth (ft): 1.00	**Total Depth (ft):** N/A		**EASTING:** 372606.646
Sampler: Trowel (stainless steel)	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-11A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 304749.049
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 372670.842
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand
	1								

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-11B **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:** N/A		**NORTHING:** 304766.389
Total Depth (ft): 1.00	**Total Depth (ft):** N/A		**EASTING:** 372660.234
Sampler: Trowel (stainless steel)	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-12A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 304769.23
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 372777.204
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	BORING NO.: HA-12B WELL NO.: N/A

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo, West Deptford, NJ				**DATE STARTED:**	4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.				**DATE FINISHED:**	4/9/2002
DRILLING METHOD: Hand Augers				**DRILLER:**	J.Kelly(LBG)
BOREHOLE DATA		**WELL DATA**		**INSPECTOR:**	J.Kelly
Diameter (in):	4	**Completion:**	N/A	**NORTHING:**	304789.032
Total Depth (ft):	1.00	**Total Depth (ft):**	N/A	**EASTING:**	372782.967
Sampler:	Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:**	N/A
Depth to Water (ft):	N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:**	N/A
Depth to Rock (ft):	N/A	**Permit No.:**	N/A		

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-13A **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:** N/A		**NORTHING:** 304770.815
Total Depth (ft): 1.00	**Total Depth (ft):** N/A		**EASTING:** 372881.921
Sampler: Trowel (stainless steel)	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** HA-13B **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:** N/A		**NORTHING:** 304791.489
Total Depth (ft): 1.00	**Total Depth (ft):** N/A		**EASTING:** 372885.005
Sampler: Trowel (stainless steel)	**Screen Length/Slot:** N/A		**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):** N/A		**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:** N/A		

NOTES: HA borings were completed from 0-6 inches below ground surface.
Soil samples were collected from the 0-6 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** T-1 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 304319.85
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 372585.287
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: A soil sample was collected from the 0-12 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** T-2 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 303091.527
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 373511.625
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: A soil sample was collected from the 0-12 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** T-3 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 302331
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 373642.103
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: A soil sample was collected from the 0-12 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** T-4 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 304184.466
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 373322.909
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: A soil sample was collected from the 0-12 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Drilling Log** Page 1 of 1	**BORING NO.:** T-5 **WELL NO.:** N/A

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo, West Deptford, NJ			**DATE STARTED:** 4/9/2002
DRILLING CONTRACTOR: The Louis Berger Group, Inc.			**DATE FINISHED:** 4/9/2002
DRILLING METHOD: Hand Augers			**DRILLER:** J.Kelly(LBG)
BOREHOLE DATA	**WELL DATA**		**INSPECTOR:** J.Kelly
Diameter (in): 4	**Completion:**	N/A	**NORTHING:** 302634.69
Total Depth (ft): 1.00	**Total Depth (ft):**	N/A	**EASTING:** 373396.933
Sampler: Trowel (stainless steel)	**Screen Length/Slot:**	N/A	**GROUND ELEVATION:** N/A
Depth to Water (ft): N/A	**Depth to Water (ft):**	N/A	**TOC ELEVATION:** N/A
Depth to Rock (ft): N/A	**Permit No.:**	N/A	

NOTES: A soil sample was collected from the 0-12 inch interval.

Well Construction	Depth	Lithology	USCS	Sample Interval	Sample Recovery	Blows/6 in	PID (ppm)	Description	Remarks
	0 1		SP					Brownish yellow (10YR 6/6) coarse to fine SAND, trace Silt; dry.	Sand

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP1A Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	9/6/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/6/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas
Length (ft):	15.00	**Material:**	Native	**NORTHING:**	373546.01
Width (ft):	3.00	**Compaction:**	Bucket	**EASTING:**	303111.88
Depth (ft):	2.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	3.20
Depth to Water (ft):	2.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0	<1	Dusky yellowish brown(10YR2/2), Moderate yellowish brown (10YR5/4) SILT, little fine Sand	**Silt with Waste**
	FILL-W	1	<1	Dusky yellowish brown(10YR2/2) SILT, little fine Sand; with Waste (batteries, fabric, metal case, glass, and hose)	**Collect sample TP-1A at 1.5 ft**
		2			**Bottom of Excavation at 2.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP1B Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	9/6/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/6/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas
Length (ft):	15.00	**Material:**	Native	**NORTHING:**	373513.57
Width (ft):	4.00	**Compaction:**	Bucket	**EASTING:**	303101.5
Depth (ft):	7.50	**Lifts (in):**	N/A	**GROUND ELEVATION:**	3.50
Depth to Water (ft):	2.50	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0	<1	Waste (glass, tires, battery casings, wood, rags)	Waste
		1	0-12		
		2			Collect Sample TP-1B at 2 ft ⧖
		3			
		4			
		5			Ground water dropped to 6 ft due to tidal influence
	ML	6	N/A	Dusty yellowish brown (10YR2/2) SILT & CLAY, trace fine Sand; wet	Silt & Clay
		7	<1		BottomofExcavation@ 7.5 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP1C Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	9/6/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/6/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas
Length (ft):	20.00	**Material:**	Native	**NORTHING:**	373459.39
Width (ft):	4.00	**Compaction:**	Bucket	**EASTING:**	303082.57
Depth (ft):	6.50	**Lifts (in):**	N/A	**GROUND ELEVATION:**	4.00
Depth to Water (ft):	3.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0	<1	Moderate brown (5YR4/4) fine medium SAND, little Silt; with Waste (glass, wood, household trash)	**Sand with Waste** **Collect sample TP-1C at 2.5 ft** ▽
	FILL-W	4	<1	Dusky yellowish brown(10YR2/2) SILT & CLAY, with Waste (glass and wood)	**Clayey Silt with Waste** **Stopped test pit to keep safe distance from the gas main** **Bottom of Excavation at 6.50 ft**
	ML	6	<1	Dusky yellowish brown (10YR2/2) SILT & CLAY	**Silt & Clay**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP2A Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:** 9/7/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:** 9/7/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:** B.Jankaukas
Length (ft):	85.00	**Material:**	Native	**NORTHING:** 373450.9
Width (ft):	4.00	**Compaction:**	Bucket	**EASTING:** 303175.94
Depth (ft):	8.00	**Lifts (in):**	N/A	**GROUND ELEVATION:** 4.00
Depth to Water (ft):	4.00	**Restoration:**	None	
Depth to Rock (ft):	N/A			

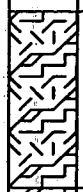
NOTES: Collected sample TP-2C below the waste.

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-M	0	2	Dark yellowish brown(10YR4/2) SILT, little fine Sand, with Waste (glass, wood, batteries)	**Silt with Waste**
		1			
	FILL-M		2	Black(N1) SILT; with Waste (glass, wood, and some battery casings)	
		2			
		3			**Collect sample TP-2A and TP-2B at 3 ft**
		4			⧖
		5	2		
		6			
		7			**Bottom of Excavation at 8.0 ft** **Collect sample TP-2C at 7 ft**
	CL-ML	8		Black(N1) CLAY & SILT	**Clay & Silt**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP3A Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	9/7/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/7/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas
Length (ft):	20.00	**Material:**	Native	**NORTHING:**	373409.34
Width (ft):	4.00	**Compaction:**	Bucket	**EASTING:**	303315.76
Depth (ft):	6.50	**Lifts (in):**	N/A	**GROUND ELEVATION:**	3.00
Depth to Water (ft):	2.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-M	0 1	<1	Waste (battery casings, glass, wood, and tires)	Waste
	FILL-B	2 3 4 5	<1	Waste (battery casings and glass)	⧖ Collect sample TP-3A at 1.5-2 ft
	CL-ML	6	<1	Black (N1) CLAY & SILT	Clay & Silt Bottom of Excavation at 6.5 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP3B Page 1 of 1

CLIENT:	New Jersey Department of Environmental Protection			**PROJECT NO:**	JG-1565
PROJECT:	Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:**	9/7/2000
EXCAVATION CONTRACTOR:	Green Contracting Co.			**DATE FINISHED:**	9/7/2000
EXCAVATOR:	Rubber Tire Backhoe			**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas
Length (ft):	20.00	**Material:**	Native	**NORTHING:**	373253.18
Width (ft):	4.00	**Compaction:**	Bucket	**EASTING:**	303087.1
Depth (ft):	15.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	4.10
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL	0	<1	Dark yellowish brown (10YR4/2) SILT, some fine Sand	Silt
	FILL-W	1 2 3	<1	Black(N1), Dark yellowish brown (10YR4/2) fine SAND, with Waste (sheet metal, brick, wood, and shoes)	Sand with Waste
	ML	4	<1	Dark yellowish brown (10YR4/2) SILT	Silt
	SP	5 6 7 8 9 10 11 12 13 14 15	<1	Greenish gray (5GY6/1) medium to fine SAND, trace Silt	Sand Collect sample TP-3B at 4.5 ft Bottom of Excavation at 15 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP4A Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/7/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/7/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas
Length (ft):	20.00	**Material:** Native	**NORTHING:** 373385.13
Width (ft):	4.00	**Compaction:** Bucket	**EASTING:** 303504.07
Depth (ft):	7.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 3.00
Depth to Water (ft):	2.50	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 1 2	<1	Moderate brown (5YR4/4) SILT with Waste (glass, wood, and household Waste)	**Silt with Waste** **Collect sample TP-4A at 2 ft**
	FILL-B	2 3 4 5 6	<1	Black(N1) Waste (batteries, tires), little Silt	**Waste** ▽
	CL-ML	6 7	<1	Black(N1) CLAY & SILT	**Clay & Silt** **Bottom of Excavation at 7.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP4B Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	9/7/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/7/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas
Length (ft):	20.00	**Material:**	Native	**NORTHING:**	373243.61
Width (ft):	4.00	**Compaction:**	Bucket	**EASTING:**	303457.93
Depth (ft):	4.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	5.00
Depth to Water (ft):	2.50	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 1	<1	Dark yellowish orange (10YR6/6) fine SAND, some Silt, with Waste(tires, wood, and plastic)	**Silty Sand with Waste**
	SP-SM	2 3 4	<1	Grayish orange (10YR7/4) fine SAND, little Silt	**Sand** **Collect sample TP-4B at 2 ft** ▽ **Bottom of Excavation at 4 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP4C Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/7/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/7/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas
Length (ft):	15.00	**Material:** Native	**NORTHING:** 373253.72
Width (ft):	4.00	**Compaction:** Bucket	**EASTING:** 303462.73
Depth (ft):	15.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 4.00
Depth to Water (ft):	6.00	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 – 1 – 2	<1	Moderate brown (5YR4/4) fine SAND, some Silt, with Waste (household and batteries); dry	**Silty Sand with Waste**
	FILL-B	2 – 3 – 4	<1	Waste (batteries); dry	**Waste**
	SP-SM	5 – 6	<1	Grayish orange (10YR7/4) fine SAND, little Silt; dry and moist	**Sand** **Collect sample TP-4C at 5 ft**
	CL	6 – 7 – 8 – 9 – 10 – 11 – 12	<1	Dusky yellow (5Y6/4) Silty CLAY, little fine Sand; moist	**Clay**
	GP	12 – 13	<1	Dark gray(N3) coarse to medium GRAVEL, some coarse to medium Sand, trace Silt; wet	**Gravel**
	CL	13 – 14 – 15	<1	Dusky yellow (5Y6/4) Silty CLAY, little fine Sand; moist	**Clay** **Collect sample TP-4D at 13-14 ft** **Bottom of Excavation at 15.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP5 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/8/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/8/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas
Length (ft):	20.00	**Material:** Native	**NORTHING:** 373291.23
Width (ft):	4.00	**Compaction:** Bucket	**EASTING:** 303721.16
Depth (ft):	7.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 6.00
Depth to Water (ft):	3.00	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0	<1	Dusky yellowish brown (10YR2/2) SILT; with Waste (metal, tires, glass); dry	Silt with Waste
	SM	1 2 3 4 5 6 7	<1	Moderate yellowish brown (10YR5/4) fine SAND, some Silt; dry	Silty Sand Collect sample TP-5A at 2.5 ft ▽ Bottom of Excavation at 7.0 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP6A Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	9/8/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/8/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas
Length (ft):	30.00	**Material:**	Native	**NORTHING:**	373403.11
Width (ft):	4.00	**Compaction:**	Bucket	**EASTING:**	302659.58
Depth (ft):	11.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	3.20
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL	0	<1	Grayish orange(10YR7/4) fine medium SAND, trace Silt; dry	**Sand**
	FILL-W FILL-W	1 2 3 4 5	20 0-30	Grayish black (N2) medium to fine SAND, trace Silt, little medium Gravel; with Waste (wood, plastic, and yellow material); dry Moderate yellowish brown(10YR5/4), Dark yellowish brown(10YR4/2), Dusky yellow(5Y6/4), Black (N1) fine medium SAND, trace Silt; with Waste (wood, 4 drums, plastic, yellow material); moist; odor	**Sand with Waste**
	SP	6 7 8 9 10 11	0-30	Dusky yellow (5Y6/4) fine medium SAND, trace Silt; moist	**Sand** **Collect sample TP-6A at 6 ft** **Collect sample TP-6B at 11 ft** **Bottom of Excavation at 11.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP6B Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	9/8/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/8/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas
Length (ft):	10.00	**Material:**	Native	**NORTHING:**	373447.86
Width (ft):	4.00	**Compaction:**	Bucket	**EASTING:**	302668.7
Depth (ft):	2.50	**Lifts (in):**	N/A	**GROUND ELEVATION:**	3.50
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 1 2	15	Waste (wood, 2 drums, metal, and pink material); with fine medium Sand, little Silt	**Waste with Sand** **Collect sample TP-6D at 1 ft (pink material, 70 ppm on PID)** **Collect sample TP-6C at 2.5 ft** **Bottom of Excavation at 2.5 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP7 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/8/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/8/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas
Length (ft):	30.00	**Material:** Native	**NORTHING:** 373148.7
Width (ft):	3.50	**Compaction:** Bucket	**EASTING:** 303428.89
Depth (ft):	15.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 7.70
Depth to Water (ft):	12.00	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0	<1	Dusky yellowish brown (10YR2/2) fine SAND and Silt; with Waste (brick, and burned pieces); dry	Silty Sand with Waste
	SP-SM	1	<1	Dark yellowish orange (10YR6/6) fine SAND, little Silt; dry	Sand Collect sample TP-7B at 1.5 ft
		2			
		3			
		4			
		5			
		6			
		7			
		8			
		9			
	SP-SM	10	<1	Dark yellowish orange (10YR6/6), Pale yellowish brown (10YR6/2) fine SAND, little Silt (varved); moist	Collect samplw TP-7A at 10-11 ft
	CL	11	<1	Dark yellowish orange (10YR6/6) Silty CLAY, trace medium Gravel; moist	Silty Clay ▽
		12			
		13			
		14			Bottom of Excavation at 15 ft
		15			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP8 Page 1 of 1

CLIENT:	New Jersey Department of Environmental Protection			**PROJECT NO:**	JG-1565
PROJECT:	Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:**	9/8/2000
EXCAVATION CONTRACTOR:	Green Contracting Co.			**DATE FINISHED:**	9/8/2000
EXCAVATOR:	Rubber Tire Backhoe			**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas
Length (ft):	20.00	**Material:**	Native	**NORTHING:**	373060.14
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	303541.4
Depth (ft):	13.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	10.50
Depth to Water (ft):	8.50	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP-SM	0	<1	Dusky yellowish brown (10YR2/2) fine SAND, little Silt; dry	Sand
	SC	1	<1	Dark yellowish orange (10YR6/6) fine SAND, and Clay	Clayey Sand
		2			
		3			
		4			
		5			
		6			
		7			
		8			Collect sample TP-8A at 8 ft ▽
	SC	9		Dark yellowish orange (10YR6/6), Light brown(5YR5/6), Pale yellowish brown(10YR6/2) fine SAND, and Clay; moist	
	CL	10	<1	Dark yellowish orange (10YR6/6) CLAY, some fine Sand, trace medium Gravel; moist	Clay
	CL	11	<1	Grayish black(N2) Silty CLAY; moist	Silty Clay
		12			Bottom of Excavation at 13.0 ft
		13			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP9 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	9/8/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/8/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas
Length (ft):	16.00	**Material:**	Native	**NORTHING:**	373373.63
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	304065.48
Depth (ft):	8.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	5.20
Depth to Water (ft):	3.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-B	0	<1	Waste (batteries), trace fine Sand; wet	Waste
		1			
		2			
		3			▽
		4			
		5			
		6			
		7			Collect sample TP-9A at 7.5 ft
	CL		<1	Medium gray (N5) CLAY; moist	Clay
		8			Bottom of Excavation at 8.0 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP10 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:** JG-1565	
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:** 9/11/2000	
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:** 9/11/2000	
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:** J.Galzanlichter	
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:** B.Jankaukas/C.Nagy	
Length (ft):	30.00	**Material:**	Native	**NORTHING:**	373277.88
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	303885.07
Depth (ft):	14.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	10.00
Depth to Water (ft):	13.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0	N/A	Dusky yellowish brown (10YR2/2) fine SAND, some Silt; dry	**Silty Sand**
	SP-SM	1 2 3 4 5 6 7 8 9 10 11	N/A	Dark yellowish orange (10YR6/6), Pale yellowish brown (10YR6/2), Light brown (5YR5/6) fine SAND, little Silt; dry to moist	**Sand** **Collect Sample TP-10A at 12 ft**
	SP	12	N/A	Dark yellowish orange (10YR6/6) fine SAND, little Clay & Silt; dry and moist	**Bottom of Excavation at 14.0 ft**
	CL	13 14	N/A	Dusky yellowish brown (10YR2/2) Silty CLAY; moist	**Silty Clay**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP11 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/11/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/11/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas/C.Nagy
Length (ft):	26.00	**Material:** Native	**NORTHING:** 373211.5
Width (ft):	3.50	**Compaction:** Bucket	**EASTING:** 304076.15
Depth (ft):	10.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 14.20
Depth to Water (ft):	N/A	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-B	0	N/A	Dark yellowish orange (10YR6/6) fine SAND, some Silt; with Waste (batteries); dry	**Silty Sand with Waste**
		1			**Collect sample TP-11A at 2 ft**
	SP-SM	2	N/A	Dark yellowish orange (10YR6/6), Pale yellowish brown(10YR6/2), Light brown (5YR5/6) fine SAND, little Silt; moist	**Sand**
		3			
		4			
		5			
		6			
		7			
		8			
		9			**Bottom of Excavation at 10.0 ft**
		10			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP12 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/11/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/11/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas/C.Nagy
Length (ft):	20.00	**Material:** Native	**NORTHING:** 373319.86
Width (ft):	3.50	**Compaction:** Bucket	**EASTING:** 303988.98
Depth (ft):	1.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 8.50
Depth to Water (ft):	N/A	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0	N/A	Dusky yellowish brown (10YR2/2) fine SAND, some Silt; dry	**Silty Sand** **Bottom of Excavation at 1.0 ft**
		1			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP13 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 9/11/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/11/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas/C.Nagy
Length (ft):	20.00	**Material:** Native	**NORTHING:** 373337.29
Width (ft):	3.50	**Compaction:** Bucket	**EASTING:** 304044.46
Depth (ft):	10.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 7.50
Depth to Water (ft):	7.00	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-B	0	N/A	Waste (batteries, wood, and tires); dry and wet	Waste ▽ Collect sample TP-13A at 9.5 ft Bottom of Excavation at 10.0 ft
	SP-SM	9	N/A	Dark gray (N3) fine medium SAND, little Silt; wet	Sand
	CL	10	N/A	Grayish black (N2) CLAY; moist	Clay

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP14 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	9/11/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/11/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	30.00	**Material:**	Native	**NORTHING:**	373310.21
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	304013.68
Depth (ft):	7.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	11.00
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-B	0	N/A	Grayish black (N2) Waste (batteries and wood); dry	**Waste** **Collect sample TP-14A at 6.5 ft**
	SP-SC	6	N/A	Dark yellowish orange (10YR6/6), Pale yellowish brown (10YR6/2), Light brown (5YR5/6) fine SAND, little Clay; moist	**Sand** **Bottom of Excavation at 7.0 ft**
		7			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP15 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/11/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/11/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	28.00	**Material:**	Native	**NORTHING:**	373308.98
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	304252.62
Depth (ft):	9.50	**Lifts (in):**	N/A	**GROUND ELEVATION:**	7.00
Depth to Water (ft):	5.50	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-B	0	<1	Waste (batteries and cloth); dry	Waste
		1			
		2			
		3			
		4			
		5			▽
	FILL-B	6		Waste (batteries and cloth); wet	
		7			
		8			Collect sample TP-15A at 9.5 ft Bottom of Excavation at 9.5 ft
	CL	9	<1	Dark greenish gray (5GY4/1) Silty CLAY, little fine Sand; moist	Silty Clay

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP16 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/11/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/11/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	23.00	**Material:**	Native	**NORTHING:**	373334.56
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	304140.01
Depth (ft):	11.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	8.50
Depth to Water (ft):	6.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL	0	<1	Dark yellowish brown (10YR4/2) fine SAND, little Silt; dry	Sand
	FILL-B	1	<1	Waste (batteries); dry	Waste
		2			
		3			
		4			
		5			
	FILL-B	6		Waste (batteries); wet	▽
		7			
		8			
		9			
		10			Collect sample TP-16A at 10.5 ft
	CL	11	<1	Dark greenish gray (5GY4/1) CLAY, little fine Sand; wet	Clay Bottom of Excavation at 11.0 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP17 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/11/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/11/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	24.00	**Material:**	Native	**NORTHING:**	373283.14
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	304171.17
Depth (ft):	7.50	**Lifts (in):**	N/A	**GROUND ELEVATION:**	12.00
Depth to Water (ft):	7.50	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP-SM	0	<1	Dusky yellowish brown (10YR2/2) fine SAND, little Silt; dry	**Sand**
	FILL-B	1 2 3 4 5	<1	Waste (batteries, metal and wood); dry to moist	**Waste**
	SP-SM	6 7	<1	Dark yellowish orange (10YR6/6), Pale yellowish brown (10YR6/2), Light brown (5YR5/6) fine SAND, little Silt; moist	**Sand** **Collect sample TP-17A at 6 ft** **Bottom of Excavation at 7.5 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP18 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/12/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/12/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	20.00	**Material:**	Native	**NORTHING:**	373100.75
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	304592.78
Depth (ft):	9.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	10.00
Depth to Water (ft):	8.50	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-B	0	<1	Waste (batteries); dry and moist	**Waste**
		1			
		2			
		3			
		4			
		5			
		6			
		7			
		8			**Collect sample TP-18 at 8 ft**
	ML-CL		<1	Olive gray (5Y4/1), Dark yellowish orange (10YR6/6) Clayey SILT; moist	**Clayey Silt** ▽ **Bottom of Excavation at 9.0 ft**
		9			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP19 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/12/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/12/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	15.00	**Material:**	Native	**NORTHING:**	373156.7
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	304428.03
Depth (ft):	7.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	7.00
Depth to Water (ft):	7.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0	<1	Dark yellowish brown (10YR4/2) coarse SAND; dry	**Sand** **Collect sample TP-19 at 7 ft**
	OH	6	<1	Dark greenish gray (5GY4/1) Organic SILT (very high plasticity); moist	**Organic Silt** **Bottom of Excavation at 7.0 ft**
		7			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP20 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/12/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/12/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	16.00	**Material:**	Native	**NORTHING:**	373252.04
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	304346.54
Depth (ft):	9.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	11.50
Depth to Water (ft):	9.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0	<1	Pale yellowish brown (10YR6/2) coarse SAND; dry	**Sand**
		1			
		2			
		3			
		4			
		5			
		6			
		7			
		8			**Collect sample TP-20 at 9 ft**
	SM		<1	Light brown (5YR5/6) fine SAND, some Silt; moist	**Silty Sand**
		9			**Bottom of Excavation at 9.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP21 Page 1 of 1

CLIENT:	New Jersey Department of Environmental Protection			**PROJECT NO:**	JG-1565
PROJECT:	Matteo Iron + Metal, West Deptford, NJ			**DATE STARTED:**	9/12/2000
EXCAVATION CONTRACTOR:	Green Contracting Co.			**DATE FINISHED:**	9/12/2000
EXCAVATOR:	Rubber Tire Backhoe			**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	18.00	**Material:**	Native	**NORTHING:**	373218.05
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	304291.47
Depth (ft):	12.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	15.00
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0	N/A	Grayish orange (10YR7/4), Pale yellowish orange (10YR8/6) fine SAND, some Silt; moist	**Silty Sand**
		1			
		2			
		3			
		4			
		5			
		6			
		7			
		8			
		9			
	SP	10	N/A	Dark yellowish orange(10YR6/6) coarse SAND; moist	**Sand** **Collect sample TP-21 at 12 ft** **Bottom of Excavation at 12.0 ft**
		11			
		12			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	TEST PIT NO.: TP22 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/12/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/12/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	18.00	**Material:**	Native	**NORTHING:**	372917.54
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	303128.97
Depth (ft):	14.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	4.60
Depth to Water (ft):	13.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0	<1	Dusky brown (5YR2/2) fine SAND, some Silt; dry	**Silty Sand**
	SP	1	<1	Dark yellowish orange (10YR6/6) coarse SAND; moist	**Sand**
		2			
		3			
		4			
		5			
		6			
		7			
		8			
		9			
		10			
		11			
		12			
		13			**Collect sample TP-22 at 13 ft** ▽
	CL	14	<1	Medium bluish gray (5B5/1) CLAY; wet	**Clay** **Bottom of Excavation at 14.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP23 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/12/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/12/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	24.00	**Material:**	Native	**NORTHING:**	372704.54
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	303155.63
Depth (ft):	14.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	5.10
Depth to Water (ft):	13.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0	<1	Dusky brown(5YR2/2) fine SAND, some Silt; dry	Silty Sand
	SP	1	<1	Dark yellowish orange (10YR6/6) coarse SAND; moist	Sand
		2			
		3			
		4			
		5			
		6			
		7			
		8			
		9			
		10			
		11			
		12			Collect sample TP-23 at 13 ft
	SP	13	<1	Pale yellowish brown (10YR6/2) coarse SAND, trace fine Gravel; wet	▽ Bottom of Excavation at 14.0 ft
		14			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP24 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/12/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/12/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	19.00	**Material:**	Native	**NORTHING:**	372717.14
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302968.96
Depth (ft):	9.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	4.70
Depth to Water (ft):	8.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0	<1	Dusky brown (5YR2/2) fine SAND, some Silt; moist	**Silty Sand**
	SP	1	<1	Light brown (5YR5/6) coarse SAND; moist.	**Sand**
		2			
		3			
		4			
		5			
		6			
		7			**Collect sample TP-24 at 8 ft**
	CL	8	<1	Medium bluish gray (5B5/1) Silty Clay, trace Gravel; wet	**Silty Clay** **Bottom of Excavation at 9.0 ft**
		9			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP25 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/12/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/12/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	19.00	**Material:**	Native	**NORTHING:**	372634.9
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302367.12
Depth (ft):	9.50	**Lifts (in):**	N/A	**GROUND ELEVATION:**	3.30
Depth to Water (ft):	2.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0	<1	Dusky brown (5YR2/2) fine SAND, some Silt; moist	**Silty Sand**
	SP	1	<1	Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt, trace medium to fine Gravel; wet	**Sand** ▽ **Collect sample TP-25 at 2 ft**
		2			
		3			
		4			
		5			
		6			
		7			
	CL	8	<1	Medium dark gray (N4) CLAY, trace fine Sand; moist	**Clay** **Bottom of Excavation at 9.5 ft**
		9			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP26 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ			**DATE STARTED:** 9/12/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/12/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas/C.Nagy
Length (ft):	19.00	**Material:** Native	**NORTHING:** 372962.29
Width (ft):	3.50	**Compaction:** Bucket	**EASTING:** 302575.65
Depth (ft):	10.50	**Lifts (in):** N/A	**GROUND ELEVATION:** 3.90
Depth to Water (ft):	8.00	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	ML	0	<1	Pale yellowish brown (10YR6/2) SILT; dry	**Silt**
	SP	1	<1	Dark yellowish orange (10YR6/6), Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; dry	**Sand**
		2			
	SP	3	<1	Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt, some medium to fine Gravel; moist	**Gravelly Sand**
		4			
	SP	5	<1	Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; dry	**Sand**
		6			
	SP	7	<1	Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt, some medium to fine Gravel; moist	**Gravelly Sand**
	SP	8	<1	Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; wet	**Sand** **Collect sample TP-26 at 8.5 ft** **Bottom of Excavation at 10.5 ft**
		9			
	SP	10	<1	Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt and medium to fine Gravel; wet	**Gravelly Sand**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP27 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/13/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/13/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	19.00	**Material:**	Native	**NORTHING:**	373584.05
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302358.98
Depth (ft):	3.50	**Lifts (in):**	N/A	**GROUND ELEVATION:**	3.50
Depth to Water (ft):	3.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 1 2 3	<1	Moderate yellowish brown (10YR5/4) Clayey SILT; with Waste(little pieces of battery casings on surface); moist	**Clayey Silt with Waste** **Collect sample TP-27A at 1.5 ft** **Collect sample TP-27B at 3 ft** **Bottom of Excavation at 3.5 ft**
	SM		<1	Dark greenish gray (5G4/1) fine SAND, trace Silt; wet	**Sand**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP28 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/13/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/13/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	21.00	**Material:**	Native	**NORTHING:**	373599.41
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302186.64
Depth (ft):	4.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	3.50
Depth to Water (ft):	4.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 1 2 3	<1	Dusky yellowish brown (10YR2/2) fine SAND, trace medium Gravel; with Waste (some pieces of battery casings at the surface); moist	**Sand with Waste** **Collect sample TP-28C at 0.5 ft** **Collect sample TP-28A at 2 ft**
	SM	3 4	<1	Dark greenish gray (5GY4/1) Silty CLAY; wet	**Silty Clay** **Collect sample TP-28B at 4 ft** **Bottom of Excavation at 4.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP29 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/13/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/13/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	19.00	**Material:**	Native	**NORTHING:**	373567.51
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302086.55
Depth (ft):	10.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	2.50
Depth to Water (ft):	10.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0	<1	Dusky yellowish brown (10YR2/2) fine SAND, trace Silt, and trace medium Gravel; wet	**Sand**
	SP	1	<1	Dark yellowish orange (10YR6/6) coarse SAND, trace Silt, trace medium Gravel; wet	
		2			
		3			
		4			
		5			
		6			
		7			
		8			
		9			**Collect sample TP-29 at 10 ft**
		10			**Bottom of Excavation at 10.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP30 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/13/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/13/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	18.00	**Material:**	Native	**NORTHING:**	373468.99
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302210.43
Depth (ft):	12.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	4.00
Depth to Water (ft):	12.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0	<1	Pale yellowish brown (10YR6/2) fine SAND, trace Silt; dry	**Sand**
	SP	1	<1	Grayish orange (10YR7/4), Dark yellowish orange (10YR6/6) fine SAND, little fine Gravel; dry	
	SP	3	<1	Dark yellowish brown (10YR6/6), Light brown (5YR5/6) medium SAND, little fine Gravel; wet	
		10			**Collect sample TP-30 at 12 ft** **Bottom of Excavation at 12.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP31 Page 1 of 1

CLIENT:	New Jersey Department of Environmental Protection			**PROJECT NO:**	JG-1565
PROJECT:	Matteo Iron + Metal, West Deptford, NJ			**DATE STARTED:**	9/13/2000
EXCAVATION CONTRACTOR:	Green Contracting Co.			**DATE FINISHED:**	9/13/2000
EXCAVATOR:	Rubber Tire Backhoe			**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	28.00	**Material:**	Native	**NORTHING:**	373572.88
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302185.72
Depth (ft):	4.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	4.50
Depth to Water (ft):	3.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-M	0 1 2	<1	Dusky yellowish brown (10YR2/2) fine SAND, trace Silt; with Waste (batteries); moist	Sand with Waste
	SP	2		Dusky yellowish brown (10YR2/2) fine SAND, trace Silt; moist	Sand Collect sample TP-31 at 3 ft ▽
	SP	3 4	<1	Grayish orange (10YR7/4) medium SAND, trace medium Gravel; wet	Bottom of Excavation at 4.0 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP32 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/13/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/13/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	17.00	**Material:**	Native	**NORTHING:**	373430.91
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302246.59
Depth (ft):	2.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	2.80
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0	<1	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt; with Waste (concrete, metal, hose, layer of fiber board on surface)	**Sand with Waste** **Collect sample TP-32 at 2 ft**
	SP-SM	1		Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt; dry	**Sand** **Bottom of Excavation at 2.0 ft**
		2			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP33 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/13/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/13/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	15.00	**Material:**	Native	**NORTHING:**	373419.08
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302178.37
Depth (ft):	3.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	2.80
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0	<1	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt; with Waste (concrete, layer of melted Styrofoam on surface); dry	**Sand with Waste**
	SP	1 2 3	<1	Grayish orange (10YR7/4) fine medium SAND, trace Silt, trace medium Gravel; dry	**Sand** **Bottom of Excavation at 3.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP34 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/13/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/13/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	19.00	**Material:**	Native	**NORTHING:**	373472.32
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302379.57
Depth (ft):	3.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	4.00
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 1	4	Pale yellowish brown (10YR6/2), Grayish green (5G5/2) fine SAND, little Silt; with Waste (roof shingles); dry	**Sand with Waste**
	SM	2	<1	Dark yellowish orange (10YR6/6) fine SAND, some Silt, trace medium Gravel; dry	**Silty Sand** **Collect sample TP-34 at 2 ft**
	SP-SM	3	<1	Dark yellowish brown (10YR6/6) fine SAND, little Silt, little medium Gravel; dry	**Sand** **Bottom of Excavation at 3.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP35 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/14/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/14/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	19.00	**Material:**	Native	**NORTHING:**	373683.88
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302564.18
Depth (ft):	6.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	3.00
Depth to Water (ft):	5.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0	<1	Dark yellowish brown (10YR4/2) SILT, trace fine Sand; with Waste (household); dry	**Silt with Waste**
	FILL-M	1	<1	Dark yellowish orange (10YR6/6) fine SAND, trace Silt; with Waste (household, batteries); moist	**Sand with Waste**
		2			
		3			
	SP	4		Dark yellowish orange (10YR6/6) fine SAND, trace Silt; moist	**Sand** **Collect sample TP-35 at 5 ft**
	CL	5	<1	Dark greenish gray (5G4/1) Silty CLAY; moist	**Silty Clay** **Bottom of Excavation at 6.0 ft**
		6			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP36 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ			**DATE STARTED:** 9/14/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/14/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas/C.Nagy
Length (ft):	20.00	**Material:** Native	**NORTHING:** 373612.42
Width (ft):	3.50	**Compaction:** Bucket	**EASTING:** 302548.07
Depth (ft):	13.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 3.10
Depth to Water (ft):	13.00	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-M	0	<1	Dark yellowish brown (10YR4/2) SILT, fine Sand; with Waste (household, batteries); dry	**Silt with Waste**
		1			
		2			**Collect sample TP-36A at 3 ft**
		3			
	SC	4	<1	Medium bluish gray (5B5/1) medium SAND, some Silty Clay; dry	**Clayey Sand**
	SC		<1	Pale yellowish brown (10YR6/2) medium SAND, some Clay, trace medium Gravel; moist	
		5			
		6			
		7			
		8			
		9			
		10			
		11			**Collect sample TP-36B at 13 ft**
		12			**Bottom of Excavation at 13.0 ft**
		13			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP37 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/14/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/14/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	16.00	**Material:**	Native	**NORTHING:**	373567.24
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302551.33
Depth (ft):	13.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	4.20
Depth to Water (ft):	13.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL	0	<1	Dark yellowish brown (10YR4/2) SILT, fine Sand; with Waste (household); dry	**Silt with Waste**
	ML	1 2	<1	Pale yellowish brown (10YR6/2) SILT, some medium Sand; dry	**Sandy Silt**
	SP	3 4 5 6 7 8 9 10 11 12 13	<1	Dark yellowish orange (10YR6/6) medium SAND, trace Silt, little medium Gravel; dry to moist	**Sand** **Collect sample TP-37 at 13 ft** **Bottom of Excavation at 13.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP38 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/14/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/14/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	19.00	**Material:**	Native	**NORTHING:**	373638.34
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302680.96
Depth (ft):	5.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	3.00
Depth to Water (ft):	4.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0	<1	Dark yellowish brown (10YR4/2) fine Sand, some Silt; with Waste (household); dry	**Silty Sand with Waste** **Collect sample TP-38 at 4 ft**
	CL	4	<1	Dark greenish gray (5G4/1) Silty CLAY; wet	**Silty Clay** **Bottom of Excavation at 5.0 ft**
		5			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP39 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/14/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/14/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	21.00	**Material:**	Native	**NORTHING:**	373549.93
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302658.45
Depth (ft):	10.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	3.80
Depth to Water (ft):	10.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	ML	0	<1	Dark yellowish brown 10YR4/2) fine Sand, some Silt; with Waste (tires on surface); dry	**Silty Sand**
		1			
		2			
		3			
	SC	4	<1	Dark yellowish brown (10YR6/6) medium SAND, some Clay, trace medium Gravel; dry	**Clayey Silt**
		5			
		6			
		7			
		8			
		9			**Collect sample TP-39 at 10 ft** **Bottom of Excavation at 10.0 ft**
		10			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP40 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/14/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/14/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	19.00	**Material:**	Native	**NORTHING:**	373540.27
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302901.77
Depth (ft):	10.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	4.00
Depth to Water (ft):	9.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-M	0	<1	Dusky yellowish brown (10YR2/2), Light brown (5YR5/6) SILT, little fine Sand; with Waste (household, batteries); dry	**Silt with Waste**
		1			
		2			
		3			
	FILL-W	4	<1	Dark greenish gray (5GY4/1) Clayey SILT, trace fine Sand; with Waste (hoousehold); moist	**Silt with Waste**
		5			
		6			
		7			
		8			**Collect sample TP-40 at 9 ft**
	CL	9	<1	Dark greenish black (5GY2/1) CLAY, trace Silt; wet	**Clay** **Bottom of Excavation at 10.0 ft**
		10			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP41 Page 1 of 1

CLIENT:	New Jersey Department of Environmental Protection			**PROJECT NO:**	JG-1565
PROJECT:	Matteo Iron + Metal, West Deptford, NJ			**DATE STARTED:**	9/14/2000
EXCAVATION CONTRACTOR:	Green Contracting Co.			**DATE FINISHED:**	9/14/2000
EXCAVATOR:	Rubber Tire Backhoe			**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	22.00	**Material:**	Native	**NORTHING:**	373623.57
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302333.8
Depth (ft):	7.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	3.00
Depth to Water (ft):	3.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-B	0	<1	Waste (batteries); with Dusky yellowish brown (10YR2/2) fine SAND some Silt; moist	**Waste with Silty Sand**
		1			
		2			
		3			▽
		4			
		5			
		6			**Collect sample TP-41 at 6 ft**
	SP		<1	Medium bluish gray (5B5/1) medium SAND, trace Silt; wet	**Sand** **Bottom of Excavation at 7.0 ft**
		7			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP42 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/14/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/14/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	21.00	**Material:**	Native	**NORTHING:**	373584.39
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302293.73
Depth (ft):	9.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	4.00
Depth to Water (ft):	9.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-M	0	<1	Moderate brown (5YR4/4) fine SAND, some Silt; with Waste (batteries); moist	**Silty Sand with Waste**
		1			
		2			**Collect sample TP-42A at 3 ft**
		3			
	SP		<1	Medium bluish gray (5B5/1) medium to fine SAND, little medium Gravel; moist	**Sand**
	SP	4	<1	Dark yellowish orange (10YR6/6) medium to fine SAND, trace medium Gravel; moist	
		5			
		6			
		7			
		8			**Collect sample TP-42B at 9 ft** **Bottom of Excavation at 9.0 ft**
		9			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP43 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/14/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/14/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	17.00	**Material:**	Native	**NORTHING:**	373282.47
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302584.19
Depth (ft):	13.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	3.40
Depth to Water (ft):	13.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0	<1	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt; dry	Sand
	SP	2	<1	Dark yellowish brown (10YR6/6) fine SAND, trace Silt, trace medium Gravel; moist	
	SP	10	<1	Pale yellowish brown (10YR6/2) medium SAND, trace Silt, trace medium Gravel; moist	Collect sample TP-43 at 13 ft Bottom of Excavation at 13.0 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP44 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/14/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/14/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	20.00	**Material:**	Native	**NORTHING:**	373242.07
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	302895.74
Depth (ft):	3.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	4.00
Depth to Water (ft):	2.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-M	0 1 2	<1	Moderate brown (5YR3/4) Clayey SILT, little fine Sand; with Waste (batteries, construction material); dry	**Organic Silt with Waste** **Collect sample TP-44 at 2 ft**
	CL	2 3	<1	Dark greenish gray (5GY4/1) Silty CLAY; moist	**Silty Clay** **Bottom of Excavation at 3.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP45 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	9/14/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/14/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	45.00	**Material:**	Native	**NORTHING:**	373371.31
Width (ft):	3.00	**Compaction:**	Bucket	**EASTING:**	302813.26
Depth (ft):	3.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	4.00
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 1	>100	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt; with Waste (wood, black materials, 2 crushed drums); dry	**Sand with Waste** **Collect sample TP-45A at 1.5 ft**
	SP	2 3	<10	Grayish orange (10YR7/4) medium SAND, trace Silt, little medium Gravel; dry	**Sand** **Collect sample TP-45B at 2 ft** **Bottom of Excavation at 3.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP46 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ			**DATE STARTED:** 9/15/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/15/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas/C.Nagy
Length (ft):	21.00	**Material:** Native	**NORTHING:** 372997.91
Width (ft):	3.50	**Compaction:** Bucket	**EASTING:** 303222.48
Depth (ft):	15.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 5.90
Depth to Water (ft):	15.00	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP-SM	0	<1	Dark yellowish brown (10YR4/2) fine SAND, little Silt; dry	Sand
	SP-SM	1	<1	Dark yellowish orange (10YR6/6), Dusky yellowish green (5GY5/1) medium SAND, little Silt; dry	
	SP	2	<1	Grayish orange (10YR7/4) medium SAND, trace Silt, trace medium Gravel; dry	
	SP	3	<1	Moderate yellowish brown (10YR5/4), Grayish orange (10YR7/4) medium SAND, trace Silt, trace medium Gravel; moist	
		4			
		5			
		6			
		7			
		8			
		9			
		10			
		11			
		12			
		13			
	SP	14	<1	Moderate yellowish brown (10YR5/4) coarse SAND, trace Silt, little medium Gravel; wet	Collect sample TP-46 at 15 ft Bottom of Excavation at 15.0 ft
		15			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP47 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ			**DATE STARTED:** 9/15/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/15/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas/C.Nagy
Length (ft):	19.00	**Material:** Native	**NORTHING:** 372661.05
Width (ft):	3.50	**Compaction:** Bucket	**EASTING:** 304046.13
Depth (ft):	13.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 20.00
Depth to Water (ft):	13.00	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0	<1	Dark yellowish brown (10YR4/2) fine SAND, some Silt; dry	**Silty Sand**
	SP	1 2 3 4 5 6 7 8	<1	Grayish orange (10YR7/4) medium to fine SAND, trace Silt, trace medium Gravel; dry	**Sand**
	SC	9 10	<1	Light bluish gray (5B7/1), Dark yellowish orange (10YR6/6) fine SAND, some Silty Clay; moist	**Clayey Sand** **Collect sample TP-47 at 13 ft**
	SP	11 12 13	<1	Grayish orange (10YR7/4) SAND, trace Silt, trace medium Gravel; moist	**Sand** **Bottom of Excavation at 13.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP48 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ			**DATE STARTED:** 9/15/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/15/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas/C.Nagy
Length (ft):	15.00	**Material:** Native	**NORTHING:** 372773.48
Width (ft):	3.50	**Compaction:** Bucket	**EASTING:** 304020.99
Depth (ft):	9.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 19.50
Depth to Water (ft):	N/A	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0	<1	Dark yellowish gray (10YR4/2) fine SAND, trace Silt; dry	**Sand**
	SP	1	<1	Grayish orange (10YR7/4) medium SAND, trace fine Gravel; dry	**Collect sample TP-48A at 1 ft**
		2			
		3			
	SP	4	<1	Dark yellowish orange (10YR6/6) fine SAND, trace Silt; dry	
		5			
		6			
		7			**Collect sample TP-48B at 9 ft**
	SC	8	<1	Light bluish gray (5B7/1), Dark yellowish orange (10YR6/6) fine SAND, some Clay; moist	**Clayey Sand** **Bottom of Excavation at 9.0 ft**
		9			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP49 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ			**DATE STARTED:** 9/15/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/15/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas/C.Nagy
Length (ft):	15.00	**Material:** Native	**NORTHING:** 372444.6
Width (ft):	3.50	**Compaction:** Bucket	**EASTING:** 304243.09
Depth (ft):	9.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 22.00
Depth to Water (ft):	N/A	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0	<1	Dark yellowish brown (10YR4/2) fine SAND, some Silt; dry	**Silty Sand** **Collect sample TP-49 at 1 ft**
	SP	1	<1	Dark yellowish orange (10YR6/6), Grayish orange (10YR7/4) fine SAND, trace Silt, trace medium Gravel; moist	**Sand**
		2			
		3			
		4			
		5			
		6			
		7			
		8			**Bottom of Excavation at 9.0 ft**
		9			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP50 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:** JG-1565	
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:** 9/15/2000	
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:** 9/15/2000	
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:** J.Galzanlichter	
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:** B.Jankaukas/C.Nagy	
Length (ft):	18.00	**Material:**	Native	**NORTHING:** 372435.69	
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:** 304264.79	
Depth (ft):	14.00	**Lifts (in):**	N/A	**GROUND ELEVATION:** 22.00	
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

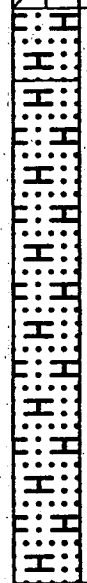
NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0	<1	Dark yellowish brown (10YR4/2) fine SAND, some Silt; with Waste (drums and wood at surface); dry	Silty Sand with Waste
	SP	1 2 3 4 5 6 7 8 9 10 11 12 13 14	<1	Dark yellowish brown (10YR6/6), Grayish orange (10YR7/4) medium SAND, trace Silt; moist	Sand Collect sample TP-50A at 1 ft Collect sample TP-50B at 14 ft Bottom of Excavation at 14.0 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP51 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ			**DATE STARTED:** 9/18/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/18/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas/C.Nagy
Length (ft):	19.00	**Material:** Native	**NORTHING:** 373269.97
Width (ft):	3.50	**Compaction:** Bucket	**EASTING:** 303579
Depth (ft):	13.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 5.50
Depth to Water (ft):	13.00	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-M	0 1 2 3	<1	Dark yellowish brown (10YR4/2) fine SAND, trace Silt; with Waste (household); dry	**Sand with Waste** **Collect samp lw TP-51A at 3 ft**
	SC SC	4 5 6 7 8 9 10 11	<1 <1	Medium bluish gray (5B5/1) medium to fine SAND, some Silty Clay; moist Dark yellowish orange (10YR6/6) fine SAND, some Clay, trace fine Gravel; moist	**Clayey Sand** **Collect sample TP-51B at 13 ft**
	CL	12 13	<1	Dark greenish gray (5GY4/1) Silty CLAY; wet	**Silty Clay** **Bottom of Excavation at 13.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP52 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/18/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/18/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	21.00	**Material:**	Native	**NORTHING:**	373363.99
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	303638.27
Depth (ft):	5.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	3.00
Depth to Water (ft):	4.00	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES: Battery casing on surface.

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0 1 2 3 4	<1	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt; moist; batteries at surface	**Sand** **Collect sample TP-52 at 4 ft** ▽
	CL	4 5	<1	Dark greenish gray (5G4/1) Silty CLAY; wet	**Silty Clay** **Bottom of Excavation at 5.0 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP53 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ			**DATE STARTED:** 9/18/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/18/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas/C.Nagy
Length (ft):	17.00	**Material:** Native	**NORTHING:** 372745.73
Width (ft):	3.50	**Compaction:** Bucket	**EASTING:** 303508.07
Depth (ft):	13.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 12.80
Depth to Water (ft):	13.00	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0	2.3	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt; dry	Sand
	SW	1	1.5	Pale yellowish orange (10YR8/6) coarse to fine SAND, trace Silt; dry	Sand
		2			
		3			
		4			
		5			
		6			
	SP	7	<1	Dark yellowish orange (10YR6/6), Very pale orange (10YR8/2) medium SAND, trace medium Gravel; dry	Sand
	SP	8	<1	Pale yellowish brown (10YR6/2) medium SAND, little medium Gravel; moist	
		9			
		10			
		11			
		12			Collect sample TP-53 at 13 ft Bottom of Excavation at 13.0 ft
		13			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP54 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ			**DATE STARTED:** 9/18/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/18/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas/C.Nagy
Length (ft):	22.00	**Material:** Native	**NORTHING:** 373249.98
Width (ft):	3.50	**Compaction:** Bucket	**EASTING:** 303342.56
Depth (ft):	15.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 5.00
Depth to Water (ft):	15.00	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0	<1	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt; dry	Sand
	SP	1	<1	Grayish orange (10YR7/4) fine Sand, trace Silt, trace fine Gravel; dry	
		2			
		3			
	SP	4	<1	Dark yellowish orange (10YR6/6), Very pale orange (10YR8/2) fine SAND, little medium Gravel; moist	
		5			
		6			
		7			
		8			
		9			
		10			
		11			
		12			
		13			Collect sample TP-54 at 15 ft
		14			Bottom of Excavation at 15.0 ft
		15			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP55 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ				**DATE STARTED:**	9/18/2000
EXCAVATION CONTRACTOR: Green Contracting Co.				**DATE FINISHED:**	9/18/2000
EXCAVATOR: Rubber Tire Backhoe				**OPERATOR:**	J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	B.Jankaukas/C.Nagy
Length (ft):	18.00	**Material:**	Native	**NORTHING:**	373129.15
Width (ft):	3.50	**Compaction:**	Bucket	**EASTING:**	303093.56
Depth (ft):	8.00	**Lifts (in):**	N/A	**GROUND ELEVATION:**	4.00
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0	<1	Pale yellowish brown (10YR6/2) fine SAND, trace Silt; with Waste (household); dry	Silty Sand with Waste
		1	<1		
		2			
		3			
		4			
		5			
		6			Collect sample TP-55 at 8 ft
	SP	7		Pale yellowish brown (10YR6/2) fine SAND, trace Silt; dry	Sand
		8			Bottom of Excavation at 8.0 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP56 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1565
PROJECT: Matteo Iron + Metal, West Deptford, NJ			**DATE STARTED:** 9/18/2000
EXCAVATION CONTRACTOR: Green Contracting Co.			**DATE FINISHED:** 9/18/2000
EXCAVATOR: Rubber Tire Backhoe			**OPERATOR:** J.Galzanlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** B.Jankaukas/C.Nagy
Length (ft):	15.00	**Material:** Native	**NORTHING:** 373151.78
Width (ft):	3.50	**Compaction:** Bucket	**EASTING:** 302954.1
Depth (ft):	12.00	**Lifts (in):** N/A	**GROUND ELEVATION:** 4.00
Depth to Water (ft):	12.00	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-M	0	<1	Dark yellowish brown (10YR4/2) fine SAND, trace Silt; with Waste; dry	Silty Sand with Waste
		1			
	SP	2	<1	Dark yellowish brown (10YR4/2) fine SAND, trace Silt; dry	Sand
	SP		<1	Pale yellowish brown (10YR6/2) fine SAND, trace fine Gravel; dry	Collect sample TP-56A at 2 ft
	SP	3	<1	Dark yellowish orange (10YR6/6) medium SAND, little coarse to medium Gravel; moist	
		4			
		5			
		6			
		7			
		8			
		9			
		10			Collect sample TP-56B at 12 ft
		11			Bottom of Excavation at 12.0 ft
		12			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-60 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/22/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/22/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	27	**Material:**	Native	**NORTHING:**	303126.2016
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373071.6834
Depth (ft):	5.00	**Lifts (in):**	1	**GROUND ELEVATION:**	4.15
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 1 2 3		Dark yellowish brown (10YR4/2), Pale yellowish brown (10YR6/2) with a 1 in layer of Moderate yellow (5Y7/6) medium to fine SAND, trace Silt; with Waste (white (N9) powder, pieces of metal, shafts, plastic beads, and rubber tubing); dry.	**Sand with Waste, Collect TP-60A at 1.5 ft below white material**
	SP	3 4 5		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	**Sand, Bottom of Excavation at 5 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-61 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/22/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/22/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	110	**Material:**	Native	**NORTHING:**	302973.2758
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373059.3407
Depth (ft):	7.00	**Lifts (in):**	1	**GROUND ELEVATION:**	3.59
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 1 2 3 4 5 6		Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; with Waste (styrofoam, plastic pipe, plastic bags, cement, rubber hoses, glass bottles, metal wire, tires, steel tank, battery casings, chain link fence, and aerosol cans); dry.	**Sand with Waste, Collect TP-61A at 1 ft**
	SP	6 7		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; with 6 in layer of Black (N1) Clayey SILT; moist.	**Collect TP-61B at 7 ft below black material, Bottom of Excavation at 7 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-62 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/22/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/22/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	17	**Material:**	Native	**NORTHING:**	302834.8751
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	372990.0699
Depth (ft):	3.00	**Lifts (in):**	1	**GROUND ELEVATION:**	3.14
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0		Pale yellowish brown (10YR6/2) medium to fine SAND, some Silt; with Waste (boards, white (N9)) flaky material, cement, rubber hoses, tires, metal, blue powder); dry.	**Silty Sand with Waste, Collect TP-62A at 4 in below blue material**
	SP	1 2 3		Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; dry.	**Sand, Bottom of Excavation at 3 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-63 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/22/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/22/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	20	**Material:**	Native	**NORTHING:**	302776.3197
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373299.6489
Depth (ft):	3.00	**Lifts (in):**	1	**GROUND ELEVATION:**	2.94
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0 1 2		Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	**Sand**
	SP	2 3		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt, little medium to fine Gravel; dry.	**Bottom of Excavation at 3 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-64 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/23/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/23/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	35	**Material:**	Native	**NORTHING:**	304198.4792
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373287.1899
Depth (ft):	10.00	**Lifts (in):**	1	**GROUND ELEVATION:**	12.90
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-B	0 – 8		Black (N1) Battery Casings, trace Silt; dry.	Waste
	SP	8 – 9		Grayish orange (10YR7/4) medium to fine SAND, trace Silt; dry.	Sand, Bottom of Excavation at 10 ft
	SP	9 – 10		Pale yellowish orange (10YR8/6) medium to fine SAND, trace Silt; dry.	Collect TP-64A & TP-64B at 9 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-65 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/23/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.			**DATE FINISHED:** 10/23/2001
EXCAVATOR: Track Mounted Backhoe			**OPERATOR:** J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** J.Lottig
Length (ft):	55	**Material:** Native	**NORTHING:** 303976.8326
Width (ft):	3	**Compaction:** Bucket	**EASTING:** 373275.6123
Depth (ft):	12.00	**Lifts (in):** 1	**GROUND ELEVATION:** 15.76
Depth to Water (ft):	12	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0		Grayish brown (5YR3/2) medium to fine SAND, trace Silt; with Waste (tires); dry.	Sand with Waste, Bottom of Excavation at 12 ft
	SP	1		Grayish orange (10YR7/4) medium to fine SAND, trace Silt; dry.	Sand, Collect TP-65A at 5 ft
		2			
		3			
		4			
		5			
		6			
		7			
	SP	8		Pale yellowish orange (10YR8/6) medium to fine SAND, trace Silt; dry.	
		9			
		10			
		11			
		12			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-66 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/23/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/23/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	17	**Material:**	Native	**NORTHING:**	303751.6901
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373070.4568
Depth (ft):	13.00	**Lifts (in):**	1	**GROUND ELEVATION:**	13.69
Depth to Water (ft):	13	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0		Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; dry.	Sand
		1			
		2			
		3			
		4			
	SP	5		Pale yellowish orange (10YR8/6) medium to fine SAND, trace Silt; dry.	
		6			
		7			
		8			
		9			
	CL-ML	10		Dusky yellowish brown (10YR2/2) Silty CLAY, trace fine Sand; moist.	Silty Clay, Bottom of Excavation at 13 ft
		11			
		12			
		13			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-67 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/23/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/23/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	53	**Material:**	Native	**NORTHING:**	303511.4419
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373109.3917
Depth (ft):	13.00	**Lifts (in):**	1	**GROUND ELEVATION:**	9.68
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0		Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; dry.	**Sand**
		1			
		2			
	SP	3		Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	**Collect TP-67A at 4 ft**
		4			
		5			
	SP	6		Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	**Bottom of Excavation at 13 ft**
		7			
		8			
		9			
		10			
		11			
		12			
		13			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-68 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/23/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/23/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	32	**Material:**	Native	**NORTHING:**	303284.227
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373126.9688
Depth (ft):	12.00	**Lifts (in):**	1	**GROUND ELEVATION:**	4.95
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0		Grayish brown (5YR3/2) medium to fine SAND, trace Silt; dry.	**Sand**
	SP	1		Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	**Collect TP-68A at 3.5 ft**
		2			
		3			
		4			
	SP	5		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	**Bottom of Excavation at 12 ft**
		6			
		7			
		8			
		9			
		10			
		11			
		12			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-69 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/24/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/24/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	50	**Material:**	Native	**NORTHING:**	303262.8186
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373212.9776
Depth (ft):	12.00	**Lifts (in):**	1	**GROUND ELEVATION:**	4.70
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0		Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt; with Waste (tires, metal); dry.	Sand with Waste
	SP	1		Grayish orange (10YR7/4) medium to fine SAND, trace Silt; dry.	Sand
		2			
		3			
		4			
		5			
		6			
		7			
	SP	8		Very pale orange (10YR8/2) medium to fine SAND, trace Silt; dry.	Bottom of Excavation at 8 ft
		9			
		10			
		11			
		12			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-70 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/24/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/24/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	37	**Material:**	Native	**NORTHING:**	303244.2833
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373282.4414
Depth (ft):	6.00	**Lifts (in):**	1	**GROUND ELEVATION:**	3.31
Depth to Water (ft):	4	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 1 2 3 4		Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; with Waste (tires, batteries, household waste); moist.	**Sand with Waste**
	SP	4		Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; wet.	**Sand**
	SP	5 6		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; moist.	**Collect TP-70A at 4.5 ft, Bottom of Excavation at 6 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-71 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/24/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/24/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	25	**Material:**	Native	**NORTHING:**	303064.9358
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373385.1034
Depth (ft):	8.00	**Lifts (in):**	1	**GROUND ELEVATION:**	4.90
Depth to Water (ft):	6	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-M	0		Dark yellowish orange (10YR6/6) Waste (battery casings, glass, plastic pipe, metal, wood, plastic bags, cardboard), medium to fine Sand; dry.	Waste
		1			
		2			
		3			
		4			
		5			
		6			▽
	SP			Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; wet.	Sand, Collect TP-72A at 4 ft, Bottom of Excavation at 8 ft
		7			
		8			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-72 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/24/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/24/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	20	**Material:**	Native	**NORTHING:**	302990.3761
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373384.7045
Depth (ft):	8.00	**Lifts (in):**	1	**GROUND ELEVATION:**	3.87
Depth to Water (ft):	4	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-M	0 1 2 3 4		Light brown (5YR5/6), Grayish black (N2) Waste (lumber, glass, metal, shingles, cardboard, battery casings, rubber); dry.	Waste
	SP	4 5 6 7 8		Pale green (5G7/2) medium to fine SAND, trace Silt; wet.	Sand, Collect TP-72A at 4 ft, Bottom of Excavation at 8 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-73 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/24/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.			**DATE FINISHED:** 10/24/2001
EXCAVATOR: Track Mounted Backhoe			**OPERATOR:** J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** J.Lottig
Length (ft):	25	**Material:** Native	**NORTHING:** 302917.9632
Width (ft):	3	**Compaction:** Bucket	**EASTING:** 373378.0108
Depth (ft):	11.00	**Lifts (in):** 1	**GROUND ELEVATION:** 2.86
Depth to Water (ft):	3	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-M	0		Light brown (5YR5/6) Waste (battery casings, plastic, lumber, glass, metal); dry.	Waste
	FILL-M	2		Grayish black (N2) Waste (battery casings, plastic, lumber, glass, metal); wet.	▽
	PT	8		Dusky yellowish brown (10YR2/2) PEAT, trace fine Sand, some Silt; wet.	Peat, Collect TP-73A at 9 ft, Bottom of Excavation at 11 ft

0 1 2 3 4 5 6 7 8 9 10 11

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-74 Page 1 of 2

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/24/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/24/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	50	**Material:**	Native	**NORTHING:**	302661.3855
Width (ft):	30	**Compaction:**	Bucket	**EASTING:**	373388.7451
Depth (ft):	8.50	**Lifts (in):**	1	**GROUND ELEVATION:**	3.27
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP-SM	0		Dusky yellowish brown (10YR2/2) medium to fine SAND, little Silt; dry.	Sand
	FILL-W	1		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; with Waste (wire, plastic, wood, white (N9) powder, Moderate yellow (5Y7/6) powder, drum, black (N1) liquid, large plastic objects, plastic beads); dry.	Sand with Waste
		2			
		3			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	TEST PIT NO.: TP-74 Page 2 of 2

USCS	Lith.	Depth	PID	Description	Remarks
		4			
		5			
		6			
		7			
		8			
	SP			Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	**Sand, Collect TP-74A at 8 ft below black liquid, white powder, yellow powder, Bottom of Excavation at 8.5 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-75 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/24/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/24/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	20	**Material:**	Native	**NORTHING:**	302557.3342
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373370.5124
Depth (ft):	6.00	**Lifts (in):**	1	**GROUND ELEVATION:**	3.19
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0		Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	Sand
	SP	1		Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	
		2			
		3			
		4			
	SP	5		Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; moist.	Bottom of Excavation at 6 ft
		6			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-76 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/25/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.			**DATE FINISHED:** 10/25/2001
EXCAVATOR: Track Mounted Backhoe			**OPERATOR:** J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** J.Lottig
Length (ft):	23	**Material:** Native	**NORTHING:** 302444.2918
Width (ft):	3	**Compaction:** Bucket	**EASTING:** 373379.8521
Depth (ft):	3.00	**Lifts (in):** 1	**GROUND ELEVATION:** 3.39
Depth to Water (ft):	N/A	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0		Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	Sand
	SP	1		Moderate yellowish brown (0YR5/4) medium to fine SAND, trace Silt; dry.	Bottom of Excavation at 3 ft
		2			
		3			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-77 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/25/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/25/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	20	**Material:**	Native	**NORTHING:**	302435.2669
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373394.9541
Depth (ft):	3.00	**Lifts (in):**	1	**GROUND ELEVATION:**	2.95
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0		Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	Sand
	SP	1		Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	Bottom of Excavation at 3 ft
		2			
		3			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-78 Page 1 of 2

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/25/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/25/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	27	**Material:**	Native	**NORTHING:**	302063.2329
Width (ft):	12	**Compaction:**	Bucket	**EASTING:**	373440.8205
Depth (ft):	9.00	**Lifts (in):**	1	**GROUND ELEVATION:**	6.10
Depth to Water (ft):	9	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; with Waste (Moderate yellow (5Y7/6), Black (N1) liquid, drum, plastic strands, tires, steel, plastic sheeting, glass); dry.	**Sand with Waste, Collect TP-78B at 2 ft below drum with black liquid**
		1			
		2			
	FILL-W	3		Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; with Waste (Moderate yellow (5Y7/6), Black (N1) liquid, drum, plastic strands, tires, steel, plastic sheeting, glass); dry.	**Silty Sand (Topsoil) with Waste**
	FILL-W	4		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; with Waste (Moderate yellow (5Y7/6), Black (N1) liquid, drum, plastic strands, tires, steel, plastic sheeting, glass); dry.	**Sand with Waste**
		5			
		6			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	PROJECT NO.: JG-1565	TEST PIT NO.: TP-78
		Page 2 of 2

USCS	Lith.	Depth	PID	Description	Remarks
		7			
	SP	8		Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt; dry.	Sand, Collect TP-78A at 8 ft below white & yellow powder, Bottom of Excavation at 9 ft
		9			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-79 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/25/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/25/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	28	**Material:**	Native	**NORTHING:**	302125.8295
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373271.6676
Depth (ft):	8.00	**Lifts (in):**	1	**GROUND ELEVATION:**	3.92
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 1 2 3 4 5 6 7		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; with Waste (plastic strands, drum lids, drum, metal, rubber); dry.	Sand with Waste
	SP	7 8		Moderate yellowish brown (10YR5/4) coarse to fine SAND, trace Silt; moist.	Sand, Collect TP-79A at 7 ft, Bottom of Excavation at 8 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-80 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/25/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.			**DATE FINISHED:** 10/25/2001
EXCAVATOR: Track Mounted Backhoe			**OPERATOR:** J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** J.Lottig
Length (ft):	12	**Material:** Native	**NORTHING:** 302144.6557
Width (ft):	3	**Compaction:** Bucket	**EASTING:** 373268.485
Depth (ft):	5.00	**Lifts (in):** 1	**GROUND ELEVATION:** 3.43
Depth to Water (ft):	N/A	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 1 2 3 4		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; with Waste (tires, moderate yellow (5Y7/6) powder, plastic strand & objects); dry.	**Sand with Waste**
	SP	5		Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	**Sand, Bottom of Excavation at 5 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-81 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/25/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/25/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	15	**Material:**	Native	**NORTHING:**	302158.3141
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373287.3716
Depth (ft):	8.00	**Lifts (in):**	1	**GROUND ELEVATION:**	3.19
Depth to Water (ft):	8	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0		Dark yellowish orange (10YR6/6) coarse to fine SAND, trace Silt; with Waste (plastic strands, drum lids); moist.	**Sand with Waste**
		1			
		2			
	FILL-W	3		Moderate yellowish brown (10YR5/4) coarse to fine SAND, trace Silt; with Waste (Pale blue green (5BG7/2) material - PID = 472 ppm); moist.	**TP-81A at 3 ft from the material, TP-81B at 3.5 ft below the material**
	SP	4		Moderate yellowish brown (10YR5/4) coarse to fine SAND, trace Silt; moist.	**Sand, TP-81C at 8 ft, Bottom of Excavation at 8 ft**
		5			
		6			
		7			
		8			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-82 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/25/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/25/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	21	**Material:**	Native	**NORTHING:**	302254.9491
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373045.1287
Depth (ft):	10.00	**Lifts (in):**	1	**GROUND ELEVATION:**	2.79
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SP	0		Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt, trace medium to fine Gravel; dry.	**Sand (soil mound)**
		1			
		2			
		3			
		4			
	SP	5		Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; dry.	**Sand (Topsoil)**
	SP	6		Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt; dry.	**Sand, Bottom of Excavation at 10 ft**
		7			
		8			
		9			
		10			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-83 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/25/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/25/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	24	**Material:**	Native	**NORTHING:**	302223.9965
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373182.2136
Depth (ft):	5.00	**Lifts (in):**	1	**GROUND ELEVATION:**	2.65
Depth to Water (ft):	0	**Restoration:**	None		
Depth to Rock (ft):	N/A				

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0		Dusky yellowish brown (10YR2/2) medium to fine SAND, some Silt; with organic material; moist.	Silty Sand
	SM	1		Pale yellowish brown (10YR6/2) medium to fine SAND, some Silt, trace medium to fine Gravel; wet.	
	SP	2		Pale yellowish brown (10YR6/2) medium to fine SAND, trace Silt, trace coarse to fine Gravel; moist.	Sand, Bottom of Excavation at 5 ft
		3			
		4			
		5			

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-84 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/25/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.			**DATE FINISHED:** 10/25/2001
EXCAVATOR: Track Mounted Backhoe			**OPERATOR:** J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** J.Lottig
Length (ft):	20	**Material:** Native	**NORTHING:** 302165.0069
Width (ft):	3	**Compaction:** Bucket	**EASTING:** 373195.0614
Depth (ft):	6.00	**Lifts (in):** 1	**GROUND ELEVATION:** 2.91
Depth to Water (ft):	0	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 1 2 3 4 5		Dark yellowish brown (10YR4/4) medium to fine SAND, trace Silt; with Waste (tires, plastic strands & objects, glass, white residue); wet.	Sand with Waste
	SP	6		Pale yellowish brown (10YR6/2) coarse to fine SAND, trace Silt, trace coarse to fine Gravel; wet.	Sand, Collect TP-84A at 5 ft, Bottom of Excavation at 6 ft

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-85 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/26/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.			**DATE FINISHED:** 10/26/2001
EXCAVATOR: Track Mounted Backhoe			**OPERATOR:** J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** J.Lottig
Length (ft):	39	**Material:** Native	**NORTHING:** 302180.1138
Width (ft):	3	**Compaction:** Bucket	**EASTING:** 373092.2362
Depth (ft):	7.00	**Lifts (in):** 1	**GROUND ELEVATION:** 2.43
Depth to Water (ft):	4	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0		Dusky yellowish brown (10YR2/2) medium to fine SAND, some Silt; dry.	**Silty Sand**
	FILL-W	1 2 3 4		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; with Waste (plastic, white residue, metal); moist.	**Sand with Waste**
	SP	5 6 7		Moderate yellowish brown (10YR5/4) medium to fine SAND, trace Silt, trace coarse to fine Gravel; wet.	**Sand, Bottom of Excavation at 7 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-86 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection				**PROJECT NO:**	JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ				**DATE STARTED:**	10/26/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.				**DATE FINISHED:**	10/26/2001
EXCAVATOR: Track Mounted Backhoe				**OPERATOR:**	J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**		**INSPECTOR:**	J.Lottig
Length (ft):	30	**Material:**	Native	**NORTHING:**	302192.4267
Width (ft):	3	**Compaction:**	Bucket	**EASTING:**	373036.2308
Depth (ft):	5.00	**Lifts (in):**	1	**GROUND ELEVATION:**	3.55
Depth to Water (ft):	N/A	**Restoration:**	None		
Depth to Rock (ft):	N/A				

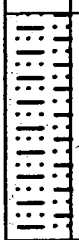
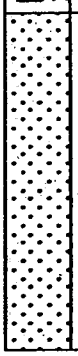
NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	FILL-W	0 1 2 3 4		Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt; with Waste (plastic strands, glass, White (N9) & Moderate yellow (5Y7/6) powder, four drums); dry.	**Sand with Waste**
	SP	5		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt, trace coarse to fine Gravel; moist.	**Sand, Collect TP-86A at 4.5 ft, Bottom of Excavation at 5 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-87 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/26/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.			**DATE FINISHED:** 10/26/2001
EXCAVATOR: Track Mounted Backhoe			**OPERATOR:** J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** J.Lottig
Length (ft):	36	**Material:** Native	**NORTHING:** 302210.8553
Width (ft):	3	**Compaction:** Bucket	**EASTING:** 372984.5649
Depth (ft):	5.00	**Lifts (in):** 1	**GROUND ELEVATION:** 2.51
Depth to Water (ft):	N/A	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0 1 2		Dusky yellowish brown (10YR2/2) medium to fine SAND, some Silt; moist.	**Silty Sand**
	SP	2 3 4 5		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt, some medium to fine Gravel; moist.	**Sand, Collect TP-87A at 2.5 ft, Bottom of Excavation at 5 ft**

The Louis Berger Group, Inc. 30 Vreeland Road, Building A Florham Park, NJ 07932	**Excavation Log**	**TEST PIT NO.:** TP-88 Page 1 of 1

CLIENT: New Jersey Department of Environmental Protection			**PROJECT NO:** JG-1691
PROJECT: Matteo Iron & Metal, West Deptford, NJ			**DATE STARTED:** 10/26/2001
EXCAVATION CONTRACTOR: Greentree Contracting Co.			**DATE FINISHED:** 10/26/2001
EXCAVATOR: Track Mounted Backhoe			**OPERATOR:** J.Gelzenlichter
EXCAVATION DATA		**BACKFILL DATA**	**INSPECTOR:** J.Lottig
Length (ft):	20	**Material:** Native	**NORTHING:** 302483.2309
Width (ft):	3	**Compaction:** Bucket	**EASTING:** 373334.1854
Depth (ft):	5.00	**Lifts (in):** 1	**GROUND ELEVATION:** 3.15
Depth to Water (ft):	N/A	**Restoration:** None	
Depth to Rock (ft):	N/A		

NOTES:

Lithology	USCS	Depth	PID (ppm)	Description	Remarks
	SM	0		Dusky yellowish brown (10YR2/2) medium to fine SAND, some Silt; dry.	**Silty Sand**
	FILL-W	1 2 3		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; with Waste (cloth, cement blocks, metal); dry.	**Sand with Waste**
	SP	4 5		Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt; dry.	**Sand, Collect TP-88A at 4.5 ft, Bottom of Excavation at 5 ft**

MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ **BUST case No.:** ____-____-____-____

CERTIFICATION

Well Permit Number: 31 B 58898 **Owner's Well Number** MW01
Well Completion Date: 9/25/00 **Lithologic Log:** Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	-0.90
Total Depth of Well to the nearest 1/2 foot:	18.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	7.10
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	11.41
Yield (gallons per minute):	0.5
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Technical Certification:

Richard P. Lovett
Name (Type or Print)

Signature

10276
Certification or License No.

Seal: AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS CERTIFICATE NUMBER 10276 AIPG RICHARD P. LOVETT CERTIFIED PROFESSIONAL GEOLOGIST

Certification by Executive Officer or Duly Authorized Representative:

Name (Type or Print) Signature Date

Title: _____

SIGNATORY REQUIREMENTS

The form entitled "Monitoring Well Certification - Form A - As- Built Construction Certification", must be signed by one of the following: a New Jersey licensed Professional Engineer; a licensed New Jersey Well Driller; a geologist certified by any State; a geologist certified by the American Institute of Professional Geologists; an individual certified by the American Institute of Hydrology; any other person approved by the Department.

Form B, "Location Certification", must be signed and sealed by a Licensed New Jersey Land Surveyor.

MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ **BUST case No.:** ____-____-____-_____

CERTIFICATION

Well Permit Number: 31 - 58899
Owner's Well Number MW02
Well Completion Date: 9/19/00
Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.84
Total Depth of Well to the nearest 1/2 foot:	15.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	7.70
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	12.49
Yield (gallons per minute):	1
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

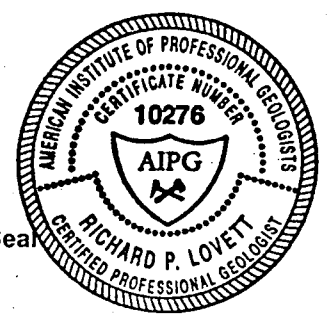
Technical Certification:

Richard P. Lovett — Name (Type or Print)

Signature

10276 — Certification or License No.

Seal



Certification by Executive Officer or Duly Authorized Representative:

Name (Type or Print) _____ Signature _____ Date _____

Title: _____

SIGNATORY REQUIREMENTS

The form entitled "Monitoring Well Certification - Form A - As- Built Construction Certification", must be signed by one of the following: a New Jersey licensed Professional Engineer; a licensed New Jersey Well Driller; a geologist certified by any State; a geologist certified by the American Institute of Professional Geologists; an individual certified by the American Institute of Hydrology; any other person approved by the Department.

Form B, "Location Certification", must be signed and sealed by a Licensed New Jersey Land Surveyor.

MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ **BUST case No.:** ____-____-____-____

CERTIFICATION

Well Permit Number: 31 - 58906 **Owner's Well Number** MW03
Well Completion Date: 9/18/00 **Lithologic Log:** Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.53
Total Depth of Well to the nearest 1/2 foot:	14.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	6.70
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	12.17
Yield (gallons per minute):	1.5
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Technical Certification:

Richard P. Lovett
Name (Type or Print)

Signature

10276
Certification or License No.

Seal: AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS — CERTIFICATE NUMBER 10276 — AIPG — RICHARD P. LOVETT — CERTIFIED PROFESSIONAL GEOLOGIST

Certification by Executive Officer or Duly Authorized Representative:

Name (Type or Print) Signature Date

Title: _____

SIGNATORY REQUIREMENTS

The form entitled "Monitoring Well Certification - Form A - As- Built Construction Certification", must be signed by one of the following: a New Jersey licensed Professional Engineer; a licensed New Jersey Well Driller; a geologist certified by any State; a geologist certified by the American Institute of Professional Geologists; an individual certified by the American Institute of Hydrology; any other person approved by the Department.

Form B, "Location Certification", must be signed and sealed by a Licensed New Jersey Land Surveyor.

MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration No.: _____ BUST case No.: ____-____-____-____

CERTIFICATION

Well Permit Number: 31 - 58907 Owner's Well Number MW04

Well Completion Date: 9/20/00 Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.55
Total Depth of Well to the nearest 1/2 foot:	12.5
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	5.04
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	11.05
Yield (gallons per minute):	1.5
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Technical Certification:

Richard P. Lovett — Name (Type or Print)

Signature

10276 — Certification or License No.

Seal: AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS, CERTIFICATE NUMBER 10276, AIPG, RICHARD P. LOVETT, CERTIFIED PROFESSIONAL GEOLOGIST

Certification by Executive Officer or Duly Authorized Representative:

Name (Type or Print) Signature Date

Title: _____

SIGNATORY REQUIREMENTS

The form entitled "Monitoring Well Certification - Form A - As- Built Construction Certification", must be signed by one of the following: a New Jersey licensed Professional Engineer; a licensed New Jersey Well Driller; a geologist certified by any State; a geologist certified by the American Institute of Professional Geologists; an individual certified by the American Institute of Hydrology; any other person approved by the Department.

Form B, "Location Certification", must be signed and sealed by a Licensed New Jersey Land Surveyor.

MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ **BUST case No.:** ____-____-____-____

CERTIFICATION

Well Permit Number: 31 - 58908
Owner's Well Number MW05
Well Completion Date: 9/19/00
Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.84
Total Depth of Well to the nearest 1/2 foot:	14.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	6.80
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	11.0
Yield (gallons per minute):	1.5
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

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Signature

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Seal: AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS — CERTIFICATE NUMBER 10276 — AIPG — RICHARD P. LOVETT — CERTIFIED PROFESSIONAL GEOLOGIST

Certification by Executive Officer or Duly Authorized Representative:

Name (Type or Print) _____ Signature _____ Date _____

Title: _____

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MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ BUST case No.: ____-____-____-_____

CERTIFICATION

Well Permit Number: 31 - 58909 Owner's Well Number MW06
Well Completion Date: 9/20/00 Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.24
Total Depth of Well to the nearest 1/2 foot:	12.5
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	4.96
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	8.31
Yield (gallons per minute):	1.5
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

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Richard P. Lovett
Name (Type or Print)

Signature

10276
Certification or License No.

Seal

AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS
CERTIFICATE NUMBER
10276
AIPG
RICHARD P. LOVETT
CERTIFIED PROFESSIONAL GEOLOGIST

Certification by Executive Officer or Duly Authorized Representative:

Name (Type or Print) Signature Date

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MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ **BUST case No.:** ____-____-____-_____

CERTIFICATION

Well Permit Number: 31 - 58910 **Owner's Well Number** MW07
Well Completion Date: 9/21/00 **Lithologic Log:** Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.28
Total Depth of Well to the nearest 1/2 foot:	14.5
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	6.75
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	9.11
Yield (gallons per minute):	1.5
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

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Richard P. Lovett _____
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10276
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Certification by Executive Officer or Duly Authorized Representative:

_____ _____ _____
Name (Type or Print) Signature Date
Title: _____

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MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ **BUST case No.:** _____-_____-_____-_____

CERTIFICATION

Well Permit Number: 31 - 58911
Owner's Well Number MW08
Well Completion Date: 9/20/00
Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.91
Total Depth of Well to the nearest 1/2 foot:	20.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	12.91
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	19.4
Yield (gallons per minute):	1.5
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

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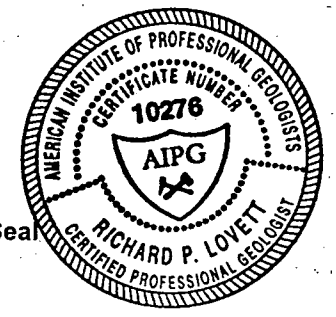
Richard P. Lovett
Name (Type or Print)

Signature

10276
Certification or License No.

Seal



Certification by Executive Officer or Duly Authorized Representative:

Name (Type or Print) Signature Date

Title: _____

SIGNATORY REQUIREMENTS

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MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ **BUST case No.:** ____-____-____-_____

CERTIFICATION

Well Permit Number: 31 - 58912 **Owner's Well Number** MW09
Well Completion Date: 9/22/00 **Lithologic Log:** Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.52
Total Depth of Well to the nearest 1/2 foot:	14.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	6.72
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	13.24
Yield (gallons per minute):	1.5
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

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Name (Type or Print) Signature

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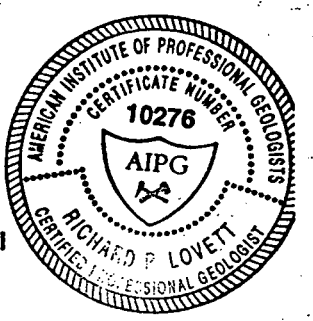
Certification or License No.

Seal



Certification by Executive Officer or Duly Authorized Representative:

_____ _____ _____
Name (Type or Print) Signature Date
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MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ **BUST case No.:** ____-____-____-____

CERTIFICATION

Well Permit Number: 31 - 58913
Owner's Well Number MW10
Well Completion Date: 9/22/00
Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.40
Total Depth of Well to the nearest 1/2 foot:	14.5
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	6.95
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	12.28
Yield (gallons per minute):	1.5
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

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Technical Certification:

Richard P Lovett
Name (Type or Print)

Signature

10276
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Seal: AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS CERTIFICATE NUMBER 10276 AIPG RICHARD P LOVETT CERTIFIED PROFESSIONAL GEOLOGIST

Certification by Executive Officer or Duly Authorized Representative:

Name (Type or Print) Signature Date

Title: _____

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MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ BUST case No.: _____-_____-_____-_____

CERTIFICATION

Well Permit Number: 31 - 58914 Owner's Well Number MW11
Well Completion Date: 9/21/00 Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.70
Total Depth of Well to the nearest 1/2 foot:	12.5
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	4.95
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	11.75
Yield (gallons per minute):	1.5
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

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Certification by Executive Officer or Duly Authorized Representative:

_____ _____ _____
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Title: _____

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MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration No.: _____ BUST case No.: _____-_____-_____-_____

CERTIFICATION

Well Permit Number: 31 - 58915 Owner's Well Number MW12

Well Completion Date: 9/22/00 Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	1.83
Total Depth of Well to the nearest 1/2 foot:	13.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	4.96
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	11.27
Yield (gallons per minute):	1.5
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

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MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ **BUST case No.:** ____-____-____-____

CERTIFICATION

Well Permit Number: 31 - 58916 **Owner's Well Number** MW13D
Well Completion Date: 10/17/00 **Lithologic Log:** Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.40
Total Depth of Well to the nearest 1/2 foot:	76.5
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	68.90
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	25.15
Yield (gallons per minute):	10
Development Technique (specify):	Submersible Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

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MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ **BUST case No.:** ____-____-____-_____

CERTIFICATION

Well Permit Number: 31 - 58900
Owner's Well Number MW13S
Well Completion Date: 10/18/00
Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.06
Total Depth of Well to the nearest 1/2 foot:	15.5
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	7.56
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	9.61
Yield (gallons per minute):	1.5
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

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MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ **BUST case No.:** ____-____-____-_____

CERTIFICATION

Well Permit Number: 31 - 58917 **Owner's Well Number** MW14D
Well Completion Date: 10/24/00 **Lithologic Log:** Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.08
Total Depth of Well to the nearest 1/2 foot:	84.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	76.08
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	37.17
Yield (gallons per minute):	10
Development Technique (specify):	Submersible Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

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Technical Certification:

Richard P. Lovett — Name (Type or Print)

Signature

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Certification by Executive Officer or Duly Authorized Representative:

Name (Type or Print) _____ Signature _____ Date _____

Title: _____

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MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ BUST case No.: ____-____-____-_____

CERTIFICATION

Well Permit Number: 31 - 58901 Owner's Well Number MW14S
Well Completion Date: 10/25/00 Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	1.96
Total Depth of Well to the nearest 1/2 foot:	23.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	14.96
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	14.47
Yield (gallons per minute):	1.5
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Technical Certification:

Richard Lovett
Name (Type or Print)

Signature

10276
Certification or License No.

Seal: AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS CERTIFICATE NUMBER 10276 AIPG RICHARD P. LOVETT CERTIFIED PROFESSIONAL GEOLOGIST

Certification by Executive Officer or Duly Authorized Representative:

Name (Type or Print) Signature Date

Title: _____

SIGNATORY REQUIREMENTS

The form entitled "Monitoring Well Certification - Form A - As- Built Construction Certification", must be signed by one of the following: a New Jersey licensed Professional Engineer; a licensed New Jersey Well Driller; a geologist certified by any State; a geologist certified by the American Institute of Professional Geologists; an individual certified by the American Institute of Hydrology; any other person approved by the Department.

Form B, "Location Certification", must be signed and sealed by a Licensed New Jersey Land Surveyor.

MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ BUST case No.: ____-____-____-_____

CERTIFICATION

Well Permit Number: 31 - 58918 Owner's Well Number MW15D
Well Completion Date: 10/18/00 Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.20
Total Depth of Well to the nearest 1/2 foot:	68.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	60.20
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	15.37
Yield (gallons per minute):	10
Development Technique (specify):	Submersible Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Technical Certification:

Richard P. Lovett
Name (Type or Print)

Signature

10276
Certification or License No.

Seal: AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS CERTIFICATE NUMBER 10276 AIPG RICHARD P. LOVETT CERTIFIED PROFESSIONAL GEOLOGIST

Certification by Executive Officer or Duly Authorized Representative:

Name (Type or Print) Signature Date

Title: _____

SIGNATORY REQUIREMENTS

The form entitled "Monitoring Well Certification - Form A - As- Built Construction Certification", must be signed by one of the following: a New Jersey licensed Professional Engineer; a licensed New Jersey Well Driller; a geologist certified by any State; a geologist certified by the American Institute of Professional Geologists; an individual certified by the American Institute of Hydrology; any other person approved by the Department.

Form B, "Location Certification", must be signed and sealed by a Licensed New Jersey Land Surveyor.

MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ BUST case No.: ____-____-____-_____

CERTIFICATION

Well Permit Number: 31 - 58902 Owner's Well Number MW15S
Well Completion Date: 10/19/00 Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.61
Total Depth of Well to the nearest 1/2 foot:	12.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	4.61
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	10.15
Yield (gallons per minute):	1
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Technical Certification:

Richard P. Lovett _____
Name (Type or Print) Signature

10276
Certification or License No.

Seal: AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS CERTIFICATE NUMBER 10276 AIPG RICHARD P. LOVETT CERTIFIED PROFESSIONAL GEOLOGIST

Certification by Executive Officer or Duly Authorized Representative:

_____ _____ _____
Name (Type or Print) Signature Date

Title: _____

SIGNATORY REQUIREMENTS

The form entitled "Monitoring Well Certification - Form A - As- Built Construction Certification", must be signed by one of the following: a New Jersey licensed Professional Engineer; a licensed New Jersey Well Driller; a geologist certified by any State; a geologist certified by the American Institute of Professional Geologists; an individual certified by the American Institute of Hydrology; any other person approved by the Department.

Form B, "Location Certification", must be signed and sealed by a Licensed New Jersey Land Surveyor.

MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ **BUST case No.:** ____-____-____-_____

CERTIFICATION

Well Permit Number: 31 - 58919 **Owner's Well Number** MW16D
Well Completion Date: 10/17/00 **Lithologic Log:** Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	1.78
Total Depth of Well to the nearest 1/2 foot:	70.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	61.78
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	15.27
Yield (gallons per minute):	10
Development Technique (specify):	Submersible Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

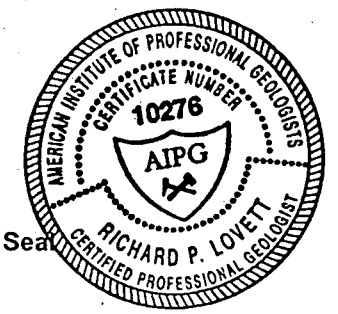
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Technical Certification:

Richard P. Lovett _____
Name (Type or Print) Signature

10276
Certification or License No.

Seal



Certification by Executive Officer or Duly Authorized Representative:

_____ _____ _____
Name (Type or Print) Signature Date

Title: _____

SIGNATORY REQUIREMENTS

The form entitled "Monitoring Well Certification - Form A - As- Built Construction Certification", must be signed by one of the following: a New Jersey licensed Professional Engineer; a licensed New Jersey Well Driller; a geologist certified by any State; a geologist certified by the American Institute of Professional Geologists; an individual certified by the American Institute of Hydrology; any other person approved by the Department.

Form B, "Location Certification", must be signed and sealed by a Licensed New Jersey Land Surveyor.

MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration No.: _____ BUST case No.: ____-____-____-_____

CERTIFICATION

Well Permit Number: 31 - 58903 Owner's Well Number MW16S

Well Completion Date: 10/23/00 Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.46
Total Depth of Well to the nearest 1/2 foot:	12.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	4.46
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	7.06
Yield (gallons per minute):	2
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Technical Certification:

Richard P. Lovett _____

Name (Type or Print) Signature

10276

Certification or License No.

Seal

AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS
CERTIFICATE NUMBER
10276
AIPG
RICHARD P. LOVETT
CERTIFIED PROFESSIONAL GEOLOGIST

Certification by Executive Officer or Duly Authorized Representative:

_____ _____ _____

Name (Type or Print) Signature Date

Title: _____

SIGNATORY REQUIREMENTS

The form entitled "Monitoring Well Certification - Form A - As- Built Construction Certification", must be signed by one of the following: a New Jersey licensed Professional Engineer; a licensed New Jersey Well Driller; a geologist certified by any State; a geologist certified by the American Institute of Professional Geologists; an individual certified by the American Institute of Hydrology; any other person approved by the Department.

Form B, "Location Certification", must be signed and sealed by a Licensed New Jersey Land Surveyor.

MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration No.: _____ BUST case No.: ____-____-____-_____

CERTIFICATION

Well Permit Number: 31 - 58920 Owner's Well Number MW17D

Well Completion Date: 10/23/00 Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.47
Total Depth of Well to the nearest 1/2 foot:	70.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	62.47
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	14.86
Yield (gallons per minute):	10
Development Technique (specify):	Submersible Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Technical Certification:

Richard P. Lovett _____

Name (Type or Print) Signature

10276

Certification or License No.

Seal: AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS CERTIFICATE NUMBER 10276 AIPG RICHARD P. LOVETT CERTIFIED PROFESSIONAL GEOLOGIST

Certification by Executive Officer or Duly Authorized Representative:

_____ _____ _____

Name (Type or Print) Signature Date

Title: _____

SIGNATORY REQUIREMENTS

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Form B, "Location Certification", must be signed and sealed by a Licensed New Jersey Land Surveyor.

MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ **BUST case No.:** ____-____-____-____

CERTIFICATION

Well Permit Number: 31 - 58904 **Owner's Well Number** MW17S
Well Completion Date: 10/24/00 **Lithologic Log:** Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.90
Total Depth of Well to the nearest 1/2 foot:	15.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	8.10
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	6.45
Yield (gallons per minute):	1.5
Development Technique (specify):	Submersible Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

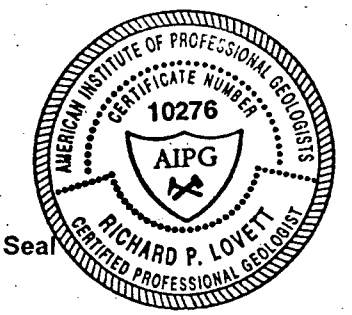
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Technical Certification:

Richard P. Lovett _____
Name (Type or Print) Signature

10276
Certification or License No.

Seal



Certification by Executive Officer or Duly Authorized Representative:

_____ _____ _____
Name (Type or Print) Signature Date

Title: _____

SIGNATORY REQUIREMENTS

The form entitled "Monitoring Well Certification - Form A - As- Built Construction Certification", must be signed by one of the following: a New Jersey licensed Professional Engineer; a licensed New Jersey Well Driller; a geologist certified by any State; a geologist certified by the American Institute of Professional Geologists; an individual certified by the American Institute of Hydrology; any other person approved by the Department.

Form B, "Location Certification", must be signed and sealed by a Licensed New Jersey Land Surveyor.

MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ **BUST case No.:** ____-____-____-____

CERTIFICATION

Well Permit Number: 31 - 58921 **Owner's Well Number** MW18D
Well Completion Date: 10/19/00 **Lithologic Log:** Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.29
Total Depth of Well to the nearest 1/2 foot:	69.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	61.29
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	11.23
Yield (gallons per minute):	10
Development Technique (specify):	Submersible Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

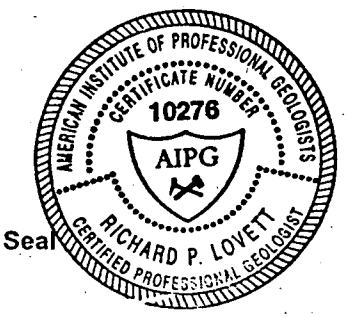
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Technical Certification:

Richard P. Lovett _____
Name (Type or Print) Signature

10276
Certification or License No.

Seal



Certification by Executive Officer or Duly Authorized Representative:

_____ _____ _____
Name (Type or Print) Signature Date
Title: _____

SIGNATORY REQUIREMENTS

The form entitled "Monitoring Well Certification - Form A - As- Built Construction Certification", must be signed by one of the following: a New Jersey licensed Professional Engineer; a licensed New Jersey Well Driller; a geologist certified by any State; a geologist certified by the American Institute of Professional Geologists; an individual certified by the American Institute of Hydrology; any other person approved by the Department.

Form B, "Location Certification", must be signed and sealed by a Licensed New Jersey Land Surveyor.

MONITORING WELL CERTIFICATION - FORM A - AS-BUILT CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration No.: _____ BUST case No.: ____-____-____-_____

CERTIFICATION

Well Permit Number: 31 - 58905 Owner's Well Number MW18S
Well Completion Date: 10/20/00 Lithologic Log: Attach

Distance from Top of Casing (cap off) to ground surface (one-hundredth of a foot):	2.46
Total Depth of Well to the nearest 1/2 foot:	12.0
Depth to Top of Screen (or Top of Open Hole) From Top of Casing (one-hundredth of a foot):	4.46
Screen Length (or length of open hole) in feet:	10
Screen or Slot Size:	0.010
Screen or Slot Material:	Sch 40 PVC
Casing Material: (PVC, Steel or Other-Specify):	PVC
Casing Diameter (inches):	4
Static Water Level From Top of Casing at the Time of Installation (one-hundredth of a foot):	10.98
Yield (gallons per minute):	1.5
Development Technique (specify):	Centrifugal Pump
Length of Time Well is Developed/Pumped or Bailed:	1 Hour

Authentication

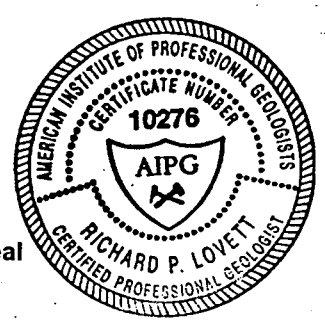
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Technical Certification:

Richard P. Lovett _____
Name (Type or Print) Signature

10276
Certification or License No.

Seal



Certification by Executive Officer or Duly Authorized Representative:

_____ _____ _____
Name (Type or Print) Signature Date

Title: _____

SIGNATORY REQUIREMENTS

The form entitled "Monitoring Well Certification - Form A - As- Built Construction Certification", must be signed by one of the following: a New Jersey licensed Professional Engineer; a licensed New Jersey Well Driller; a geologist certified by any State; a geologist certified by the American Institute of Professional Geologists; an individual certified by the American Institute of Hydrology; any other person approved by the Department.

Form B, "Location Certification", must be signed and sealed by a Licensed New Jersey Land Surveyor.

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770 -013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: 31-58898

This number must be permanently affixed to the well casing.

Longitude (to nearest 1/10th second): West 75° 10' 02.2"

Latitude (to nearest 1/10th second): North 39° 51' 18.3"

Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):

PVC	RIM	CONC. PAD
19.96	20.86	20.86

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)

NJ Geodetic Control Survey

Source: MON 10041

NAD

____ 1927 __X__ 1983 (Adjustment)

Elevation: NAVD 1988 (Adjustment)

Owners Well Number (As shown on application or plans): MW-1

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Michael T. Angeline

PROFESSIONAL LAND SURVEYOR'S SIGNATURE

Michael T. Angeline SEAL

PROFESSIONAL LAND SURVEYOR'S NAME

(Please print or type)

14156

PROFESSIONAL LAND SURVEYOR'S LICENSE#

MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-0110-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: This number must be permanently affixed to the well casing.	31-58899
Longitude (to nearest 1/10th second):	West 75° 10' 12.3"
Latitude (to nearest 1/10th second):	North 39° 51' 16.3"
Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):	PVC RIM CONC. PAD 21.09 21.33 18.25
Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)	NJ Geodetic Control Survey Source: MON 10041 NAD ____ 1927 __X__ 1983 (Adjustment) Elevation: NAVD 1988 (Adjustment)
Owners Well Number (As shown on application or plans):	MW-2

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x (mile)$^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Michael T. Angeline

PROFESSIONAL LAND SURVEYOR'S SIGNATURE

SEAL

Michael T. Angeline

PROFESSIONAL LAND SURVEYOR'S NAME

(Please print or type)

14156

PROFESSIONAL LAND SURVEYOR'S LICENSE#

MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: 31-58906

This number must be permanently affixed to the well casing.

Longitude (to nearest 1/10th second): West 75° 10' 13.4"

Latitude (to nearest 1/10th second): North 39° 51' 20.2"

Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot): PVC 18.67 RIM 18.97 CONC. PAD 16.14

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)

NJ Geodetic Control Survey

Source: MON 10041

NAD

____ 1927 __X__ 1983 (Adjustment)

Elevation: NAVD 1988 (Adjustment)

Owners Well Number (As shown on application or plans): MW-3

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(mile)^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Michael T. Angeline

PROFESSIONAL LAND SURVEYOR'S SIGNATURE

SEAL

Michael T. Angeline

PROFESSIONAL LAND SURVEYOR'S NAME

(Please print or type)

14156

PROFESSIONAL LAND SURVEYOR'S LICENSE#

MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: 31-58907

This number must be permanently affixed to the well casing.

Longitude (to nearest 1/10th second): West 75° 10' 14.0"

Latitude (to nearest 1/10th second): North 39° 51' 22.5"

Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot): PVC 15.27 RIM 15.61 CONC. PAD 12.72

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)

NJ Geodetic Control Survey

Source: MON 10041

NAD

____ 1927 __X__ 1983 (Adjustment)

Elevation: NAVD 1988 (Adjustment)

Owners Well Number (As shown on application or plans): MW-4

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x. $(mile)^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Michael T. Angeline

PROFESSIONAL LAND SURVEYOR'S SIGNATURE

Michael T. Angeline SEAL

PROFESSIONAL LAND SURVEYOR'S NAME

(Please print or type)

14156

PROFESSIONAL LAND SURVEYOR'S LICENSE#

MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: 31-58908

This number must be permanently affixed to the well casing.

Longitude (to nearest 1/10th second): West 75° 10' 11.0"

Latitude (to nearest 1/10th second): North 39° 51' 22.8"

Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot): PVC 14.57 RIM 14.75 CONC. PAD 11.73

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)

NJ Geodetic Control Survey

Source: MON 10041

NAD

____ 1927 __X__ 1983 (Adjustment)

Elevation: NAVD 1988 (Adjustment)

Owners Well Number (As shown on application or plans): MW-5

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: This number must be permanently affixed to the well casing.	31-58909
Longitude (to nearest 1/10th second):	West 75° 10' 18.1"
Latitude (to nearest 1/10th second):	North 39° 51' 22.3"
Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):	PVC RIM CONC. PAD 7.92 8.23 5.68
Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)	NJ Geodetic Control Survey Source: MON 10041 NAD ____ 1927 __X__ 1983 (Adjustment) Elevation: NAVD 1988 (Adjustment)
Owners Well Number (As shown on application or plans):	MW-6

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: This number must be permanently affixed to the well casing.	31-58610
Longitude (to nearest 1/10th second):	West 75° 10' 19.8"
Latitude (to nearest 1/10th second):	North 39° 51' 17.3"
Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):	PVC RIM CONC. PAD 12.63 13.03 10.35
Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)	NJ Geodetic Control Survey Source: MON 10041 NAD ____ 1927 __X__ 1983 (Adjustment) Elevation: NAVD 1988 (Adjustment)
Owners Well Number (As shown on application or plans):	MW-7

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD- 011- 770-031

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: This number must be permanently affixed to the well casing.	31-58911
Longitude (to nearest 1/10th second):	West 75° 10' 20.4"
Latitude (to nearest 1/10th second):	North 39° 51' 21.7"
Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):	PVC RIM CONC. PAD 9.63 9.88 6.72
Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)	NJ Geodetic Control Survey Source: MON 10041 NAD ____ 1927 __X__ 1983 (Adjustment) Elevation: NAVD 1988 (Adjustment)
Owners Well Number (As shown on application or plans):	MW-8

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x, $(mile)^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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MC Project No. 00-0064A

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Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: This number must be permanently affixed to the well casing.	31-58912
Longitude (to nearest 1/10th second):	West 75° 10' 31.0"
Latitude (to nearest 1/10th second):	North 39° 51' 21.2"
Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):	PVC RIM CONC. PAD 6.57 6.84 4.05
Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)	NJ Geodetic Control Survey Source: MON 10041 NAD ____ 1927 __X__ 1983 (Adjustment) Elevation: NAVD 1988 (Adjustment)
Owners Well Number (As shown on application or plans):	MW-9

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: 31-58913

This number must be permanently affixed to the well casing.

Longitude (to nearest 1/10th second): West 75° 10' 30.2"

Latitude (to nearest 1/10th second): North 39° 51' 23.1"

Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):

PVC	RIM	CONC. PAD
5.80	6.14	3.40

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)

NJ Geodetic Control Survey

Source: MON 10041

NAD

____ 1927 __X__ 1983 (Adjustment)

Elevation: NAVD 1988 (Adjustment)

Owners Well Number (As shown on application or plans): MW-10

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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Michael T. Angeline SEAL

PROFESSIONAL LAND SURVEYOR'S NAME

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PROFESSIONAL LAND SURVEYOR'S LICENSE#

MC Project No. 00-0064A

MONITORING WELL CERTIFICATION FORM B - LOCATION CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

Case Number(s): NJD-011-770-013 **(UST #, ISRA #, Incidents #, or EPA#)**

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:
(This number must be permanently affixed to the well casing): **31-62539**

Owners Well Number (As shown on application or plans): **MW-10D**

Geographic Coordinate NAD 83. (to nearest 1/10 of second):

Longitude: West 075°10'30.0" **Latitude:** North 39°51'23.1"

New Jersey State Plane Coordinates NAD 83 nearest 10 feet:

North 373329.56 East 302636.01

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'):	PVC	RIM	GRD
	5.99	6.23	3.41

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

Monument 10041 (NAVD88)

AUTHENTICATION

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SEAL

PROFESSIONAL LAND SURVEYOR'S SIGNATURE

4/9/03
DATE

Michael F. Burns GS 34841
PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER
(Please print or type)

4621 Nottingham Way Suite 8 Hamilton Square, New Jersey 08690 609-587-8200
PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: This number must be permanently affixed to the well casing.	31-58914 –
Longitude (to nearest 1/10th second):	West 75° 10' 31.2"
Latitude (to nearest 1/10th second):	North 39° 51' 25.6"
Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):	PVC RIM CONC. PAD 6.13 6.48 3.43
Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)	NJ Geodetic Control Survey Source: MON 10041 NAD ____ 1927 __X__ 1983 (Adjustment) Elevation: NAVD 1988 (Adjustment)
Owners Well Number (As shown on application or plans):	MW-11

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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Michael T. Angeline

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Michael T. Angeline SEAL

PROFESSIONAL LAND SURVEYOR'S NAME

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14156

PROFESSIONAL LAND SURVEYOR'S LICENSE#

MC Project No. 00-0064A

MONITORING WELL CERTIFICATION FORM B - LOCATION CERTIFICATION

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

Case Number(s): NJD-011-770-013 **(UST #, ISRA #, Incidents #, or EPA#)**

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:
(This number must be permanently affixed to the well casing): 31-62540

Owners Well Number (As shown on application or plans): MW-11D

Geographic Coordinate NAD 83. (to nearest 1/10 of second):

Longitude: West 075°10'31.3" **Latitude:** North 39°51'25.5"

New Jersey State Plane Coordinates NAD 83 nearest 10 feet:

North 373573.74 East 302551.31

Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'):	PVC	RIM	GRD
	5.72	6.08	3.16

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

Monument 10041 (NAVD88)

AUTHENTICATION

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DATE

Michael F. Burns GS 34841
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4621 Nottingham Way Suite 8 Hamilton Square, New Jersey 08690 609-587-8200
PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770 -013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: This number must be permanently affixed to the well casing.	31-58915
Longitude (to nearest 1/10th second):	West 75° 10' 34.7"
Latitude (to nearest 1/10th second):	North 39° 51' 21.0"
Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):	PVC RIM CONC. PAD 5.56 5.96 3.73
Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)	NJ Geodetic Control Survey Source: MON 10041 NAD ____ 1927 __X__ 1983 (Adjustment) Elevation: NAVD 1988 (Adjustment)
Owners Well Number (As shown on application or plans):	MW-12

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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Michael S Angeline

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Michael T. Angeline SEAL

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MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770 -013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: This number must be permanently affixed to the well casing.	31-58900
Longitude (to nearest 1/10th second):	West 75° 10' 07.7"
Latitude (to nearest 1/10th second):	North 39° 51' 21.8"
Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):	PVC RIM CONC. PAD 13.73 14.13 11.67
Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)	NJ Geodetic Control Survey Source: MON 10041 NAD ____ 1927 __X__ 1983 (Adjustment) Elevation: NAVD 1988 (Adjustment)
Owners Well Number (As shown on application or plans):	MW-13

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: 31-58916

This number must be permanently affixed to the well casing.

Longitude (to nearest 1/10th second): West 75° 10' 07.6"

Latitude (to nearest 1/10th second): North 39° 51' 21.7"

Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):

PVC	RIM	CONC. PAD
14.23	14.49	11.83

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)

NJ Geodetic Control Survey

Source: MON 10041

NAD

____ 1927 __X__ 1983 (Adjustment)

Elevation: NAVD 1988 (Adjustment)

Owners Well Number (As shown on application or plans): MW-13D

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: 31-58901

This number must be permanently affixed to the well casing.

Longitude (to nearest 1/10th second): West 75° 10' 09.4"

Latitude (to nearest 1/10th second): North 39° 51' 13.8"

Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):

PVC	RIM	CONC. PAD
24.08	24.39	22.12

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)

NJ Geodetic Control Survey

Source: MON 10041

NAD

____ 1927 __X__ 1983 (Adjustment)

Elevation: NAVD 1988 (Adjustment)

Owners Well Number (As shown on application or plans): MW-14

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: 31-58917

This number must be permanently affixed to the well casing.

Longitude (to nearest 1/10th second): West 75° 10' 09.4"

Latitude (to nearest 1/10th second): North 39° 51' 13.7"

Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot): PVC RIM CONC. PAD
24.19 24.50 22.11

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)

NJ Geodetic Control Survey
Source: MON 10041
NAD
____ 1927 __X__ 1983 (Adjustment)

Elevation: NAVD 1988 (Adjustment)

Owners Well Number (As shown on application or plans): MW-14D

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(mile)^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Michael T. Angeline

PROFESSIONAL LAND SURVEYOR'S SIGNATURE

Michael T. Angeline

PROFESSIONAL LAND SURVEYOR'S NAME
(Please print or type)

14156

PROFESSIONAL LAND SURVEYOR'S LICENSE#

SEAL

MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration Number: _____ Case Number: NJD-011-770-013
ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: This number must be permanently affixed to the well casing.	31-58902
Longitude (to nearest 1/10th second):	West 75° 10' 24.4"
Latitude (to nearest 1/10th second):	North 39° 51' 19.6"
Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):	PVC RIM CONC. PAD 6.53 6.82 3.92
Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)	NJ Geodetic Control Survey Source: MON 10041 NAD ____ 1927 __X__ 1983 (Adjustment) Elevation: NAVD 1988 (Adjustment)
Owners Well Number (As shown on application or plans):	MW-15

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(mile)^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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Michael T. Angeline SEAL
PROFESSIONAL LAND SURVEYOR'S NAME
(Please print or type)

14156
PROFESSIONAL LAND SURVEYOR'S LICENSE#

MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-110-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: This number must be permanently affixed to the well casing.	31-58918
Longitude (to nearest 1/10th second):	West 75° 10' 24.3"
Latitude (to nearest 1/10th second):	North 39° 51' 19.6"
Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):	PVC RIM CONC. PAD 5.99 6.30 3.79
Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)	NJ Geodetic Control Survey Source: MON 10041 NAD ____ 1927 __X__ 1983 (Adjustment) Elevation: NAVD 1988 (Adjustment)
Owners Well Number (As shown on application or plans):	MW-15D

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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Michael T. Angeline SEAL

PROFESSIONAL LAND SURVEYOR'S NAME

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MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: This number must be permanently affixed to the well casing.	31-58903
Longitude (to nearest 1/10th second):	West 75° 10' 23.8"
Latitude (to nearest 1/10th second):	North 39° 51' 23.8"
Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):	PVC RIM CONC. PAD 6.93 7.20 4.47
Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)	NJ Geodetic Control Survey Source: MON 10041 NAD ____ 1927 __X__ 1983 (Adjustment) Elevation: NAVD 1988 (Adjustment)
Owners Well Number (As shown on application or plans):	MW-16

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: 31-58919

This number must be permanently affixed to the well casing.

Longitude (to nearest 1/10th second): West 75° 10' 23.7"

Latitude (to nearest 1/10th second): North 39° 51' 23.7"

Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot): PVC 6.67 RIM 7.03 CONC. PAD 4.89

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.) NJ Geodetic Control Survey Source: MON 10041

NAD

____ 1927 __X__ 1983 (Adjustment)

Elevation: NAVD 1988 (Adjustment)

Owners Well Number (As shown on application or plans): MW-16D

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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MC Project No. 00-0064A

SEAL

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: 31-58920

This number must be permanently affixed to the well casing.

Longitude (to nearest 1/10th second): West 75° 10' 31.3"

Latitude (to nearest 1/10th second): North 39° 51' 16.1"

Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot): PVC RIM CONC. PAD

6.87 7.10 4.40

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)

NJ Geodetic Control Survey

Source: MON 10041

NAD

____ 1927 __X__ 1983 (Adjustment)

Elevation: NAVD 1988 (Adjustment)

Owners Well Number (As shown on application or plans): MW-17D

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(mile)^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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Michael J. Angeline

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Michael T. Angeline SEAL

PROFESSIONAL LAND SURVEYOR'S NAME

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14156

PROFESSIONAL LAND SURVEYOR'S LICENSE#

MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection
Name of Facility: Matteo Iron & Metal
Location: West Deptford, New Jersey
UST Registration Number: _____ Case Number: NJD-011-770-013
ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: 31-58905
This number must be permanently affixed to the well casing.

Longitude (to nearest 1/10th second): West 75° 10' 36.5"
Latitude (to nearest 1/10th second): North 39° 51' 24.2"
Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):

PVC	RIM	CONC. PAD
5.79	6.10	3.33

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)

NJ Geodetic Control Survey
Source: MON 10041
NAD
____ 1927 __X__ 1983 (Adjustment)

Elevation: NAVD 1988 (Adjustment)

Owners Well Number (As shown on application or plans): MW-18

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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SEAL

Michael T. Angeline
PROFESSIONAL LAND SURVEYOR'S NAME
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MC Project No. 00-0064A

THIS FORM MUST BE COMPLETED BY THE PERMITTEE AND/OR SURVEYOR

Monitoring Well Certification-Form B-Location Certification

Name of Owner: New Jersey Department of Environmental Protection

Name of Facility: Matteo Iron & Metal

Location: West Deptford, New Jersey

UST Registration Number: _____ Case Number: NJD-011-770-013

ISRA Case Number: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: 31-58921

This number must be permanently affixed to the well casing.

Longitude (to nearest 1/10th second): West 75° 10' 36.6"

Latitude (to nearest 1/10th second): North 39° 51' 24.3"

Elevation of Top of Inner Casing (cap off) (to one-hundredth of a foot):

PVC	RIM	CONC. PAD
5.73	6.03	3.44

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the department, identify here, assume datum of 100', and give approximated actual elevation.)

NJ Geodetic Control Survey

Source: MON 10041

NAD

____ 1927 __X__ 1983 (Adjustment)

Elevation: NAVD 1988 (Adjustment)

Owners Well Number (As shown on application or plans): MW-18D

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from federal or state benchmark if not more than 1000 feet from the site or from an alternate datum approved by the department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

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Michael T. Angeline

PROFESSIONAL LAND SURVEYOR'S SIGNATURE

Michael T. Angeline

PROFESSIONAL LAND SURVEYOR'S NAME

(Please print or type)

14156

PROFESSIONAL LAND SURVEYOR'S LICENSE#

SEAL

MC Project No. 00-0064A

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 -58898

Atlas Sheet Coordinates 31 : 11 437

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 128/325
Address 1708 US HWY 130

DATE WELL STARTED 09/25/00
DATE WELL COMPLETED 09/25/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 18 ft.
Well finished to 18 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☒ above grade ☐ flush mounted

Finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 12 ft.

Water level was measured using M scope

Well was developed for 1 hours at .5 gpm

Method of development Centrifugal pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	8	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	8	18	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	6	18	12	# 1 sand	600 lbs
Grout	0	6	12	Neat Cement Bentonite	300 lbs. 15 lbs.

Grouting Method Tremie
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-3' fill
3-18' sand and gravel
18' clay

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES

Well Driller (Print) William G. Petley

Driller's Signature

Registration No. J 13761 Date / /

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

3002

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 -58899

Atlas Sheet Coordinates 31 [illegible]

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW - 2
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. [illegible]
Address 1700 US HWY 130

DATE WELL STARTED 09 / 19 /00
DATE WELL COMPLETED 09 / 19 /00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 13 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

Finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 6 ft.

Water level was measured using M scope

Well was developed for 1 hours at 1 gpm

Method of development Centrifugal pump

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	4	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	4	14	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	14	12	# 1 sand	600 lbs
Grout	0	2	12	Neat Cement / Bentonite	lbs / 10 lbs

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' fill
5-14' sand and gravel

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES

Well Driller (Print) William G. Petley

Driller's Signature

Registration No. J 13761 Date / /

3002

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

-138 M
8

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 58906

Atlas Sheet Coordinates 31 11

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-3
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 128/325
Address 1708 US HWY 130

DATE WELL STARTED 09 / 18 / 00
DATE WELL COMPLETED 09 / 18 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

" finished above grade, casing height (stick) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 6 ft.

Water level was measured using M Scope

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal pump

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-61

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	4	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	4	14	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	14	12	# 1 sand	600 lbs.
Grout	0	2	12	Neat Cement	lbs.
				Bentonite	10 lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' fill
5-14' mf sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES

Well Driller (Print) William G. Petley

Driller's Signature William G. Petley

Registration No. J 13761 Date 12 / 11 / 00

3002

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

A-138 M
98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 59907

Atlas Sheet Coordinates 31 11 427

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E STATE ST
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-4
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 128/725
Address 1708 US HWY 130

DATE WELL STARTED 09 / 20 /00
DATE WELL COMPLETED 09 / 20 /00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 4 ft.

Water level was measured using m scope

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	2	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	2	12	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	12	12	#1 sand	600 lbs
Grout	0	1	12	Neat Cement / Bentonite	lbs. / 5 lbs.

Grouting Method Gravity
Drilling Method HSA

Was permanent pumping equipment installed? [ ] Yes [X] No
Pump capacity – gpm
Pump type: –
Drilling Fluid – Type of Rig Mobile B-59

Health and Safety Plan submitted? [X] Yes [ ] No
Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William G. Petzey
Driller's Signature
Registration No. 13761 Date 12 / 5 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' fill
5-12' sand and gravel

3002 COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 58908

Atlas Sheet Coordinates 31 11 437

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-5
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 126/325
Address 1708 US HWY 130

DATE WELL STARTED 09 / 19 / 00
DATE WELL COMPLETED 09 / 19 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 6 ft.
Water level was measured using H scope

Well was developed for 1 hours at 1.5 gpm
Method of development Centrifugal pump

Was permanent pumping equipment installed? [ ] Yes [X] No
Pump capacity - gpm
Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? [X] Yes [ ] No
Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	4	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	4	14	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	14	12	#1 sand	600 lbs
Grout	0	2	12	Neat Cement	lbs.
				Bentonite	10 lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' fill
5-14' sand and gravel

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William C. Petley
Driller's Signature
Registration No. J 13761 Date

3002 COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 58709

Atlas Sheet Coordinates 31 : 11 477

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-6
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 129/325
Address 1708 US HWY 130

DATE WELL STARTED 09 / 20 /00
DATE WELL COMPLETED 09 / 20 /00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☒ above grade ☐ flush mounted

" finished above grade, casing height (stick) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 4 ft.

Water level was measured using M scope

Well was developed for 1 hours at 1.5 gpm

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	2	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	2	12	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	12	12	#1 sand	550 lbs
Grout	0	1	12	Neat Cement	lbs.
				Bentonite	5 lbs.

Grouting Method Gravity
Drilling Method HSA

Method of development Centrifugal pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-61

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES

Well Driller (Print) William G. Petley

Driller's Signature William G. Petley

Registration No. J 13761 Date 12 / 11 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' fill
5-12' mf sand

3002

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Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 58910

Atlas Sheet Coordinates 31 11 437

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-7
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 128/325
Address 1708 US HWY 130

DATE WELL STARTED 09/21/00
DATE WELL COMPLETED 09/21/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 6 ft.

Water level was measured using H scope

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	4	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	4	14	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	14	12	#1 sand	600 lbs
Grout	0-	2	12	Neat Cement / Bentonite	lbs. / 10 lbs.

Grouting Method Gravity
Drilling Method HSA

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES

Well Driller (Print) William G. Petley

Driller's Signature

Registration No. J 13761 Date 11/3/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' fill
5-14' sand and gravel

3002

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 58211

Atlas Sheet Coordinates 31 : 11 437

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-8
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 128/325
Address 1709 US HWY 130

DATE WELL STARTED 09 / 20 /00
DATE WELL COMPLETED 09 / 20 /00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 4 ft.

Water level was measured using M Scope

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal pump

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-61

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	2	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	2	12	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	12	12	# 1 sand	550 lbs
Grout	0	1	12	Neat Cement	lbs.
				Bentonite	5 lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-3' fill
3-12' mf sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES

Well Driller (Print) William G. Petley

Driller's Signature

Registration No. J 13761 Date 12 / 11 / 00

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 58912

Atlas Sheet Coordinates 31 11 437

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-9
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 128/325
Address 1700 US HWY 130

DATE WELL STARTED 09 / 22 / 00
DATE WELL COMPLETED 09 / 22 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick-up) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 6 ft.

Water level was measured using M scope

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal pump

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	4	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	4	14	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	14	12	#1 sand	600 lbs
Grout	0	2	12	Neat Cement	lbs
				Bentonite	10 lbs

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' fill
5-13' m sand and coarse sand
13-14' silty clay

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William G. Petley
Driller's Signature
Registration No. J 13761 Date 12 / 5 / 00

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 58213

Atlas Sheet Coordinates 21 : 11 437

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State N.J Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-10
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 7 Block No. 128/325
Address 1708 US HWY 130

DATE WELL STARTED 09 / 22 /00
DATE WELL COMPLETED 09 / 22 /00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 14 ft.
Well finished to 14 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 6 ft.

Water level was measured using M scope

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch.no.)
Single/Inner Casing	+ 2.5	4	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	4	14	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	14	12	#1 sand	575 lbs
Grout	0	2	12	Neat Cement	lbs.
				Bentonite	10 lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-6' fill
6-14' sand

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William G. Petley
Driller's Signature
Registration No. J 13761 Date 10 / 3 /

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 58214

Atlas Sheet Coordinates 31 : 11 : 437

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-11
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 129/325
Address 1703 US HWY 130

DATE WELL STARTED 09 / 21 / 00
DATE WELL COMPLETED 09 / 21 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 5 ft.

Water level was measured using a scope

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal pump

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	2	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	2	12	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	12	12	#1 sand	600 lbs
Grout	0	1	12	Neat Cement	lbs.
				Bentonite	5 lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-3' fill
3-12 sand and gravel

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William G. Petlery
Driller's Signature
Registration No. J 13761 Date / /

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 58915

Atlas Sheet Coordinates 31 : 11 A-7

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-12
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 128/125
Address 1708 US HWY 130

DATE WELL STARTED 09 / 22 / 00
DATE WELL COMPLETED 09 / 22 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 13 ft.
Well finished to 13 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 2.4 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 6 ft.

Water level was measured using M scope

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	3	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	3	13	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1.5	13	12	#1 sand	650 lbs
Grout	0	1.5	12	Neat Cement	lbs.
				Bentonite	10 lbs.

Grouting Method Gravity
Drilling Method HSA

Was permanent pumping equipment installed? [ ] Yes [X] No
Pump capacity - gpm
Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William G. Petley
Driller's Signature
Registration No. J 13761 Date 12 / 5 / 00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' fill
5-13' mf sand

3002

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 -58200

Atlas Sheet Coordinates 31 : 11 4?7

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW - 13
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 128/325
Address 1708 US HWY 130

DATE WELL STARTED 10 / 18 /00
DATE WELL COMPLETED 10 / 18 /00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 7 ft.

Water level was measured using M scope

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal pump

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-61

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES

Well Driller (Print) William C. Petley

Driller's Signature

Registration No. J 13761 Date / /

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	5	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	5	15	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	3	15	12	# 1 sand	600 lbs
Grout	0	3	12	Neat Cement Bentonite	15 lbs lbs

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-2' fill
2-12' sand and gravel

3002

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11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 58916

Atlas Sheet Coordinates 21 - 11 - 477

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-13D
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 128/325
Address 1706 US HWY. 130

DATE WELL STARTED 10 / 17 / 00
DATE WELL COMPLETED 10 / 17 / 00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 77 ft.
Well finished to 77 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick-up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 15 ft.

Water level was measured using N scope

Well was developed for 1 hours at 10 gpm

Method of development Submersible pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	67	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	67	77	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	63	77	12	#1 sand	750 lbs
Grout	0	63	12	Neat Cement Bentonite	3864 lbs. 214 lbs.

Grouting Method Tremie
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES

Well Driller (Print) Willian G. Petley

Driller's Signature

Registration No. J 13761 Date 10/17/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-3' fill
3-25' mf sand and gravel
25-77' some cobbles tr clay sand & gravel

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Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 58701

Atlas Sheet Coordinates 21 : 11 A7

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-14
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 126/325
Address 1703 US HWY 130

DATE WELL STARTED 10/25/00
DATE WELL COMPLETED 10/25/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 23 ft.
Well finished to 23 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 15 ft.

Water level was measured using M scope

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	13	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	13	23	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	9	23	12	#1 sand	700 lbs
Grout	0	9	12	Neat Cement Bentonite	500 lbs. 15 lbs.

Grouting Method Tremel
Drilling Method HSA

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES

Well Driller (Print) William G. Petley

Driller's Signature

Registration No. J 13761 Date / /

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' fill
5-23' silty sand

3002

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

OWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 58917

Atlas Sheet Coordinates 31 11 457

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-14D
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. ? Block No. 126/325
Address 1708 US HWY. 130

DATE WELL STARTED 10/24/00
DATE WELL COMPLETED 10/24/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 84 ft.
Well finished to 84 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick-up) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 17 ft.
Water level was measured using M scope
Well was developed for 1 hours at 10 gpm
Method of development Submersible pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	74	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	74	84	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	70	84	12	#1 sand	700lbs
Grout	0	70	12	Neat Cement Bentonite	4293 lbs. 237 lbs.

Grouting Method Tremie
Drilling Method HSA

Was permanent pumping equipment installed? [ ] Yes [X] No
Pump capacity - gpm
Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? [X] Yes [ ] No
Level of Protection used on site (circle one) None D C B A

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' fill
5-15' silty sand
15-25' clay
25-84' sand and gravel some cobbles clay

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William G. Petley
Driller's Signature
Registration No. J 13761 Date 12/5/

2002

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 58902

Atlas Sheet Coordinates 31 31

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-15
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 120/125
Address 1708 US HWY 130

DATE WELL STARTED 10 / 19 /00
DATE WELL COMPLETED 10 / 19 /00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 4 ft.

Water level was measured using M scope

Well was developed for 1 hours at 1 gpm

Method of development Centrifugal pump

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	2	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	2	12	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	12	12	#1 sand	550 lbs
Grout	0	1	12	Neat Cement	lbs.
				Bentonite	5 lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-3' fill
3-12' sand and gravel

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES

Well Driller (Print) William G. Petley

Driller's Signature William G. Petley

Registration No. J 13761 Date 12 / 5 / 00

3002

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 -58918

Atlas Sheet Coordinates 31 : 11 A32

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-15D
County GLOUCESTER Municipality WEST DEPTFORD T. Lot No. 2 Block No. 128/32
Address 1703 US HWY. 130

DATE WELL STARTED 10 / 18 /00
DATE WELL COMPLETED 10 / 18 /00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 68 ft.
Well finished to 68 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 17 ft.

Water level was measured using Hscope

Well was developed for 1 hours at 10 gpm

Method of development Submersible pump

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	58	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	58	68	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	54	68	12	#1 sand	750 lbs
Grout	0	54	12	Neat Cement Bentonite	3312 lbs 183 lbs

Grouting Method Tremie
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-3' fill
3-19' sand
19-25' clay
25-68' sand and gravel some cobbles

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William G. Petley
Driller's Signature
Registration No. J 13761 Date 12 / [illegible] / 00

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New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 51 - 38903

Atlas Sheet Coordinates 31 : 11 437

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-16
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 178/325
Address 1708 US HWY 130

DATE WELL STARTED 10 / 23 /00
DATE WELL COMPLETED 10 / 23 /00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 4 ft.

Water level was measured using H scope

Well was developed for 1 hours at 2 gpm

Method of development Centrifugal pump

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	2	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used 010)	2	12	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	12	12	#1 sand	600 lbs
Grout	0	1	12	Neat Cement	lbs.
				Bentonite	5 lbs.

Grouting Method Gavity
Drilling Method HSA

Was permanent pumping equipment installed? ☐ Yes ☒ No
Pump capacity - gpm
Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? ☒ Yes ☐ No
Level of Protection used on site (circle one) None D C B A

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William G. Petley
Driller's Signature William G. Petley
Registration No. J 13761 Date 12/5/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-8' fill
8-12' sand

3002

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DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 50919

Atlas Sheet Coordinates 31 : 11 437

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-16D
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 123/325
Address 1700 US RTE. 130

DATE WELL STARTED 10/17/00
DATE WELL COMPLETED 10/17/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 77 ft.
Well finished to 77 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 14 ft.

Water level was measured using M scope

Well was developed for 1 hours at 10 gpm

Method of development Submersible pump

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-61

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	67	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	67	77	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	63	77	12	# 1 sand	600 lbs
Grout	0	63	12	Neat Cement	1200 lbs.
				Bentonite	60 lbs.

Grouting Method Tremie
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' fill
5-12' mf sand
12-26' clay silty clay
26-77' mf sand and gravel

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES

Well Driller (Print) William G. Petley

Driller's Signature William G. Petley

Registration No. J 13761 Date 12/11/00

3002

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DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 8904

Atlas Sheet Coordinates 31 : 11 : 437

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-17
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 128/125
Address 1708 US HWY 130

DATE WELL STARTED 10/24/00
DATE WELL COMPLETED 10/24/00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 6 ft.

Water level was measured using M scope

Well was developed for 1 hours at 1.5 gpm

Method of development Centrifugal pump

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	2	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	2	12	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	12	12	#1 sand	600 lbs
Grout	0	1	12	Neat Cement	lbs.
				Bentonite	5 lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-5' fill
5-12' sand and gravel

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C.I.S.E. ENVIRONMENTAL SERVICES
Well Driller (Print) William C. Petley
Driller's Signature
Registration No. J 13761 Date 12/5/00

3002

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BWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 58926

Atlas Sheet Coordinates 31 11 43?

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-17D
County GLOUCESTER Municipality WEST DEPTFORD T. Lot No. 2 Block No. 178/325
Address 1700 US HWY. 130

DATE WELL STARTED 10 / 23 /00
DATE WELL COMPLETED 10 / 23 /00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 69 ft.
Well finished to 69 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade [ ] flush mounted

If finished above grade, casing height (stick) above land surface 2.5 ft.

Was steel protective casing installed? [X] Yes [ ] No

Static water level after drilling 14 ft.

Water level was measured using M scope

Well was developed for 1 hours at 10 gpm

Method of development Submersible pump

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	59	43	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	59	69	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	55	69	12	#1 sand	700 lbs
Grout	0	55	12	Neat Cement Bentonite	3315 lbs. 185 lbs.

Grouting Method Tremie
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-3' fill
3-10' sand
10-18' clay
18-69' sand gravel tr clay some cobbles

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES
Well Driller (Print) William G. petley
Driller's Signature William G. Petley
Registration No. J 13761 Date 12 / 5 / 00

3002

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 58905

Atlas Sheet Coordinates 21 : 11 437

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-18
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 129/525
Address 1708 US HWY 130

DATE WELL STARTED 10 / 20 /00
DATE WELL COMPLETED 10 / 20 /00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 12 ft.
Well finished to 12 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: [X] above grade
[ ] flush mounted

If finished above grade, casing height (stick) above land surface 2.5 ft.

Was steel protective casing installed?
[X] Yes [ ] No

Static water level after drilling 4 ft.

Water level was measured using M scope

Well was developed for 1 hours
at 1.5 gpm

Method of development Centrifugal pump

Was permanent pumping equipment installed? [ ] Yes [X] No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? [X] Yes [ ] No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	2	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	2	12	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	1	12	12	#1 sand	600 lbs
Grout	0	1	12	Neat Cement	lbs.
				Bentonite	5 lbs.

Grouting Method Gravity
Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-6' fill
6-12' sand and gravel

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C T & E ENVIRONMENTAL SERVICES

Well Driller (Print) William G. Petley

Driller's Signature

Registration No. J 13761 Date / /

3002

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-138 M
11/98

New Jersey Department of Environmental Protection
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 31 - 50221

Atlas Sheet Coordinates 31 : 1 A22

OWNER IDENTIFICATION - Owner NJDEP
Address 401 E. STATE ST.
City TRENTON State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-18D
County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 2 Block No. 138/325
Address 1708 US HWY. 130

DATE WELL STARTED 10/ 19 /00
DATE WELL COMPLETED 10/ 19 /00

TYPE OF WELL (as per Well Permit Categories) MONITORING
Regulatory Program Requiring Well Case I.D.#

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION

Total depth drilled 69 ft.
Well finished to 69 ft.

Borehole diameter:
Top 12 in.
Bottom 12 in.

Well was finished: ☒ above grade ☐ flush mounted

If finished above grade, casing height (stick up) above land surface 2.5 ft.

Was steel protective casing installed? ☒ Yes ☐ No

Static water level after drilling 11 ft.

Water level was measured using M scope

Well was developed for 1 hours at 10 gpm

Method of development Submersible pump

Was permanent pumping equipment installed? ☐ Yes ☒ No

Pump capacity - gpm

Pump type: -

Drilling Fluid - Type of Rig Mobile B-59

Health and Safety Plan submitted? ☒ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+ 2.5	59	4	PVC	sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	59	69	4	PVC	sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	55	69	12	#1 sand	700 lbs
Grout	0	55	12	Neat Cement Bentonite	3312 lbs. 183 lbs.

Grouting Method Tremie
Drilling Method HSA

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company C. J. & E. ENVIRONMENTAL SERVICES
Well Driller (Print) William G. Petley
Driller's Signature
Registration No. J 13761 Date 12/5/00

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-6' fill
6-69' sand and gravel some cobbles

3 of 2

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

DWR-133M
2/00

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON, NJ

3162539

MONITORING WELL PERMIT

20

Permit No. 3162540

Mail To:
NJDEP
BUREAU OF WATER ALLOCATION
PO BOX 426
TRENTON, NJ 08625-0426

VALID ONLY AFTER APPROVAL BY THE D.E.P.

COORD #: 31.11.438

Owner NJDEP

Address 401 E. STATE STREET
TRENTON, NJ 08625

Driller OT&E Environmental Svcs

Address PO BOX 423
WEST CREEK, NJ 08092

Name of Facility MATTEO IRON & METAL

Address 1708 US Highway Rt. 130
West Deptford NJ

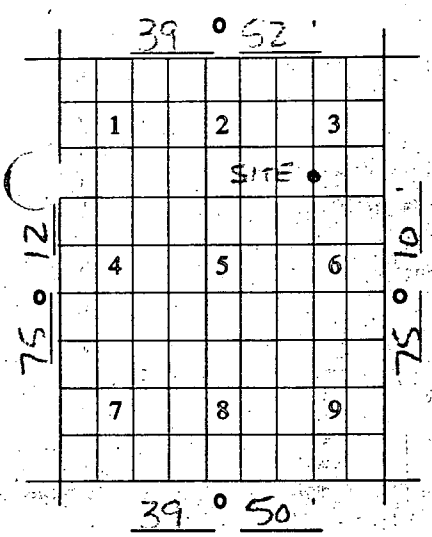
Diameter of Well(s)	4 Inches	Proposed Depth of Well(s)	75 Feet
# of Wells Applied for (max. 10)	2	Will pumping equipment be utilized?	YES ☐ NO ☑
Type of Well (see reverse)	monitoring	If Yes, give pump capacity	— cumulative GPM

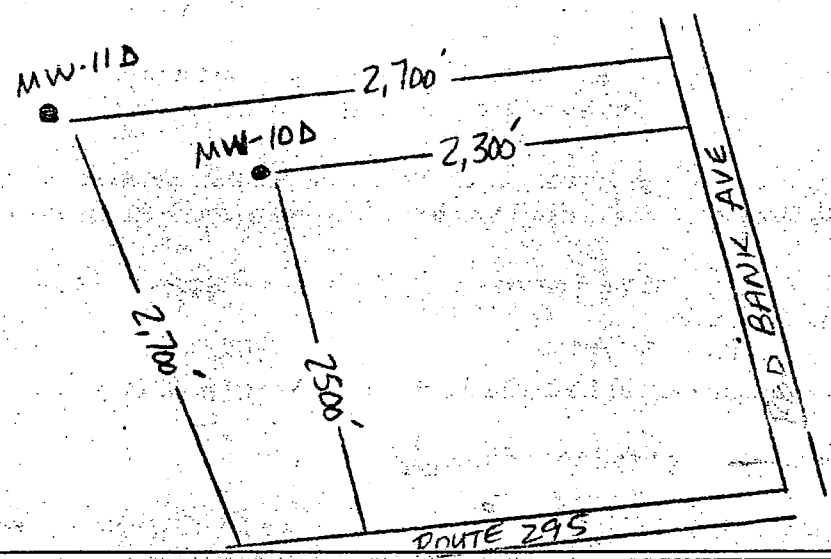
LOCATION OF WELL(S)

Lot #	Block #	Municipality	County
2	128/325	W DEPTFORD	Gloucester

State Atlas Map No. 31

Draw sketch of well(s) nearest roads, buildings, etc. with marked distances in feet. Each well MUST be labeled with a name and/or number on the sketch.





FOR MONITORING WELLS, RECOVERY WELLS, OR PIEZOMETERS, THE FOLLOWING MUST BE COMPLETED BY THE APPLICANT. PLEASE INDICATE WHY THE WELLS ARE BEING INSTALLED:

- ☐ Spill Site
- ☑ ISRA Site
- ☐ CERCLA (Superfund) Site
- ☐ RCRA Site
- ☐ Underground Storage Tank Site
- ☐ Operational Ground Water Permit Site
- ☐ Pretreatment and Residuals Site
- ☐ Water and Hazardous Waste Enforcement Case
- ☐ Water Supply Aquifer Test Observation Well
- ☐ Other (explain)

CASE I.D. Number 91-01-11-SP015

This Space for Approval Stamp

WELL PERMIT APPROVED
N.J. D.E.P.
JAN 4 2002
BUREAU OF WATER ALLOCATION

FOR D.E.P. USE

- ☐ Issuance of this permit is subject to the conditions attached. (see next page)
- ☐ For monitoring purposes only
- ☐
- ☑ The well(s) may not be completed with more than 25 feet of total screen or uncased borehole.

SEE REVERSE SIDE FOR IMPORTANT PROVISIONS PERTAINING TO THIS PERMIT.
In compliance with N.J.S.A.58;4A-14, application is made for a permit to drill a well as described above.

Date 12/20/01 Signature of Driller [signature] Registration No. M-1418

NJ 3285 Signature of Property Owner Rich Harding Rep Louis Berger 973 678 1960

COPIES: Water Allocation - White Health Dept. - Yellow Owner - Blue Driller - White

APPENDIX C
Grain Size Data

GRAIN SIZE DATA

Matteo Iron and Metal

Sample Location	Sample ID	Lab ID	Date	Depth (Feet)	Soil Description
Soil Samples					
MW1	MW1C	E77442-7	9/25/00	14-16	Light brown medium to fine SAND, little Fines
MW2	MW-2A	E77159-15	9/18/00	12-14	Light brown medium to fine SAND, some Fines, trace Gravel
MW3	MW-3A	E77159-16	9/18/00	10-12	Light brown medium to fine SAND, little Fines
MW4	MW-4A	E76949-15	9/19/00	8-9.5	Olive brown fine SAND, and Fines
MW5	MW-5A	E77159-17	9/19/00	12-14	Dark gray medium to fine SAND, some Fines
MW6	MW-6A	E76949-16	9/20/00	8-10	Olive FINES, and fine Sand, trace Gravel
MW6	MW-6DUP	E76949-17	9/20/00	8-10	Olive FINES, some fine Sand
MW7	MW-7A	E76949-18	9/21/00	8.5-10	Olive brown coarse to fine SAND, and fine Gravel, trace Fines
MW8	MW8A	E77442-3	9/25/00	14-16	Olive green medium to fine SAND, some Fines, little Gravel
MW8	MW8B	E77442-4	9/25/00	16-18	Olive brown medium to fine SAND, some fine Gravel, little Fines
MW9	MW-9A	E77442-1	9/22/00	10-12	Strong brown coarse to fine SAND, some fine Gravel, little Fines
MW10	MW-10A	E77442-2	9/22/00	10-12	Strong brown medium to fine SAND, little Fines, trace Gravel
MW11	MW-11A	E76949-19	9/21/00	6-8	Strong brown coarse to fine SAND, some fine Gravel, trace Fines
MW12	MW-12A	E76949-20	9/21/00	6-8.5	Light brown medium to fine SAND, some Gravel, trace Fines
B13	DUPTOC	E78963-10	10/16/00	85-86	Gray coarse to fine SAND, some fine Gravel, little Fines
B13	MW13A	E78510-17	10/12/00	6-7	Light yellowish brown medium to fine SAND, little Fines
B13	MW13B	E78510-18	10/12/00	12-13	Very dark gray FINES, some fine Sand, trace Gravel
B14	MW14-A	E77892-1	9/29/00	6-8	Dark brown medium to fine SAND, trace Fines
B14	MW14-B	E77892-2	9/29/00	18-20	Dark olive FINES, and fine Sand, trace Gravel
B14	MW14-C	E78043-1	10/2/00	45-47	Light brownish gray medium to fine SAND, and Fines, trace Gravel
B14	MW14-D	E78043-2	10/2/00	75-77	Black medium to fine SAND, little Fines, little Gravel
B15	MW15-A	E78043-12	10/3/00	2-8	Strong brown medium to fine SAND, little Fines, trace Gravel
B15	MW15-B	E78043-13	10/3/00	8-12	Dark gray FINES, little Sand
B15	MW15-C	E78043-14	10/3/00	25-32	Light olive brown coarse to fine SAND, little Fines, trace Gravel
B15	MW15E	E78043-15	10/3/00	45-52	Gray medium to fine SAND, little Fines, trace Gravel
B15	MW15-E	E78265-1	10/5/00	80-87	Gray fine GRAVEL, and coarse to medium Sand, trace Fines
B16	MW16C	E78265-4	10/5/00	10-11.5	Olive gray medium to fine SAND, little Fines, trace Gravel
B16	MW16D	E78266-12	10/6/00	45-46	Gray coarse to medium SAND, little Gravel, trace Fines
B16	MW16E	E78266-13	10/6/00	50-51	Dark gray coarse to fine SAND, some fine Gravel, some Fines
B16	MW16F	E78266-14	10/6/00	60-61	Very dark gray medium to fine SAND, little fine Gravel, trace Fines
B16	MW16G	E78510-9	10/9/00	85-86	Dark gray fine SAND, and coarse to fine Gravel, some Fines
B16	MW16H	E78510-10	10/9/00	90-91	Very dark gray medium to fine SAND, and coarse to fine Gravel, trace Fines
B17	MW17D-A	E76840-5	9/13/00	4-5.5	Yellowish brown medium to fine SAND, some fine Gravel, trace Fines
B17	MW17D-B	E76840-6	9/13/00	9-10.5	Yellowish olive brown FINES, some coarse Gravel, some fine Sand
B17	MW17D-C	E76840-7	9/13/00	18-19	Gray fine SAND, some Fines, trace Gravel
B17	MW17D-D	E76840-8	9/14/00	45-46	Yellowish gray brown coarse to fine SAND, little Fines, little Gravel
B17	MW17D-E	E76840-9	9/14/00	65-66	Gray fine SAND, some Fines, little Gravel
B17	MW17D-F	E76840-10	9/14/00	75-76	Dark gray fine SAND, some Fines
B17	MW17D-G	E76949-2	9/15/00	85-86	Black fine SAND, and Fines
B18	MW18C	E78510-13	10/10/00	6-7	Yellowish brown medium to fine SAND, little fine Gravel, trace Fines
B18	MW18D	E78510-14	10/10/00	16-17	Yellowish brown medium to fine SAND, some fine Gravel, little Fines
B18	MW18E	E78510-15	10/10/00	25-26	Yellowish brown medium to fine SAND, trace Fines, trace Gravel
B18	MW18F	E78510-16	10/10/00	50-51	Gray medium to fine SAND, trace Fines

GRAIN SIZE DATA
Matteo Iron and Metal

Sample Location	Sample ID	Lab ID	Date	Depth ft	Description
Sediment Samples					
T2-A	T2-AA	E79744-13	10/31/00	0-3	Black FINES, some Sand, trace Gravel
T2-B	T2-BA	E79745-10	10/31/00	0-1	Black FINES, trace Sand
T2-B	T2-BB	E79745-11	10/31/00	1-3	Black FINES, little Sand, trace Gravel
T2-C	T2-CA	E79745-7	10/31/00	0-1	Very dark brown medium to fine SAND, some Fines trace Gravel
T2-C	T2-CC	E79745-9	10/31/00	1-3	Very dark grayish brown medium to fine SAND, and Fines, trace Gravel
T2-D	T2-DA	E79745-4	10/31/00	0-2	Very dark gray medium to fine SAND, and Fines, trace Gravel
T2-D	T2-DC	E79745-6	10/31/00	2-3	Very dark gray medium to fine SAND, and Fines, trace Gravel
T2-E	T2-EA	E79745-1	10/31/00	0-3	Dark brown medium to fine SAND, and Fines, trace Gravel
T4-C	T4-CA	E79744-16	10/30/00	0-2	Black medium to fine SAND, little Fines, trace Gravel
T4-C	T4-CC	E79744-18	10/30/00	2-3	Dark brown FINES, some fine Sand
T4-D	T4-DA	E79744-20	10/30/00	0-3	Black FINES, little Sand, trace Gravel
T4-E	T4-EA	E79744-1	10/30/00	0-3	Very dark brown FINES, some Sand, trace Gravel
T5-C	T5-CA	E79743-8	10/31/00	0-3	Dark gray medium to fine SAND, and Fines, trace Gravel
T5-D	T5-DA	E79743-5	10/30/00	0-3	Very dark olive FINES, trace Sand
T5-E	T5-EA	E79743-2	10/30/00	0-3	Dark olive FINES, and fine Sand, trace Gravel
T6-C	T6-CA	E79744-10	10/30/00	0-3	Very dark brown FINES, and medium to fine Sand
T6-D	T6-DA	E79744-7	10/30/00	0-1	Dark olive FINES, trace SAND, trace Gravel
T6-D	T6-DC	E79744-9	10/30/00	1-3	Very dark gray FINES, trace Sand
T6-E	T6-EA	E79744-4	10/30/00	0-3	Black FINES, little Sand, trace Gravel
T7-C	T7-CA	E79745-13	10/31/00	0-3	Very dark brown FINES, and fine Sand, trace Gravel
T7-D	T7-DA	E79745-16	10/31/00	0-3	Black FINES, trace Sand, trace Gravel
T7-E	T7-EA	E79743-11	10/31/00	0-1	Dark olive FINES, and fine Sand, trace Gravel
T7-E	T7-EC	E79743-13	10/31/00	1-3	Dark olive medium to fine Sand, some Fines, trace Gravel
T8-C	T8-CA	E79743-20	10/31/00	0-3	Dark gray FINES, trace Sand
T8-D	T8-DA	E79743-17	10/31/00	0-3	Dark gray FINES, trace Sand
T8-E	T8-EA	E79743-14	10/31/00	0-1.5	Dark olive FINES, little Sand, trace Gravel
T8-E	T8-EC	E79743-16	10/31/00	1.5-3	Dark brownmedium to fine SAND, some Fines, trace Gravel
T11-A	T11-AA	E79555-11	10/27/00	0-3	Very dark gray FINES, trace Sand
T11-B	T11-BA	E79555-14	10/27/00	0-3	Dark olive gray FINES, trace Sand
T11-C	T11-CA	E79555-8	10/27/00	0-3	Very dark olive FINES, trace Sand
T11-D	T11-DA	E79555-4	10/27/00	0-3	Dark olive gray FINES, trace Sand, trace Gravel
T11-E	T11-EA	E79555-1	10/27/00	0-2	Black FINES, and medium to fine Sand, trace Gravel
T11-E	T11-EC	E79555-3	10/27/00	2-3	Black FINES, little Sand, trace Gravel
T13-A	T13-AA	E79453-3	10/25/00	0-1	Black FINES, trace Sand
T13-A	T13-AB	E79453-4	10/25/00	1-3	Very dark brown FINES, trace Sand
T13-B	T13-BA	E79452-21	10/25/00	0-3	Gray FINES, trace Sand
T13-C	T13-CA	E79452-15	10/25/00	0-2	Black FINES, little Sand
T13-C	T13-CC	E79452-17	10/25/00	2-3	Gray FINES, trace Sand
T13-D	T13-DB	E79452-19	10/25/00	0-3	Gray FINES, trace Sand, trace Gravel
T13-E	T13-EA	E79452-11	10/25/00	0-2	Brownish gray FINES, little Sand, trace Gravel
T13-E	T13-EB	E79452-12	10/25/00	2-3	Brown FINES, some coarse Gravel, some fine Sand
T14-A	T14-AA	E78963-7	10/18/00	0-6	Dark gray FINES, trace Sand
T14-A	T14-AB	E78963-8	10/18/00	1-2	Dark gray FINES, trace Sand, trace Gravel
T14-A	T14-AC	E78963-9	10/18/00	2-3	Dark gray FINES, trace Sand, trace Gravel
T14-B	T14-BA	E78963-4	10/18/00	0-6	Gray FINES, trace Sand

GRAIN SIZE DATA

Matteo Iron and Metal

Sample Location	Sample ID	Lab ID	Date	Depth ft	Description
Sediment Samples					
T14-B	T14-BB	E78963-5	10/18/00	1-2	Dark gray FINES, little Sand, trace Gravel
T14-B	T14-BC	E78963-6	10/18/00	2-3	Dark gray FINES, little Sand, trace Gravel
T14-C	T14-CA	E78964-6	10/18/00	0-6	Gray FINES, trace Sand
T14-C	T14-CB	E78964-7	10/18/00	1-2	Gray FINES, trace Sand
T14-C	T14-CC	E78964-8	10/18/00	2-3	Gray FINES, trace Sand
T14-D	T14-DA	E78963-1	10/18/00	0-6	Dark gray FINES, trace Sand, trace Gravel
T14-D	T14-DB	E78963-2	10/18/00	1-2	Gray FINES, trace Sand, trace Gravel
T14-D	T14-DC	E78963-3	10/18/00	2-3	Gray FINES, trace Sand
T14-E	T14-EA	E78964-9	10/18/00	0-6	Gray FINES, trace Sand, trace Gravel
T14-E	T14-EB	E78964-10	10/18/00	1-2	Gray FINES, trace Sand
T14-E	T14-EC	E78964-11	10/18/00	2-3	Gray FINES, little fine Sand
T15-A	T15-AA	E78963-18	10/17/00	0-6	Dark gray FINES, trace Sand, trace Gravel
T15-A	T15-AB	E78963-19	10/17/00	1-2	Gray FINES, trace Sand, trace Gravel
T15-A	T15-AC	E78963-20	10/17/00	2-3	Gray FINES, trace Sand
T15-B	T15-BA	E78963-21	10/17/00	0-6	Dark gray FINES, some fine Sand, trace Gravel
T15-B	T15-BB	E78964-1	10/17/00	1-2	Gray medium to fine SAND, some Fines, trace Gravel
T15-B	T15-BC	E78964-2	10/17/00	2-3	Gray FINES, trace Sand, trace Gravel
T15-C	T15-CA	E78964-3	10/18/00	0-6	Gray FINES, little Sand, trace Gravel
T15-C	T15-CB	E78964-4	10/18/00	1-2	Gray FINES, trace Sand
T15-C	T15-CC	E78964-5	10/18/00	2-3	Gray FINES, trace Sand
T15-D	T15-DA	E78963-15	10/17/00	0-6	Gray FINES, trace Sand
T15-D	T15-DB	E78963-16	10/17/00	1-2	Gray FINES, trace Sand
T15-D	T15-DC	E78963-17	10/17/00	2-3	Dark gray FINES, trace Sand
T15-E	T15-EA	E78963-11	10/17/00	0-6	Dark gray FINES, some medium to fine Sand, little Gravel
T15-E	T15-EB	E78963-12	10/17/00	1-2	Dark gray FINES, trace Sand, trace Gravel
T15-E	T15-EC	E78963-13	10/17/00	2-3	Gray FINES, trace Sand, trace Gravel
T16-A	T16-AB	E79452-2	10/26/00	0-3	Gray FINES, trace Sand
T16-B	T16-BA	E79452-8	10/26/00	0-2	Dark gray FINES, some fine Sand
T16-B	T16-BC	E79452-10	10/26/00	2-3	Brown FINES, little Sand, trace Gravel
T16-C	T16-CA	E79452-5	10/26/00	0-1	Gray FINES, little Sand
T16-C	T16-CB	E79452-6	10/26/00	1-3	Brown FINES, some fine Sand
T16-D	T16-DA	E79453-6	10/25/00	0-1	Black FINES, trace Sand
T16-D	T16-DB	E79453-7	10/25/00	1-3	Black FINES, trace Sand
T16-E	T16-EA	E79453-9	10/25/00	0-1.5	Very dark brown FINES, some medium to fine Sand, trace Gravel
T16-E	T16-EB	E79453-10	10/25/00	1.5-3	Dark brown medium to fine SAND, some Fines, some fine Gravel
T17-A	T17-AA	E79931-16	11/2/00	0-0.5	Very dark gray FINES, little Sand
T17-A	T17-AC	E79931-18	11/2/00	0.5-3	Very dark gray FINES, trace Sand, trace Gravel
T17-B	T17-BA	E79931-13	11/2/00	0-3	Gray FINES, trace Sand
T17-C	T17-CA	E79932-6	11/2/00	0-3	Gray FINES, trace Sand, trace Gravel
T17-D	T17-DA	E79932-9	11/2/00	0-1.5	Dark gray FINES, trace Sand
T17-D	T17-DC	E79931-12	11/2/00	1.5-3	Very dark brown FINES, and medium to fine Sand, trace Gravel
T17-E	T17-EA	E79931-7	11/2/00	0-1	Olive FINES, some Sand, trace Gravel
T17-E	T17-EC	E79931-9	11/2/00	1-3	Olive medium to fine SAND, some fine Gravel, little Fines
T18-D	T18-DA	E80721-9	11/14/00	0-3	Variegated FINES, trace Sand
T18-E	T18-EA	E80721-6	11/14/00	0-3	Dark gray FINES, some fine Sand, trace Gravel
T19-A	T19-AA	E79931-4	11/2/00	0-3	Very dark gray FINES, trace Sand

GRAIN SIZE DATA
Matteo Iron and Metal

Sample Location	Sample ID	Lab ID	Date	Depth ft	Description
Sediment Samples					
T19-B	T19-BA	E79931-1	11/2/00	0-1	Olive FINES, trace Sand, trace Gravel
T19-B	T19-BB	E79931-2	11/2/00	1-3	Olive FINES, trace Sand
T19-C	T19-CA	E79933-1	11/1/00	0-3	Black FINES, and medium to fine Sand
T19-D	T19-DA	E79933-8	11/1/00	0-1.5	Dark gray FINES, little Sand
T19-D	T19-DC	E79933-10	11/1/00	1.5-3	Black coarse to fine SAND, and Fines, little Gravel
T19-E	T19-EA	E79933-4	11/1/00	0-3	Very dark gray FINES, some fine Sand, trace Gravel
T20-A	T20-AA	E79931-10	11/2/00	0-3	Gray FINES, trace Sand
T20-B	T20-BA	E79932-3	11/2/00	0-3	Gray FINES, trace Sand
T20-C	T20-CA	E79932-17	11/2/00	0-1	Dark brown medium to fine SAND, little fines, trace Gravel
T20-C	T20-CB	E79932-18	11/2/00	1-3	Dark gray FINES, and medium to fine Sand, trace Gravel
T20-D	T20-DA	E79932-14	11/2/00	0-3	Dark gray FINES, little Sand
T20-E	T20-EA	E79932-11	11/2/00	0-3	Gray FINES, trace Sand
T21-A	T21-AA	E80047-14	11/3/00	0-3	Very dark gray FINES, some Sand, little Gravel
T21-D	T21-DA	E80047-11	11/3/00	0-3	Dark gray Fines, some Sand, trace Gravel
T22-C	T22-CA	E80721-2	11/14/00	0-3	Very dark brown FINES, some fine Sand, trace Gravel
T24-A	T24-AA	E80318-7	11/8/00	0-3	Very dark gray FINES, trace Sand
T24-B	T24-BA	E80318-10	11/8/00	0-3	Very dark gray FINES, some fine Sand, trace Gravel
T24-D	T24-DA	E80318-14	11/8/00	0-3	Very dark gray FINES, trace Sand
T26-A	T26-AA	E80047-1	11/3/00	0-1	Dark gray FINES, little Sand
T26-A	T26-AB	E80047-2	11/3/00	1-3	Very dark gray FINES, some fine Sand
T26-D	T26-DA	E80047-8	11/3/00	0-3	Gray FINES, little Sand, trace Gravel
T26-E	T26-EA	E80047-5	11/3/00	0-1	Very dark gray FINES, trace Sand
T26-E	T26-EB	E80047-6	11/3/00	1-3	Dark gray FINES, little Sand, trace Gravel
T29-B	T29-BA	E80318-1	11/8/00	0-3	Very dark gray FINES, trace Sand
T29-C	T29-CA	E80318-4	11/8/00	0-3	Dark gray FINES, trace Sand
T30-C	T30-CA	E80721-13	11/13/00	0-3	Dark olive FINES, trace Sand
T30-E	T30-EC	E80721-12	11/13/00	0-3	Very dark brown FINES, trace Sand
S1	S1	E80721-1	11/13/00	0-1	Dark olive brown FINES, trace Sand
S2	S2	E80721-20	11/13/00	0-1	Dark olive brown FINES, trace Sand, trace Gravel
S3	S3	E80721-19	11/13/00	0-1	Very dark gray FINES, trace Sand
S4	S4	E80721-17	11/13/00	0-1	Very dark gray FINES, trace Sand
S5	S5	E80721-18	11/13/00	0-1	Very dark gray FINES, trace Sand, trace Gravel

Notes:
All particle size analysis were performed by Golder Associates Inc., Cherry Hill, New Jersey.
All descriptions of soil/sediment samples were pervided by Golder Associates, Inc.

APPENDIX D
Tidal Study Data and NOAA Tidal Data

Tidal Study Data
January 10-25, 2001

Elevation Mark			-11.15	-8.82	-9.4	-12.48	-9.25	-5.65	-10.15	-5.49
SN			6544	6518	6523	3395	3869	6547	5711	6542
No.	Date	Time	MW10S	MW11S	MW12S	MW14D	MW15D	MW18D	MW9S	SG-1
16	1/10/01	10:30:00	-6.55	-5.57	-5.85	-12.72	-9.34	-5.71	-6.62	-1.89
17	1/10/01	10:40:00	-6.56	-5.59	-5.87	-12.71	-9.36	-5.72	-6.64	-1.68
18	1/10/01	10:50:00	-6.56	-5.58	-5.86	-12.69	-9.36	-5.7	-6.64	-1.47
19	1/10/01	11:00:00	-6.59	-5.61	-5.88	-12.7	-9.39	-5.72	-6.65	-1.28
20	1/10/01	11:10:00	-6.58	-5.61	-5.88	-12.7	-9.36	-5.71	-6.64	-1.08
21	1/10/01	11:20:00	-6.6	-5.61	-5.89	-12.72	-9.38	-5.71	-6.66	-0.89
22	1/10/01	11:30:00	-6.6	-5.62	-5.89	-12.71	-9.38	-5.71	-6.66	-0.68
23	1/10/01	11:40:00	-6.6	-5.61	-5.88	-12.71	-9.38	-5.7	-6.66	-0.48
24	1/10/01	11:50:00	-6.59	-5.61	-5.88	-12.69	-9.38	-5.68	-6.64	-0.27
25	1/10/01	12:00:00	-6.59	-5.61	-5.87	-12.69	-9.34	-5.66	-6.64	-0.06
26	1/10/01	12:10:00	-6.59	-5.6	-5.85	-12.69	-9.33	-5.66	-6.61	0.11
27	1/10/01	12:20:00	-6.58	-5.6	-5.85	-12.69	-9.33	-5.64	-6.61	0.28
28	1/10/01	12:30:00	-6.58	-5.61	-5.84	-12.67	-9.33	-5.63	-6.61	0.44
29	1/10/01	12:40:00	-6.58	-5.61	-5.84	-12.66	-9.33	-5.63	-6.61	0.55
30	1/10/01	12:50:00	-6.58	-5.6	-5.83	-12.66	-9.33	-5.62	-6.59	0.66
31	1/10/01	13:00:00	-6.58	-5.6	-5.83	-12.66	-9.33	-5.62	-6.58	0.79
32	1/10/01	13:10:00	-6.57	-5.6	-5.82	-12.66	-9.33	-5.62	-6.56	0.89
33	1/10/01	13:20:00	-6.57	-5.6	-5.81	-12.64	-9.33	-5.61	-6.56	0.96
34	1/10/01	13:30:00	-6.57	-5.6	-5.81	-12.64	-9.31	-5.61	-6.56	1.04
35	1/10/01	13:40:00	-6.57	-5.6	-5.81	-12.64	-9.3	-5.6	-6.56	1.08
36	1/10/01	13:50:00	-6.56	-5.6	-5.81	-12.64	-9.3	-5.62	-6.56	1.12
37	1/10/01	14:00:00	-6.56	-5.6	-5.8	-12.64	-9.31	-5.62	-6.56	1.13
38	1/10/01	14:10:00	-6.55	-5.6	-5.8	-12.64	-9.3	-5.65	-6.56	1.08
39	1/10/01	14:20:00	-6.56	-5.6	-5.81	-12.62	-9.33	-5.66	-6.56	0.98
40	1/10/01	14:30:00	-6.55	-5.61	-5.81	-12.64	-9.33	-5.69	-6.56	0.85
41	1/10/01	14:40:00	-6.55	-5.62	-5.81	-12.64	-9.33	-5.71	-6.56	0.68
42	1/10/01	14:50:00	-6.56	-5.61	-5.81	-12.64	-9.33	-5.73	-6.56	0.5
43	1/10/01	15:00:00	-6.56	-5.62	-5.83	-12.66	-9.33	-5.74	-6.58	0.32
44	1/10/01	15:10:00	-6.56	-5.64	-5.83	-12.64	-9.33	-5.76	-6.59	0.12
45	1/10/01	15:20:00	-6.55	-5.63	-5.84	-12.64	-9.36	-5.77	-6.61	-0.07
46	1/10/01	15:30:00	-6.55	-5.64	-5.84	-12.64	-9.38	-5.79	-6.61	-0.27
47	1/10/01	15:40:00	-6.56	-5.64	-5.86	-12.64	-9.38	-5.8	-6.61	-0.47
48	1/10/01	15:50:00	-6.56	-5.65	-5.86	-12.66	-9.38	-5.82	-6.61	-0.66
49	1/10/01	16:00:00	-6.56	-5.65	-5.87	-12.64	-9.38	-5.83	-6.61	-0.85
50	1/10/01	16:10:00	-6.57	-5.65	-5.88	-12.66	-9.38	-5.83	-6.63	-1.03
51	1/10/01	16:20:00	-6.57	-5.65	-5.88	-12.64	-9.38	-5.84	-6.64	-1.2
52	1/10/01	16:30:00	-6.57	-5.65	-5.88	-12.66	-9.38	-5.84	-6.64	-1.35
53	1/10/01	16:40:00	-6.58	-5.65	-5.89	-12.64	-9.39	-5.84	-6.63	-1.52
54	1/10/01	16:50:00	-6.58	-5.66	-5.89	-12.66	-9.39	-5.85	-6.64	-1.67
55	1/10/01	17:00:00	-6.57	-5.65	-5.9	-12.66	-9.39	-5.85	-6.64	-1.84
56	1/10/01	17:10:00	-6.58	-5.66	-5.9	-12.66	-9.39	-5.85	-6.66	-1.99
57	1/10/01	17:20:00	-6.57	-5.66	-5.9	-12.66	-9.38	-5.85	-6.66	-2.16
58	1/10/01	17:30:00	-6.58	-5.66	-5.9	-12.66	-9.38	-5.85	-6.66	-2.32
59	1/10/01	17:40:00	-6.58	-5.66	-5.9	-12.66	-9.39	-5.86	-6.66	-2.47
60	1/10/01	17:50:00	-6.58	-5.66	-5.9	-12.66	-9.39	-5.86	-6.66	-2.62
61	1/10/01	18:00:00	-6.6	-5.67	-5.91	-12.67	-9.39	-5.87	-6.67	-2.8
62	1/10/01	18:10:00	-6.59	-5.67	-5.91	-12.67	-9.4	-5.87	-6.67	-2.95
63	1/10/01	18:20:00	-6.59	-5.66	-5.91	-12.66	-9.39	-5.86	-6.66	-3.12
64	1/10/01	18:30:00	-6.59	-5.67	-5.91	-12.66	-9.39	-5.86	-6.66	-3.29

Tidal Study Data
January 10-25, 2001

65	1/10/01	18:40:00	-6.59	-5.68	-5.91	-12.67	-9.4	-5.87	-6.67	-3.46
66	1/10/01	18:50:00	-6.59	-5.68	-5.92	-12.67	-9.4	-5.87	-6.68	-3.67
67	1/10/01	19:00:00	-6.61	-5.68	-5.92	-12.67	-9.4	-5.88	-6.7	-3.83
68	1/10/01	19:10:00	-6.6	-5.68	-5.92	-12.66	-9.41	-5.87	-6.69	-3.98
69	1/10/01	19:20:00	-6.6	-5.68	-5.92	-12.66	-9.39	-5.87	-6.69	-4.14
70	1/10/01	19:30:00	-6.6	-5.67	-5.92	-12.66	-9.41	-5.87	-6.69	-4.31
71	1/10/01	19:40:00	-6.6	-5.68	-5.92	-12.66	-9.41	-5.89	-6.69	-4.41
72	1/10/01	19:50:00	-6.6	-5.68	-5.92	-12.69	-9.41	-5.88	-6.69	-4.48
73	1/10/01	20:00:00	-6.61	-5.68	-5.92	-12.66	-9.41	-5.88	-6.69	-4.48
74	1/10/01	20:10:00	-6.61	-5.69	-5.93	-12.67	-9.41	-5.88	-6.69	-4.48
75	1/10/01	20:20:00	-6.61	-5.69	-5.94	-12.67	-9.41	-5.89	-6.69	-4.47
76	1/10/01	20:30:00	-6.62	-5.7	-5.94	-12.67	-9.41	-5.89	-6.69	-4.48
77	1/10/01	20:40:00	-6.62	-5.7	-5.94	-12.67	-9.41	-5.89	-6.69	-4.48
78	1/10/01	20:50:00	-6.62	-5.7	-5.94	-12.69	-9.41	-5.89	-6.69	-4.48
79	1/10/01	21:00:00	-6.62	-5.7	-5.94	-12.69	-9.41	-5.89	-6.69	-4.48
80	1/10/01	21:10:00	-6.62	-5.7	-5.94	-12.69	-9.41	-5.89	-6.69	-4.48
81	1/10/01	21:20:00	-6.62	-5.7	-5.94	-12.66	-9.41	-5.9	-6.69	-4.48
82	1/10/01	21:30:00	-6.62	-5.7	-5.94	-12.66	-9.41	-5.89	-6.69	-4.48
83	1/10/01	21:40:00	-6.63	-5.7	-5.95	-12.67	-9.41	-5.88	-6.69	-4.48
84	1/10/01	21:50:00	-6.63	-5.7	-5.94	-12.69	-9.41	-5.88	-6.69	-4.48
85	1/10/01	22:00:00	-6.63	-5.71	-5.94	-12.69	-9.41	-5.87	-6.69	-4.48
86	1/10/01	22:10:00	-6.63	-5.71	-5.93	-12.66	-9.41	-5.86	-6.71	-3.31
87	1/10/01	22:20:00	-6.63	-5.72	-5.94	-12.69	-9.41	-5.86	-6.69	-3
88	1/10/01	22:30:00	-6.63	-5.71	-5.93	-12.66	-9.41	-5.85	-6.69	-2.7
89	1/10/01	22:40:00	-6.64	-5.71	-5.93	-12.67	-9.41	-5.84	-6.69	-2.43
90	1/10/01	22:50:00	-6.62	-5.69	-5.91	-12.64	-9.39	-5.8	-6.67	-2.16
91	1/10/01	23:00:00	-6.61	-5.7	-5.9	-12.67	-9.39	-5.79	-6.67	-1.87
92	1/10/01	23:10:00	-6.62	-5.69	-5.9	-12.64	-9.39	-5.78	-6.67	-1.65
93	1/10/01	23:20:00	-6.61	-5.68	-5.9	-12.65	-9.37	-5.76	-6.67	-1.42
94	1/10/01	23:30:00	-6.61	-5.68	-5.89	-12.64	-9.37	-5.74	-6.67	-1.22
95	1/10/01	23:40:00	-6.6	-5.67	-5.88	-12.64	-9.36	-5.74	-6.66	-0.99
96	1/10/01	23:50:00	-6.61	-5.68	-5.87	-12.63	-9.35	-5.73	-6.66	-0.79
97	1/11/01	0:00:00	-6.58	-5.65	-5.86	-12.61	-9.34	-5.7	-6.64	-0.57
98	1/11/01	0:10:00	-6.58	-5.66	-5.85	-12.61	-9.33	-5.69	-6.64	-0.36
99	1/11/01	0:20:00	-6.58	-5.66	-5.85	-12.61	-9.33	-5.68	-6.64	-0.17
100	1/11/01	0:30:00	-6.58	-5.66	-5.85	-12.61	-9.33	-5.66	-6.64	0.02
101	1/11/01	0:40:00	-6.59	-5.67	-5.85	-12.59	-9.33	-5.67	-6.61	0.21
102	1/11/01	0:50:00	-6.59	-5.67	-5.85	-12.59	-9.33	-5.67	-6.62	0.36
103	1/11/01	1:00:00	-6.57	-5.66	-5.83	-12.57	-9.31	-5.64	-6.59	0.52
104	1/11/01	1:10:00	-6.59	-5.67	-5.84	-12.59	-9.33	-5.65	-6.61	0.62
105	1/11/01	1:20:00	-6.56	-5.65	-5.81	-12.56	-9.3	-5.63	-6.58	0.76
106	1/11/01	1:30:00	-6.56	-5.64	-5.81	-12.53	-9.25	-5.62	-6.58	0.88
107	1/11/01	1:40:00	-6.56	-5.64	-5.8	-12.56	-9.25	-5.62	-6.58	0.96
108	1/11/01	1:50:00	-6.56	-5.65	-5.8	-12.53	-9.25	-5.61	-6.58	1.05
109	1/11/01	2:00:00	-6.56	-5.64	-5.8	-12.53	-9.25	-5.61	-6.58	1.12
110	1/11/01	2:10:00	-6.55	-5.63	-5.78	-12.53	-9.25	-5.61	-6.55	1.18
111	1/11/01	2:20:00	-6.56	-5.65	-5.79	-12.54	-9.26	-5.63	-6.57	1.2
112	1/11/01	2:30:00	-6.55	-5.64	-5.78	-12.51	-9.25	-5.62	-6.55	1.25
113	1/11/01	2:40:00	-6.55	-5.64	-5.78	-12.53	-9.25	-5.64	-6.55	1.22
114	1/11/01	2:50:00	-6.58	-5.68	-5.81	-12.56	-9.29	-5.68	-6.58	1.12
115	1/11/01	3:00:00	-6.55	-5.65	-5.78	-12.53	-9.28	-5.68	-6.56	1.03
116	1/11/01	3:10:00	-6.55	-5.66	-5.8	-12.53	-9.3	-5.72	-6.58	0.88

Tidal Study Data
January 10-25, 2001

117	1/11/01	3:20:00	-6.55	-5.67	-5.8	-12.53	-9.3	-5.73	-6.58	0.69
118	1/11/01	3:30:00	-6.56	-5.67	-5.81	-12.54	-9.31	-5.75	-6.58	0.51
119	1/11/01	3:40:00	-6.55	-5.68	-5.81	-12.54	-9.33	-5.76	-6.59	0.32
120	1/11/01	3:50:00	-6.56	-5.68	-5.82	-12.56	-9.33	-5.78	-6.61	0.12
121	1/11/01	4:00:00	-6.56	-5.68	-5.83	-12.56	-9.33	-5.81	-6.61	-0.1
122	1/11/01	4:10:00	-6.56	-5.68	-5.84	-12.56	-9.33	-5.82	-6.61	-0.31
123	1/11/01	4:20:00	-6.56	-5.69	-5.85	-12.56	-9.33	-5.83	-6.61	-0.52
124	1/11/01	4:30:00	-6.57	-5.7	-5.86	-12.56	-9.35	-5.85	-6.61	-0.73
125	1/11/01	4:40:00	-6.57	-5.7	-5.87	-12.56	-9.35	-5.85	-6.61	-0.91
126	1/11/01	4:50:00	-6.57	-5.7	-5.87	-12.56	-9.35	-5.85	-6.63	-1.09
127	1/11/01	5:00:00	-6.57	-5.7	-5.88	-12.56	-9.36	-5.86	-6.63	-1.26
128	1/11/01	5:10:00	-6.58	-5.71	-5.88	-12.56	-9.35	-5.87	-6.63	-1.42
129	1/11/01	5:20:00	-6.58	-5.71	-5.89	-12.58	-9.36	-5.87	-6.64	-1.58
130	1/11/01	5:30:00	-6.58	-5.7	-5.89	-12.58	-9.36	-5.88	-6.66	-1.73
131	1/11/01	5:40:00	-6.57	-5.7	-5.9	-12.58	-9.36	-5.88	-6.66	-1.89
132	1/11/01	5:50:00	-6.58	-5.71	-5.9	-12.58	-9.36	-5.87	-6.64	-2.05
133	1/11/01	6:00:00	-6.58	-5.71	-5.9	-12.59	-9.37	-5.88	-6.67	-2.22
134	1/11/01	6:10:00	-6.61	-5.73	-5.92	-12.61	-9.39	-5.91	-6.69	-2.39
135	1/11/01	6:20:00	-6.61	-5.72	-5.93	-12.61	-9.39	-5.9	-6.69	-2.55
136	1/11/01	6:30:00	-6.6	-5.73	-5.93	-12.61	-9.38	-5.91	-6.69	-2.69
137	1/11/01	6:40:00	-6.61	-5.73	-5.93	-12.61	-9.39	-5.91	-6.69	-2.86
138	1/11/01	6:50:00	-6.61	-5.73	-5.93	-12.61	-9.39	-5.91	-6.69	-3.02
139	1/11/01	7:00:00	-6.62	-5.73	-5.93	-12.61	-9.39	-5.92	-6.69	-3.2
140	1/11/01	7:10:00	-6.61	-5.73	-5.93	-12.61	-9.39	-5.92	-6.69	-3.37
141	1/11/01	7:20:00	-6.62	-5.75	-5.95	-12.61	-9.39	-5.93	-6.72	-3.55
142	1/11/01	7:30:00	-6.59	-5.72	-5.92	-12.61	-9.36	-5.91	-6.68	-3.69
143	1/11/01	7:40:00	-6.63	-5.74	-5.96	-12.62	-9.39	-5.94	-6.71	-3.85
144	1/11/01	7:50:00	-6.63	-5.74	-5.95	-12.62	-9.39	-5.93	-6.71	-4.06
145	1/11/01	8:00:00	-6.6	-5.72	-5.93	-12.59	-9.36	-5.92	-6.68	-4.16
146	1/11/01	8:10:00	-6.61	-5.72	-5.93	-12.61	-9.38	-5.9	-6.69	-4.34
147	1/11/01	8:20:00	-6.64	-5.75	-5.96	-12.64	-9.41	-5.93	-6.72	-4.48
148	1/11/01	8:30:00	-6.61	-5.73	-5.94	-12.61	-9.38	-5.9	-6.69	-4.48
149	1/11/01	8:40:00	-6.61	-5.73	-5.94	-12.61	-9.38	-5.91	-6.69	-4.49
150	1/11/01	8:50:00	-6.61	-5.73	-5.94	-12.61	-9.4	-5.91	-6.69	-4.49
151	1/11/01	9:00:00	-6.62	-5.74	-5.96	-12.61	-9.4	-5.92	-6.69	-4.49
152	1/11/01	9:10:00	-6.63	-5.74	-5.95	-12.61	-9.4	-5.92	-6.69	-4.49
153	1/11/01	9:20:00	-6.63	-5.75	-5.96	-12.61	-9.4	-5.93	-6.69	-4.77
154	1/11/01	9:30:00	-6.63	-5.74	-5.95	-12.61	-9.4	-5.92	-6.69	-4.15
155	1/11/01	9:40:00	-6.63	-5.75	-5.95	-12.61	-9.4	-5.91	-6.69	-3.66
156	1/11/01	9:50:00	-6.62	-5.74	-5.95	-12.61	-9.38	-5.91	-6.69	-3.22
157	1/11/01	10:00:00	-6.63	-5.74	-5.94	-12.61	-9.4	-5.89	-6.69	-2.83
158	1/11/01	10:10:00	-6.62	-5.74	-5.94	-12.61	-9.4	-5.87	-6.69	-2.47
159	1/11/01	10:20:00	-6.62	-5.74	-5.94	-12.61	-9.38	-5.86	-6.69	-2.16
160	1/11/01	10:30:00	-6.63	-5.74	-5.93	-12.61	-9.38	-5.84	-6.69	-1.84
161	1/11/01	10:40:00	-6.63	-5.74	-5.93	-12.61	-9.38	-5.82	-6.69	-1.54
162	1/11/01	10:50:00	-6.64	-5.75	-5.93	-12.61	-9.36	-5.82	-6.69	-1.28
163	1/11/01	11:00:00	-6.62	-5.73	-5.91	-12.59	-9.34	-5.78	-6.67	-1
164	1/11/01	11:10:00	-6.6	-5.71	-5.89	-12.57	-9.32	-5.76	-6.65	-0.74
165	1/11/01	11:20:00	-6.6	-5.71	-5.89	-12.57	-9.32	-5.74	-6.65	-0.5
166	1/11/01	11:30:00	-6.6	-5.7	-5.87	-12.56	-9.31	-5.73	-6.64	-0.26
167	1/11/01	11:40:00	-6.6	-5.71	-5.89	-12.56	-9.31	-5.72	-6.64	-0.06
168	1/11/01	11:50:00	-6.6	-5.7	-5.86	-12.56	-9.31	-5.71	-6.64	0.17

Tidal Study Data
January 10-25, 2001

169	1/11/01	12:00:00	-6.6	-5.71	-5.86	-12.56	-9.31	-5.7	-6.64	0.38
170	1/11/01	12:10:00	-6.59	-5.71	-5.86	-12.54	-9.31	-5.69	-6.63	0.61
171	1/11/01	12:20:00	-6.58	-5.69	-5.84	-12.52	-9.28	-5.66	-6.59	0.83
172	1/11/01	12:30:00	-6.58	-5.68	-5.83	-12.51	-9.26	-5.65	-6.61	1.03
173	1/11/01	12:40:00	-6.6	-5.71	-5.84	-12.53	-9.28	-5.65	-6.61	1.2
174	1/11/01	12:50:00	-6.58	-5.69	-5.8	-12.49	-9.26	-5.62	-6.59	1.38
175	1/11/01	13:00:00	-6.57	-5.68	-5.8	-12.49	-9.26	-5.6	-6.59	1.55
176	1/11/01	13:10:00	-6.56	-5.68	-5.79	-12.49	-9.26	-5.58	-6.57	1.7
177	1/11/01	13:20:00	-6.54	-5.65	-5.76	-12.47	-9.22	-5.56	-6.52	1.86
178	1/11/01	13:30:00	-6.57	-5.69	-5.79	-12.48	-9.25	-5.59	-6.56	1.95
179	1/11/01	13:40:00	-6.57	-5.68	-5.79	-12.48	-9.25	-5.57	-6.56	2.07
180	1/11/01	13:50:00	-6.58	-5.68	-5.78	-12.48	-9.25	-5.56	-6.56	2.19
181	1/11/01	14:00:00	-6.53	-5.63	-5.73	-12.44	-9.19	-5.51	-6.52	2.33
182	1/11/01	14:10:00	-6.54	-5.65	-5.74	-12.44	-9.23	-5.51	-6.52	2.42
183	1/11/01	14:20:00	-6.55	-5.66	-5.75	-12.45	-9.2	-5.52	-6.54	2.49
184	1/11/01	14:30:00	-6.55	-5.66	-5.75	-12.45	-9.2	-5.51	-6.53	2.57
185	1/11/01	14:40:00	-6.54	-5.66	-5.73	-12.45	-9.2	-5.52	-6.53	2.64
186	1/11/01	14:50:00	-6.54	-5.65	-5.72	-12.45	-9.2	-5.51	-6.53	2.68
187	1/11/01	15:00:00	-6.53	-5.65	-5.73	-12.45	-9.2	-5.52	-6.53	2.7
188	1/11/01	15:10:00	-6.53	-5.66	-5.72	-12.45	-9.2	-5.53	-6.53	2.67
189	1/11/01	15:20:00	-6.53	-5.66	-5.73	-12.45	-9.2	-5.56	-6.51	2.59
190	1/11/01	15:30:00	-6.53	-5.65	-5.73	-12.45	-9.21	-5.58	-6.51	2.46
191	1/11/01	15:40:00	-6.53	-5.66	-5.74	-12.45	-9.25	-5.61	-6.53	2.28
192	1/11/01	15:50:00	-6.53	-5.66	-5.75	-12.46	-9.25	-5.64	-6.53	2.11
193	1/11/01	16:00:00	-6.52	-5.67	-5.76	-12.45	-9.26	-5.66	-6.53	1.94
194	1/11/01	16:10:00	-6.53	-5.67	-5.76	-12.46	-9.28	-5.68	-6.53	1.73
195	1/11/01	16:20:00	-6.52	-5.67	-5.77	-12.46	-9.28	-5.71	-6.56	1.54
196	1/11/01	16:30:00	-6.52	-5.67	-5.78	-12.48	-9.28	-5.74	-6.56	1.32
197	1/11/01	16:40:00	-6.52	-5.68	-5.79	-12.48	-9.3	-5.76	-6.56	1.09
198	1/11/01	16:50:00	-6.53	-5.68	-5.8	-12.48	-9.31	-5.77	-6.56	0.88
199	1/11/01	17:00:00	-6.53	-5.68	-5.8	-12.48	-9.31	-5.79	-6.56	0.65
200	1/11/01	17:10:00	-6.53	-5.68	-5.81	-12.51	-9.31	-5.78	-6.56	0.41
201	1/11/01	17:20:00	-6.55	-5.69	-5.82	-12.52	-9.32	-5.81	-6.59	0.2
202	1/11/01	17:30:00	-6.54	-5.69	-5.84	-12.52	-9.32	-5.81	-6.59	0
203	1/11/01	17:40:00	-6.54	-5.69	-5.85	-12.52	-9.32	-5.82	-6.6	-0.19
204	1/11/01	17:50:00	-6.59	-5.72	-5.89	-12.56	-9.36	-5.86	-6.66	-0.41
205	1/11/01	18:00:00	-6.59	-5.73	-5.89	-12.56	-9.36	-5.86	-6.66	-0.58
206	1/11/01	18:10:00	-6.59	-5.73	-5.9	-12.56	-9.36	-5.86	-6.66	-0.76
207	1/11/01	18:20:00	-6.59	-5.73	-5.9	-12.58	-9.36	-5.87	-6.66	-0.93
208	1/11/01	18:30:00	-6.58	-5.73	-5.9	-12.56	-9.36	-5.87	-6.66	-1.09
209	1/11/01	18:40:00	-6.59	-5.73	-5.9	-12.56	-9.36	-5.88	-6.66	-1.26
210	1/11/01	18:50:00	-6.59	-5.71	-5.91	-12.58	-9.36	-5.88	-6.66	-1.41
211	1/11/01	19:00:00	-6.58	-5.71	-5.9	-12.58	-9.36	-5.88	-6.66	-1.57
212	1/11/01	19:10:00	-6.59	-5.71	-5.92	-12.58	-9.36	-5.87	-6.66	-1.75
213	1/11/01	19:20:00	-6.59	-5.7	-5.91	-12.58	-9.36	-5.88	-6.66	-1.91
214	1/11/01	19:30:00	-6.59	-5.71	-5.92	-12.58	-9.36	-5.89	-6.66	-2.08
215	1/11/01	19:40:00	-6.6	-5.7	-5.93	-12.58	-9.36	-5.89	-6.66	-2.25
216	1/11/01	19:50:00	-6.59	-5.71	-5.93	-12.58	-9.36	-5.9	-6.68	-2.43
217	1/11/01	20:00:00	-6.6	-5.7	-5.92	-12.59	-9.36	-5.89	-6.66	-2.59
218	1/11/01	20:10:00	-6.6	-5.69	-5.93	-12.58	-9.38	-5.88	-6.69	-2.77
219	1/11/01	20:20:00	-6.59	-5.69	-5.93	-12.59	-9.36	-5.89	-6.69	-2.94
220	1/11/01	20:30:00	-6.62	-5.71	-5.96	-12.61	-9.39	-5.92	-6.69	-3.13

Tidal Study Data
January 10-25, 2001

221	1/11/01	20:40:00	-6.63	-5.71	-5.95	-12.61	-9.39	-5.92	-6.71	-3.32
222	1/11/01	20:50:00	-6.62	-5.71	-5.95	-12.61	-9.39	-5.92	-6.71	-3.45
223	1/11/01	21:00:00	-6.62	-5.7	-5.95	-12.64	-9.39	-5.92	-6.71	-3.62
224	1/11/01	21:10:00	-6.62	-5.7	-5.95	-12.64	-9.39	-5.91	-6.69	-3.85
225	1/11/01	21:20:00	-6.62	-5.69	-5.95	-12.64	-9.39	-5.9	-6.71	-3.93
226	1/11/01	21:30:00	-6.63	-5.69	-5.95	-12.64	-9.39	-5.91	-6.69	-4.01
227	1/11/01	21:40:00	-6.62	-5.68	-5.95	-12.64	-9.39	-5.91	-6.69	-4.14
228	1/11/01	21:50:00	-6.63	-5.68	-5.95	-12.64	-9.39	-5.91	-6.71	-4.26
229	1/11/01	22:00:00	-6.61	-5.68	-5.94	-12.64	-9.39	-5.9	-6.72	-4.3
230	1/11/01	22:10:00	-6.62	-5.67	-5.94	-12.64	-9.39	-5.9	-6.69	-4.38
231	1/11/01	22:20:00	-6.62	-5.66	-5.94	-12.64	-9.39	-5.88	-6.69	-4.3
232	1/11/01	22:30:00	-6.66	-5.71	-5.98	-12.69	-9.44	-5.95	-6.74	-4.1
233	1/11/01	22:40:00	-6.64	-5.69	-5.96	-12.67	-9.41	-5.9	-6.72	-3.69
234	1/11/01	22:50:00	-6.66	-5.71	-5.98	-12.67	-9.44	-5.92	-6.74	-3.25
235	1/11/01	23:00:00	-6.64	-5.69	-5.96	-12.65	-9.41	-5.88	-6.72	-2.8
236	1/11/01	23:10:00	-6.64	-5.68	-5.94	-12.64	-9.41	-5.87	-6.72	-2.44
237	1/11/01	23:20:00	-6.64	-5.68	-5.94	-12.64	-9.39	-5.84	-6.72	-2.11
238	1/11/01	23:30:00	-6.63	-5.67	-5.93	-12.62	-9.39	-5.82	-6.72	-1.81
239	1/11/01	23:40:00	-6.66	-5.69	-5.94	-12.64	-9.41	-5.82	-6.72	-1.54
240	1/11/01	23:50:00	-6.63	-5.66	-5.91	-12.62	-9.39	-5.8	-6.7	-1.27
241	1/12/01	0:00:00	-6.64	-5.68	-5.92	-12.64	-9.41	-5.8	-6.69	-1.03
242	1/12/01	0:10:00	-6.64	-5.67	-5.92	-12.61	-9.41	-5.79	-6.69	-0.82
243	1/12/01	0:20:00	-6.62	-5.65	-5.89	-12.59	-9.37	-5.74	-6.67	-0.58
244	1/12/01	0:30:00	-6.64	-5.67	-5.9	-12.61	-9.41	-5.74	-6.69	-0.4
245	1/12/01	0:40:00	-6.64	-5.66	-5.9	-12.61	-9.39	-5.75	-6.69	-0.22
246	1/12/01	0:50:00	-6.64	-5.66	-5.89	-12.59	-9.38	-5.73	-6.69	-0.04
247	1/12/01	1:00:00	-6.64	-5.65	-5.88	-12.58	-9.38	-5.73	-6.69	0.16
248	1/12/01	1:10:00	-6.63	-5.65	-5.87	-12.58	-9.38	-5.71	-6.66	0.35
249	1/12/01	1:20:00	-6.63	-5.64	-5.87	-12.58	-9.38	-5.7	-6.66	0.53
250	1/12/01	1:30:00	-6.61	-5.63	-5.84	-12.56	-9.32	-5.67	-6.64	0.71
251	1/12/01	1:40:00	-6.63	-5.64	-5.85	-12.58	-9.33	-5.68	-6.66	0.84
252	1/12/01	1:50:00	-6.61	-5.64	-5.84	-12.58	-9.33	-5.67	-6.64	0.99
253	1/12/01	2:00:00	-6.61	-5.63	-5.83	-12.58	-9.33	-5.66	-6.61	1.11
254	1/12/01	2:10:00	-6.6	-5.62	-5.83	-12.58	-9.33	-5.66	-6.61	1.23
255	1/12/01	2:20:00	-6.6	-5.62	-5.82	-12.58	-9.33	-5.66	-6.61	1.32
256	1/12/01	2:30:00	-6.6	-5.61	-5.81	-12.59	-9.33	-5.64	-6.61	1.4
257	1/12/01	2:40:00	-6.59	-5.6	-5.79	-12.58	-9.3	-5.63	-6.59	1.47
258	1/12/01	2:50:00	-6.6	-5.61	-5.79	-12.6	-9.31	-5.63	-6.59	1.53
259	1/12/01	3:00:00	-6.62	-5.64	-5.82	-12.64	-9.35	-5.67	-6.61	1.53
260	1/12/01	3:10:00	-6.61	-5.64	-5.82	-12.66	-9.35	-5.67	-6.61	1.54
261	1/12/01	3:20:00	-6.61	-5.65	-5.82	-12.66	-9.35	-5.68	-6.61	1.53
262	1/12/01	3:30:00	-6.57	-5.61	-5.78	-12.62	-9.31	-5.66	-6.57	1.53
263	1/12/01	3:40:00	-6.58	-5.61	-5.78	-12.62	-9.32	-5.68	-6.57	1.44
264	1/12/01	3:50:00	-6.61	-5.65	-5.83	-12.69	-9.36	-5.74	-6.61	1.27
265	1/12/01	4:00:00	-6.59	-5.63	-5.81	-12.67	-9.36	-5.74	-6.62	1.15
266	1/12/01	4:10:00	-6.57	-5.61	-5.8	-12.65	-9.34	-5.75	-6.59	0.96
267	1/12/01	4:20:00	-6.62	-5.66	-5.85	-12.69	-9.38	-5.79	-6.64	0.75
268	1/12/01	4:30:00	-6.59	-5.63	-5.83	-12.67	-9.36	-5.79	-6.64	0.59
269	1/12/01	4:40:00	-6.62	-5.66	-5.86	-12.69	-9.38	-5.82	-6.66	0.37
270	1/12/01	4:50:00	-6.6	-5.65	-5.85	-12.67	-9.37	-5.81	-6.64	0.19
271	1/12/01	5:00:00	-6.62	-5.67	-5.87	-12.71	-9.38	-5.84	-6.66	-0.02
272	1/12/01	5:10:00	-6.61	-5.66	-5.87	-12.69	-9.38	-5.84	-6.66	-0.21

Tidal Study Data
January 10-25, 2001

273	1/12/01	5:20:00	-6.6	-5.65	-5.87	-12.69	-9.39	-5.84	-6.66	-0.41
274	1/12/01	5:30:00	-6.61	-5.66	-5.88	-12.71	-9.38	-5.84	-6.68	-0.56
275	1/12/01	5:40:00	-6.61	-5.66	-5.88	-12.71	-9.38	-5.85	-6.66	-0.73
276	1/12/01	5:50:00	-6.6	-5.66	-5.88	-12.71	-9.41	-5.85	-6.66	-0.89
277	1/12/01	6:00:00	-6.61	-5.66	-5.88	-12.71	-9.41	-5.85	-6.68	-1.06
278	1/12/01	6:10:00	-6.61	-5.66	-5.89	-12.71	-9.41	-5.86	-6.66	-1.22
279	1/12/01	6:20:00	-6.63	-5.68	-5.91	-12.74	-9.41	-5.9	-6.69	-1.41
280	1/12/01	6:30:00	-6.63	-5.68	-5.91	-12.74	-9.41	-5.89	-6.69	-1.56
281	1/12/01	6:40:00	-6.63	-5.68	-5.91	-12.75	-9.44	-5.89	-6.69	-1.73
282	1/12/01	6:50:00	-6.63	-5.68	-5.91	-12.74	-9.41	-5.89	-6.69	-1.88
283	1/12/01	7:00:00	-6.63	-5.68	-5.92	-12.75	-9.41	-5.89	-6.71	-2.04
284	1/12/01	7:10:00	-6.63	-5.68	-5.91	-12.74	-9.41	-5.89	-6.69	-2.19
285	1/12/01	7:20:00	-6.63	-5.68	-5.91	-12.74	-9.41	-5.89	-6.71	-2.35
286	1/12/01	7:30:00	-6.63	-5.68	-5.91	-12.74	-9.41	-5.89	-6.69	-2.5
287	1/12/01	7:40:00	-6.62	-5.67	-5.91	-12.74	-9.41	-5.89	-6.69	-2.67
288	1/12/01	7:50:00	-6.64	-5.69	-5.93	-12.76	-9.43	-5.9	-6.71	-2.84
289	1/12/01	8:00:00	-6.64	-5.68	-5.93	-12.79	-9.43	-5.92	-6.71	-3.01
290	1/12/01	8:10:00	-6.65	-5.68	-5.93	-12.79	-9.43	-5.9	-6.71	-3.18
291	1/12/01	8:20:00	-6.62	-5.67	-5.91	-12.75	-9.41	-5.89	-6.69	-3.33
292	1/12/01	8:30:00	-6.63	-5.68	-5.92	-12.75	-9.41	-5.88	-6.71	-3.49
293	1/12/01	8:40:00	-6.63	-5.67	-5.91	-12.74	-9.41	-5.89	-6.69	-3.66
294	1/12/01	8:50:00	-6.64	-5.69	-5.93	-12.77	-9.43	-5.9	-6.71	-3.83
295	1/12/01	9:00:00	-6.62	-5.66	-5.91	-12.75	-9.41	-5.88	-6.69	-3.95
296	1/12/01	9:10:00	-6.67	-5.71	-5.96	-12.79	-9.46	-5.93	-6.76	-4.14
297	1/12/01	9:20:00	-6.67	-5.72	-5.96	-12.79	-9.46	-5.93	-6.74	-4.27
298	1/12/01	9:30:00	-6.66	-5.71	-5.96	-12.79	-9.46	-5.93	-6.74	-4.39
299	1/12/01	9:40:00	-6.67	-5.71	-5.95	-12.79	-9.46	-5.93	-6.74	-4.5
300	1/12/01	9:50:00	-6.66	-5.71	-5.96	-12.79	-9.46	-5.93	-6.74	-4.59
301	1/12/01	10:00:00	-6.66	-5.71	-5.95	-12.79	-9.46	-5.92	-6.74	-4.63
302	1/12/01	10:10:00	-6.66	-5.7	-5.96	-12.79	-9.46	-5.93	-6.74	-4.6
303	1/12/01	10:20:00	-6.66	-5.7	-5.95	-12.79	-9.46	-5.92	-6.74	-4.42
304	1/12/01	10:30:00	-6.65	-5.7	-5.95	-12.79	-9.46	-5.92	-6.74	-4.08
305	1/12/01	10:40:00	-6.66	-5.7	-5.94	-12.79	-9.46	-5.89	-6.74	-3.63
306	1/12/01	10:50:00	-6.66	-5.7	-5.94	-12.79	-9.46	-5.89	-6.74	-3.23
307	1/12/01	11:00:00	-6.66	-5.71	-5.94	-12.79	-9.46	-5.88	-6.74	-2.86
308	1/12/01	11:10:00	-6.66	-5.71	-5.94	-12.77	-9.46	-5.87	-6.74	-2.52
309	1/12/01	11:20:00	-6.67	-5.71	-5.92	-12.77	-9.46	-5.86	-6.74	-2.19
310	1/12/01	11:30:00	-6.66	-5.72	-5.92	-12.77	-9.46	-5.84	-6.72	-1.9
311	1/12/01	11:40:00	-6.63	-5.68	-5.89	-12.74	-9.43	-5.79	-6.69	-1.59
312	1/12/01	11:50:00	-6.61	-5.66	-5.86	-12.69	-9.39	-5.76	-6.64	-1.31
313	1/12/01	12:00:00	-6.61	-5.65	-5.86	-12.69	-9.38	-5.75	-6.66	-1.05
314	1/12/01	12:10:00	-6.61	-5.65	-5.86	-12.69	-9.38	-5.74	-6.66	-0.81
315	1/12/01	12:20:00	-6.61	-5.66	-5.85	-12.69	-9.38	-5.73	-6.64	-0.56
316	1/12/01	12:30:00	-6.61	-5.66	-5.85	-12.69	-9.38	-5.71	-6.64	-0.34
317	1/12/01	12:40:00	-6.61	-5.66	-5.85	-12.67	-9.38	-5.7	-6.64	-0.11
318	1/12/01	12:50:00	-6.62	-5.66	-5.84	-12.67	-9.38	-5.7	-6.64	0.13
319	1/12/01	13:00:00	-6.61	-5.66	-5.84	-12.66	-9.38	-5.68	-6.64	0.36
320	1/12/01	13:10:00	-6.62	-5.66	-5.83	-12.66	-9.38	-5.67	-6.64	0.58
321	1/12/01	13:20:00	-6.61	-5.65	-5.82	-12.66	-9.34	-5.66	-6.64	0.79
322	1/12/01	13:30:00	-6.61	-5.65	-5.81	-12.64	-9.34	-5.64	-6.62	0.99
323	1/12/01	13:40:00	-6.59	-5.63	-5.78	-12.62	-9.32	-5.61	-6.6	1.2
324	1/12/01	13:50:00	-6.59	-5.63	-5.77	-12.62	-9.32	-5.6	-6.59	1.36

Tidal Study Data
January 10-25, 2001

325	1/12/01	14:00:00	-6.6	-5.64	-5.79	-12.66	-9.33	-5.6	-6.61	1.49
326	1/12/01	14:10:00	-6.6	-5.64	-5.78	-12.64	-9.31	-5.59	-6.61	1.63
327	1/12/01	14:20:00	-6.57	-5.61	-5.75	-12.64	-9.29	-5.56	-6.59	1.78
328	1/12/01	14:30:00	-6.58	-5.63	-5.76	-12.64	-9.31	-5.56	-6.61	1.88
329	1/12/01	14:40:00	-6.58	-5.63	-5.76	-12.66	-9.31	-5.55	-6.57	1.99
330	1/12/01	14:50:00	-6.56	-5.61	-5.72	-12.64	-9.29	-5.52	-6.55	2.12
331	1/12/01	15:00:00	-6.57	-5.63	-5.73	-12.66	-9.31	-5.53	-6.56	2.19
332	1/12/01	15:10:00	-6.57	-5.62	-5.73	-12.66	-9.31	-5.52	-6.56	2.29
333	1/12/01	15:20:00	-6.57	-5.62	-5.71	-12.66	-9.29	-5.52	-6.56	2.36
334	1/12/01	15:30:00	-6.57	-5.61	-5.71	-12.66	-9.31	-5.52	-6.53	2.42
335	1/12/01	15:40:00	-6.56	-5.61	-5.71	-12.66	-9.29	-5.51	-6.53	2.46
336	1/12/01	15:50:00	-6.55	-5.61	-5.69	-12.66	-9.28	-5.52	-6.53	2.47
337	1/12/01	16:00:00	-6.54	-5.61	-5.7	-12.66	-9.29	-5.53	-6.53	2.45
338	1/12/01	16:10:00	-6.54	-5.61	-5.7	-12.66	-9.29	-5.56	-6.53	2.38
339	1/12/01	16:20:00	-6.54	-5.61	-5.7	-12.66	-9.31	-5.58	-6.53	2.26
340	1/12/01	16:30:00	-6.53	-5.61	-5.7	-12.66	-9.31	-5.61	-6.53	2.11
341	1/12/01	16:40:00	-6.53	-5.61	-5.71	-12.66	-9.31	-5.63	-6.53	1.96
342	1/12/01	16:50:00	-6.53	-5.62	-5.71	-12.66	-9.31	-5.64	-6.56	1.8
343	1/12/01	17:00:00	-6.58	-5.66	-5.77	-12.71	-9.36	-5.71	-6.59	1.57
344	1/12/01	17:10:00	-6.57	-5.66	-5.78	-12.71	-9.36	-5.74	-6.58	1.38
345	1/12/01	17:20:00	-6.58	-5.66	-5.79	-12.71	-9.39	-5.74	-6.61	1.19
346	1/12/01	17:30:00	-6.58	-5.67	-5.8	-12.71	-9.39	-5.76	-6.61	0.98
347	1/12/01	17:40:00	-6.58	-5.67	-5.8	-12.71	-9.39	-5.79	-6.62	0.77
348	1/12/01	17:50:00	-6.58	-5.67	-5.81	-12.71	-9.39	-5.78	-6.62	0.53
349	1/12/01	18:00:00	-6.59	-5.67	-5.82	-12.72	-9.39	-5.8	-6.64	0.33
350	1/12/01	18:10:00	-6.58	-5.67	-5.82	-12.71	-9.39	-5.79	-6.66	0.12
351	1/12/01	18:20:00	-6.58	-5.67	-5.82	-12.71	-9.39	-5.81	-6.64	-0.08
352	1/12/01	18:30:00	-6.58	-5.66	-5.83	-12.71	-9.39	-5.81	-6.64	-0.27
353	1/12/01	18:40:00	-6.58	-5.66	-5.83	-12.71	-9.41	-5.82	-6.66	-0.45
354	1/12/01	18:50:00	-6.58	-5.66	-5.83	-12.71	-9.39	-5.83	-6.66	-0.61
355	1/12/01	19:00:00	-6.61	-5.69	-5.86	-12.74	-9.42	-5.86	-6.69	-0.81
356	1/12/01	19:10:00	-6.61	-5.69	-5.86	-12.74	-9.42	-5.85	-6.69	-0.97
357	1/12/01	19:20:00	-6.64	-5.7	-5.88	-12.76	-9.44	-5.88	-6.71	-1.16
358	1/12/01	19:30:00	-6.61	-5.7	-5.87	-12.74	-9.42	-5.86	-6.69	-1.3
359	1/12/01	19:40:00	-6.64	-5.71	-5.89	-12.76	-9.44	-5.89	-6.71	-1.48
360	1/12/01	19:50:00	-6.64	-5.71	-5.89	-12.76	-9.44	-5.88	-6.71	-1.64
361	1/12/01	20:00:00	-6.63	-5.71	-5.89	-12.76	-9.44	-5.89	-6.71	-1.81
362	1/12/01	20:10:00	-6.63	-5.71	-5.89	-12.76	-9.44	-5.9	-6.71	-1.97
363	1/12/01	20:20:00	-6.63	-5.71	-5.9	-12.76	-9.46	-5.9	-6.71	-2.14
364	1/12/01	20:30:00	-6.64	-5.7	-5.89	-12.76	-9.44	-5.9	-6.71	-2.3
365	1/12/01	20:40:00	-6.63	-5.71	-5.9	-12.76	-9.44	-5.9	-6.71	-2.47
366	1/12/01	20:50:00	-6.64	-5.71	-5.9	-12.76	-9.44	-5.91	-6.71	-2.63
367	1/12/01	21:00:00	-6.63	-5.7	-5.9	-12.76	-9.44	-5.91	-6.71	-2.82
368	1/12/01	21:10:00	-6.65	-5.7	-5.9	-12.76	-9.44	-5.9	-6.71	-2.99
369	1/12/01	21:20:00	-6.64	-5.69	-5.9	-12.76	-9.44	-5.9	-6.71	-3.16
370	1/12/01	21:30:00	-6.64	-5.69	-5.9	-12.76	-9.44	-5.9	-6.71	-3.33
371	1/12/01	21:40:00	-6.64	-5.69	-5.89	-12.76	-9.44	-5.9	-6.72	-3.48
372	1/12/01	21:50:00	-6.63	-5.7	-5.9	-12.76	-9.44	-5.9	-6.72	-3.63
373	1/12/01	22:00:00	-6.64	-5.69	-5.91	-12.76	-9.44	-5.89	-6.71	-3.79
374	1/12/01	22:10:00	-6.66	-5.71	-5.92	-12.78	-9.46	-5.91	-6.73	-3.94
375	1/12/01	22:20:00	-6.65	-5.7	-5.92	-12.78	-9.46	-5.92	-6.73	-4.07
376	1/12/01	22:30:00	-6.66	-5.72	-5.93	-12.79	-9.47	-5.92	-6.74	-4.18

Tidal Study Data
January 10-25, 2001

377	1/12/01	22:40:00	-6.67	-5.71	-5.92	-12.77	-9.47	-5.92	-6.74	-4.26
378	1/12/01	22:50:00	-6.67	-5.71	-5.93	-12.77	-9.47	-5.92	-6.74	-4.31
379	1/12/01	23:00:00	-6.69	-5.73	-5.96	-12.79	-9.49	-5.93	-6.76	-4.31
380	1/12/01	23:10:00	-6.69	-5.74	-5.94	-12.79	-9.49	-5.93	-6.76	-4.15
381	1/12/01	23:20:00	-6.65	-5.7	-5.92	-12.76	-9.46	-5.89	-6.74	-3.77
382	1/12/01	23:30:00	-6.67	-5.71	-5.93	-12.79	-9.47	-5.9	-6.74	-3.33
383	1/12/01	23:40:00	-6.69	-5.73	-5.94	-12.79	-9.49	-5.89	-6.76	-2.94
384	1/12/01	23:50:00	-6.68	-5.73	-5.94	-12.79	-9.49	-5.88	-6.76	-2.59
385	1/13/01	0:00:00	-6.69	-5.73	-5.93	-12.79	-9.49	-5.86	-6.76	-2.24
386	1/13/01	0:10:00	-6.7	-5.72	-5.92	-12.77	-9.49	-5.84	-6.76	-1.93
387	1/13/01	0:20:00	-6.68	-5.72	-5.92	-12.76	-9.48	-5.83	-6.76	-1.64
388	1/13/01	0:30:00	-6.68	-5.71	-5.91	-12.74	-9.46	-5.8	-6.76	-1.38
389	1/13/01	0:40:00	-6.68	-5.71	-5.9	-12.74	-9.46	-5.79	-6.76	-1.11
390	1/13/01	0:50:00	-6.68	-5.7	-5.89	-12.74	-9.46	-5.78	-6.74	-0.87
391	1/13/01	1:00:00	-6.68	-5.69	-5.88	-12.74	-9.46	-5.75	-6.71	-0.65
392	1/13/01	1:10:00	-6.67	-5.69	-5.88	-12.72	-9.46	-5.75	-6.71	-0.45
393	1/13/01	1:20:00	-6.66	-5.69	-5.87	-12.72	-9.46	-5.74	-6.71	-0.25
394	1/13/01	1:30:00	-6.66	-5.69	-5.87	-12.72	-9.46	-5.73	-6.71	-0.05
395	1/13/01	1:40:00	-6.66	-5.67	-5.85	-12.72	-9.46	-5.71	-6.69	0.15
396	1/13/01	1:50:00	-6.66	-5.67	-5.84	-12.71	-9.43	-5.69	-6.68	0.36
397	1/13/01	2:00:00	-6.66	-5.67	-5.83	-12.72	-9.43	-5.68	-6.68	0.58
398	1/13/01	2:10:00	-6.65	-5.65	-5.82	-12.71	-9.43	-5.67	-6.68	0.72
399	1/13/01	2:20:00	-6.65	-5.65	-5.81	-12.71	-9.39	-5.66	-6.68	0.9
400	1/13/01	2:30:00	-6.64	-5.64	-5.79	-12.71	-9.39	-5.64	-6.66	1.07
401	1/13/01	2:40:00	-6.63	-5.64	-5.79	-12.71	-9.39	-5.64	-6.68	1.21
402	1/13/01	2:50:00	-6.63	-5.64	-5.78	-12.71	-9.38	-5.62	-6.66	1.34
403	1/13/01	3:00:00	-6.63	-5.63	-5.77	-12.71	-9.38	-5.61	-6.64	1.44
404	1/13/01	3:10:00	-6.63	-5.64	-5.78	-12.72	-9.37	-5.63	-6.64	1.54
405	1/13/01	3:20:00	-6.62	-5.64	-5.77	-12.72	-9.37	-5.61	-6.62	1.63
406	1/13/01	3:30:00	-6.62	-5.64	-5.75	-12.72	-9.37	-5.6	-6.62	1.72
407	1/13/01	3:40:00	-6.6	-5.62	-5.74	-12.71	-9.36	-5.59	-6.59	1.81
408	1/13/01	3:50:00	-6.6	-5.61	-5.73	-12.71	-9.36	-5.59	-6.59	1.87
409	1/13/01	4:00:00	-6.6	-5.63	-5.74	-12.72	-9.37	-5.59	-6.6	1.91
410	1/13/01	4:10:00	-6.61	-5.64	-5.75	-12.75	-9.39	-5.63	-6.62	1.92
411	1/13/01	4:20:00	-6.61	-5.64	-5.76	-12.75	-9.39	-5.62	-6.62	1.92
412	1/13/01	4:30:00	-6.6	-5.64	-5.75	-12.75	-9.39	-5.62	-6.62	1.9
413	1/13/01	4:40:00	-6.6	-5.64	-5.76	-12.75	-9.39	-5.65	-6.62	1.84
414	1/13/01	4:50:00	-6.6	-5.64	-5.76	-12.75	-9.39	-5.67	-6.62	1.71
415	1/13/01	5:00:00	-6.6	-5.65	-5.76	-12.75	-9.39	-5.69	-6.62	1.58
416	1/13/01	5:10:00	-6.61	-5.65	-5.77	-12.75	-9.39	-5.71	-6.62	1.43
417	1/13/01	5:20:00	-6.61	-5.64	-5.77	-12.75	-9.42	-5.73	-6.62	1.25
418	1/13/01	5:30:00	-6.6	-5.66	-5.78	-12.77	-9.42	-5.75	-6.62	1.06
419	1/13/01	5:40:00	-6.61	-5.66	-5.79	-12.77	-9.42	-5.76	-6.64	0.88
420	1/13/01	5:50:00	-6.6	-5.66	-5.79	-12.77	-9.42	-5.78	-6.62	0.69
421	1/13/01	6:00:00	-6.59	-5.66	-5.8	-12.77	-9.42	-5.78	-6.66	0.47
422	1/13/01	6:10:00	-6.6	-5.66	-5.81	-12.75	-9.44	-5.79	-6.66	0.27
423	1/13/01	6:20:00	-6.6	-5.66	-5.81	-12.77	-9.44	-5.79	-6.66	0.07
424	1/13/01	6:30:00	-6.6	-5.66	-5.82	-12.77	-9.46	-5.81	-6.66	-0.13
425	1/13/01	6:40:00	-6.6	-5.66	-5.82	-12.77	-9.46	-5.81	-6.66	-0.31
426	1/13/01	6:50:00	-6.6	-5.66	-5.82	-12.77	-9.46	-5.81	-6.66	-0.48
427	1/13/01	7:00:00	-6.6	-5.66	-5.83	-12.77	-9.46	-5.82	-6.66	-0.65
428	1/13/01	7:10:00	-6.6	-5.66	-5.83	-12.77	-9.46	-5.83	-6.66	-0.82

Tidal Study Data
January 10-25, 2001

429	1/13/01	7:20:00	-6.63	-5.68	-5.85	-12.79	-9.48	-5.85	-6.68	-1
430	1/13/01	7:30:00	-6.61	-5.66	-5.83	-12.77	-9.46	-5.83	-6.66	-1.13
431	1/13/01	7:40:00	-6.63	-5.68	-5.86	-12.81	-9.48	-5.86	-6.71	-1.32
432	1/13/01	7:50:00	-6.63	-5.68	-5.86	-12.79	-9.48	-5.87	-6.71	-1.48
433	1/13/01	8:00:00	-6.65	-5.7	-5.87	-12.82	-9.49	-5.88	-6.74	-1.65
434	1/13/01	8:10:00	-6.64	-5.69	-5.87	-12.82	-9.49	-5.87	-6.74	-1.8
435	1/13/01	8:20:00	-6.64	-5.69	-5.87	-12.8	-9.49	-5.88	-6.72	-1.94
436	1/13/01	8:30:00	-6.64	-5.69	-5.87	-12.82	-9.49	-5.88	-6.74	-2.09
437	1/13/01	8:40:00	-6.66	-5.7	-5.88	-12.82	-9.49	-5.88	-6.74	-2.24
438	1/13/01	8:50:00	-6.65	-5.7	-5.88	-12.85	-9.49	-5.89	-6.74	-2.4
439	1/13/01	9:00:00	-6.65	-5.7	-5.88	-12.84	-9.49	-5.88	-6.74	-2.55
440	1/13/01	9:10:00	-6.66	-5.7	-5.89	-12.82	-9.49	-5.89	-6.74	-2.74
441	1/13/01	9:20:00	-6.65	-5.7	-5.9	-12.82	-9.49	-5.89	-6.76	-2.94
442	1/13/01	9:30:00	-6.65	-5.7	-5.9	-12.84	-9.51	-5.9	-6.76	-3.06
443	1/13/01	9:40:00	-6.65	-5.69	-5.89	-12.85	-9.47	-5.89	-6.74	-3.2
444	1/13/01	9:50:00	-6.65	-5.69	-5.89	-12.82	-9.47	-5.88	-6.74	-3.36
445	1/13/01	10:00:00	-6.64	-5.69	-5.89	-12.84	-9.47	-5.89	-6.74	-3.53
446	1/13/01	10:10:00	-6.66	-5.7	-5.91	-12.87	-9.49	-5.9	-6.76	-3.68
447	1/13/01	10:20:00	-6.65	-5.7	-5.9	-12.84	-9.47	-5.89	-6.76	-3.81
448	1/13/01	10:30:00	-6.65	-5.69	-5.89	-12.84	-9.49	-5.88	-6.76	-3.9
449	1/13/01	10:40:00	-6.65	-5.69	-5.9	-12.82	-9.49	-5.89	-6.74	-3.98
450	1/13/01	10:50:00	-6.65	-5.7	-5.9	-12.82	-9.51	-5.89	-6.76	-4.02
451	1/13/01	11:00:00	-6.66	-5.7	-5.9	-12.82	-9.49	-5.9	-6.76	-4.02
452	1/13/01	11:10:00	-6.67	-5.71	-5.91	-12.82	-9.49	-5.89	-6.76	-3.87
453	1/13/01	11:20:00	-6.67	-5.7	-5.91	-12.82	-9.51	-5.89	-6.76	-3.54
454	1/13/01	11:30:00	-6.67	-5.71	-5.9	-12.82	-9.51	-5.88	-6.76	-3.12
455	1/13/01	11:40:00	-6.66	-5.69	-5.88	-12.78	-9.49	-5.85	-6.74	-2.71
456	1/13/01	11:50:00	-6.62	-5.66	-5.85	-12.75	-9.46	-5.81	-6.71	-2.31
457	1/13/01	12:00:00	-6.63	-5.66	-5.86	-12.75	-9.46	-5.79	-6.71	-2.01
458	1/13/01	12:10:00	-6.63	-5.66	-5.85	-12.75	-9.46	-5.77	-6.71	-1.69
459	1/13/01	12:20:00	-6.63	-5.66	-5.85	-12.75	-9.46	-5.76	-6.71	-1.4
460	1/13/01	12:30:00	-6.64	-5.66	-5.85	-12.75	-9.42	-5.74	-6.71	-1.12
461	1/13/01	12:40:00	-6.63	-5.66	-5.84	-12.74	-9.46	-5.73	-6.71	-0.86
462	1/13/01	12:50:00	-6.62	-5.65	-5.82	-12.72	-9.4	-5.7	-6.69	-0.6
463	1/13/01	13:00:00	-6.61	-5.63	-5.8	-12.71	-9.39	-5.68	-6.68	-0.34
464	1/13/01	13:10:00	-6.61	-5.64	-5.8	-12.68	-9.4	-5.67	-6.69	-0.11
465	1/13/01	13:20:00	-6.6	-5.63	-5.79	-12.66	-9.39	-5.66	-6.66	0.12
466	1/13/01	13:30:00	-6.6	-5.63	-5.79	-12.66	-9.39	-5.64	-6.66	0.35
467	1/13/01	13:40:00	-6.6	-5.63	-5.78	-12.66	-9.39	-5.62	-6.63	0.58
468	1/13/01	13:50:00	-6.6	-5.63	-5.77	-12.66	-9.36	-5.62	-6.63	0.79
469	1/13/01	14:00:00	-6.59	-5.63	-5.76	-12.66	-9.36	-5.6	-6.63	1
470	1/13/01	14:10:00	-6.6	-5.62	-5.75	-12.66	-9.36	-5.59	-6.63	1.19
471	1/13/01	14:20:00	-6.59	-5.62	-5.74	-12.64	-9.36	-5.57	-6.59	1.36
472	1/13/01	14:30:00	-6.58	-5.61	-5.73	-12.64	-9.33	-5.55	-6.59	1.54
473	1/13/01	14:40:00	-6.58	-5.6	-5.73	-12.64	-9.31	-5.54	-6.59	1.68
474	1/13/01	14:50:00	-6.58	-5.61	-5.72	-12.64	-9.31	-5.53	-6.59	1.83
475	1/13/01	15:00:00	-6.58	-5.6	-5.71	-12.64	-9.31	-5.52	-6.59	1.95
476	1/13/01	15:10:00	-6.58	-5.61	-5.7	-12.62	-9.31	-5.51	-6.59	2.07
477	1/13/01	15:20:00	-6.57	-5.6	-5.7	-12.64	-9.31	-5.5	-6.58	2.19
478	1/13/01	15:30:00	-6.56	-5.59	-5.69	-12.64	-9.28	-5.49	-6.54	2.31
479	1/13/01	15:40:00	-6.55	-5.59	-5.68	-12.64	-9.28	-5.48	-6.56	2.4
480	1/13/01	15:50:00	-6.55	-5.58	-5.67	-12.64	-9.28	-5.47	-6.53	2.51

Tidal Study Data
January 10-25, 2001

481	1/13/01	16:00:00	-6.54	-5.57	-5.65	-12.64	-9.28	-5.46	-6.53	2.59
482	1/13/01	16:10:00	-6.54	-5.58	-5.66	-12.64	-9.28	-5.45	-6.53	2.66
483	1/13/01	16:20:00	-6.54	-5.57	-5.64	-12.64	-9.28	-5.45	-6.51	2.72
484	1/13/01	16:30:00	-6.53	-5.57	-5.64	-12.66	-9.28	-5.45	-6.51	2.76
485	1/13/01	16:40:00	-6.53	-5.57	-5.64	-12.66	-9.28	-5.46	-6.51	2.76
486	1/13/01	16:50:00	-6.53	-5.56	-5.63	-12.66	-9.28	-5.47	-6.51	2.74
487	1/13/01	17:00:00	-6.52	-5.57	-5.65	-12.65	-9.29	-5.5	-6.52	2.64
488	1/13/01	17:10:00	-6.55	-5.59	-5.67	-12.69	-9.31	-5.55	-6.54	2.51
489	1/13/01	17:20:00	-6.52	-5.57	-5.65	-12.67	-9.29	-5.55	-6.52	2.39
490	1/13/01	17:30:00	-6.54	-5.6	-5.68	-12.69	-9.33	-5.59	-6.54	2.2
491	1/13/01	17:40:00	-6.54	-5.61	-5.68	-12.69	-9.34	-5.62	-6.54	2.04
492	1/13/01	17:50:00	-6.52	-5.59	-5.68	-12.67	-9.32	-5.62	-6.52	1.87
493	1/13/01	18:00:00	-6.53	-5.59	-5.69	-12.67	-9.34	-5.65	-6.55	1.69
494	1/13/01	18:10:00	-6.53	-5.59	-5.7	-12.67	-9.37	-5.67	-6.55	1.5
495	1/13/01	18:20:00	-6.55	-5.61	-5.73	-12.69	-9.39	-5.7	-6.57	1.29
496	1/13/01	18:30:00	-6.55	-5.61	-5.74	-12.69	-9.39	-5.73	-6.62	1.08
497	1/13/01	18:40:00	-6.53	-5.59	-5.72	-12.66	-9.36	-5.71	-6.59	0.9
498	1/13/01	18:50:00	-6.53	-5.61	-5.74	-12.66	-9.39	-5.72	-6.59	0.68
499	1/13/01	19:00:00	-6.54	-5.6	-5.75	-12.66	-9.39	-5.73	-6.59	0.47
500	1/13/01	19:10:00	-6.54	-5.6	-5.75	-12.66	-9.39	-5.74	-6.59	0.25
501	1/13/01	19:20:00	-6.53	-5.6	-5.75	-12.66	-9.39	-5.75	-6.59	0.05
502	1/13/01	19:30:00	-6.56	-5.61	-5.77	-12.66	-9.41	-5.76	-6.63	-0.14
503	1/13/01	19:40:00	-6.55	-5.61	-5.77	-12.66	-9.39	-5.76	-6.63	-0.31
504	1/13/01	19:50:00	-6.56	-5.61	-5.78	-12.66	-9.41	-5.77	-6.63	-0.49
505	1/13/01	20:00:00	-6.56	-5.6	-5.79	-12.67	-9.43	-5.78	-6.63	-0.67
506	1/13/01	20:10:00	-6.57	-5.62	-5.8	-12.67	-9.44	-5.78	-6.64	-0.82
507	1/13/01	20:20:00	-6.56	-5.6	-5.79	-12.66	-9.41	-5.78	-6.63	-0.98
508	1/13/01	20:30:00	-6.56	-5.6	-5.79	-12.66	-9.41	-5.8	-6.63	-1.12
509	1/13/01	20:40:00	-6.6	-5.63	-5.82	-12.69	-9.46	-5.82	-6.66	-1.32
510	1/13/01	20:50:00	-6.59	-5.63	-5.82	-12.69	-9.44	-5.82	-6.67	-1.47
511	1/13/01	21:00:00	-6.57	-5.59	-5.79	-12.66	-9.41	-5.79	-6.66	-1.61
512	1/13/01	21:10:00	-6.59	-5.61	-5.83	-12.69	-9.44	-5.83	-6.69	-1.79
513	1/13/01	21:20:00	-6.58	-5.6	-5.82	-12.69	-9.42	-5.82	-6.66	-1.96
514	1/13/01	21:30:00	-6.59	-5.6	-5.82	-12.7	-9.44	-5.83	-6.67	-2.11
515	1/13/01	21:40:00	-6.59	-5.59	-5.83	-12.7	-9.46	-5.83	-6.66	-2.28
516	1/13/01	21:50:00	-6.59	-5.59	-5.82	-12.69	-9.46	-5.82	-6.69	-2.45
517	1/13/01	22:00:00	-6.59	-5.59	-5.82	-12.69	-9.46	-5.83	-6.69	-2.64
518	1/13/01	22:10:00	-6.6	-5.59	-5.82	-12.69	-9.46	-5.83	-6.69	-2.81
519	1/13/01	22:20:00	-6.59	-5.59	-5.82	-12.7	-9.46	-5.83	-6.69	-2.96
520	1/13/01	22:30:00	-6.6	-5.58	-5.83	-12.7	-9.44	-5.82	-6.69	-3.12
521	1/13/01	22:40:00	-6.6	-5.58	-5.83	-12.7	-9.44	-5.82	-6.71	-3.21
522	1/13/01	22:50:00	-6.6	-5.57	-5.84	-12.69	-9.44	-5.83	-6.71	-3.37
523	1/13/01	23:00:00	-6.6	-5.57	-5.82	-12.69	-9.46	-5.82	-6.69	-3.51
524	1/13/01	23:10:00	-6.6	-5.56	-5.83	-12.7	-9.46	-5.83	-6.71	-3.63
525	1/13/01	23:20:00	-6.6	-5.57	-5.83	-12.7	-9.46	-5.82	-6.71	-3.72
526	1/13/01	23:30:00	-6.6	-5.56	-5.83	-12.69	-9.46	-5.82	-6.71	-3.82
527	1/13/01	23:40:00	-6.6	-5.56	-5.83	-12.69	-9.46	-5.81	-6.71	-3.96
528	1/13/01	23:50:00	-6.6	-5.57	-5.84	-12.69	-9.46	-5.82	-6.71	-3.82
529	1/14/01	0:00:00	-6.61	-5.57	-5.84	-12.69	-9.46	-5.82	-6.71	-3.71
530	1/14/01	0:10:00	-6.62	-5.57	-5.83	-12.69	-9.46	-5.82	-6.71	-3.38
531	1/14/01	0:20:00	-6.62	-5.57	-5.83	-12.69	-9.46	-5.8	-6.71	-2.98
532	1/14/01	0:30:00	-6.62	-5.57	-5.82	-12.67	-9.46	-5.79	-6.71	-2.57

Tidal Study Data
January 10-25, 2001

533	1/14/01	0:40:00	-6.59	-5.54	-5.8	-12.64	-9.43	-5.73	-6.68	-2.19
534	1/14/01	0:50:00	-6.59	-5.53	-5.79	-12.64	-9.43	-5.71	-6.68	-1.87
535	1/14/01	1:00:00	-6.59	-5.54	-5.79	-12.64	-9.43	-5.71	-6.68	-1.59
536	1/14/01	1:10:00	-6.59	-5.53	-5.79	-12.62	-9.41	-5.69	-6.68	-1.31
537	1/14/01	1:20:00	-6.58	-5.53	-5.78	-12.62	-9.41	-5.67	-6.68	-1.07
538	1/14/01	1:30:00	-6.59	-5.53	-5.77	-12.62	-9.39	-5.66	-6.66	-0.83
539	1/14/01	1:40:00	-6.59	-5.52	-5.75	-12.62	-9.39	-5.64	-6.63	-0.61
540	1/14/01	1:50:00	-6.59	-5.53	-5.75	-12.62	-9.39	-5.64	-6.63	-0.4
541	1/14/01	2:00:00	-6.59	-5.52	-5.75	-12.59	-9.39	-5.63	-6.63	-0.2
542	1/14/01	2:10:00	-6.58	-5.53	-5.75	-12.59	-9.39	-5.61	-6.63	-0.01
543	1/14/01	2:20:00	-6.58	-5.52	-5.74	-12.58	-9.39	-5.6	-6.63	0.19
544	1/14/01	2:30:00	-6.57	-5.52	-5.74	-12.58	-9.38	-5.6	-6.61	0.36
545	1/14/01	2:40:00	-6.57	-5.51	-5.73	-12.58	-9.36	-5.58	-6.59	0.56
546	1/14/01	2:50:00	-6.57	-5.51	-5.72	-12.58	-9.36	-5.57	-6.59	0.73
547	1/14/01	3:00:00	-6.57	-5.52	-5.71	-12.58	-9.36	-5.57	-6.59	0.9
548	1/14/01	3:10:00	-6.56	-5.51	-5.71	-12.56	-9.36	-5.56	-6.59	1.06
549	1/14/01	3:20:00	-6.56	-5.51	-5.7	-12.56	-9.36	-5.53	-6.59	1.22
550	1/14/01	3:30:00	-6.56	-5.51	-5.69	-12.56	-9.33	-5.53	-6.58	1.35
551	1/14/01	3:40:00	-6.56	-5.52	-5.69	-12.56	-9.33	-5.52	-6.59	1.45
552	1/14/01	3:50:00	-6.55	-5.51	-5.68	-12.56	-9.33	-5.52	-6.59	1.56
553	1/14/01	4:00:00	-6.56	-5.5	-5.67	-12.56	-9.31	-5.51	-6.56	1.66
554	1/14/01	4:10:00	-6.56	-5.52	-5.68	-12.58	-9.31	-5.52	-6.56	1.73
555	1/14/01	4:20:00	-6.55	-5.52	-5.67	-12.58	-9.31	-5.51	-6.56	1.82
556	1/14/01	4:30:00	-6.55	-5.51	-5.67	-12.58	-9.31	-5.51	-6.54	1.87
557	1/14/01	4:40:00	-6.53	-5.49	-5.64	-12.56	-9.29	-5.49	-6.52	1.96
558	1/14/01	4:50:00	-6.54	-5.5	-5.65	-12.58	-9.31	-5.5	-6.53	1.98
559	1/14/01	5:00:00	-6.54	-5.51	-5.65	-12.59	-9.31	-5.51	-6.54	1.99
560	1/14/01	5:10:00	-6.54	-5.5	-5.65	-12.59	-9.31	-5.53	-6.54	1.99
561	1/14/01	5:20:00	-6.52	-5.49	-5.63	-12.57	-9.29	-5.51	-6.52	1.97
562	1/14/01	5:30:00	-6.54	-5.52	-5.66	-12.62	-9.31	-5.55	-6.54	1.87
563	1/14/01	5:40:00	-6.54	-5.51	-5.66	-12.62	-9.31	-5.59	-6.54	1.74
564	1/14/01	5:50:00	-6.54	-5.52	-5.67	-12.62	-9.36	-5.6	-6.56	1.6
565	1/14/01	6:00:00	-6.54	-5.52	-5.68	-12.62	-9.36	-5.62	-6.54	1.46
566	1/14/01	6:10:00	-6.53	-5.52	-5.68	-12.62	-9.36	-5.64	-6.54	1.28
567	1/14/01	6:20:00	-6.52	-5.52	-5.68	-12.62	-9.36	-5.65	-6.56	1.12
568	1/14/01	6:30:00	-6.52	-5.51	-5.68	-12.62	-9.36	-5.66	-6.56	0.92
569	1/14/01	6:40:00	-6.52	-5.51	-5.68	-12.64	-9.36	-5.67	-6.56	0.74
570	1/14/01	6:50:00	-6.52	-5.51	-5.68	-12.64	-9.36	-5.68	-6.59	0.53
571	1/14/01	7:00:00	-6.53	-5.51	-5.7	-12.64	-9.38	-5.7	-6.59	0.31
572	1/14/01	7:10:00	-6.53	-5.52	-5.7	-12.64	-9.39	-5.71	-6.59	0.1
573	1/14/01	7:20:00	-6.53	-5.52	-5.72	-12.64	-9.39	-5.71	-6.59	-0.09
574	1/14/01	7:30:00	-6.54	-5.53	-5.72	-12.64	-9.39	-5.72	-6.59	-0.27
575	1/14/01	7:40:00	-6.54	-5.53	-5.73	-12.64	-9.39	-5.72	-6.59	-0.44
576	1/14/01	7:50:00	-6.55	-5.53	-5.73	-12.64	-9.39	-5.72	-6.59	-0.62
577	1/14/01	8:00:00	-6.55	-5.53	-5.73	-12.64	-9.39	-5.75	-6.59	-0.78
578	1/14/01	8:10:00	-6.55	-5.53	-5.74	-12.64	-9.41	-5.74	-6.63	-0.94
579	1/14/01	8:20:00	-6.56	-5.53	-5.74	-12.64	-9.41	-5.75	-6.63	-1.09
580	1/14/01	8:30:00	-6.56	-5.53	-5.74	-12.64	-9.41	-5.75	-6.63	-1.26
581	1/14/01	8:40:00	-6.56	-5.54	-5.75	-12.66	-9.43	-5.76	-6.63	-1.42
582	1/14/01	8:50:00	-6.56	-5.54	-5.75	-12.66	-9.43	-5.76	-6.63	-1.56
583	1/14/01	9:00:00	-6.56	-5.55	-5.76	-12.66	-9.43	-5.76	-6.63	-1.71
584	1/14/01	9:10:00	-6.56	-5.54	-5.75	-12.66	-9.43	-5.76	-6.63	-1.87

Tidal Study Data
January 10-25, 2001

585	1/14/01	9:20:00	-6.56	-5.54	-5.76	-12.66	-9.43	-5.77	-6.63	-2.02
586	1/14/01	9:30:00	-6.56	-5.54	-5.76	-12.66	-9.43	-5.77	-6.63	-2.17
587	1/14/01	9:40:00	-6.56	-5.55	-5.75	-12.66	-9.43	-5.77	-6.63	-2.33
588	1/14/01	9:50:00	-6.56	-5.53	-5.75	-12.66	-9.43	-5.76	-6.64	-2.5
589	1/14/01	10:00:00	-6.56	-5.53	-5.76	-12.66	-9.43	-5.78	-6.66	-2.66
590	1/14/01	10:10:00	-6.56	-5.53	-5.76	-12.66	-9.43	-5.78	-6.63	-2.83
591	1/14/01	10:20:00	-6.57	-5.54	-5.76	-12.66	-9.43	-5.77	-6.63	-2.98
592	1/14/01	10:30:00	-6.56	-5.54	-5.76	-12.66	-9.43	-5.78	-6.66	-3.14
593	1/14/01	10:40:00	-6.56	-5.53	-5.76	-12.66	-9.43	-5.76	-6.63	-3.29
594	1/14/01	10:50:00	-6.57	-5.54	-5.76	-12.66	-9.43	-5.78	-6.68	-3.44
595	1/14/01	11:00:00	-6.57	-5.55	-5.77	-12.66	-9.43	-5.78	-6.68	-3.59
596	1/14/01	11:10:00	-6.58	-5.54	-5.78	-12.66	-9.43	-5.79	-6.68	-3.74
597	1/14/01	11:20:00	-6.57	-5.56	-5.78	-12.66	-9.44	-5.79	-6.68	-3.87
598	1/14/01	11:30:00	-6.55	-5.52	-5.76	-12.63	-9.43	-5.76	-6.65	-3.97
599	1/14/01	11:40:00	-6.57	-5.54	-5.76	-12.64	-9.44	-5.77	-6.66	-4
600	1/14/01	11:50:00	-6.54	-5.51	-5.74	-12.61	-9.41	-5.75	-6.63	-4.06
601	1/14/01	12:00:00	-6.55	-5.51	-5.74	-12.61	-9.41	-5.75	-6.63	-4.06
602	1/14/01	12:10:00	-6.55	-5.52	-5.74	-12.61	-9.41	-5.76	-6.63	-3.98
603	1/14/01	12:20:00	-6.55	-5.52	-5.75	-12.61	-9.41	-5.75	-6.63	-3.75
604	1/14/01	12:30:00	-6.56	-5.53	-5.75	-12.61	-9.41	-5.74	-6.63	-3.35
605	1/14/01	12:40:00	-6.56	-5.53	-5.75	-12.59	-9.41	-5.73	-6.63	-2.96
606	1/14/01	12:50:00	-6.55	-5.51	-5.73	-12.57	-9.39	-5.71	-6.61	-2.57
607	1/14/01	13:00:00	-6.55	-5.52	-5.73	-12.57	-9.39	-5.69	-6.61	-2.24
608	1/14/01	13:10:00	-6.54	-5.5	-5.71	-12.56	-9.38	-5.66	-6.6	-1.92
609	1/14/01	13:20:00	-6.55	-5.51	-5.72	-12.57	-9.39	-5.65	-6.61	-1.63
610	1/14/01	13:30:00	-6.53	-5.48	-5.68	-12.54	-9.36	-5.6	-6.58	-1.33
611	1/14/01	13:40:00	-6.53	-5.49	-5.69	-12.54	-9.36	-5.6	-6.58	-1.08
612	1/14/01	13:50:00	-6.52	-5.48	-5.69	-12.52	-9.36	-5.58	-6.58	-0.83
613	1/14/01	14:00:00	-6.53	-5.49	-5.67	-12.52	-9.36	-5.57	-6.58	-0.58
614	1/14/01	14:10:00	-6.53	-5.48	-5.66	-12.52	-9.33	-5.56	-6.58	-0.34
615	1/14/01	14:20:00	-6.52	-5.48	-5.65	-12.52	-9.33	-5.55	-6.58	-0.14
616	1/14/01	14:30:00	-6.52	-5.48	-5.66	-12.52	-9.33	-5.54	-6.58	0.05
617	1/14/01	14:40:00	-6.52	-5.5	-5.67	-12.49	-9.36	-5.55	-6.58	0.23
618	1/14/01	14:50:00	-6.53	-5.48	-5.64	-12.51	-9.33	-5.52	-6.58	0.44
619	1/14/01	15:00:00	-6.52	-5.47	-5.64	-12.49	-9.31	-5.52	-6.56	0.66
620	1/14/01	15:10:00	-6.53	-5.48	-5.64	-12.49	-9.33	-5.51	-6.54	0.82
621	1/14/01	15:20:00	-6.52	-5.48	-5.63	-12.49	-9.29	-5.49	-6.53	0.99
622	1/14/01	15:30:00	-6.51	-5.47	-5.61	-12.49	-9.29	-5.48	-6.53	1.17
623	1/14/01	15:40:00	-6.5	-5.47	-5.6	-12.49	-9.29	-5.46	-6.53	1.32
624	1/14/01	15:50:00	-6.5	-5.47	-5.6	-12.48	-9.26	-5.46	-6.49	1.46
625	1/14/01	16:00:00	-6.49	-5.47	-5.6	-12.48	-9.26	-5.45	-6.49	1.57
626	1/14/01	16:10:00	-6.5	-5.47	-5.6	-12.49	-9.26	-5.45	-6.49	1.67
627	1/14/01	16:20:00	-6.49	-5.46	-5.59	-12.49	-9.26	-5.44	-6.49	1.77
628	1/14/01	16:30:00	-6.49	-5.47	-5.58	-12.49	-9.26	-5.43	-6.49	1.85
629	1/14/01	16:40:00	-6.49	-5.47	-5.58	-12.49	-9.26	-5.44	-6.49	1.92
630	1/14/01	16:50:00	-6.49	-5.47	-5.58	-12.49	-9.26	-5.44	-6.49	1.99
631	1/14/01	17:00:00	-6.49	-5.47	-5.57	-12.49	-9.26	-5.43	-6.49	2.05
632	1/14/01	17:10:00	-6.48	-5.47	-5.56	-12.52	-9.26	-5.44	-6.49	2.08
633	1/14/01	17:20:00	-6.43	-5.43	-5.53	-12.47	-9.21	-5.4	-6.44	2.13
634	1/14/01	17:30:00	-6.47	-5.47	-5.57	-12.52	-9.26	-5.44	-6.49	2.09
635	1/14/01	17:40:00	-6.47	-5.47	-5.57	-12.52	-9.26	-5.46	-6.49	2.05
636	1/14/01	17:50:00	-6.47	-5.47	-5.57	-12.52	-9.26	-5.49	-6.49	1.96

Tidal Study Data
January 10-25, 2001

637	1/14/01	18:00:00	-6.47	-5.47	-5.58	-12.52	-9.28	-5.52	-6.49	1.84
638	1/14/01	18:10:00	-6.48	-5.48	-5.59	-12.52	-9.29	-5.54	-6.49	1.71
639	1/14/01	18:20:00	-6.48	-5.48	-5.59	-12.52	-9.29	-5.56	-6.49	1.55
640	1/14/01	18:30:00	-6.46	-5.48	-5.58	-12.5	-9.27	-5.56	-6.47	1.39
641	1/14/01	18:40:00	-6.49	-5.5	-5.62	-12.52	-9.33	-5.59	-6.49	1.2
642	1/14/01	18:50:00	-6.49	-5.5	-5.61	-12.54	-9.33	-5.61	-6.53	1.01
643	1/14/01	19:00:00	-6.49	-5.5	-5.63	-12.54	-9.33	-5.63	-6.53	0.8
644	1/14/01	19:10:00	-6.49	-5.51	-5.63	-12.54	-9.33	-5.64	-6.53	0.61
645	1/14/01	19:20:00	-6.5	-5.52	-5.64	-12.54	-9.36	-5.66	-6.53	0.39
646	1/14/01	19:30:00	-6.48	-5.5	-5.62	-12.51	-9.33	-5.65	-6.53	0.22
647	1/14/01	19:40:00	-6.51	-5.52	-5.66	-12.54	-9.36	-5.67	-6.56	0.02
648	1/14/01	19:50:00	-6.51	-5.53	-5.67	-12.54	-9.36	-5.68	-6.58	-0.17
649	1/14/01	20:00:00	-6.52	-5.53	-5.68	-12.54	-9.36	-5.7	-6.58	-0.34
650	1/14/01	20:10:00	-6.47	-5.49	-5.64	-12.49	-9.31	-5.66	-6.53	-0.47
651	1/14/01	20:20:00	-6.48	-5.48	-5.64	-12.51	-9.31	-5.66	-6.53	-0.62
652	1/14/01	20:30:00	-6.51	-5.53	-5.69	-12.56	-9.36	-5.71	-6.58	-0.83
653	1/14/01	20:40:00	-6.52	-5.53	-5.69	-12.56	-9.36	-5.72	-6.58	-0.98
654	1/14/01	20:50:00	-6.52	-5.53	-5.69	-12.56	-9.36	-5.72	-6.58	-1.13
655	1/14/01	21:00:00	-6.49	-5.5	-5.66	-12.51	-9.33	-5.7	-6.55	-1.3
656	1/14/01	21:10:00	-6.51	-5.52	-5.69	-12.54	-9.34	-5.72	-6.57	-1.44
657	1/14/01	21:20:00	-6.48	-5.5	-5.66	-12.51	-9.34	-5.69	-6.56	-1.57
658	1/14/01	21:30:00	-6.49	-5.5	-5.66	-12.51	-9.31	-5.7	-6.56	-1.71
659	1/14/01	21:40:00	-6.5	-5.52	-5.69	-12.51	-9.34	-5.72	-6.57	-1.89
660	1/14/01	21:50:00	-6.51	-5.53	-5.7	-12.51	-9.34	-5.73	-6.56	-2.05
661	1/14/01	22:00:00	-6.5	-5.52	-5.68	-12.51	-9.34	-5.73	-6.57	-2.23
662	1/14/01	22:10:00	-6.51	-5.53	-5.7	-12.51	-9.34	-5.73	-6.56	-2.38
663	1/14/01	22:20:00	-6.51	-5.53	-5.71	-12.51	-9.34	-5.74	-6.59	-2.56
664	1/14/01	22:30:00	-6.49	-5.51	-5.68	-12.49	-9.31	-5.72	-6.58	-2.7
665	1/14/01	22:40:00	-6.5	-5.52	-5.71	-12.53	-9.31	-5.72	-6.58	-2.87
666	1/14/01	22:50:00	-6.52	-5.54	-5.72	-12.52	-9.34	-5.74	-6.61	-3.04
667	1/14/01	23:00:00	-6.51	-5.53	-5.72	-12.56	-9.34	-5.74	-6.61	-3.19
668	1/14/01	23:10:00	-6.5	-5.52	-5.7	-12.54	-9.34	-5.73	-6.59	-3.34
669	1/14/01	23:20:00	-6.52	-5.54	-5.72	-12.56	-9.34	-5.74	-6.61	-3.49
670	1/14/01	23:30:00	-6.5	-5.51	-5.7	-12.53	-9.33	-5.73	-6.58	-3.57
671	1/14/01	23:40:00	-6.49	-5.52	-5.7	-12.53	-9.33	-5.72	-6.58	-3.69
672	1/14/01	23:50:00	-6.51	-5.53	-5.72	-12.51	-9.33	-5.73	-6.58	-3.86
673	1/15/01	0:00:00	-6.52	-5.53	-5.73	-12.53	-9.35	-5.75	-6.61	-3.98
674	1/15/01	0:10:00	-6.51	-5.53	-5.72	-12.53	-9.35	-5.73	-6.61	-4.07
675	1/15/01	0:20:00	-6.52	-5.54	-5.73	-12.51	-9.35	-5.74	-6.59	-4.14
676	1/15/01	0:30:00	-6.52	-5.53	-5.72	-12.53	-9.35	-5.73	-6.59	-4.2
677	1/15/01	0:40:00	-6.52	-5.53	-5.73	-12.49	-9.35	-5.74	-6.61	-4.18
678	1/15/01	0:50:00	-6.52	-5.53	-5.73	-12.48	-9.35	-5.74	-6.61	-4.08
679	1/15/01	1:00:00	-6.53	-5.54	-5.72	-12.49	-9.35	-5.74	-6.61	-3.84
680	1/15/01	1:10:00	-6.54	-5.55	-5.74	-12.48	-9.35	-5.73	-6.61	-3.46
681	1/15/01	1:20:00	-6.54	-5.55	-5.73	-12.48	-9.35	-5.73	-6.61	-3.08
682	1/15/01	1:30:00	-6.54	-5.55	-5.73	-12.48	-9.35	-5.71	-6.61	-2.73
683	1/15/01	1:40:00	-6.5	-5.51	-5.69	-12.44	-9.31	-5.66	-6.57	-2.39
684	1/15/01	1:50:00	-6.54	-5.54	-5.72	-12.48	-9.35	-5.68	-6.61	-2.12
685	1/15/01	2:00:00	-6.49	-5.49	-5.67	-12.43	-9.3	-5.62	-6.56	-1.8
686	1/15/01	2:10:00	-6.53	-5.53	-5.7	-12.46	-9.35	-5.65	-6.61	-1.59
687	1/15/01	2:20:00	-6.51	-5.51	-5.68	-12.44	-9.33	-5.62	-6.56	-1.33
688	1/15/01	2:30:00	-6.54	-5.53	-5.71	-12.46	-9.35	-5.63	-6.58	-1.13

Tidal Study Data
January 10-25, 2001

689	1/15/01	2:40:00	-6.49	-5.5	-5.66	-12.4	-9.27	-5.58	-6.54	-0.88
690	1/15/01	2:50:00	-6.49	-5.49	-5.65	-12.4	-9.27	-5.56	-6.54	-0.67
691	1/15/01	3:00:00	-6.49	-5.5	-5.64	-12.4	-9.27	-5.55	-6.54	-0.47
692	1/15/01	3:10:00	-6.49	-5.49	-5.64	-12.39	-9.26	-5.54	-6.53	-0.28
693	1/15/01	3:20:00	-6.5	-5.49	-5.64	-12.4	-9.27	-5.54	-6.54	-0.09
694	1/15/01	3:30:00	-6.49	-5.48	-5.62	-12.39	-9.26	-5.51	-6.53	0.11
695	1/15/01	3:40:00	-6.49	-5.49	-5.63	-12.39	-9.26	-5.52	-6.53	0.28
696	1/15/01	3:50:00	-6.49	-5.48	-5.62	-12.4	-9.27	-5.5	-6.52	0.48
697	1/15/01	4:00:00	-6.48	-5.48	-5.61	-12.39	-9.26	-5.49	-6.53	0.65
698	1/15/01	4:10:00	-6.48	-5.49	-5.61	-12.39	-9.26	-5.48	-6.53	0.82
699	1/15/01	4:20:00	-6.47	-5.48	-5.6	-12.39	-9.25	-5.48	-6.51	0.96
700	1/15/01	4:30:00	-6.47	-5.48	-5.59	-12.39	-9.23	-5.47	-6.48	1.08
701	1/15/01	4:40:00	-6.48	-5.48	-5.59	-12.39	-9.23	-5.47	-6.48	1.21
702	1/15/01	4:50:00	-6.47	-5.47	-5.58	-12.39	-9.23	-5.46	-6.48	1.32
703	1/15/01	5:00:00	-6.47	-5.47	-5.57	-12.39	-9.23	-5.45	-6.48	1.42
704	1/15/01	5:10:00	-6.45	-5.47	-5.57	-12.39	-9.23	-5.44	-6.46	1.51
705	1/15/01	5:20:00	-6.45	-5.46	-5.56	-12.39	-9.23	-5.45	-6.48	1.58
706	1/15/01	5:30:00	-6.46	-5.47	-5.56	-12.41	-9.23	-5.44	-6.45	1.65
707	1/15/01	5:40:00	-6.45	-5.47	-5.56	-12.41	-9.23	-5.44	-6.45	1.71
708	1/15/01	5:50:00	-6.46	-5.47	-5.56	-12.41	-9.23	-5.45	-6.45	1.74
709	1/15/01	6:00:00	-6.45	-5.47	-5.56	-12.41	-9.23	-5.45	-6.46	1.77
710	1/15/01	6:10:00	-6.44	-5.47	-5.54	-12.41	-9.21	-5.44	-6.43	1.8
711	1/15/01	6:20:00	-6.46	-5.48	-5.57	-12.43	-9.23	-5.48	-6.45	1.75
712	1/15/01	6:30:00	-6.47	-5.48	-5.57	-12.43	-9.23	-5.5	-6.45	1.69
713	1/15/01	6:40:00	-6.46	-5.49	-5.58	-12.43	-9.23	-5.52	-6.48	1.58
714	1/15/01	6:50:00	-6.45	-5.49	-5.58	-12.43	-9.26	-5.54	-6.45	1.44
715	1/15/01	7:00:00	-6.46	-5.5	-5.6	-12.43	-9.26	-5.56	-6.48	1.27
716	1/15/01	7:10:00	-6.47	-5.5	-5.61	-12.43	-9.26	-5.58	-6.48	1.1
717	1/15/01	7:20:00	-6.46	-5.5	-5.61	-12.43	-9.26	-5.59	-6.49	0.93
718	1/15/01	7:30:00	-6.47	-5.5	-5.62	-12.43	-9.26	-5.62	-6.51	0.75
719	1/15/01	7:40:00	-6.47	-5.51	-5.63	-12.48	-9.28	-5.62	-6.48	0.57
720	1/15/01	7:50:00	-6.46	-5.5	-5.63	-12.44	-9.28	-5.63	-6.51	0.37
721	1/15/01	8:00:00	-6.47	-5.51	-5.64	-12.48	-9.3	-5.65	-6.51	0.19
722	1/15/01	8:10:00	-6.47	-5.51	-5.65	-12.48	-9.3	-5.66	-6.53	0
723	1/15/01	8:20:00	-6.47	-5.51	-5.65	-12.48	-9.3	-5.68	-6.53	-0.18
724	1/15/01	8:30:00	-6.48	-5.53	-5.66	-12.48	-9.3	-5.68	-6.53	-0.35
725	1/15/01	8:40:00	-6.48	-5.52	-5.66	-12.48	-9.3	-5.68	-6.53	-0.52
726	1/15/01	8:50:00	-6.49	-5.53	-5.68	-12.49	-9.31	-5.69	-6.54	-0.68
727	1/15/01	9:00:00	-6.49	-5.54	-5.68	-12.49	-9.31	-5.7	-6.56	-0.84
728	1/15/01	9:10:00	-6.49	-5.54	-5.69	-12.51	-9.33	-5.7	-6.56	-1.01
729	1/15/01	9:20:00	-6.47	-5.52	-5.68	-12.47	-9.31	-5.7	-6.54	-1.14
730	1/15/01	9:30:00	-6.47	-5.52	-5.67	-12.47	-9.31	-5.69	-6.54	-1.29
731	1/15/01	9:40:00	-6.47	-5.53	-5.69	-12.47	-9.31	-5.71	-6.54	-1.45
732	1/15/01	9:50:00	-6.49	-5.55	-5.71	-12.49	-9.33	-5.73	-6.56	-1.62
733	1/15/01	10:00:00	-6.5	-5.55	-5.71	-12.49	-9.33	-5.72	-6.56	-1.75
734	1/15/01	10:10:00	-6.47	-5.53	-5.69	-12.49	-9.31	-5.72	-6.54	-1.89
735	1/15/01	10:20:00	-6.48	-5.53	-5.69	-12.49	-9.31	-5.72	-6.54	-2.06
736	1/15/01	10:30:00	-6.5	-5.55	-5.72	-12.51	-9.33	-5.74	-6.58	-2.25
737	1/15/01	10:40:00	-6.49	-5.53	-5.7	-12.48	-9.3	-5.73	-6.55	-2.38
738	1/15/01	10:50:00	-6.46	-5.52	-5.69	-12.46	-9.28	-5.71	-6.54	-2.55
739	1/15/01	11:00:00	-6.47	-5.52	-5.7	-12.46	-9.28	-5.72	-6.56	-2.71
740	1/15/01	11:10:00	-6.49	-5.54	-5.71	-12.46	-9.29	-5.73	-6.56	-2.86

Tidal Study Data
January 10-25, 2001

741	1/15/01	11:20:00	-6.49	-5.54	-5.71	-12.46	-9.29	-5.73	-6.56	-3.02
742	1/15/01	11:30:00	-6.49	-5.55	-5.72	-12.49	-9.31	-5.74	-6.56	-3.18
743	1/15/01	11:40:00	-6.49	-5.55	-5.72	-12.48	-9.33	-5.75	-6.56	-3.34
744	1/15/01	11:50:00	-6.5	-5.55	-5.73	-12.49	-9.33	-5.74	-6.58	-3.49
745	1/15/01	12:00:00	-6.47	-5.52	-5.71	-12.46	-9.3	-5.72	-6.56	-3.61
746	1/15/01	12:10:00	-6.48	-5.53	-5.72	-12.46	-9.31	-5.73	-6.58	-3.73
747	1/15/01	12:20:00	-6.49	-5.55	-5.72	-12.45	-9.3	-5.73	-6.58	-3.83
748	1/15/01	12:30:00	-6.49	-5.55	-5.72	-12.43	-9.31	-5.74	-6.58	-3.93
749	1/15/01	12:40:00	-6.5	-5.55	-5.73	-12.46	-9.31	-5.74	-6.58	-3.99
750	1/15/01	12:50:00	-6.49	-5.55	-5.73	-12.43	-9.3	-5.74	-6.58	-4.01
751	1/15/01	13:00:00	-6.5	-5.55	-5.73	-12.43	-9.31	-5.73	-6.58	-3.96
752	1/15/01	13:10:00	-6.5	-5.56	-5.73	-12.43	-9.31	-5.72	-6.58	-3.74
753	1/15/01	13:20:00	-6.51	-5.56	-5.73	-12.43	-9.33	-5.73	-6.59	-3.35
754	1/15/01	13:30:00	-6.48	-5.53	-5.7	-12.39	-9.29	-5.68	-6.57	-2.91
755	1/15/01	13:40:00	-6.47	-5.53	-5.7	-12.38	-9.28	-5.66	-6.56	-2.55
756	1/15/01	13:50:00	-6.49	-5.54	-5.7	-12.38	-9.28	-5.65	-6.56	-2.27
757	1/15/01	14:00:00	-6.49	-5.53	-5.7	-12.38	-9.28	-5.65	-6.56	-1.97
758	1/15/01	14:10:00	-6.49	-5.53	-5.69	-12.36	-9.28	-5.63	-6.56	-1.71
759	1/15/01	14:20:00	-6.48	-5.52	-5.68	-12.38	-9.28	-5.6	-6.56	-1.42
760	1/15/01	14:30:00	-6.48	-5.52	-5.68	-12.36	-9.25	-5.59	-6.53	-1.17
761	1/15/01	14:40:00	-6.48	-5.52	-5.67	-12.37	-9.26	-5.58	-6.55	-0.93
762	1/15/01	14:50:00	-6.49	-5.54	-5.67	-12.39	-9.28	-5.58	-6.54	-0.73
763	1/15/01	15:00:00	-6.46	-5.5	-5.64	-12.36	-9.25	-5.54	-6.53	-0.49
764	1/15/01	15:10:00	-6.46	-5.5	-5.64	-12.36	-9.25	-5.54	-6.53	-0.31
765	1/15/01	15:20:00	-6.47	-5.51	-5.65	-12.37	-9.26	-5.54	-6.51	-0.15
766	1/15/01	15:30:00	-6.46	-5.5	-5.64	-12.36	-9.25	-5.53	-6.51	0.04
767	1/15/01	15:40:00	-6.46	-5.51	-5.63	-12.35	-9.21	-5.52	-6.5	0.23
768	1/15/01	15:50:00	-6.46	-5.5	-5.63	-12.35	-9.23	-5.51	-6.51	0.41
769	1/15/01	16:00:00	-6.46	-5.51	-5.63	-12.35	-9.2	-5.5	-6.5	0.59
770	1/15/01	16:10:00	-6.46	-5.5	-5.62	-12.35	-9.21	-5.49	-6.48	0.78
771	1/15/01	16:20:00	-6.47	-5.5	-5.62	-12.35	-9.2	-5.49	-6.48	0.93
772	1/15/01	16:30:00	-6.46	-5.51	-5.61	-12.35	-9.2	-5.48	-6.48	1.06
773	1/15/01	16:40:00	-6.46	-5.5	-5.61	-12.35	-9.2	-5.48	-6.48	1.19
774	1/15/01	16:50:00	-6.46	-5.5	-5.6	-12.35	-9.2	-5.47	-6.48	1.31
775	1/15/01	17:00:00	-6.46	-5.51	-5.59	-12.35	-9.2	-5.46	-6.48	1.42
776	1/15/01	17:10:00	-6.45	-5.5	-5.59	-12.35	-9.2	-5.45	-6.45	1.52
777	1/15/01	17:20:00	-6.45	-5.5	-5.59	-12.35	-9.2	-5.45	-6.45	1.61
778	1/15/01	17:30:00	-6.45	-5.49	-5.58	-12.35	-9.18	-5.44	-6.43	1.71
779	1/15/01	17:40:00	-6.44	-5.49	-5.57	-12.35	-9.18	-5.43	-6.43	1.79
780	1/15/01	17:50:00	-6.44	-5.48	-5.57	-12.35	-9.18	-5.44	-6.43	1.86
781	1/15/01	18:00:00	-6.43	-5.48	-5.56	-12.35	-9.17	-5.42	-6.43	1.93
782	1/15/01	18:10:00	-6.43	-5.48	-5.56	-12.36	-9.17	-5.43	-6.43	1.97
783	1/15/01	18:20:00	-6.43	-5.48	-5.56	-12.36	-9.17	-5.44	-6.43	2.01
784	1/15/01	18:30:00	-6.43	-5.49	-5.56	-12.36	-9.17	-5.44	-6.43	2.02
785	1/15/01	18:40:00	-6.44	-5.48	-5.56	-12.36	-9.17	-5.45	-6.43	2.01
786	1/15/01	18:50:00	-6.42	-5.48	-5.56	-12.36	-9.17	-5.46	-6.43	1.96
787	1/15/01	19:00:00	-6.43	-5.49	-5.56	-12.36	-9.2	-5.49	-6.43	1.86
788	1/15/01	19:10:00	-6.43	-5.5	-5.57	-12.38	-9.2	-5.52	-6.43	1.7
789	1/15/01	19:20:00	-6.43	-5.5	-5.57	-12.38	-9.2	-5.53	-6.43	1.57
790	1/15/01	19:30:00	-6.43	-5.5	-5.58	-12.38	-9.2	-5.55	-6.45	1.41
791	1/15/01	19:40:00	-6.44	-5.51	-5.6	-12.38	-9.21	-5.56	-6.46	1.22
792	1/15/01	19:50:00	-6.43	-5.51	-5.61	-12.36	-9.23	-5.59	-6.46	1.04

Tidal Study Data
January 10-25, 2001

793	1/15/01	20:00:00	-6.43	-5.5	-5.6	-12.38	-9.21	-5.58	-6.45	0.86
794	1/15/01	20:10:00	-6.44	-5.51	-5.62	-12.4	-9.25	-5.61	-6.48	0.66
795	1/15/01	20:20:00	-6.43	-5.52	-5.64	-12.38	-9.25	-5.63	-6.48	0.47
796	1/15/01	20:30:00	-6.45	-5.52	-5.64	-12.4	-9.26	-5.64	-6.5	0.28
797	1/15/01	20:40:00	-6.44	-5.53	-5.65	-12.41	-9.26	-5.65	-6.5	0.1
798	1/15/01	20:50:00	-6.45	-5.53	-5.66	-12.41	-9.28	-5.66	-6.51	-0.09
799	1/15/01	21:00:00	-6.45	-5.52	-5.67	-12.41	-9.28	-5.67	-6.53	-0.26
800	1/15/01	21:10:00	-6.45	-5.54	-5.67	-12.41	-9.28	-5.67	-6.53	-0.44
801	1/15/01	21:20:00	-6.46	-5.54	-5.68	-12.41	-9.28	-5.69	-6.53	-0.61
802	1/15/01	21:30:00	-6.47	-5.56	-5.69	-12.41	-9.28	-5.7	-6.53	-0.77
803	1/15/01	21:40:00	-6.46	-5.54	-5.7	-12.43	-9.28	-5.7	-6.53	-0.89
804	1/15/01	21:50:00	-6.47	-5.55	-5.7	-12.43	-9.28	-5.7	-6.54	-1.04
805	1/15/01	22:00:00	-6.46	-5.55	-5.69	-12.43	-9.28	-5.71	-6.54	-1.19
806	1/15/01	22:10:00	-6.47	-5.55	-5.7	-12.43	-9.28	-5.71	-6.56	-1.35
807	1/15/01	22:20:00	-6.47	-5.55	-5.7	-12.43	-9.28	-5.73	-6.56	-1.49
808	1/15/01	22:30:00	-6.48	-5.56	-5.72	-12.43	-9.28	-5.73	-6.56	-1.65
809	1/15/01	22:40:00	-6.48	-5.56	-5.72	-12.45	-9.28	-5.73	-6.56	-1.81
810	1/15/01	22:50:00	-6.49	-5.57	-5.73	-12.45	-9.31	-5.73	-6.56	-1.97
811	1/15/01	23:00:00	-6.47	-5.55	-5.71	-12.43	-9.29	-5.74	-6.54	-2.09
812	1/15/01	23:10:00	-6.47	-5.55	-5.72	-12.43	-9.29	-5.74	-6.54	-2.26
813	1/15/01	23:20:00	-6.5	-5.57	-5.75	-12.45	-9.31	-5.76	-6.56	-2.45
814	1/15/01	23:30:00	-6.48	-5.55	-5.73	-12.43	-9.29	-5.74	-6.54	-2.58
815	1/15/01	23:40:00	-6.46	-5.53	-5.7	-12.4	-9.26	-5.72	-6.54	-2.71
816	1/15/01	23:50:00	-6.46	-5.54	-5.72	-12.4	-9.3	-5.72	-6.56	-2.88
817	1/16/01	0:00:00	-6.47	-5.55	-5.72	-12.41	-9.3	-5.73	-6.56	-3.02
818	1/16/01	0:10:00	-6.46	-5.53	-5.72	-12.43	-9.26	-5.72	-6.56	-3.15
819	1/16/01	0:20:00	-6.46	-5.54	-5.72	-12.43	-9.28	-5.72	-6.56	-3.3
820	1/16/01	0:30:00	-6.47	-5.55	-5.73	-12.41	-9.28	-5.73	-6.56	-3.44
821	1/16/01	0:40:00	-6.47	-5.55	-5.74	-12.43	-9.3	-5.74	-6.56	-3.54
822	1/16/01	0:50:00	-6.48	-5.56	-5.74	-12.43	-9.3	-5.74	-6.56	-3.65
823	1/16/01	1:00:00	-6.48	-5.56	-5.74	-12.4	-9.3	-5.73	-6.56	-3.69
824	1/16/01	1:10:00	-6.49	-5.56	-5.74	-12.4	-9.3	-5.74	-6.59	-3.75
825	1/16/01	1:20:00	-6.5	-5.57	-5.75	-12.4	-9.3	-5.74	-6.59	-3.75
826	1/16/01	1:30:00	-6.49	-5.56	-5.74	-12.4	-9.3	-5.73	-6.59	-3.69
827	1/16/01	1:40:00	-6.5	-5.56	-5.74	-12.4	-9.3	-5.73	-6.59	-3.51
828	1/16/01	1:50:00	-6.5	-5.56	-5.74	-12.4	-9.3	-5.72	-6.58	-3.21
829	1/16/01	2:00:00	-6.5	-5.57	-5.74	-12.4	-9.3	-5.71	-6.59	-2.88
830	1/16/01	2:10:00	-6.49	-5.56	-5.74	-12.4	-9.3	-5.69	-6.59	-2.54
831	1/16/01	2:20:00	-6.49	-5.56	-5.73	-12.4	-9.3	-5.67	-6.59	-2.23
832	1/16/01	2:30:00	-6.48	-5.55	-5.73	-12.4	-9.28	-5.66	-6.56	-1.91
833	1/16/01	2:40:00	-6.49	-5.55	-5.72	-12.4	-9.3	-5.65	-6.58	-1.64
834	1/16/01	2:50:00	-6.49	-5.55	-5.72	-12.4	-9.28	-5.63	-6.56	-1.38
835	1/16/01	3:00:00	-6.49	-5.55	-5.72	-12.4	-9.26	-5.61	-6.56	-1.14
836	1/16/01	3:10:00	-6.5	-5.54	-5.71	-12.38	-9.26	-5.6	-6.56	-0.9
837	1/16/01	3:20:00	-6.49	-5.54	-5.71	-12.38	-9.26	-5.59	-6.56	-0.65
838	1/16/01	3:30:00	-6.48	-5.54	-5.7	-12.38	-9.26	-5.58	-6.56	-0.45
839	1/16/01	3:40:00	-6.48	-5.53	-5.7	-12.38	-9.26	-5.57	-6.54	-0.24
840	1/16/01	3:50:00	-6.48	-5.54	-5.69	-12.38	-9.26	-5.56	-6.53	-0.03
841	1/16/01	4:00:00	-6.49	-5.54	-5.68	-12.36	-9.25	-5.56	-6.53	0.17
842	1/16/01	4:10:00	-6.48	-5.53	-5.67	-12.36	-9.23	-5.54	-6.51	0.37
843	1/16/01	4:20:00	-6.47	-5.53	-5.68	-12.38	-9.23	-5.53	-6.51	0.55
844	1/16/01	4:30:00	-6.47	-5.52	-5.66	-12.36	-9.23	-5.52	-6.51	0.74

Tidal Study Data
January 10-25, 2001

845	1/16/01	4:40:00	-6.47	-5.53	-5.66	-12.36	-9.23	-5.51	-6.51	0.91
846	1/16/01	4:50:00	-6.48	-5.52	-5.65	-12.36	-9.23	-5.51	-6.51	1.07
847	1/16/01	5:00:00	-6.47	-5.52	-5.65	-12.33	-9.23	-5.49	-6.51	1.22
848	1/16/01	5:10:00	-6.46	-5.52	-5.64	-12.35	-9.21	-5.48	-6.51	1.36
849	1/16/01	5:20:00	-6.46	-5.52	-5.63	-12.36	-9.2	-5.47	-6.51	1.5
850	1/16/01	5:30:00	-6.46	-5.51	-5.62	-12.35	-9.2	-5.45	-6.48	1.63
851	1/16/01	5:40:00	-6.46	-5.5	-5.61	-12.36	-9.2	-5.44	-6.48	1.75
852	1/16/01	5:50:00	-6.45	-5.5	-5.6	-12.36	-9.16	-5.43	-6.48	1.86
853	1/16/01	6:00:00	-6.45	-5.49	-5.58	-12.36	-9.15	-5.43	-6.45	1.95
854	1/16/01	6:10:00	-6.44	-5.49	-5.59	-12.36	-9.15	-5.42	-6.45	2.03
855	1/16/01	6:20:00	-6.43	-5.48	-5.57	-12.38	-9.15	-5.41	-6.43	2.11
856	1/16/01	6:30:00	-6.43	-5.48	-5.58	-12.4	-9.15	-5.41	-6.43	2.17
857	1/16/01	6:40:00	-6.43	-5.49	-5.57	-12.38	-9.15	-5.41	-6.43	2.23
858	1/16/01	6:50:00	-6.42	-5.48	-5.56	-12.4	-9.15	-5.41	-6.43	2.26
859	1/16/01	7:00:00	-6.42	-5.48	-5.56	-12.4	-9.15	-5.41	-6.43	2.29
860	1/16/01	7:10:00	-6.41	-5.48	-5.56	-12.4	-9.15	-5.42	-6.41	2.3
861	1/16/01	7:20:00	-6.42	-5.48	-5.55	-12.4	-9.15	-5.43	-6.41	2.28
862	1/16/01	7:30:00	-6.41	-5.48	-5.56	-12.4	-9.15	-5.45	-6.41	2.21
863	1/16/01	7:40:00	-6.44	-5.51	-5.59	-12.43	-9.18	-5.49	-6.44	2.09
864	1/16/01	7:50:00	-6.41	-5.48	-5.56	-12.4	-9.16	-5.49	-6.43	1.99
865	1/16/01	8:00:00	-6.45	-5.53	-5.62	-12.46	-9.25	-5.56	-6.48	1.81
866	1/16/01	8:10:00	-6.44	-5.51	-5.61	-12.46	-9.23	-5.54	-6.46	1.7
867	1/16/01	8:20:00	-6.46	-5.53	-5.64	-12.46	-9.25	-5.59	-6.48	1.52
868	1/16/01	8:30:00	-6.46	-5.53	-5.64	-12.48	-9.26	-5.6	-6.48	1.36
869	1/16/01	8:40:00	-6.45	-5.53	-5.65	-12.48	-9.26	-5.62	-6.48	1.18
870	1/16/01	8:50:00	-6.47	-5.54	-5.66	-12.48	-9.28	-5.64	-6.53	1
871	1/16/01	9:00:00	-6.46	-5.53	-5.66	-12.48	-9.28	-5.64	-6.51	0.8
872	1/16/01	9:10:00	-6.46	-5.54	-5.68	-12.48	-9.28	-5.66	-6.53	0.62
873	1/16/01	9:20:00	-6.46	-5.53	-5.69	-12.48	-9.28	-5.67	-6.53	0.42
874	1/16/01	9:30:00	-6.46	-5.55	-5.68	-12.49	-9.28	-5.68	-6.53	0.23
875	1/16/01	9:40:00	-6.47	-5.54	-5.7	-12.51	-9.28	-5.69	-6.53	0.05
876	1/16/01	9:50:00	-6.46	-5.55	-5.7	-12.51	-9.28	-5.69	-6.53	-0.12
877	1/16/01	10:00:00	-6.46	-5.53	-5.7	-12.51	-9.28	-5.7	-6.53	-0.28
878	1/16/01	10:10:00	-6.46	-5.54	-5.71	-12.51	-9.28	-5.7	-6.54	-0.44
879	1/16/01	10:20:00	-6.46	-5.53	-5.7	-12.51	-9.28	-5.71	-6.54	-0.59
880	1/16/01	10:30:00	-6.46	-5.54	-5.71	-12.53	-9.28	-5.71	-6.56	-0.74
881	1/16/01	10:40:00	-6.46	-5.54	-5.71	-12.53	-9.3	-5.72	-6.56	-0.89
882	1/16/01	10:50:00	-6.48	-5.54	-5.73	-12.54	-9.29	-5.72	-6.57	-1.04
883	1/16/01	11:00:00	-6.46	-5.53	-5.72	-12.53	-9.28	-5.71	-6.56	-1.16
884	1/16/01	11:10:00	-6.46	-5.54	-5.72	-12.53	-9.3	-5.72	-6.56	-1.31
885	1/16/01	11:20:00	-6.47	-5.53	-5.72	-12.54	-9.3	-5.72	-6.56	-1.45
886	1/16/01	11:30:00	-6.48	-5.54	-5.74	-12.57	-9.29	-5.73	-6.57	-1.59
887	1/16/01	11:40:00	-6.48	-5.54	-5.73	-12.53	-9.31	-5.73	-6.56	-1.76
888	1/16/01	11:50:00	-6.48	-5.54	-5.74	-12.56	-9.3	-5.73	-6.56	-1.89
889	1/16/01	12:00:00	-6.47	-5.54	-5.75	-12.56	-9.31	-5.73	-6.56	-2.05
890	1/16/01	12:10:00	-6.48	-5.54	-5.75	-12.57	-9.32	-5.75	-6.57	-2.2
891	1/16/01	12:20:00	-6.48	-5.54	-5.74	-12.56	-9.3	-5.75	-6.56	-2.35
892	1/16/01	12:30:00	-6.48	-5.54	-5.76	-12.57	-9.32	-5.75	-6.57	-2.49
893	1/16/01	12:40:00	-6.51	-5.56	-5.77	-12.59	-9.33	-5.77	-6.59	-2.66
894	1/16/01	12:50:00	-6.49	-5.54	-5.75	-12.57	-9.32	-5.75	-6.57	-2.8
895	1/16/01	13:00:00	-6.49	-5.55	-5.76	-12.57	-9.32	-5.75	-6.57	-2.91
896	1/16/01	13:10:00	-6.51	-5.56	-5.77	-12.59	-9.34	-5.76	-6.59	-3.08

Tidal Study Data
January 10-25, 2001

897	1/16/01	13:20:00	-6.51	-5.56	-5.78	-12.59	-9.34	-5.76	-6.59	-3.19
898	1/16/01	13:30:00	-6.5	-5.55	-5.76	-12.57	-9.32	-5.74	-6.57	-3.25
899	1/16/01	13:40:00	-6.49	-5.53	-5.76	-12.54	-9.31	-5.74	-6.58	-3.31
900	1/16/01	13:50:00	-6.5	-5.55	-5.77	-12.57	-9.32	-5.75	-6.57	-3.36
901	1/16/01	14:00:00	-6.5	-5.55	-5.78	-12.54	-9.32	-5.75	-6.59	-3.29
902	1/16/01	14:10:00	-6.5	-5.54	-5.77	-12.55	-9.32	-5.74	-6.59	-3.14
903	1/16/01	14:20:00	-6.5	-5.54	-5.76	-12.55	-9.32	-5.73	-6.57	-2.83
904	1/16/01	14:30:00	-6.51	-5.56	-5.78	-12.56	-9.33	-5.73	-6.59	-2.56
905	1/16/01	14:40:00	-6.54	-5.57	-5.79	-12.58	-9.33	-5.73	-6.61	-2.28
906	1/16/01	14:50:00	-6.53	-5.56	-5.79	-12.58	-9.35	-5.71	-6.61	-2.01
907	1/16/01	15:00:00	-6.51	-5.55	-5.75	-12.56	-9.31	-5.69	-6.59	-1.73
908	1/16/01	15:10:00	-6.52	-5.56	-5.76	-12.56	-9.33	-5.68	-6.61	-1.51
909	1/16/01	15:20:00	-6.5	-5.53	-5.74	-12.54	-9.31	-5.65	-6.59	-1.26
910	1/16/01	15:30:00	-6.52	-5.55	-5.75	-12.56	-9.33	-5.65	-6.61	-1.05
911	1/16/01	15:40:00	-6.51	-5.54	-5.74	-12.56	-9.33	-5.64	-6.58	-0.84
912	1/16/01	15:50:00	-6.51	-5.53	-5.73	-12.56	-9.31	-5.62	-6.59	-0.65
913	1/16/01	16:00:00	-6.51	-5.53	-5.73	-12.54	-9.31	-5.61	-6.58	-0.5
914	1/16/01	16:10:00	-6.51	-5.53	-5.72	-12.53	-9.31	-5.6	-6.58	-0.3
915	1/16/01	16:20:00	-6.5	-5.52	-5.71	-12.53	-9.3	-5.59	-6.58	-0.15
916	1/16/01	16:30:00	-6.49	-5.52	-5.71	-12.53	-9.3	-5.58	-6.58	0.01
917	1/16/01	16:40:00	-6.48	-5.51	-5.69	-12.53	-9.3	-5.57	-6.53	0.17
918	1/16/01	16:50:00	-6.48	-5.52	-5.7	-12.51	-9.3	-5.57	-6.53	0.32
919	1/16/01	17:00:00	-6.49	-5.51	-5.69	-12.51	-9.27	-5.56	-6.54	0.46
920	1/16/01	17:10:00	-6.5	-5.52	-5.7	-12.53	-9.28	-5.56	-6.56	0.58
921	1/16/01	17:20:00	-6.5	-5.51	-5.68	-12.53	-9.28	-5.55	-6.54	0.74
922	1/16/01	17:30:00	-6.49	-5.51	-5.68	-12.53	-9.28	-5.54	-6.53	0.89
923	1/16/01	17:40:00	-6.48	-5.51	-5.68	-12.53	-9.28	-5.53	-6.53	1.02
924	1/16/01	17:50:00	-6.49	-5.52	-5.68	-12.54	-9.28	-5.54	-6.53	1.1
925	1/16/01	18:00:00	-6.49	-5.51	-5.66	-12.53	-9.28	-5.52	-6.51	1.21
926	1/16/01	18:10:00	-6.48	-5.5	-5.65	-12.53	-9.26	-5.5	-6.51	1.31
927	1/16/01	18:20:00	-6.5	-5.52	-5.68	-12.56	-9.28	-5.52	-6.54	1.37
928	1/16/01	18:30:00	-6.5	-5.52	-5.67	-12.56	-9.28	-5.52	-6.54	1.42
929	1/16/01	18:40:00	-6.46	-5.49	-5.64	-12.53	-9.25	-5.49	-6.49	1.51
930	1/16/01	18:50:00	-6.49	-5.52	-5.66	-12.56	-9.28	-5.51	-6.52	1.5
931	1/16/01	19:00:00	-6.48	-5.52	-5.66	-12.56	-9.28	-5.53	-6.51	1.52
932	1/16/01	19:10:00	-6.49	-5.53	-5.67	-12.59	-9.3	-5.55	-6.53	1.49
933	1/16/01	19:20:00	-6.49	-5.53	-5.66	-12.59	-9.3	-5.56	-6.53	1.45
934	1/16/01	19:30:00	-6.49	-5.53	-5.67	-12.61	-9.3	-5.57	-6.53	1.36
935	1/16/01	19:40:00	-6.49	-5.53	-5.67	-12.61	-9.3	-5.59	-6.53	1.27
936	1/16/01	19:50:00	-6.49	-5.54	-5.69	-12.61	-9.31	-5.61	-6.53	1.13
937	1/16/01	20:00:00	-6.5	-5.54	-5.69	-12.61	-9.33	-5.63	-6.54	0.99
938	1/16/01	20:10:00	-6.49	-5.55	-5.7	-12.64	-9.33	-5.63	-6.54	0.86
939	1/16/01	20:20:00	-6.49	-5.54	-5.7	-12.62	-9.33	-5.65	-6.56	0.7
940	1/16/01	20:30:00	-6.49	-5.54	-5.7	-12.61	-9.33	-5.66	-6.56	0.55
941	1/16/01	20:40:00	-6.49	-5.54	-5.71	-12.61	-9.33	-5.67	-6.56	0.39
942	1/16/01	20:50:00	-6.49	-5.54	-5.71	-12.64	-9.33	-5.68	-6.56	0.22
943	1/16/01	21:00:00	-6.49	-5.54	-5.72	-12.64	-9.33	-5.68	-6.56	0.07
944	1/16/01	21:10:00	-6.52	-5.57	-5.75	-12.67	-9.36	-5.73	-6.59	-0.13
945	1/16/01	21:20:00	-6.5	-5.56	-5.73	-12.65	-9.34	-5.7	-6.57	-0.27
946	1/16/01	21:30:00	-6.54	-5.59	-5.78	-12.69	-9.38	-5.75	-6.61	-0.44
947	1/16/01	21:40:00	-6.53	-5.6	-5.78	-12.69	-9.38	-5.75	-6.61	-0.59
948	1/16/01	21:50:00	-6.54	-5.59	-5.78	-12.69	-9.38	-5.76	-6.61	-0.74

Tidal Study Data
January 10-25, 2001

949	1/16/01	22:00:00	-6.54	-5.59	-5.78	-12.71	-9.38	-5.76	-6.61	-0.87
950	1/16/01	22:10:00	-6.54	-5.6	-5.79	-12.69	-9.38	-5.77	-6.61	-1.04
951	1/16/01	22:20:00	-6.54	-5.59	-5.79	-12.69	-9.38	-5.78	-6.61	-1.18
952	1/16/01	22:30:00	-6.54	-5.59	-5.79	-12.71	-9.38	-5.78	-6.61	-1.33
953	1/16/01	22:40:00	-6.54	-5.59	-5.8	-12.71	-9.38	-5.78	-6.63	-1.46
954	1/16/01	22:50:00	-6.54	-5.59	-5.79	-12.71	-9.38	-5.78	-6.61	-1.6
955	1/16/01	23:00:00	-6.54	-5.59	-5.79	-12.69	-9.38	-5.79	-6.64	-1.74
956	1/16/01	23:10:00	-6.54	-5.59	-5.8	-12.71	-9.38	-5.79	-6.61	-1.9
957	1/16/01	23:20:00	-6.54	-5.6	-5.8	-12.71	-9.38	-5.79	-6.63	-2.04
958	1/16/01	23:30:00	-6.54	-5.6	-5.81	-12.71	-9.38	-5.8	-6.64	-2.21
959	1/16/01	23:40:00	-6.54	-5.59	-5.81	-12.71	-9.38	-5.79	-6.64	-2.35
960	1/16/01	23:50:00	-6.54	-5.59	-5.81	-12.71	-9.38	-5.8	-6.63	-2.54
961	1/17/01	0:00:00	-6.54	-5.59	-5.81	-12.71	-9.38	-5.8	-6.64	-2.65
962	1/17/01	0:10:00	-6.54	-5.59	-5.82	-12.71	-9.38	-5.81	-6.64	-2.82
963	1/17/01	0:20:00	-6.55	-5.59	-5.82	-12.71	-9.38	-5.81	-6.66	-2.99
964	1/17/01	0:30:00	-6.55	-5.61	-5.83	-12.73	-9.39	-5.81	-6.65	-3.09
965	1/17/01	0:40:00	-6.55	-5.6	-5.82	-12.74	-9.39	-5.8	-6.66	-3.24
966	1/17/01	0:50:00	-6.55	-5.59	-5.82	-12.72	-9.38	-5.8	-6.64	-3.41
967	1/17/01	1:00:00	-6.57	-5.63	-5.85	-12.75	-9.42	-5.83	-6.69	-3.58
968	1/17/01	1:10:00	-6.55	-5.61	-5.82	-12.72	-9.38	-5.81	-6.66	-3.63
969	1/17/01	1:20:00	-6.56	-5.62	-5.84	-12.72	-9.39	-5.82	-6.67	-3.82
970	1/17/01	1:30:00	-6.58	-5.63	-5.86	-12.74	-9.41	-5.84	-6.69	-3.95
971	1/17/01	1:40:00	-6.56	-5.6	-5.84	-12.72	-9.4	-5.81	-6.67	-4.08
972	1/17/01	1:50:00	-6.58	-5.64	-5.85	-12.74	-9.41	-5.83	-6.69	-4.14
973	1/17/01	2:00:00	-6.57	-5.64	-5.87	-12.72	-9.42	-5.84	-6.69	-4.22
974	1/17/01	2:10:00	-6.57	-5.64	-5.86	-12.72	-9.41	-5.83	-6.69	-4.27
975	1/17/01	2:20:00	-6.58	-5.63	-5.86	-12.72	-9.41	-5.83	-6.69	-4.24
976	1/17/01	2:30:00	-6.58	-5.63	-5.86	-12.72	-9.41	-5.83	-6.69	-4.16
977	1/17/01	2:40:00	-6.58	-5.63	-5.86	-12.72	-9.41	-5.83	-6.69	-4
978	1/17/01	2:50:00	-6.58	-5.64	-5.86	-12.72	-9.41	-5.82	-6.69	-3.73
979	1/17/01	3:00:00	-6.58	-5.64	-5.86	-12.72	-9.41	-5.83	-6.69	-3.43
980	1/17/01	3:10:00	-6.58	-5.64	-5.86	-12.72	-9.41	-5.82	-6.69	-3.13
981	1/17/01	3:20:00	-6.59	-5.64	-5.85	-12.7	-9.41	-5.8	-6.69	-2.83
982	1/17/01	3:30:00	-6.59	-5.64	-5.85	-12.7	-9.41	-5.78	-6.69	-2.54
983	1/17/01	3:40:00	-6.59	-5.64	-5.85	-12.69	-9.41	-5.77	-6.69	-2.28
984	1/17/01	3:50:00	-6.59	-5.62	-5.85	-12.69	-9.41	-5.75	-6.69	-2.02
985	1/17/01	4:00:00	-6.57	-5.61	-5.82	-12.67	-9.39	-5.73	-6.65	-1.76
986	1/17/01	4:10:00	-6.59	-5.64	-5.84	-12.67	-9.41	-5.74	-6.67	-1.56
987	1/17/01	4:20:00	-6.57	-5.61	-5.81	-12.65	-9.39	-5.69	-6.65	-1.32
988	1/17/01	4:30:00	-6.56	-5.6	-5.8	-12.66	-9.38	-5.68	-6.63	-1.1
989	1/17/01	4:40:00	-6.59	-5.63	-5.83	-12.66	-9.41	-5.7	-6.66	-0.95
990	1/17/01	4:50:00	-6.58	-5.63	-5.82	-12.66	-9.41	-5.7	-6.64	-0.76
991	1/17/01	5:00:00	-6.55	-5.6	-5.79	-12.63	-9.38	-5.66	-6.61	-0.55
992	1/17/01	5:10:00	-6.59	-5.62	-5.8	-12.66	-9.41	-5.68	-6.64	-0.39
993	1/17/01	5:20:00	-6.58	-5.63	-5.8	-12.66	-9.38	-5.67	-6.64	-0.21
994	1/17/01	5:30:00	-6.57	-5.62	-5.8	-12.66	-9.39	-5.67	-6.64	-0.01
995	1/17/01	5:40:00	-6.57	-5.62	-5.79	-12.64	-9.38	-5.64	-6.64	0.18
996	1/17/01	5:50:00	-6.57	-5.62	-5.78	-12.64	-9.38	-5.64	-6.62	0.35
997	1/17/01	6:00:00	-6.57	-5.62	-5.78	-12.64	-9.38	-5.63	-6.62	0.52
998	1/17/01	6:10:00	-6.56	-5.61	-5.78	-12.64	-9.34	-5.62	-6.61	0.67
999	1/17/01	6:20:00	-6.56	-5.6	-5.77	-12.66	-9.34	-5.61	-6.61	0.81
1000	1/17/01	6:30:00	-6.56	-5.59	-5.75	-12.66	-9.34	-5.6	-6.61	0.95

Tidal Study Data
January 10-25, 2001

1001	1/17/01	6:40:00	-6.56	-5.61	-5.75	-12.66	-9.34	-5.59	-6.61	1.05
1002	1/17/01	6:50:00	-6.55	-5.6	-5.74	-12.66	-9.34	-5.58	-6.61	1.18
1003	1/17/01	7:00:00	-6.55	-5.59	-5.74	-12.66	-9.34	-5.58	-6.61	1.27
1004	1/17/01	7:10:00	-6.55	-5.6	-5.75	-12.68	-9.33	-5.58	-6.61	1.37
1005	1/17/01	7:20:00	-6.54	-5.6	-5.73	-12.68	-9.33	-5.58	-6.61	1.46
1006	1/17/01	7:30:00	-6.55	-5.6	-5.73	-12.69	-9.34	-5.59	-6.59	1.52
1007	1/17/01	7:40:00	-6.57	-5.63	-5.75	-12.71	-9.36	-5.59	-6.61	1.57
1008	1/17/01	7:50:00	-6.56	-5.61	-5.75	-12.71	-9.36	-5.59	-6.61	1.64
1009	1/17/01	8:00:00	-6.56	-5.63	-5.74	-12.71	-9.36	-5.59	-6.61	1.68
1010	1/17/01	8:10:00	-6.56	-5.6	-5.73	-12.71	-9.36	-5.59	-6.58	1.71
1011	1/17/01	8:20:00	-6.55	-5.6	-5.73	-12.71	-9.36	-5.6	-6.61	1.72
1012	1/17/01	8:30:00	-6.56	-5.61	-5.74	-12.71	-9.36	-5.61	-6.58	1.69
1013	1/17/01	8:40:00	-6.56	-5.61	-5.74	-12.72	-9.36	-5.63	-6.58	1.61
1014	1/17/01	8:50:00	-6.56	-5.62	-5.75	-12.71	-9.36	-5.64	-6.58	1.5
1015	1/17/01	9:00:00	-6.55	-5.62	-5.75	-12.72	-9.36	-5.67	-6.61	1.36
1016	1/17/01	9:10:00	-6.56	-5.63	-5.75	-12.71	-9.39	-5.7	-6.61	1.21
1017	1/17/01	9:20:00	-6.56	-5.63	-5.77	-12.72	-9.39	-5.71	-6.61	1.03
1018	1/17/01	9:30:00	-6.56	-5.63	-5.78	-12.72	-9.39	-5.73	-6.61	0.88
1019	1/17/01	9:40:00	-6.57	-5.64	-5.79	-12.72	-9.39	-5.76	-6.64	0.69
1020	1/17/01	9:50:00	-6.57	-5.65	-5.8	-12.71	-9.39	-5.77	-6.64	0.49
1021	1/17/01	10:00:00	-6.57	-5.66	-5.8	-12.72	-9.43	-5.78	-6.66	0.31
1022	1/17/01	10:10:00	-6.54	-5.64	-5.79	-12.68	-9.38	-5.76	-6.63	0.15
1023	1/17/01	10:20:00	-6.55	-5.64	-5.8	-12.69	-9.4	-5.78	-6.63	-0.03
1024	1/17/01	10:30:00	-6.58	-5.66	-5.83	-12.72	-9.43	-5.81	-6.66	-0.22
1025	1/17/01	10:40:00	-6.58	-5.66	-5.83	-12.74	-9.43	-5.82	-6.66	-0.37
1026	1/17/01	10:50:00	-6.55	-5.64	-5.81	-12.71	-9.4	-5.79	-6.63	-0.52
1027	1/17/01	11:00:00	-6.54	-5.63	-5.8	-12.69	-9.39	-5.78	-6.64	-0.66
1028	1/17/01	11:10:00	-6.55	-5.64	-5.82	-12.67	-9.39	-5.8	-6.64	-0.83
1029	1/17/01	11:20:00	-6.55	-5.64	-5.82	-12.69	-9.39	-5.81	-6.64	-0.97
1030	1/17/01	11:30:00	-6.56	-5.64	-5.83	-12.69	-9.41	-5.82	-6.64	-1.13
1031	1/17/01	11:40:00	-6.56	-5.64	-5.84	-12.69	-9.41	-5.83	-6.64	-1.28
1032	1/17/01	11:50:00	-6.56	-5.65	-5.83	-12.69	-9.41	-5.84	-6.64	-1.45
1033	1/17/01	12:00:00	-6.54	-5.63	-5.82	-12.66	-9.38	-5.82	-6.63	-1.6
1034	1/17/01	12:10:00	-6.55	-5.63	-5.83	-12.66	-9.38	-5.83	-6.63	-1.75
1035	1/17/01	12:20:00	-6.55	-5.65	-5.84	-12.66	-9.38	-5.84	-6.66	-1.91
1036	1/17/01	12:30:00	-6.56	-5.66	-5.85	-12.66	-9.38	-5.85	-6.66	-2.08
1037	1/17/01	12:40:00	-6.56	-5.66	-5.86	-12.66	-9.38	-5.85	-6.66	-2.24
1038	1/17/01	12:50:00	-6.57	-5.67	-5.86	-12.66	-9.39	-5.86	-6.66	-2.41
1039	1/17/01	13:00:00	-6.57	-5.66	-5.87	-12.66	-9.38	-5.85	-6.68	-2.57
1040	1/17/01	13:10:00	-6.57	-5.66	-5.86	-12.66	-9.39	-5.87	-6.66	-2.69
1041	1/17/01	13:20:00	-6.57	-5.67	-5.87	-12.66	-9.39	-5.87	-6.68	-2.85
1042	1/17/01	13:30:00	-6.57	-5.67	-5.87	-12.66	-9.39	-5.86	-6.68	-2.99
1043	1/17/01	13:40:00	-6.57	-5.66	-5.87	-12.66	-9.39	-5.85	-6.66	-3.11
1044	1/17/01	13:50:00	-6.57	-5.65	-5.88	-12.66	-9.41	-5.87	-6.66	-3.26
1045	1/17/01	14:00:00	-6.58	-5.66	-5.88	-12.66	-9.39	-5.87	-6.66	-3.36
1046	1/17/01	14:10:00	-6.58	-5.67	-5.88	-12.66	-9.38	-5.86	-6.68	-3.55
1047	1/17/01	14:20:00	-6.59	-5.67	-5.88	-12.66	-9.41	-5.87	-6.69	-3.66
1048	1/17/01	14:30:00	-6.59	-5.68	-5.88	-12.66	-9.43	-5.87	-6.71	-3.75
1049	1/17/01	14:40:00	-6.59	-5.69	-5.89	-12.64	-9.43	-5.88	-6.71	-3.74
1050	1/17/01	14:50:00	-6.6	-5.69	-5.89	-12.64	-9.43	-5.88	-6.71	-3.82
1051	1/17/01	15:00:00	-6.59	-5.68	-5.89	-12.64	-9.41	-5.87	-6.71	-3.82
1052	1/17/01	15:10:00	-6.58	-5.67	-5.88	-12.64	-9.39	-5.85	-6.71	-3.76

Tidal Study Data
January 10-25, 2001

1053	1/17/01	15:20:00	-6.58	-5.66	-5.88	-12.63	-9.39	-5.85	-6.71	-3.61
1054	1/17/01	15:30:00	-6.59	-5.68	-5.89	-12.64	-9.42	-5.85	-6.7	-3.38
1055	1/17/01	15:40:00	-6.59	-5.68	-5.88	-12.64	-9.39	-5.83	-6.7	-3.08
1056	1/17/01	15:50:00	-6.58	-5.66	-5.87	-12.63	-9.38	-5.82	-6.69	-2.79
1057	1/17/01	16:00:00	-6.59	-5.67	-5.88	-12.63	-9.43	-5.81	-6.69	-2.55
1058	1/17/01	16:10:00	-6.59	-5.66	-5.87	-12.63	-9.38	-5.8	-6.69	-2.31
1059	1/17/01	16:20:00	-6.6	-5.68	-5.89	-12.66	-9.41	-5.81	-6.69	-2.06
1060	1/17/01	16:30:00	-6.61	-5.67	-5.87	-12.66	-9.41	-5.79	-6.69	-1.82
1061	1/17/01	16:40:00	-6.6	-5.68	-5.87	-12.64	-9.41	-5.78	-6.69	-1.59
1062	1/17/01	16:50:00	-6.61	-5.66	-5.86	-12.64	-9.41	-5.75	-6.69	-1.38
1063	1/17/01	17:00:00	-6.6	-5.67	-5.86	-12.64	-9.41	-5.75	-6.69	-1.16
1064	1/17/01	17:10:00	-6.59	-5.65	-5.85	-12.62	-9.39	-5.74	-6.67	-0.97
1065	1/17/01	17:20:00	-6.59	-5.66	-5.85	-12.62	-9.39	-5.74	-6.66	-0.8
1066	1/17/01	17:30:00	-6.58	-5.66	-5.84	-12.62	-9.38	-5.72	-6.64	-0.63
1067	1/17/01	17:40:00	-6.59	-5.64	-5.84	-12.62	-9.38	-5.71	-6.64	-0.45
1068	1/17/01	17:50:00	-6.58	-5.65	-5.83	-12.59	-9.38	-5.7	-6.64	-0.28
1069	1/17/01	18:00:00	-6.58	-5.64	-5.82	-12.61	-9.38	-5.69	-6.64	-0.11
1070	1/17/01	18:10:00	-6.63	-5.69	-5.86	-12.64	-9.41	-5.73	-6.69	0
1071	1/17/01	18:20:00	-6.6	-5.67	-5.83	-12.62	-9.37	-5.69	-6.67	0.18
1072	1/17/01	18:30:00	-6.62	-5.69	-5.86	-12.64	-9.39	-5.71	-6.69	0.32
1073	1/17/01	18:40:00	-6.6	-5.66	-5.82	-12.62	-9.37	-5.69	-6.65	0.48
1074	1/17/01	18:50:00	-6.59	-5.66	-5.82	-12.59	-9.36	-5.68	-6.66	0.6
1075	1/17/01	19:00:00	-6.6	-5.66	-5.82	-12.6	-9.37	-5.67	-6.64	0.7
1076	1/17/01	19:10:00	-6.61	-5.67	-5.83	-12.64	-9.39	-5.69	-6.66	0.79
1077	1/17/01	19:20:00	-6.61	-5.67	-5.82	-12.62	-9.39	-5.69	-6.66	0.87
1078	1/17/01	19:30:00	-6.61	-5.68	-5.82	-12.64	-9.39	-5.69	-6.66	0.94
1079	1/17/01	19:40:00	-6.6	-5.68	-5.82	-12.64	-9.38	-5.69	-6.66	1
1080	1/17/01	19:50:00	-6.6	-5.67	-5.82	-12.64	-9.39	-5.68	-6.66	1.06
1081	1/17/01	20:00:00	-6.59	-5.68	-5.81	-12.64	-9.36	-5.67	-6.66	1.1
1082	1/17/01	20:10:00	-6.58	-5.67	-5.81	-12.64	-9.38	-5.69	-6.66	1.1
1083	1/17/01	20:20:00	-6.59	-5.68	-5.81	-12.64	-9.39	-5.7	-6.66	1.09
1084	1/17/01	20:30:00	-6.58	-5.68	-5.81	-12.66	-9.39	-5.72	-6.66	1.03
1085	1/17/01	20:40:00	-6.59	-5.67	-5.81	-12.67	-9.38	-5.73	-6.66	0.95
1086	1/17/01	20:50:00	-6.59	-5.68	-5.82	-12.66	-9.39	-5.74	-6.66	0.86
1087	1/17/01	21:00:00	-6.59	-5.69	-5.83	-12.67	-9.39	-5.76	-6.66	0.73
1088	1/17/01	21:10:00	-6.59	-5.68	-5.83	-12.67	-9.39	-5.77	-6.66	0.58
1089	1/17/01	21:20:00	-6.59	-5.69	-5.83	-12.66	-9.39	-5.79	-6.66	0.44
1090	1/17/01	21:30:00	-6.58	-5.68	-5.84	-12.67	-9.39	-5.8	-6.66	0.3
1091	1/17/01	21:40:00	-6.59	-5.68	-5.85	-12.67	-9.39	-5.81	-6.66	0.15
1092	1/17/01	21:50:00	-6.6	-5.69	-5.86	-12.69	-9.39	-5.81	-6.66	0
1093	1/17/01	22:00:00	-6.59	-5.69	-5.85	-12.69	-9.39	-5.83	-6.66	-0.15
1094	1/17/01	22:10:00	-6.58	-5.69	-5.86	-12.69	-9.39	-5.83	-6.66	-0.29
1095	1/17/01	22:20:00	-6.59	-5.7	-5.86	-12.69	-9.39	-5.85	-6.67	-0.45
1096	1/17/01	22:30:00	-6.59	-5.7	-5.88	-12.69	-9.41	-5.85	-6.67	-0.59
1097	1/17/01	22:40:00	-6.6	-5.7	-5.88	-12.69	-9.41	-5.86	-6.69	-0.72
1098	1/17/01	22:50:00	-6.61	-5.7	-5.89	-12.71	-9.43	-5.87	-6.69	-0.87
1099	1/17/01	23:00:00	-6.6	-5.7	-5.89	-12.71	-9.43	-5.87	-6.69	-1.01
1100	1/17/01	23:10:00	-6.61	-5.7	-5.9	-12.71	-9.43	-5.88	-6.69	-1.16
1101	1/17/01	23:20:00	-6.61	-5.71	-5.9	-12.71	-9.43	-5.88	-6.69	-1.32
1102	1/17/01	23:30:00	-6.61	-5.71	-5.9	-12.71	-9.43	-5.89	-6.69	-1.47
1103	1/17/01	23:40:00	-6.62	-5.72	-5.92	-12.71	-9.43	-5.89	-6.69	-1.62
1104	1/17/01	23:50:00	-6.61	-5.72	-5.91	-12.71	-9.43	-5.9	-6.69	-1.76

Tidal Study Data
January 10-25, 2001

1105	1/18/01	0:00:00	-6.62	-5.72	-5.92	-12.71	-9.43	-5.91	-6.71	-1.92
1106	1/18/01	0:10:00	-6.63	-5.73	-5.92	-12.71	-9.43	-5.91	-6.71	-2.07
1107	1/18/01	0:20:00	-6.62	-5.73	-5.93	-12.71	-9.44	-5.92	-6.72	-2.24
1108	1/18/01	0:30:00	-6.63	-5.73	-5.93	-12.71	-9.43	-5.91	-6.72	-2.39
1109	1/18/01	0:40:00	-6.62	-5.73	-5.94	-12.71	-9.44	-5.92	-6.74	-2.55
1110	1/18/01	0:50:00	-6.62	-5.73	-5.94	-12.71	-9.43	-5.93	-6.74	-2.72
1111	1/18/01	1:00:00	-6.63	-5.73	-5.94	-12.72	-9.46	-5.92	-6.72	-2.87
1112	1/18/01	1:10:00	-6.64	-5.75	-5.96	-12.74	-9.45	-5.94	-6.74	-3.03
1113	1/18/01	1:20:00	-6.64	-5.73	-5.94	-12.72	-9.44	-5.93	-6.72	-3.17
1114	1/18/01	1:30:00	-6.63	-5.73	-5.94	-12.72	-9.44	-5.93	-6.74	-3.34
1115	1/18/01	1:40:00	-6.65	-5.76	-5.98	-12.75	-9.47	-5.96	-6.77	-3.48
1116	1/18/01	1:50:00	-6.66	-5.76	-5.98	-12.74	-9.46	-5.95	-6.77	-3.62
1117	1/18/01	2:00:00	-6.63	-5.74	-5.95	-12.71	-9.46	-5.92	-6.74	-3.73
1118	1/18/01	2:10:00	-6.66	-5.76	-5.98	-12.74	-9.49	-5.95	-6.77	-3.89
1119	1/18/01	2:20:00	-6.63	-5.74	-5.95	-12.71	-9.46	-5.93	-6.74	-3.98
1120	1/18/01	2:30:00	-6.64	-5.73	-5.96	-12.72	-9.46	-5.93	-6.74	-4.13
1121	1/18/01	2:40:00	-6.64	-5.74	-5.97	-12.71	-9.46	-5.92	-6.74	-4.22
1122	1/18/01	2:50:00	-6.64	-5.75	-5.96	-12.71	-9.46	-5.93	-6.76	-4.32
1123	1/18/01	3:00:00	-6.65	-5.75	-5.96	-12.71	-9.46	-5.93	-6.74	-4.39
1124	1/18/01	3:10:00	-6.65	-5.75	-5.96	-12.71	-9.46	-5.92	-6.74	-4.46
1125	1/18/01	3:20:00	-6.65	-5.75	-5.97	-12.71	-9.46	-5.93	-6.76	-4.47
1126	1/18/01	3:30:00	-6.65	-5.75	-5.97	-12.69	-9.46	-5.94	-6.76	-4.4
1127	1/18/01	3:40:00	-6.66	-5.76	-5.98	-12.73	-9.48	-5.95	-6.76	-4.2
1128	1/18/01	3:50:00	-6.66	-5.76	-5.97	-12.69	-9.46	-5.92	-6.74	-3.84
1129	1/18/01	4:00:00	-6.67	-5.78	-5.98	-12.71	-9.48	-5.94	-6.76	-3.51
1130	1/18/01	4:10:00	-6.66	-5.76	-5.96	-12.69	-9.46	-5.91	-6.74	-3.17
1131	1/18/01	4:20:00	-6.66	-5.76	-5.96	-12.69	-9.46	-5.9	-6.76	-2.89
1132	1/18/01	4:30:00	-6.65	-5.74	-5.96	-12.69	-9.44	-5.88	-6.74	-2.6
1133	1/18/01	4:40:00	-6.7	-5.79	-6	-12.72	-9.48	-5.92	-6.79	-2.37
1134	1/18/01	4:50:00	-6.68	-5.77	-5.97	-12.7	-9.46	-5.88	-6.77	-2.08
1135	1/18/01	5:00:00	-6.67	-5.77	-5.97	-12.7	-9.46	-5.88	-6.77	-1.85
1136	1/18/01	5:10:00	-6.67	-5.76	-5.96	-12.7	-9.46	-5.85	-6.77	-1.62
1137	1/18/01	5:20:00	-6.68	-5.78	-5.97	-12.72	-9.48	-5.86	-6.77	-1.41
1138	1/18/01	5:30:00	-6.67	-5.76	-5.95	-12.7	-9.46	-5.84	-6.75	-1.2
1139	1/18/01	5:40:00	-6.64	-5.74	-5.93	-12.64	-9.43	-5.8	-6.72	-1
1140	1/18/01	5:50:00	-6.67	-5.76	-5.95	-12.67	-9.44	-5.82	-6.74	-0.85
1141	1/18/01	6:00:00	-6.64	-5.73	-5.91	-12.64	-9.41	-5.79	-6.71	-0.63
1142	1/18/01	6:10:00	-6.64	-5.74	-5.92	-12.64	-9.43	-5.79	-6.69	-0.45
1143	1/18/01	6:20:00	-6.65	-5.75	-5.92	-12.64	-9.41	-5.78	-6.71	-0.26
1144	1/18/01	6:30:00	-6.64	-5.74	-5.92	-12.64	-9.41	-5.77	-6.69	-0.07
1145	1/18/01	6:40:00	-6.64	-5.74	-5.91	-12.64	-9.41	-5.76	-6.69	0.13
1146	1/18/01	6:50:00	-6.64	-5.75	-5.9	-12.62	-9.39	-5.74	-6.69	0.32
1147	1/18/01	7:00:00	-6.63	-5.73	-5.89	-12.62	-9.39	-5.74	-6.69	0.5
1148	1/18/01	7:10:00	-6.67	-5.76	-5.92	-12.67	-9.43	-5.77	-6.72	0.63
1149	1/18/01	7:20:00	-6.67	-5.76	-5.91	-12.67	-9.41	-5.76	-6.71	0.77
1150	1/18/01	7:30:00	-6.67	-5.76	-5.91	-12.67	-9.41	-5.76	-6.71	0.9
1151	1/18/01	7:40:00	-6.67	-5.76	-5.91	-12.67	-9.41	-5.75	-6.71	1.02
1152	1/18/01	7:50:00	-6.64	-5.74	-5.88	-12.67	-9.39	-5.72	-6.69	1.16
1153	1/18/01	8:00:00	-6.65	-5.75	-5.89	-12.69	-9.41	-5.73	-6.71	1.26
1154	1/18/01	8:10:00	-6.65	-5.73	-5.86	-12.67	-9.39	-5.71	-6.69	1.38
1155	1/18/01	8:20:00	-6.64	-5.73	-5.87	-12.65	-9.39	-5.7	-6.69	1.48
1156	1/18/01	8:30:00	-6.65	-5.75	-5.88	-12.69	-9.41	-5.71	-6.69	1.56

Tidal Study Data
January 10-25, 2001

1157	1/18/01	8:40:00	-6.65	-5.75	-5.87	-12.69	-9.41	-5.71	-6.71	1.63
1158	1/18/01	8:50:00	-6.66	-5.75	-5.87	-12.69	-9.38	-5.71	-6.67	1.71
1159	1/18/01	9:00:00	-6.65	-5.75	-5.86	-12.69	-9.39	-5.7	-6.69	1.78
1160	1/18/01	9:10:00	-6.63	-5.75	-5.86	-12.69	-9.39	-5.7	-6.67	1.84
1161	1/18/01	9:20:00	-6.64	-5.74	-5.85	-12.69	-9.38	-5.7	-6.66	1.86
1162	1/18/01	9:30:00	-6.63	-5.74	-5.85	-12.69	-9.39	-5.72	-6.66	1.85
1163	1/18/01	9:40:00	-6.64	-5.75	-5.86	-12.71	-9.39	-5.74	-6.66	1.79
1164	1/18/01	9:50:00	-6.63	-5.75	-5.86	-12.69	-9.41	-5.75	-6.66	1.69
1165	1/18/01	10:00:00	-6.63	-5.75	-5.87	-12.69	-9.41	-5.79	-6.66	1.54
1166	1/18/01	10:10:00	-6.62	-5.75	-5.87	-12.69	-9.41	-5.81	-6.67	1.4
1167	1/18/01	10:20:00	-6.63	-5.76	-5.89	-12.72	-9.41	-5.83	-6.71	1.23
1168	1/18/01	10:30:00	-6.63	-5.76	-5.89	-12.71	-9.41	-5.84	-6.71	1.07
1169	1/18/01	10:40:00	-6.63	-5.76	-5.9	-12.72	-9.44	-5.85	-6.71	0.89
1170	1/18/01	10:50:00	-6.64	-5.78	-5.91	-12.72	-9.44	-5.87	-6.71	0.69
1171	1/18/01	11:00:00	-6.65	-5.78	-5.92	-12.72	-9.44	-5.9	-6.71	0.49
1172	1/18/01	11:10:00	-6.65	-5.78	-5.94	-12.72	-9.44	-5.9	-6.71	0.31
1173	1/18/01	11:20:00	-6.65	-5.79	-5.94	-12.72	-9.46	-5.92	-6.74	0.11
1174	1/18/01	11:30:00	-6.64	-5.77	-5.93	-12.7	-9.44	-5.92	-6.72	-0.06
1175	1/18/01	11:40:00	-6.62	-5.77	-5.92	-12.67	-9.43	-5.9	-6.69	-0.22
1176	1/18/01	11:50:00	-6.63	-5.77	-5.94	-12.67	-9.43	-5.92	-6.71	-0.4
1177	1/18/01	12:00:00	-6.63	-5.77	-5.94	-12.67	-9.43	-5.92	-6.69	-0.55
1178	1/18/01	12:10:00	-6.63	-5.77	-5.95	-12.67	-9.43	-5.93	-6.72	-0.7
1179	1/18/01	12:20:00	-6.64	-5.78	-5.96	-12.67	-9.44	-5.95	-6.72	-0.87
1180	1/18/01	12:30:00	-6.65	-5.78	-5.97	-12.67	-9.46	-5.96	-6.74	-1.02
1181	1/18/01	12:40:00	-6.63	-5.78	-5.96	-12.65	-9.44	-5.95	-6.72	-1.17
1182	1/18/01	12:50:00	-6.64	-5.79	-5.97	-12.65	-9.44	-5.96	-6.72	-1.32
1183	1/18/01	13:00:00	-6.62	-5.76	-5.95	-12.62	-9.41	-5.93	-6.74	-1.44
1184	1/18/01	13:10:00	-6.62	-5.77	-5.96	-12.62	-9.41	-5.94	-6.74	-1.6
1185	1/18/01	13:20:00	-6.63	-5.77	-5.96	-12.62	-9.41	-5.94	-6.74	-1.75
1186	1/18/01	13:30:00	-6.64	-5.78	-5.97	-12.64	-9.41	-5.95	-6.74	-1.92
1187	1/18/01	13:40:00	-6.63	-5.78	-5.97	-12.64	-9.41	-5.95	-6.74	-2.06
1188	1/18/01	13:50:00	-6.64	-5.78	-5.98	-12.64	-9.41	-5.95	-6.74	-2.22
1189	1/18/01	14:00:00	-6.65	-5.79	-5.99	-12.64	-9.41	-5.96	-6.77	-2.37
1190	1/18/01	14:10:00	-6.66	-5.8	-5.99	-12.62	-9.44	-5.97	-6.77	-2.52
1191	1/18/01	14:20:00	-6.66	-5.79	-5.99	-12.62	-9.44	-5.98	-6.77	-2.67
1192	1/18/01	14:30:00	-6.67	-5.8	-6	-12.62	-9.46	-5.98	-6.77	-2.82
1193	1/18/01	14:40:00	-6.65	-5.78	-5.98	-12.62	-9.44	-5.97	-6.75	-2.95
1194	1/18/01	14:50:00	-6.67	-5.79	-6	-12.62	-9.42	-5.98	-6.77	-3.06
1195	1/18/01	15:00:00	-6.67	-5.8	-6	-12.62	-9.46	-5.98	-6.77	-3.18
1196	1/18/01	15:10:00	-6.67	-5.8	-6.01	-12.62	-9.46	-5.98	-6.77	-3.37
1197	1/18/01	15:20:00	-6.68	-5.8	-6	-12.62	-9.46	-5.97	-6.77	-3.47
1198	1/18/01	15:30:00	-6.66	-5.79	-5.99	-12.6	-9.44	-5.96	-6.75	-3.5
1199	1/18/01	15:40:00	-6.66	-5.79	-5.99	-12.59	-9.43	-5.96	-6.76	-3.54
1200	1/18/01	15:50:00	-6.66	-5.79	-5.99	-12.58	-9.43	-5.96	-6.76	-3.56
1201	1/18/01	16:00:00	-6.66	-5.8	-6.01	-12.58	-9.44	-5.97	-6.77	-3.55
1202	1/18/01	16:10:00	-6.67	-5.81	-6.01	-12.59	-9.44	-5.96	-6.74	-3.42
1203	1/18/01	16:20:00	-6.67	-5.8	-6.01	-12.58	-9.44	-5.96	-6.76	-3.18
1204	1/18/01	16:30:00	-6.68	-5.8	-6.01	-12.56	-9.44	-5.96	-6.76	-2.95
1205	1/18/01	16:40:00	-6.68	-5.81	-6.01	-12.56	-9.46	-5.94	-6.79	-2.7
1206	1/18/01	16:50:00	-6.68	-5.8	-6	-12.58	-9.44	-5.92	-6.79	-2.44
1207	1/18/01	17:00:00	-6.69	-5.8	-6	-12.56	-9.44	-5.91	-6.76	-2.17
1208	1/18/01	17:10:00	-6.68	-5.8	-5.99	-12.56	-9.43	-5.9	-6.76	-1.93

Tidal Study Data
January 10-25, 2001

1209	1/18/01	17:20:00	-6.68	-5.8	-5.99	-12.56	-9.43	-5.89	-6.76	-1.71
1210	1/18/01	17:30:00	-6.67	-5.79	-5.99	-12.56	-9.43	-5.88	-6.74	-1.49
1211	1/18/01	17:40:00	-6.68	-5.8	-5.98	-12.56	-9.43	-5.86	-6.76	-1.26
1212	1/18/01	17:50:00	-6.68	-5.79	-5.97	-12.54	-9.43	-5.85	-6.74	-1.06
1213	1/18/01	18:00:00	-6.68	-5.79	-5.98	-12.54	-9.43	-5.85	-6.74	-0.88
1214	1/18/01	18:10:00	-6.68	-5.79	-5.97	-12.54	-9.43	-5.84	-6.74	-0.7
1215	1/18/01	18:20:00	-6.67	-5.79	-5.97	-12.54	-9.41	-5.83	-6.74	-0.53
1216	1/18/01	18:30:00	-6.67	-5.79	-5.97	-12.53	-9.39	-5.82	-6.74	-0.35
1217	1/18/01	18:40:00	-6.67	-5.79	-5.96	-12.53	-9.38	-5.81	-6.74	-0.18
1218	1/18/01	18:50:00	-6.67	-5.79	-5.96	-12.53	-9.38	-5.81	-6.74	-0.01
1219	1/18/01	19:00:00	-6.67	-5.79	-5.95	-12.53	-9.38	-5.8	-6.74	0.15
1220	1/18/01	19:10:00	-6.67	-5.79	-5.95	-12.49	-9.38	-5.79	-6.74	0.29
1221	1/18/01	19:20:00	-6.65	-5.77	-5.93	-12.51	-9.36	-5.77	-6.72	0.46
1222	1/18/01	19:30:00	-6.63	-5.75	-5.9	-12.43	-9.33	-5.73	-6.69	0.63
1223	1/18/01	19:40:00	-6.62	-5.74	-5.9	-12.46	-9.33	-5.74	-6.69	0.76
1224	1/18/01	19:50:00	-6.62	-5.74	-5.9	-12.43	-9.33	-5.73	-6.69	0.87
1225	1/18/01	20:00:00	-6.65	-5.76	-5.92	-12.46	-9.36	-5.75	-6.69	0.96
1226	1/18/01	20:10:00	-6.63	-5.75	-5.9	-12.44	-9.34	-5.71	-6.67	1.08
1227	1/18/01	20:20:00	-6.63	-5.75	-5.89	-12.44	-9.34	-5.72	-6.67	1.17
1228	1/18/01	20:30:00	-6.62	-5.74	-5.88	-12.43	-9.33	-5.72	-6.66	1.26
1229	1/18/01	20:40:00	-6.62	-5.74	-5.88	-12.44	-9.33	-5.72	-6.66	1.33
1230	1/18/01	20:50:00	-6.62	-5.75	-5.88	-12.46	-9.33	-5.71	-6.66	1.41
1231	1/18/01	21:00:00	-6.63	-5.75	-5.88	-12.48	-9.33	-5.71	-6.66	1.46
1232	1/18/01	21:10:00	-6.62	-5.75	-5.88	-12.48	-9.33	-5.72	-6.66	1.49
1233	1/18/01	21:20:00	-6.63	-5.76	-5.88	-12.48	-9.33	-5.72	-6.66	1.5
1234	1/18/01	21:30:00	-6.61	-5.74	-5.86	-12.46	-9.31	-5.71	-6.64	1.53
1235	1/18/01	21:40:00	-6.61	-5.74	-5.87	-12.46	-9.31	-5.73	-6.64	1.52
1236	1/18/01	21:50:00	-6.62	-5.74	-5.87	-12.46	-9.31	-5.73	-6.64	1.46
1237	1/18/01	22:00:00	-6.63	-5.76	-5.89	-12.49	-9.33	-5.77	-6.66	1.36
1238	1/18/01	22:10:00	-6.62	-5.76	-5.9	-12.49	-9.33	-5.79	-6.66	1.27
1239	1/18/01	22:20:00	-6.62	-5.76	-5.91	-12.49	-9.33	-5.81	-6.67	1.13
1240	1/18/01	22:30:00	-6.63	-5.78	-5.92	-12.49	-9.38	-5.83	-6.69	0.98
1241	1/18/01	22:40:00	-6.59	-5.74	-5.87	-12.44	-9.33	-5.8	-6.64	0.88
1242	1/18/01	22:50:00	-6.59	-5.75	-5.89	-12.46	-9.34	-5.82	-6.64	0.7
1243	1/18/01	23:00:00	-6.61	-5.76	-5.9	-12.44	-9.36	-5.84	-6.64	0.53
1244	1/18/01	23:10:00	-6.61	-5.76	-5.91	-12.46	-9.36	-5.85	-6.64	0.37
1245	1/18/01	23:20:00	-6.6	-5.78	-5.93	-12.46	-9.36	-5.86	-6.69	0.21
1246	1/18/01	23:30:00	-6.61	-5.78	-5.94	-12.46	-9.36	-5.9	-6.69	0.03
1247	1/18/01	23:40:00	-6.62	-5.8	-5.94	-12.48	-9.36	-5.91	-6.69	-0.14
1248	1/18/01	23:50:00	-6.62	-5.79	-5.96	-12.49	-9.38	-5.9	-6.72	-0.31
1249	1/19/01	0:00:00	-6.63	-5.8	-5.96	-12.49	-9.38	-5.92	-6.71	-0.46
1250	1/19/01	0:10:00	-6.61	-5.78	-5.95	-12.46	-9.36	-5.91	-6.69	-0.6
1251	1/19/01	0:20:00	-6.65	-5.81	-5.98	-12.49	-9.39	-5.95	-6.72	-0.78
1252	1/19/01	0:30:00	-6.61	-5.78	-5.96	-12.46	-9.36	-5.93	-6.69	-0.9
1253	1/19/01	0:40:00	-6.62	-5.79	-5.97	-12.46	-9.36	-5.93	-6.69	-1.06
1254	1/19/01	0:50:00	-6.63	-5.79	-5.98	-12.48	-9.36	-5.94	-6.69	-1.22
1255	1/19/01	1:00:00	-6.63	-5.8	-5.97	-12.46	-9.4	-5.95	-6.73	-1.36
1256	1/19/01	1:10:00	-6.64	-5.8	-5.99	-12.48	-9.4	-5.96	-6.73	-1.51
1257	1/19/01	1:20:00	-6.63	-5.8	-5.98	-12.46	-9.38	-5.94	-6.72	-1.67
1258	1/19/01	1:30:00	-6.67	-5.83	-6.02	-12.48	-9.4	-5.97	-6.76	-1.86
1259	1/19/01	1:40:00	-6.62	-5.78	-5.99	-12.44	-9.36	-5.95	-6.72	-2
1260	1/19/01	1:50:00	-6.62	-5.79	-5.98	-12.44	-9.37	-5.96	-6.74	-2.14

Tidal Study Data
January 10-25, 2001

1261	1/19/01	2:00:00	-6.64	-5.8	-5.99	-12.44	-9.37	-5.96	-6.74	-2.28
1262	1/19/01	2:10:00	-6.63	-5.79	-5.99	-12.43	-9.38	-5.95	-6.73	-2.44
1263	1/19/01	2:20:00	-6.63	-5.79	-5.99	-12.45	-9.38	-5.96	-6.73	-2.59
1264	1/19/01	2:30:00	-6.63	-5.8	-6	-12.45	-9.38	-5.96	-6.73	-2.75
1265	1/19/01	2:40:00	-6.64	-5.8	-6	-12.45	-9.38	-5.96	-6.73	-2.88
1266	1/19/01	2:50:00	-6.64	-5.8	-6	-12.45	-9.38	-5.97	-6.73	-3.04
1267	1/19/01	3:00:00	-6.64	-5.8	-6	-12.45	-9.38	-5.95	-6.73	-3.16
1268	1/19/01	3:10:00	-6.66	-5.81	-6.01	-12.45	-9.38	-5.97	-6.73	-3.31
1269	1/19/01	3:20:00	-6.65	-5.8	-6.03	-12.45	-9.38	-5.97	-6.76	-3.45
1270	1/19/01	3:30:00	-6.66	-5.82	-6.03	-12.45	-9.38	-5.98	-6.77	-3.57
1271	1/19/01	3:40:00	-6.67	-5.83	-6.03	-12.45	-9.38	-5.98	-6.76	-3.67
1272	1/19/01	3:50:00	-6.66	-5.81	-6.02	-12.43	-9.37	-5.97	-6.75	-3.71
1273	1/19/01	4:00:00	-6.64	-5.8	-6.01	-12.41	-9.37	-5.95	-6.73	-3.74
1274	1/19/01	4:10:00	-6.64	-5.8	-6.01	-12.4	-9.36	-5.95	-6.72	-3.75
1275	1/19/01	4:20:00	-6.65	-5.81	-6.01	-12.4	-9.36	-5.94	-6.74	-3.65
1276	1/19/01	4:30:00	-6.65	-5.81	-6.02	-12.38	-9.36	-5.95	-6.74	-3.51
1277	1/19/01	4:40:00	-6.66	-5.81	-6.01	-12.38	-9.36	-5.94	-6.74	-3.2
1278	1/19/01	4:50:00	-6.65	-5.8	-6.01	-12.38	-9.36	-5.93	-6.72	-2.91
1279	1/19/01	5:00:00	-6.66	-5.8	-6.01	-12.38	-9.36	-5.92	-6.74	-2.58
1280	1/19/01	5:10:00	-6.66	-5.81	-6.01	-12.4	-9.36	-5.9	-6.74	-2.27
1281	1/19/01	5:20:00	-6.64	-5.79	-5.99	-12.36	-9.34	-5.88	-6.72	-2.02
1282	1/19/01	5:30:00	-6.66	-5.81	-6	-12.38	-9.36	-5.88	-6.74	-1.77
1283	1/19/01	5:40:00	-6.65	-5.79	-5.99	-12.38	-9.34	-5.86	-6.72	-1.49
1284	1/19/01	5:50:00	-6.66	-5.8	-6	-12.38	-9.36	-5.85	-6.72	-1.26
1285	1/19/01	6:00:00	-6.66	-5.8	-6	-12.38	-9.34	-5.84	-6.72	-1.02
1286	1/19/01	6:10:00	-6.66	-5.8	-5.99	-12.38	-9.34	-5.84	-6.72	-0.81
1287	1/19/01	6:20:00	-6.64	-5.79	-5.97	-12.36	-9.32	-5.81	-6.7	-0.58
1288	1/19/01	6:30:00	-6.66	-5.79	-5.98	-12.36	-9.33	-5.82	-6.72	-0.39
1289	1/19/01	6:40:00	-6.64	-5.77	-5.94	-12.33	-9.3	-5.78	-6.69	-0.17
1290	1/19/01	6:50:00	-6.63	-5.77	-5.95	-12.33	-9.3	-5.76	-6.69	0.03
1291	1/19/01	7:00:00	-6.63	-5.76	-5.94	-12.33	-9.3	-5.75	-6.69	0.23
1292	1/19/01	7:10:00	-6.64	-5.77	-5.94	-12.34	-9.31	-5.74	-6.69	0.42
1293	1/19/01	7:20:00	-6.65	-5.78	-5.95	-12.36	-9.33	-5.75	-6.68	0.6
1294	1/19/01	7:30:00	-6.62	-5.76	-5.92	-12.34	-9.29	-5.71	-6.66	0.79
1295	1/19/01	7:40:00	-6.63	-5.77	-5.92	-12.34	-9.28	-5.71	-6.66	0.97
1296	1/19/01	7:50:00	-6.64	-5.76	-5.93	-12.36	-9.3	-5.69	-6.68	1.13
1297	1/19/01	8:00:00	-6.63	-5.76	-5.9	-12.36	-9.28	-5.68	-6.68	1.3
1298	1/19/01	8:10:00	-6.63	-5.76	-5.89	-12.36	-9.26	-5.67	-6.66	1.44
1299	1/19/01	8:20:00	-6.62	-5.76	-5.89	-12.36	-9.26	-5.66	-6.64	1.57
1300	1/19/01	8:30:00	-6.63	-5.76	-5.89	-12.36	-9.26	-5.66	-6.66	1.7
1301	1/19/01	8:40:00	-6.6	-5.75	-5.86	-12.33	-9.23	-5.63	-6.63	1.82
1302	1/19/01	8:50:00	-6.6	-5.74	-5.86	-12.33	-9.23	-5.63	-6.63	1.92
1303	1/19/01	9:00:00	-6.61	-5.75	-5.85	-12.33	-9.25	-5.63	-6.63	2.02
1304	1/19/01	9:10:00	-6.61	-5.75	-5.85	-12.33	-9.23	-5.63	-6.61	2.1
1305	1/19/01	9:20:00	-6.57	-5.71	-5.81	-12.31	-9.19	-5.59	-6.59	2.22
1306	1/19/01	9:30:00	-6.56	-5.7	-5.8	-12.3	-9.18	-5.58	-6.56	2.31
1307	1/19/01	9:40:00	-6.56	-5.7	-5.8	-12.3	-9.18	-5.58	-6.56	2.36
1308	1/19/01	9:50:00	-6.57	-5.7	-5.79	-12.32	-9.18	-5.58	-6.56	2.41
1309	1/19/01	10:00:00	-6.56	-5.7	-5.8	-12.32	-9.18	-5.58	-6.56	2.43
1310	1/19/01	10:10:00	-6.56	-5.71	-5.81	-12.32	-9.2	-5.6	-6.56	2.42
1311	1/19/01	10:20:00	-6.56	-5.7	-5.8	-12.32	-9.2	-5.61	-6.56	2.39
1312	1/19/01	10:30:00	-6.59	-5.75	-5.84	-12.37	-9.23	-5.66	-6.61	2.28

Tidal Study Data
January 10-25, 2001

1313	1/19/01	10:40:00	-6.57	-5.72	-5.82	-12.32	-9.22	-5.67	-6.58	2.18
1314	1/19/01	10:50:00	-6.55	-5.71	-5.82	-12.3	-9.23	-5.68	-6.56	2.06
1315	1/19/01	11:00:00	-6.54	-5.71	-5.81	-12.28	-9.21	-5.67	-6.56	1.94
1316	1/19/01	11:10:00	-6.54	-5.71	-5.82	-12.28	-9.21	-5.71	-6.55	1.79
1317	1/19/01	11:20:00	-6.54	-5.72	-5.83	-12.3	-9.23	-5.73	-6.55	1.62
1318	1/19/01	11:30:00	-6.56	-5.73	-5.86	-12.28	-9.23	-5.75	-6.58	1.46
1319	1/19/01	11:40:00	-6.51	-5.7	-5.83	-12.25	-9.2	-5.73	-6.54	1.34
1320	1/19/01	11:50:00	-6.53	-5.71	-5.84	-12.26	-9.22	-5.76	-6.55	1.16
1321	1/19/01	12:00:00	-6.53	-5.71	-5.86	-12.28	-9.21	-5.77	-6.58	0.96
1322	1/19/01	12:10:00	-6.54	-5.72	-5.87	-12.28	-9.25	-5.79	-6.56	0.78
1323	1/19/01	12:20:00	-6.54	-5.72	-5.88	-12.28	-9.25	-5.79	-6.59	0.61
1324	1/19/01	12:30:00	-6.56	-5.74	-5.9	-12.28	-9.25	-5.81	-6.59	0.42
1325	1/19/01	12:40:00	-6.56	-5.74	-5.9	-12.28	-9.25	-5.82	-6.63	0.23
1326	1/19/01	12:50:00	-6.52	-5.7	-5.88	-12.24	-9.21	-5.81	-6.6	0.09
1327	1/19/01	13:00:00	-6.53	-5.71	-5.9	-12.24	-9.24	-5.82	-6.6	-0.08
1328	1/19/01	13:10:00	-6.54	-5.72	-5.91	-12.24	-9.26	-5.83	-6.6	-0.25
1329	1/19/01	13:20:00	-6.55	-5.73	-5.92	-12.26	-9.26	-5.85	-6.64	-0.4
1330	1/19/01	13:30:00	-6.55	-5.74	-5.93	-12.26	-9.26	-5.85	-6.64	-0.57
1331	1/19/01	13:40:00	-6.57	-5.74	-5.93	-12.23	-9.26	-5.86	-6.63	-0.72
1332	1/19/01	13:50:00	-6.57	-5.75	-5.94	-12.26	-9.27	-5.87	-6.64	-0.88
1333	1/19/01	14:00:00	-6.55	-5.72	-5.91	-12.22	-9.25	-5.83	-6.63	-0.99
1334	1/19/01	14:10:00	-6.55	-5.73	-5.92	-12.23	-9.26	-5.86	-6.62	-1.15
1335	1/19/01	14:20:00	-6.57	-5.73	-5.93	-12.24	-9.26	-5.85	-6.64	-1.3
1336	1/19/01	14:30:00	-6.56	-5.73	-5.95	-12.24	-9.26	-5.86	-6.64	-1.44
1337	1/19/01	14:40:00	-6.59	-5.75	-5.96	-12.29	-9.29	-5.9	-6.67	-1.61
1338	1/19/01	14:50:00	-6.56	-5.73	-5.94	-12.25	-9.25	-5.87	-6.64	-1.73
1339	1/19/01	15:00:00	-6.56	-5.72	-5.95	-12.25	-9.25	-5.87	-6.64	-1.89
1340	1/19/01	15:10:00	-6.59	-5.75	-5.97	-12.28	-9.28	-5.89	-6.67	-2.06
1341	1/19/01	15:20:00	-6.59	-5.76	-5.98	-12.29	-9.29	-5.9	-6.67	-2.22
1342	1/19/01	15:30:00	-6.6	-5.76	-5.98	-12.29	-9.29	-5.91	-6.7	-2.35
1343	1/19/01	15:40:00	-6.6	-5.75	-5.97	-12.29	-9.29	-5.9	-6.67	-2.47
1344	1/19/01	15:50:00	-6.6	-5.75	-5.99	-12.29	-9.29	-5.9	-6.68	-2.61
1345	1/19/01	16:00:00	-6.61	-5.75	-5.98	-12.29	-9.29	-5.92	-6.68	-2.72
1346	1/19/01	16:10:00	-6.6	-5.75	-5.99	-12.29	-9.29	-5.91	-6.7	-2.83
1347	1/19/01	16:20:00	-6.61	-5.75	-5.98	-12.29	-9.29	-5.91	-6.68	-2.91
1348	1/19/01	16:30:00	-6.6	-5.74	-5.98	-12.29	-9.29	-5.91	-6.7	-2.99
1349	1/19/01	16:40:00	-6.61	-5.75	-5.99	-12.29	-9.29	-5.91	-6.72	-3.05
1350	1/19/01	16:50:00	-6.61	-5.75	-5.99	-12.29	-9.29	-5.91	-6.72	-3.08
1351	1/19/01	17:00:00	-6.62	-5.75	-5.99	-12.29	-9.29	-5.91	-6.72	-3.05
1352	1/19/01	17:10:00	-6.64	-5.77	-6.01	-12.33	-9.33	-5.92	-6.71	-2.96
1353	1/19/01	17:20:00	-6.63	-5.76	-6	-12.33	-9.31	-5.91	-6.71	-2.73
1354	1/19/01	17:30:00	-6.62	-5.75	-5.99	-12.33	-9.31	-5.88	-6.71	-2.45
1355	1/19/01	17:40:00	-6.62	-5.73	-5.98	-12.33	-9.3	-5.86	-6.71	-2.15
1356	1/19/01	17:50:00	-6.62	-5.75	-5.99	-12.31	-9.31	-5.85	-6.7	-1.86
1357	1/19/01	18:00:00	-6.65	-5.76	-6.01	-12.33	-9.33	-5.86	-6.73	-1.6
1358	1/19/01	18:10:00	-6.61	-5.71	-5.96	-12.3	-9.28	-5.79	-6.68	-1.3
1359	1/19/01	18:20:00	-6.62	-5.72	-5.96	-12.3	-9.3	-5.78	-6.68	-1.06
1360	1/19/01	18:30:00	-6.64	-5.75	-5.98	-12.33	-9.3	-5.8	-6.73	-0.85
1361	1/19/01	18:40:00	-6.64	-5.75	-5.98	-12.31	-9.3	-5.79	-6.73	-0.61
1362	1/19/01	18:50:00	-6.6	-5.71	-5.93	-12.25	-9.25	-5.74	-6.68	-0.37
1363	1/19/01	19:00:00	-6.64	-5.75	-5.96	-12.3	-9.3	-5.76	-6.71	-0.21
1364	1/19/01	19:10:00	-6.6	-5.7	-5.91	-12.26	-9.25	-5.72	-6.68	0.02

Tidal Study Data
January 10-25, 2001

1365	1/19/01	19:20:00	-6.62	-5.72	-5.94	-12.3	-9.26	-5.73	-6.68	0.17
1366	1/19/01	19:30:00	-6.62	-5.71	-5.93	-12.31	-9.26	-5.72	-6.68	0.33
1367	1/19/01	19:40:00	-6.61	-5.71	-5.92	-12.3	-9.26	-5.72	-6.66	0.49
1368	1/19/01	19:50:00	-6.62	-5.71	-5.92	-12.32	-9.27	-5.71	-6.67	0.63
1369	1/19/01	20:00:00	-6.61	-5.7	-5.9	-12.3	-9.26	-5.69	-6.64	0.78
1370	1/19/01	20:10:00	-6.6	-5.7	-5.9	-12.3	-9.25	-5.68	-6.64	0.93
1371	1/19/01	20:20:00	-6.6	-5.7	-5.88	-12.3	-9.23	-5.66	-6.64	1.1
1372	1/19/01	20:30:00	-6.64	-5.72	-5.92	-12.35	-9.28	-5.69	-6.64	1.2
1373	1/19/01	20:40:00	-6.59	-5.69	-5.87	-12.31	-9.24	-5.63	-6.62	1.37
1374	1/19/01	20:50:00	-6.63	-5.72	-5.9	-12.35	-9.26	-5.66	-6.64	1.46
1375	1/19/01	21:00:00	-6.62	-5.72	-5.89	-12.35	-9.28	-5.65	-6.64	1.57
1376	1/19/01	21:10:00	-6.61	-5.7	-5.87	-12.33	-9.25	-5.65	-6.63	1.67
1377	1/19/01	21:20:00	-6.61	-5.7	-5.87	-12.35	-9.25	-5.64	-6.64	1.76
1378	1/19/01	21:30:00	-6.57	-5.67	-5.82	-12.3	-9.2	-5.59	-6.59	1.89
1379	1/19/01	21:40:00	-6.57	-5.67	-5.82	-12.33	-9.2	-5.59	-6.58	1.96
1380	1/19/01	21:50:00	-6.57	-5.67	-5.82	-12.34	-9.21	-5.59	-6.56	2.01
1381	1/19/01	22:00:00	-6.6	-5.7	-5.85	-12.38	-9.25	-5.63	-6.6	2.04
1382	1/19/01	22:10:00	-6.59	-5.69	-5.83	-12.4	-9.23	-5.6	-6.6	2.09
1383	1/19/01	22:20:00	-6.59	-5.69	-5.84	-12.4	-9.25	-5.62	-6.6	2.13
1384	1/19/01	22:30:00	-6.57	-5.68	-5.83	-12.38	-9.23	-5.61	-6.58	2.13
1385	1/19/01	22:40:00	-6.58	-5.69	-5.84	-12.43	-9.25	-5.64	-6.6	2.11
1386	1/19/01	22:50:00	-6.59	-5.69	-5.84	-12.43	-9.25	-5.66	-6.6	2.04
1387	1/19/01	23:00:00	-6.58	-5.69	-5.84	-12.43	-9.25	-5.67	-6.6	1.96
1388	1/19/01	23:10:00	-6.58	-5.69	-5.84	-12.45	-9.25	-5.69	-6.6	1.84
1389	1/19/01	23:20:00	-6.59	-5.69	-5.85	-12.45	-9.26	-5.72	-6.6	1.71
1390	1/19/01	23:30:00	-6.58	-5.7	-5.85	-12.45	-9.28	-5.73	-6.6	1.56
1391	1/19/01	23:40:00	-6.58	-5.7	-5.86	-12.45	-9.28	-5.75	-6.6	1.42
1392	1/19/01	23:50:00	-6.58	-5.69	-5.87	-12.46	-9.28	-5.76	-6.6	1.26
1393	1/20/01	0:00:00	-6.58	-5.7	-5.88	-12.46	-9.28	-5.79	-6.63	1.08
1394	1/20/01	0:10:00	-6.58	-5.7	-5.89	-12.46	-9.28	-5.8	-6.64	0.92
1395	1/20/01	0:20:00	-6.58	-5.69	-5.89	-12.48	-9.28	-5.8	-6.63	0.74
1396	1/20/01	0:30:00	-6.58	-5.7	-5.9	-12.48	-9.3	-5.8	-6.64	0.56
1397	1/20/01	0:40:00	-6.61	-5.73	-5.93	-12.55	-9.33	-5.85	-6.66	0.36
1398	1/20/01	0:50:00	-6.62	-5.73	-5.94	-12.55	-9.33	-5.86	-6.69	0.2
1399	1/20/01	1:00:00	-6.59	-5.7	-5.91	-12.51	-9.32	-5.83	-6.65	0.03
1400	1/20/01	1:10:00	-6.58	-5.7	-5.92	-12.5	-9.31	-5.83	-6.64	-0.13
1401	1/20/01	1:20:00	-6.6	-5.72	-5.94	-12.5	-9.35	-5.86	-6.66	-0.32
1402	1/20/01	1:30:00	-6.58	-5.7	-5.93	-12.51	-9.31	-5.84	-6.64	-0.45
1403	1/20/01	1:40:00	-6.63	-5.73	-5.97	-12.55	-9.35	-5.89	-6.69	-0.64
1404	1/20/01	1:50:00	-6.63	-5.74	-5.97	-12.55	-9.35	-5.88	-6.69	-0.78
1405	1/20/01	2:00:00	-6.63	-5.74	-5.97	-12.56	-9.33	-5.89	-6.69	-0.92
1406	1/20/01	2:10:00	-6.63	-5.72	-5.97	-12.56	-9.35	-5.9	-6.69	-1.06
1407	1/20/01	2:20:00	-6.63	-5.74	-5.98	-12.55	-9.36	-5.9	-6.71	-1.22
1408	1/20/01	2:30:00	-6.63	-5.73	-5.98	-12.54	-9.34	-5.9	-6.69	-1.37
1409	1/20/01	2:40:00	-6.61	-5.72	-5.97	-12.51	-9.33	-5.88	-6.68	-1.51
1410	1/20/01	2:50:00	-6.6	-5.71	-5.96	-12.51	-9.31	-5.87	-6.69	-1.64
1411	1/20/01	3:00:00	-6.64	-5.74	-6	-12.56	-9.36	-5.92	-6.74	-1.81
1412	1/20/01	3:10:00	-6.63	-5.73	-6	-12.56	-9.36	-5.91	-6.71	-1.93
1413	1/20/01	3:20:00	-6.6	-5.7	-5.97	-12.53	-9.33	-5.88	-6.69	-2.05
1414	1/20/01	3:30:00	-6.65	-5.75	-6.02	-12.58	-9.36	-5.93	-6.74	-2.25
1415	1/20/01	3:40:00	-6.64	-5.74	-6	-12.6	-9.36	-5.93	-6.72	-2.33
1416	1/20/01	3:50:00	-6.64	-5.75	-6.02	-12.56	-9.36	-5.93	-6.74	-2.54

Tidal Study Data
January 10-25, 2001

1417	1/20/01	4:00:00	-6.62	-5.72	-5.99	-12.52	-9.36	-5.91	-6.7	-2.65
1418	1/20/01	4:10:00	-6.65	-5.75	-6.01	-12.57	-9.37	-5.92	-6.74	-2.7
1419	1/20/01	4:20:00	-6.64	-5.75	-6.02	-12.57	-9.37	-5.93	-6.75	-2.83
1420	1/20/01	4:30:00	-6.65	-5.74	-6.01	-12.56	-9.36	-5.93	-6.74	-2.97
1421	1/20/01	4:40:00	-6.66	-5.74	-6.02	-12.58	-9.38	-5.93	-6.74	-2.98
1422	1/20/01	4:50:00	-6.64	-5.74	-6.01	-12.56	-9.36	-5.93	-6.74	-3.05
1423	1/20/01	5:00:00	-6.66	-5.75	-6.03	-12.56	-9.38	-5.94	-6.74	-3.09
1424	1/20/01	5:10:00	-6.62	-5.71	-5.98	-12.5	-9.35	-5.89	-6.71	-3.07
1425	1/20/01	5:20:00	-6.62	-5.71	-5.98	-12.5	-9.35	-5.88	-6.69	-2.89
1426	1/20/01	5:30:00	-6.65	-5.74	-6.01	-12.55	-9.36	-5.9	-6.74	-2.71
1427	1/20/01	5:40:00	-6.65	-5.72	-6	-12.53	-9.34	-5.87	-6.72	-2.45
1428	1/20/01	5:50:00	-6.66	-5.74	-6.01	-12.56	-9.36	-5.87	-6.74	-2.17
1429	1/20/01	6:00:00	-6.66	-5.73	-6.01	-12.56	-9.36	-5.85	-6.74	-1.82
1430	1/20/01	6:10:00	-6.66	-5.72	-5.99	-12.54	-9.36	-5.82	-6.72	-1.53
1431	1/20/01	6:20:00	-6.64	-5.71	-5.97	-12.51	-9.33	-5.8	-6.71	-1.22
1432	1/20/01	6:30:00	-6.64	-5.7	-5.96	-12.51	-9.33	-5.78	-6.69	-0.95
1433	1/20/01	6:40:00	-6.63	-5.7	-5.95	-12.51	-9.33	-5.74	-6.69	-0.69
1434	1/20/01	6:50:00	-6.64	-5.7	-5.95	-12.52	-9.34	-5.74	-6.7	-0.46
1435	1/20/01	7:00:00	-6.66	-5.72	-5.96	-12.54	-9.36	-5.74	-6.71	-0.24
1436	1/20/01	7:10:00	-6.64	-5.69	-5.94	-12.53	-9.33	-5.73	-6.68	-0.01
1437	1/20/01	7:20:00	-6.64	-5.68	-5.92	-12.53	-9.33	-5.71	-6.68	0.2
1438	1/20/01	7:30:00	-6.63	-5.68	-5.91	-12.53	-9.33	-5.68	-6.68	0.39
1439	1/20/01	7:40:00	-6.63	-5.68	-5.91	-12.51	-9.33	-5.69	-6.68	0.57
1440	1/20/01	7:50:00	-6.62	-5.68	-5.9	-12.51	-9.33	-5.67	-6.68	0.73
1441	1/20/01	8:00:00	-6.62	-5.67	-5.89	-12.51	-9.3	-5.66	-6.66	0.91
1442	1/20/01	8:10:00	-6.61	-5.68	-5.87	-12.51	-9.3	-5.65	-6.64	1.08
1443	1/20/01	8:20:00	-6.63	-5.68	-5.89	-12.51	-9.3	-5.65	-6.66	1.21
1444	1/20/01	8:30:00	-6.61	-5.67	-5.87	-12.51	-9.3	-5.63	-6.64	1.36
1445	1/20/01	8:40:00	-6.65	-5.68	-5.87	-12.56	-9.31	-5.63	-6.64	1.49
1446	1/20/01	8:50:00	-6.62	-5.67	-5.85	-12.51	-9.29	-5.61	-6.62	1.63
1447	1/20/01	9:00:00	-6.6	-5.64	-5.82	-12.48	-9.26	-5.58	-6.59	1.78
1448	1/20/01	9:10:00	-6.59	-5.64	-5.82	-12.49	-9.26	-5.57	-6.59	1.88
1449	1/20/01	9:20:00	-6.58	-5.64	-5.81	-12.48	-9.26	-5.57	-6.59	1.99
1450	1/20/01	9:30:00	-6.61	-5.66	-5.82	-12.51	-9.26	-5.58	-6.62	2.07
1451	1/20/01	9:40:00	-6.57	-5.63	-5.78	-12.49	-9.23	-5.53	-6.56	2.19
1452	1/20/01	9:50:00	-6.57	-5.62	-5.78	-12.49	-9.23	-5.53	-6.56	2.27
1453	1/20/01	10:00:00	-6.56	-5.63	-5.78	-12.51	-9.23	-5.53	-6.56	2.34
1454	1/20/01	10:10:00	-6.6	-5.66	-5.81	-12.56	-9.28	-5.57	-6.58	2.37
1455	1/20/01	10:20:00	-6.55	-5.62	-5.75	-12.51	-9.23	-5.52	-6.54	2.48
1456	1/20/01	10:30:00	-6.55	-5.61	-5.75	-12.51	-9.23	-5.52	-6.56	2.52
1457	1/20/01	10:40:00	-6.55	-5.61	-5.74	-12.51	-9.23	-5.51	-6.53	2.57
1458	1/20/01	10:50:00	-6.56	-5.63	-5.75	-12.51	-9.23	-5.53	-6.54	2.57
1459	1/20/01	11:00:00	-6.55	-5.62	-5.74	-12.51	-9.23	-5.52	-6.53	2.58
1460	1/20/01	11:10:00	-6.55	-5.63	-5.75	-12.51	-9.23	-5.54	-6.54	2.56
1461	1/20/01	11:20:00	-6.55	-5.61	-5.75	-12.51	-9.23	-5.55	-6.53	2.51
1462	1/20/01	11:30:00	-6.54	-5.62	-5.75	-12.48	-9.23	-5.57	-6.53	2.41
1463	1/20/01	11:40:00	-6.55	-5.62	-5.75	-12.5	-9.23	-5.59	-6.53	2.29
1464	1/20/01	11:50:00	-6.54	-5.63	-5.77	-12.5	-9.23	-5.61	-6.53	2.17
1465	1/20/01	12:00:00	-6.55	-5.62	-5.78	-12.52	-9.26	-5.63	-6.56	2.05
1466	1/20/01	12:10:00	-6.55	-5.62	-5.77	-12.51	-9.26	-5.64	-6.54	1.92
1467	1/20/01	12:20:00	-6.55	-5.63	-5.78	-12.5	-9.27	-5.66	-6.56	1.78
1468	1/20/01	12:30:00	-6.55	-5.63	-5.79	-12.5	-9.27	-5.67	-6.56	1.66

Tidal Study Data
January 10-25, 2001

1469	1/20/01	12:40:00	-6.52	-5.6	-5.77	-12.45	-9.25	-5.65	-6.55	1.54
1470	1/20/01	12:50:00	-6.57	-5.65	-5.82	-12.51	-9.3	-5.71	-6.56	1.34
1471	1/20/01	13:00:00	-6.53	-5.62	-5.79	-12.46	-9.25	-5.68	-6.56	1.23
1472	1/20/01	13:10:00	-6.52	-5.61	-5.8	-12.46	-9.26	-5.7	-6.56	1.07
1473	1/20/01	13:20:00	-6.53	-5.62	-5.81	-12.46	-9.28	-5.72	-6.56	0.89
1474	1/20/01	13:30:00	-6.53	-5.62	-5.81	-12.46	-9.28	-5.73	-6.58	0.71
1475	1/20/01	13:40:00	-6.54	-5.62	-5.83	-12.46	-9.28	-5.74	-6.6	0.52
1476	1/20/01	13:50:00	-6.56	-5.64	-5.84	-12.46	-9.3	-5.76	-6.6	0.33
1477	1/20/01	14:00:00	-6.51	-5.6	-5.81	-12.42	-9.27	-5.74	-6.56	0.16
1478	1/20/01	14:10:00	-6.56	-5.65	-5.86	-12.46	-9.31	-5.78	-6.6	-0.05
1479	1/20/01	14:20:00	-6.53	-5.61	-5.83	-12.42	-9.27	-5.76	-6.6	-0.21
1480	1/20/01	14:30:00	-6.53	-5.6	-5.84	-12.43	-9.26	-5.76	-6.59	-0.37
1481	1/20/01	14:40:00	-6.54	-5.61	-5.83	-12.42	-9.27	-5.76	-6.59	-0.53
1482	1/20/01	14:50:00	-6.56	-5.64	-5.87	-12.44	-9.29	-5.79	-6.62	-0.71
1483	1/20/01	15:00:00	-6.53	-5.61	-5.85	-12.41	-9.3	-5.77	-6.59	-0.84
1484	1/20/01	15:10:00	-6.54	-5.61	-5.85	-12.41	-9.3	-5.77	-6.59	-1
1485	1/20/01	15:20:00	-6.54	-5.61	-5.86	-12.41	-9.3	-5.79	-6.59	-1.19
1486	1/20/01	15:30:00	-6.54	-5.6	-5.86	-12.43	-9.3	-5.79	-6.61	-1.32
1487	1/20/01	15:40:00	-6.53	-5.59	-5.86	-12.45	-9.3	-5.79	-6.59	-1.46
1488	1/20/01	15:50:00	-6.55	-5.61	-5.88	-12.45	-9.3	-5.8	-6.64	-1.64
1489	1/20/01	16:00:00	-6.56	-5.6	-5.87	-12.43	-9.3	-5.8	-6.61	-1.78
1490	1/20/01	16:10:00	-6.55	-5.59	-5.87	-12.41	-9.3	-5.8	-6.61	-1.94
1491	1/20/01	16:20:00	-6.52	-5.56	-5.84	-12.4	-9.26	-5.78	-6.59	-2.09
1492	1/20/01	16:30:00	-6.53	-5.58	-5.86	-12.38	-9.28	-5.78	-6.59	-2.26
1493	1/20/01	16:40:00	-6.55	-5.58	-5.87	-12.39	-9.28	-5.79	-6.62	-2.41
1494	1/20/01	16:50:00	-6.56	-5.59	-5.88	-12.41	-9.3	-5.81	-6.64	-2.51
1495	1/20/01	17:00:00	-6.57	-5.59	-5.88	-12.41	-9.3	-5.81	-6.64	-2.65
1496	1/20/01	17:10:00	-6.56	-5.58	-5.87	-12.39	-9.28	-5.79	-6.64	-2.75
1497	1/20/01	17:20:00	-6.56	-5.58	-5.87	-12.39	-9.28	-5.8	-6.62	-2.87
1498	1/20/01	17:30:00	-6.58	-5.59	-5.88	-12.41	-9.3	-5.81	-6.64	-2.98
1499	1/20/01	17:40:00	-6.53	-5.56	-5.86	-12.37	-9.27	-5.78	-6.62	-3.06
1500	1/20/01	17:50:00	-6.57	-5.57	-5.87	-12.38	-9.31	-5.79	-6.64	-3.1
1501	1/20/01	18:00:00	-6.54	-5.54	-5.85	-12.33	-9.28	-5.76	-6.59	-3.06
1502	1/20/01	18:10:00	-6.55	-5.55	-5.85	-12.34	-9.27	-5.77	-6.62	-2.89
1503	1/20/01	18:20:00	-6.55	-5.54	-5.86	-12.33	-9.28	-5.74	-6.63	-2.62
1504	1/20/01	18:30:00	-6.54	-5.54	-5.84	-12.33	-9.25	-5.71	-6.61	-2.26
1505	1/20/01	18:40:00	-6.54	-5.53	-5.84	-12.34	-9.26	-5.7	-6.6	-1.92
1506	1/20/01	18:50:00	-6.53	-5.51	-5.83	-12.33	-9.25	-5.67	-6.61	-1.63
1507	1/20/01	19:00:00	-6.58	-5.56	-5.86	-12.38	-9.3	-5.69	-6.64	-1.36
1508	1/20/01	19:10:00	-6.54	-5.52	-5.81	-12.33	-9.25	-5.64	-6.59	-1.09
1509	1/20/01	19:20:00	-6.54	-5.52	-5.81	-12.3	-9.25	-5.64	-6.59	-0.91
1510	1/20/01	19:30:00	-6.53	-5.52	-5.8	-12.3	-9.25	-5.63	-6.59	-0.69
1511	1/20/01	19:40:00	-6.54	-5.53	-5.8	-12.28	-9.25	-5.61	-6.59	-0.47
1512	1/20/01	19:50:00	-6.53	-5.52	-5.8	-12.3	-9.25	-5.59	-6.58	-0.27
1513	1/20/01	20:00:00	-6.54	-5.53	-5.79	-12.28	-9.25	-5.59	-6.59	-0.11
1514	1/20/01	20:10:00	-6.51	-5.49	-5.75	-12.22	-9.21	-5.56	-6.55	0.1
1515	1/20/01	20:20:00	-6.51	-5.49	-5.75	-12.24	-9.21	-5.55	-6.55	0.25
1516	1/20/01	20:30:00	-6.51	-5.5	-5.74	-12.22	-9.21	-5.54	-6.55	0.4
1517	1/20/01	20:40:00	-6.52	-5.5	-5.74	-12.21	-9.21	-5.55	-6.55	0.54
1518	1/20/01	20:50:00	-6.52	-5.5	-5.73	-12.21	-9.21	-5.54	-6.54	0.7
1519	1/20/01	21:00:00	-6.51	-5.49	-5.72	-12.21	-9.21	-5.52	-6.52	0.87
1520	1/20/01	21:10:00	-6.51	-5.49	-5.71	-12.21	-9.21	-5.51	-6.52	1.04

Tidal Study Data
January 10-25, 2001

1521	1/20/01	21:20:00	-6.51	-5.49	-5.71	-12.19	-9.17	-5.5	-6.52	1.19
1522	1/20/01	21:30:00	-6.49	-5.48	-5.68	-12.18	-9.16	-5.47	-6.49	1.36
1523	1/20/01	21:40:00	-6.48	-5.47	-5.68	-12.16	-9.14	-5.45	-6.47	1.5
1524	1/20/01	21:50:00	-6.48	-5.46	-5.67	-12.17	-9.13	-5.43	-6.46	1.62
1525	1/20/01	22:00:00	-6.47	-5.46	-5.65	-12.17	-9.13	-5.43	-6.46	1.75
1526	1/20/01	22:10:00	-6.46	-5.45	-5.64	-12.17	-9.13	-5.42	-6.46	1.85
1527	1/20/01	22:20:00	-6.47	-5.46	-5.64	-12.17	-9.13	-5.42	-6.46	1.94
1528	1/20/01	22:30:00	-6.47	-5.46	-5.63	-12.17	-9.12	-5.41	-6.46	2.03
1529	1/20/01	22:40:00	-6.47	-5.44	-5.63	-12.2	-9.1	-5.42	-6.43	2.11
1530	1/20/01	22:50:00	-6.46	-5.44	-5.61	-12.2	-9.1	-5.4	-6.45	2.19
1531	1/20/01	23:00:00	-6.46	-5.46	-5.62	-12.22	-9.12	-5.41	-6.45	2.24
1532	1/20/01	23:10:00	-6.46	-5.46	-5.61	-12.2	-9.1	-5.41	-6.43	2.31
1533	1/20/01	23:20:00	-6.46	-5.45	-5.61	-12.22	-9.1	-5.4	-6.42	2.36
1534	1/20/01	23:30:00	-6.46	-5.43	-5.6	-12.23	-9.11	-5.4	-6.43	2.4
1535	1/20/01	23:40:00	-6.45	-5.43	-5.59	-12.23	-9.1	-5.39	-6.42	2.42
1536	1/20/01	23:50:00	-6.44	-5.44	-5.6	-12.26	-9.11	-5.42	-6.43	2.41
1537	1/21/01	0:00:00	-6.46	-5.46	-5.62	-12.29	-9.14	-5.46	-6.46	2.34
1538	1/21/01	0:10:00	-6.46	-5.45	-5.62	-12.29	-9.14	-5.47	-6.46	2.27
1539	1/21/01	0:20:00	-6.46	-5.46	-5.62	-12.29	-9.14	-5.49	-6.46	2.15
1540	1/21/01	0:30:00	-6.46	-5.46	-5.62	-12.31	-9.16	-5.51	-6.46	2.02
1541	1/21/01	0:40:00	-6.46	-5.45	-5.62	-12.3	-9.16	-5.51	-6.45	1.88
1542	1/21/01	0:50:00	-6.47	-5.46	-5.64	-12.31	-9.17	-5.55	-6.46	1.73
1543	1/21/01	1:00:00	-6.47	-5.47	-5.64	-12.31	-9.19	-5.56	-6.46	1.6
1544	1/21/01	1:10:00	-6.46	-5.47	-5.65	-12.32	-9.21	-5.58	-6.46	1.45
1545	1/21/01	1:20:00	-6.46	-5.46	-5.65	-12.32	-9.21	-5.58	-6.47	1.3
1546	1/21/01	1:30:00	-6.46	-5.46	-5.65	-12.32	-9.21	-5.59	-6.49	1.14
1547	1/21/01	1:40:00	-6.44	-5.45	-5.65	-12.32	-9.21	-5.6	-6.5	0.98
1548	1/21/01	1:50:00	-6.45	-5.45	-5.66	-12.32	-9.21	-5.61	-6.49	0.81
1549	1/21/01	2:00:00	-6.46	-5.46	-5.68	-12.36	-9.23	-5.63	-6.51	0.63
1550	1/21/01	2:10:00	-6.48	-5.48	-5.7	-12.36	-9.25	-5.67	-6.53	0.42
1551	1/21/01	2:20:00	-6.48	-5.49	-5.71	-12.36	-9.25	-5.67	-6.53	0.26
1552	1/21/01	2:30:00	-6.48	-5.48	-5.7	-12.4	-9.25	-5.67	-6.54	0.1
1553	1/21/01	2:40:00	-6.48	-5.47	-5.7	-12.4	-9.25	-5.67	-6.54	-0.06
1554	1/21/01	2:50:00	-6.48	-5.47	-5.7	-12.38	-9.25	-5.68	-6.54	-0.22
1555	1/21/01	3:00:00	-6.48	-5.46	-5.7	-12.4	-9.25	-5.67	-6.53	-0.37
1556	1/21/01	3:10:00	-6.48	-5.47	-5.71	-12.4	-9.25	-5.68	-6.54	-0.52
1557	1/21/01	3:20:00	-6.48	-5.48	-5.71	-12.4	-9.25	-5.68	-6.54	-0.69
1558	1/21/01	3:30:00	-6.48	-5.47	-5.7	-12.4	-9.25	-5.68	-6.54	-0.83
1559	1/21/01	3:40:00	-6.48	-5.47	-5.72	-12.4	-9.25	-5.69	-6.54	-0.99
1560	1/21/01	3:50:00	-6.48	-5.47	-5.71	-12.4	-9.25	-5.7	-6.54	-1.12
1561	1/21/01	4:00:00	-6.48	-5.48	-5.72	-12.4	-9.25	-5.69	-6.54	-1.27
1562	1/21/01	4:10:00	-6.48	-5.48	-5.71	-12.41	-9.25	-5.7	-6.54	-1.41
1563	1/21/01	4:20:00	-6.48	-5.47	-5.72	-12.41	-9.25	-5.7	-6.54	-1.55
1564	1/21/01	4:30:00	-6.48	-5.47	-5.71	-12.43	-9.25	-5.7	-6.54	-1.69
1565	1/21/01	4:40:00	-6.47	-5.45	-5.71	-12.41	-9.25	-5.69	-6.54	-1.82
1566	1/21/01	4:50:00	-6.52	-5.5	-5.75	-12.46	-9.3	-5.74	-6.59	-2
1567	1/21/01	5:00:00	-6.51	-5.48	-5.74	-12.48	-9.3	-5.74	-6.59	-2.12
1568	1/21/01	5:10:00	-6.52	-5.49	-5.74	-12.47	-9.31	-5.73	-6.6	-2.27
1569	1/21/01	5:20:00	-6.54	-5.5	-5.78	-12.51	-9.33	-5.76	-6.6	-2.36
1570	1/21/01	5:30:00	-6.53	-5.5	-5.76	-12.51	-9.33	-5.74	-6.6	-2.43
1571	1/21/01	5:40:00	-6.53	-5.5	-5.75	-12.52	-9.32	-5.73	-6.61	-2.5
1572	1/21/01	5:50:00	-6.56	-5.52	-5.79	-12.56	-9.36	-5.76	-6.65	-2.56

Tidal Study Data
January 10-25, 2001

1573	1/21/01	6:00:00	-6.55	-5.52	-5.77	-12.56	-9.35	-5.74	-6.65	-2.56
1574	1/21/01	6:10:00	-6.54	-5.49	-5.76	-12.56	-9.33	-5.73	-6.65	-2.6
1575	1/21/01	6:20:00	-6.56	-5.51	-5.77	-12.59	-9.36	-5.74	-6.64	-2.62
1576	1/21/01	6:30:00	-6.55	-5.5	-5.76	-12.59	-9.36	-5.73	-6.64	-2.62
1577	1/21/01	6:40:00	-6.54	-5.49	-5.74	-12.59	-9.34	-5.72	-6.63	-2.57
1578	1/21/01	6:50:00	-6.58	-5.52	-5.79	-12.66	-9.38	-5.76	-6.66	-2.6
1579	1/21/01	7:00:00	-6.57	-5.51	-5.78	-12.64	-9.38	-5.73	-6.64	-2.46
1580	1/21/01	7:10:00	-6.56	-5.5	-5.76	-12.64	-9.38	-5.71	-6.64	-2.24
1581	1/21/01	7:20:00	-6.56	-5.5	-5.76	-12.65	-9.39	-5.69	-6.65	-2
1582	1/21/01	7:30:00	-6.58	-5.52	-5.78	-12.69	-9.4	-5.72	-6.69	-1.78
1583	1/21/01	7:40:00	-6.58	-5.51	-5.77	-12.68	-9.4	-5.69	-6.66	-1.55
1584	1/21/01	7:50:00	-6.57	-5.5	-5.75	-12.68	-9.4	-5.66	-6.66	-1.31
1585	1/21/01	8:00:00	-6.57	-5.5	-5.75	-12.69	-9.37	-5.65	-6.65	-1.08
1586	1/21/01	8:10:00	-6.59	-5.51	-5.76	-12.71	-9.39	-5.64	-6.64	-0.86
1587	1/21/01	8:20:00	-6.58	-5.5	-5.74	-12.71	-9.39	-5.64	-6.64	-0.65
1588	1/21/01	8:30:00	-6.57	-5.5	-5.73	-12.71	-9.36	-5.62	-6.64	-0.46
1589	1/21/01	8:40:00	-6.56	-5.49	-5.71	-12.71	-9.36	-5.6	-6.62	-0.28
1590	1/21/01	8:50:00	-6.55	-5.47	-5.7	-12.71	-9.36	-5.58	-6.61	-0.12
1591	1/21/01	9:00:00	-6.57	-5.49	-5.71	-12.74	-9.39	-5.6	-6.64	-0.01
1592	1/21/01	9:10:00	-6.58	-5.5	-5.71	-12.72	-9.39	-5.61	-6.63	0.1
1593	1/21/01	9:20:00	-6.58	-5.5	-5.71	-12.72	-9.38	-5.6	-6.63	0.25
1594	1/21/01	9:30:00	-6.57	-5.49	-5.7	-12.72	-9.38	-5.58	-6.61	0.4
1595	1/21/01	9:40:00	-6.56	-5.49	-5.69	-12.72	-9.38	-5.56	-6.61	0.54
1596	1/21/01	9:50:00	-6.55	-5.47	-5.66	-12.72	-9.33	-5.54	-6.59	0.71
1597	1/21/01	10:00:00	-6.53	-5.47	-5.66	-12.72	-9.33	-5.53	-6.56	0.85
1598	1/21/01	10:10:00	-6.54	-5.46	-5.65	-12.71	-9.33	-5.52	-6.56	0.97
1599	1/21/01	10:20:00	-6.57	-5.5	-5.68	-12.77	-9.38	-5.54	-6.61	1.07
1600	1/21/01	10:30:00	-6.56	-5.49	-5.67	-12.77	-9.36	-5.53	-6.61	1.16
1601	1/21/01	10:40:00	-6.55	-5.48	-5.65	-12.76	-9.35	-5.52	-6.58	1.26
1602	1/21/01	10:50:00	-6.55	-5.48	-5.65	-12.77	-9.35	-5.52	-6.58	1.34
1603	1/21/01	11:00:00	-6.55	-5.49	-5.66	-12.77	-9.35	-5.53	-6.58	1.4
1604	1/21/01	11:10:00	-6.54	-5.47	-5.63	-12.77	-9.35	-5.52	-6.58	1.45
1605	1/21/01	11:20:00	-6.54	-5.47	-5.62	-12.77	-9.33	-5.51	-6.56	1.44
1606	1/21/01	11:30:00	-6.53	-5.47	-5.62	-12.77	-9.35	-5.54	-6.58	1.4
1607	1/21/01	11:40:00	-6.53	-5.47	-5.62	-12.77	-9.35	-5.55	-6.58	1.35
1608	1/21/01	11:50:00	-6.53	-5.47	-5.63	-12.77	-9.35	-5.57	-6.56	1.29
1609	1/21/01	12:00:00	-6.53	-5.47	-5.63	-12.77	-9.35	-5.58	-6.58	1.21
1610	1/21/01	12:10:00	-6.52	-5.46	-5.63	-12.77	-9.35	-5.58	-6.56	1.13
1611	1/21/01	12:20:00	-6.52	-5.47	-5.63	-12.79	-9.35	-5.59	-6.54	1.04
1612	1/21/01	12:30:00	-6.52	-5.48	-5.63	-12.81	-9.35	-5.6	-6.58	0.94
1613	1/21/01	12:40:00	-6.52	-5.48	-5.64	-12.81	-9.38	-5.61	-6.58	0.83
1614	1/21/01	12:50:00	-6.52	-5.48	-5.64	-12.81	-9.36	-5.63	-6.58	0.72
1615	1/21/01	13:00:00	-6.51	-5.49	-5.65	-12.81	-9.38	-5.63	-6.58	0.6
1616	1/21/01	13:10:00	-6.52	-5.49	-5.66	-12.81	-9.38	-5.64	-6.58	0.45
1617	1/21/01	13:20:00	-6.53	-5.49	-5.66	-12.81	-9.38	-5.66	-6.58	0.32
1618	1/21/01	13:30:00	-6.53	-5.49	-5.66	-12.81	-9.38	-5.66	-6.58	0.2
1619	1/21/01	13:40:00	-6.52	-5.5	-5.67	-12.81	-9.38	-5.66	-6.58	0.05
1620	1/21/01	13:50:00	-6.52	-5.49	-5.67	-12.81	-9.38	-5.68	-6.58	-0.1
1621	1/21/01	14:00:00	-6.52	-5.49	-5.66	-12.82	-9.38	-5.68	-6.58	-0.25
1622	1/21/01	14:10:00	-6.53	-5.51	-5.68	-12.85	-9.41	-5.7	-6.61	-0.41
1623	1/21/01	14:20:00	-6.52	-5.49	-5.66	-12.83	-9.39	-5.69	-6.59	-0.55
1624	1/21/01	14:30:00	-6.54	-5.51	-5.69	-12.85	-9.41	-5.72	-6.61	-0.72

Tidal Study Data
January 10-25, 2001

1625	1/21/01	14:40:00	-6.54	-5.51	-5.69	-12.85	-9.41	-5.72	-6.61	-0.87
1626	1/21/01	14:50:00	-6.54	-5.51	-5.69	-12.85	-9.41	-5.73	-6.61	-1.04
1627	1/21/01	15:00:00	-6.53	-5.51	-5.69	-12.85	-9.41	-5.73	-6.61	-1.2
1628	1/21/01	15:10:00	-6.54	-5.52	-5.69	-12.85	-9.41	-5.73	-6.61	-1.38
1629	1/21/01	15:20:00	-6.53	-5.5	-5.69	-12.85	-9.41	-5.74	-6.61	-1.52
1630	1/21/01	15:30:00	-6.54	-5.51	-5.69	-12.85	-9.41	-5.73	-6.61	-1.68
1631	1/21/01	15:40:00	-6.53	-5.5	-5.68	-12.85	-9.41	-5.73	-6.61	-1.85
1632	1/21/01	15:50:00	-6.53	-5.5	-5.69	-12.85	-9.41	-5.74	-6.61	-2.02
1633	1/21/01	16:00:00	-6.53	-5.51	-5.68	-12.84	-9.41	-5.74	-6.61	-2.17
1634	1/21/01	16:10:00	-6.52	-5.5	-5.69	-12.84	-9.41	-5.73	-6.61	-2.32
1635	1/21/01	16:20:00	-6.57	-5.54	-5.72	-12.89	-9.46	-5.79	-6.66	-2.53
1636	1/21/01	16:30:00	-6.56	-5.54	-5.72	-12.89	-9.43	-5.77	-6.66	-2.67
1637	1/21/01	16:40:00	-6.56	-5.53	-5.72	-12.89	-9.43	-5.77	-6.66	-2.81
1638	1/21/01	16:50:00	-6.56	-5.53	-5.71	-12.89	-9.43	-5.76	-6.66	-2.95
1639	1/21/01	17:00:00	-6.55	-5.52	-5.7	-12.89	-9.43	-5.76	-6.66	-3.03
1640	1/21/01	17:10:00	-6.57	-5.54	-5.72	-12.87	-9.45	-5.77	-6.68	-3.25
1641	1/21/01	17:20:00	-6.57	-5.54	-5.73	-12.9	-9.46	-5.78	-6.67	-3.34
1642	1/21/01	17:30:00	-6.59	-5.57	-5.74	-12.92	-9.48	-5.8	-6.67	-3.54
1643	1/21/01	17:40:00	-6.59	-5.55	-5.74	-12.9	-9.44	-5.8	-6.69	-3.65
1644	1/21/01	17:50:00	-6.58	-5.56	-5.74	-12.9	-9.46	-5.79	-6.69	-3.66
1645	1/21/01	18:00:00	-6.58	-5.55	-5.74	-12.9	-9.44	-5.78	-6.69	-3.71
1646	1/21/01	18:10:00	-6.58	-5.54	-5.73	-12.9	-9.44	-5.79	-6.66	-3.77
1647	1/21/01	18:20:00	-6.62	-5.59	-5.77	-12.94	-9.49	-5.83	-6.71	-3.84
1648	1/21/01	18:30:00	-6.62	-5.59	-5.77	-12.94	-9.49	-5.81	-6.71	-3.79
1649	1/21/01	18:40:00	-6.62	-5.58	-5.76	-12.92	-9.49	-5.81	-6.71	-3.71
1650	1/21/01	18:50:00	-6.61	-5.58	-5.75	-12.92	-9.49	-5.8	-6.71	-3.57
1651	1/21/01	19:00:00	-6.61	-5.58	-5.75	-12.92	-9.49	-5.79	-6.71	-3.45
1652	1/21/01	19:10:00	-6.6	-5.58	-5.74	-12.92	-9.49	-5.79	-6.68	-3.3
1653	1/21/01	19:20:00	-6.61	-5.57	-5.74	-12.92	-9.49	-5.78	-6.69	-3.16
1654	1/21/01	19:30:00	-6.59	-5.58	-5.73	-12.89	-9.48	-5.78	-6.69	-3
1655	1/21/01	19:40:00	-6.59	-5.56	-5.73	-12.89	-9.46	-5.75	-6.68	-2.81
1656	1/21/01	19:50:00	-6.59	-5.57	-5.73	-12.9	-9.47	-5.75	-6.69	-2.61
1657	1/21/01	20:00:00	-6.61	-5.59	-5.75	-12.92	-9.49	-5.75	-6.71	-2.39
1658	1/21/01	20:10:00	-6.61	-5.59	-5.74	-12.9	-9.49	-5.75	-6.71	-2.17
1659	1/21/01	20:20:00	-6.61	-5.58	-5.73	-12.9	-9.49	-5.73	-6.71	-1.94
1660	1/21/01	20:30:00	-6.6	-5.57	-5.73	-12.9	-9.49	-5.72	-6.71	-1.72
1661	1/21/01	20:40:00	-6.6	-5.58	-5.73	-12.9	-9.49	-5.7	-6.71	-1.5
1662	1/21/01	20:50:00	-6.59	-5.56	-5.72	-12.88	-9.47	-5.69	-6.66	-1.27
1663	1/21/01	21:00:00	-6.59	-5.55	-5.71	-12.87	-9.46	-5.67	-6.66	-1.06
1664	1/21/01	21:10:00	-6.58	-5.56	-5.7	-12.87	-9.46	-5.67	-6.66	-0.85
1665	1/21/01	21:20:00	-6.59	-5.55	-5.69	-12.85	-9.46	-5.65	-6.66	-0.63
1666	1/21/01	21:30:00	-6.58	-5.55	-5.68	-12.84	-9.44	-5.64	-6.64	-0.42
1667	1/21/01	21:40:00	-6.57	-5.55	-5.67	-12.84	-9.44	-5.62	-6.62	-0.21
1668	1/21/01	21:50:00	-6.59	-5.56	-5.67	-12.86	-9.44	-5.62	-6.64	-0.03
1669	1/21/01	22:00:00	-6.61	-5.59	-5.7	-12.89	-9.47	-5.64	-6.67	0.13
1670	1/21/01	22:10:00	-6.61	-5.58	-5.69	-12.89	-9.46	-5.63	-6.67	0.31
1671	1/21/01	22:20:00	-6.6	-5.57	-5.68	-12.89	-9.44	-5.61	-6.67	0.49
1672	1/21/01	22:30:00	-6.59	-5.57	-5.67	-12.89	-9.44	-5.6	-6.66	0.64
1673	1/21/01	22:40:00	-6.58	-5.56	-5.66	-12.89	-9.44	-5.59	-6.62	0.78
1674	1/21/01	22:50:00	-6.58	-5.56	-5.66	-12.89	-9.44	-5.59	-6.62	0.92
1675	1/21/01	23:00:00	-6.57	-5.56	-5.64	-12.89	-9.39	-5.58	-6.61	1.02
1676	1/21/01	23:10:00	-6.56	-5.56	-5.64	-12.89	-9.39	-5.58	-6.61	1.1

Tidal Study Data
January 10-25, 2001

1677	1/21/01	23:20:00	-6.56	-5.54	-5.63	-12.89	-9.39	-5.58	-6.59	1.17
1678	1/21/01	23:30:00	-6.56	-5.55	-5.62	-12.89	-9.39	-5.57	-6.59	1.22
1679	1/21/01	23:40:00	-6.55	-5.54	-5.62	-12.89	-9.39	-5.57	-6.59	1.24
1680	1/21/01	23:50:00	-6.56	-5.56	-5.63	-12.91	-9.41	-5.62	-6.61	1.19
1681	1/22/01	0:00:00	-6.54	-5.55	-5.62	-12.89	-9.39	-5.61	-6.59	1.14
1682	1/22/01	0:10:00	-6.57	-5.57	-5.64	-12.92	-9.42	-5.66	-6.62	1.01
1683	1/22/01	0:20:00	-6.56	-5.58	-5.64	-12.91	-9.43	-5.66	-6.61	0.87
1684	1/22/01	0:30:00	-6.56	-5.57	-5.64	-12.91	-9.43	-5.68	-6.61	0.73
1685	1/22/01	0:40:00	-6.59	-5.6	-5.68	-12.94	-9.49	-5.73	-6.64	0.53
1686	1/22/01	0:50:00	-6.57	-5.59	-5.66	-12.92	-9.47	-5.71	-6.62	0.38
1687	1/22/01	1:00:00	-6.58	-5.61	-5.68	-12.94	-9.49	-5.75	-6.64	0.17
1688	1/22/01	1:10:00	-6.58	-5.6	-5.69	-12.94	-9.49	-5.76	-6.64	-0.01
1689	1/22/01	1:20:00	-6.59	-5.61	-5.69	-12.94	-9.49	-5.77	-6.64	-0.18
1690	1/22/01	1:30:00	-6.58	-5.61	-5.7	-12.94	-9.49	-5.78	-6.64	-0.35
1691	1/22/01	1:40:00	-6.59	-5.61	-5.7	-12.94	-9.49	-5.79	-6.67	-0.51
1692	1/22/01	1:50:00	-6.59	-5.62	-5.71	-12.94	-9.49	-5.8	-6.66	-0.67
1693	1/22/01	2:00:00	-6.58	-5.61	-5.71	-12.94	-9.49	-5.8	-6.66	-0.82
1694	1/22/01	2:10:00	-6.58	-5.61	-5.71	-12.94	-9.49	-5.8	-6.67	-0.94
1695	1/22/01	2:20:00	-6.59	-5.61	-5.72	-12.94	-9.49	-5.8	-6.67	-1.07
1696	1/22/01	2:30:00	-6.57	-5.61	-5.71	-12.94	-9.49	-5.8	-6.67	-1.21
1697	1/22/01	2:40:00	-6.58	-5.61	-5.71	-12.94	-9.49	-5.81	-6.67	-1.36
1698	1/22/01	2:50:00	-6.6	-5.63	-5.73	-12.96	-9.51	-5.83	-6.69	-1.53
1699	1/22/01	3:00:00	-6.58	-5.61	-5.73	-12.94	-9.49	-5.82	-6.67	-1.65
1700	1/22/01	3:10:00	-6.58	-5.61	-5.72	-12.94	-9.49	-5.81	-6.69	-1.8
1701	1/22/01	3:20:00	-6.61	-5.65	-5.76	-12.97	-9.52	-5.85	-6.7	-1.98
1702	1/22/01	3:30:00	-6.61	-5.64	-5.75	-12.97	-9.52	-5.85	-6.7	-2.13
1703	1/22/01	3:40:00	-6.61	-5.64	-5.76	-12.97	-9.52	-5.85	-6.7	-2.27
1704	1/22/01	3:50:00	-6.6	-5.64	-5.75	-12.97	-9.52	-5.85	-6.7	-2.41
1705	1/22/01	4:00:00	-6.59	-5.64	-5.75	-12.95	-9.52	-5.85	-6.7	-2.55
1706	1/22/01	4:10:00	-6.6	-5.64	-5.75	-12.95	-9.5	-5.84	-6.7	-2.71
1707	1/22/01	4:20:00	-6.59	-5.62	-5.75	-12.95	-9.52	-5.84	-6.7	-2.84
1708	1/22/01	4:30:00	-6.62	-5.65	-5.77	-12.97	-9.51	-5.86	-6.72	-3.01
1709	1/22/01	4:40:00	-6.62	-5.65	-5.76	-12.97	-9.52	-5.86	-6.72	-3.14
1710	1/22/01	4:50:00	-6.61	-5.64	-5.76	-12.97	-9.51	-5.86	-6.72	-3.34
1711	1/22/01	5:00:00	-6.61	-5.65	-5.76	-12.97	-9.51	-5.86	-6.72	-3.45
1712	1/22/01	5:10:00	-6.61	-5.65	-5.76	-12.97	-9.49	-5.85	-6.72	-3.61
1713	1/22/01	5:20:00	-6.64	-5.67	-5.79	-13	-9.54	-5.89	-6.75	-3.74
1714	1/22/01	5:30:00	-6.63	-5.66	-5.78	-13	-9.52	-5.88	-6.74	-3.85
1715	1/22/01	5:40:00	-6.63	-5.67	-5.79	-13	-9.52	-5.88	-6.74	-4.04
1716	1/22/01	5:50:00	-6.63	-5.67	-5.79	-12.98	-9.52	-5.88	-6.74	-4.16
1717	1/22/01	6:00:00	-6.63	-5.67	-5.79	-12.98	-9.52	-5.88	-6.74	-4.21
1718	1/22/01	6:10:00	-6.62	-5.67	-5.78	-12.98	-9.52	-5.89	-6.72	-4.37
1719	1/22/01	6:20:00	-6.63	-5.66	-5.79	-12.98	-9.52	-5.88	-6.74	-4.47
1720	1/22/01	6:30:00	-6.63	-5.67	-5.79	-12.98	-9.52	-5.87	-6.74	-4.56
1721	1/22/01	6:40:00	-6.63	-5.66	-5.77	-12.98	-9.52	-5.87	-6.74	-4.63
1722	1/22/01	6:50:00	-6.62	-5.66	-5.78	-12.95	-9.52	-5.87	-6.72	-4.68
1723	1/22/01	7:00:00	-6.61	-5.65	-5.77	-12.95	-9.52	-5.87	-6.72	-4.65
1724	1/22/01	7:10:00	-6.62	-5.65	-5.77	-12.95	-9.51	-5.87	-6.72	-4.52
1725	1/22/01	7:20:00	-6.61	-5.66	-5.77	-12.95	-9.52	-5.86	-6.72	-4.25
1726	1/22/01	7:30:00	-6.62	-5.67	-5.79	-12.97	-9.53	-5.88	-6.74	-3.89
1727	1/22/01	7:40:00	-6.64	-5.68	-5.78	-12.96	-9.54	-5.87	-6.75	-3.5
1728	1/22/01	7:50:00	-6.65	-5.7	-5.8	-13	-9.54	-5.88	-6.77	-3.18

Tidal Study Data
January 10-25, 2001

1729	1/22/01	8:00:00	-6.65	-5.7	-5.8	-13	-9.54	-5.88	-6.77	-2.86
1730	1/22/01	8:10:00	-6.63	-5.67	-5.77	-12.96	-9.52	-5.84	-6.75	-2.52
1731	1/22/01	8:20:00	-6.65	-5.69	-5.79	-12.98	-9.54	-5.83	-6.77	-2.26
1732	1/22/01	8:30:00	-6.65	-5.69	-5.78	-12.98	-9.54	-5.81	-6.77	-1.99
1733	1/22/01	8:40:00	-6.63	-5.66	-5.75	-12.95	-9.52	-5.77	-6.72	-1.71
1734	1/22/01	8:50:00	-6.64	-5.67	-5.76	-12.97	-9.52	-5.79	-6.74	-1.47
1735	1/22/01	9:00:00	-6.64	-5.66	-5.75	-12.97	-9.51	-5.77	-6.72	-1.24
1736	1/22/01	9:10:00	-6.63	-5.66	-5.75	-12.95	-9.51	-5.76	-6.72	-1.05
1737	1/22/01	9:20:00	-6.63	-5.66	-5.74	-12.95	-9.51	-5.74	-6.72	-0.85
1738	1/22/01	9:30:00	-6.62	-5.66	-5.73	-12.92	-9.49	-5.74	-6.71	-0.66
1739	1/22/01	9:40:00	-6.62	-5.64	-5.73	-12.92	-9.47	-5.73	-6.69	-0.45
1740	1/22/01	9:50:00	-6.61	-5.65	-5.72	-12.92	-9.47	-5.71	-6.71	-0.25
1741	1/22/01	10:00:00	-6.61	-5.64	-5.71	-12.92	-9.47	-5.7	-6.67	-0.05
1742	1/22/01	10:10:00	-6.61	-5.64	-5.69	-12.9	-9.47	-5.69	-6.67	0.14
1743	1/22/01	10:20:00	-6.6	-5.64	-5.69	-12.92	-9.47	-5.68	-6.67	0.33
1744	1/22/01	10:30:00	-6.6	-5.63	-5.69	-12.9	-9.46	-5.67	-6.67	0.51
1745	1/22/01	10:40:00	-6.59	-5.64	-5.68	-12.9	-9.46	-5.66	-6.67	0.65
1746	1/22/01	10:50:00	-6.6	-5.64	-5.67	-12.9	-9.46	-5.66	-6.66	0.79
1747	1/22/01	11:00:00	-6.6	-5.64	-5.67	-12.9	-9.44	-5.65	-6.67	0.91
1748	1/22/01	11:10:00	-6.6	-5.63	-5.67	-12.9	-9.44	-5.65	-6.64	1.02
1749	1/22/01	11:20:00	-6.59	-5.64	-5.66	-12.92	-9.44	-5.65	-6.64	1.12
1750	1/22/01	11:30:00	-6.59	-5.64	-5.66	-12.9	-9.44	-5.64	-6.64	1.22
1751	1/22/01	11:40:00	-6.56	-5.62	-5.63	-12.87	-9.41	-5.62	-6.61	1.34
1752	1/22/01	11:50:00	-6.55	-5.6	-5.61	-12.85	-9.39	-5.6	-6.59	1.42
1753	1/22/01	12:00:00	-6.55	-5.6	-5.61	-12.85	-9.39	-5.59	-6.59	1.5
1754	1/22/01	12:10:00	-6.54	-5.59	-5.61	-12.85	-9.37	-5.59	-6.59	1.56
1755	1/22/01	12:20:00	-6.54	-5.6	-5.61	-12.85	-9.39	-5.59	-6.59	1.6
1756	1/22/01	12:30:00	-6.54	-5.61	-5.61	-12.85	-9.39	-5.61	-6.59	1.64
1757	1/22/01	12:40:00	-6.55	-5.61	-5.61	-12.85	-9.39	-5.61	-6.59	1.64
1758	1/22/01	12:50:00	-6.54	-5.62	-5.61	-12.85	-9.39	-5.63	-6.59	1.61
1759	1/22/01	13:00:00	-6.55	-5.61	-5.61	-12.87	-9.39	-5.65	-6.59	1.53
1760	1/22/01	13:10:00	-6.55	-5.62	-5.62	-12.87	-9.39	-5.67	-6.57	1.41
1761	1/22/01	13:20:00	-6.53	-5.63	-5.63	-12.85	-9.42	-5.7	-6.59	1.27
1762	1/22/01	13:30:00	-6.52	-5.62	-5.62	-12.83	-9.4	-5.7	-6.57	1.13
1763	1/22/01	13:40:00	-6.52	-5.62	-5.63	-12.83	-9.4	-5.72	-6.59	0.95
1764	1/22/01	13:50:00	-6.52	-5.61	-5.64	-12.84	-9.39	-5.72	-6.59	0.8
1765	1/22/01	14:00:00	-6.52	-5.62	-5.65	-12.82	-9.39	-5.74	-6.59	0.61
1766	1/22/01	14:10:00	-6.53	-5.63	-5.65	-12.82	-9.43	-5.75	-6.59	0.43
1767	1/22/01	14:20:00	-6.53	-5.64	-5.67	-12.85	-9.44	-5.78	-6.6	0.23
1768	1/22/01	14:30:00	-6.53	-5.64	-5.67	-12.83	-9.44	-5.8	-6.6	0.05
1769	1/22/01	14:40:00	-6.54	-5.65	-5.69	-12.83	-9.44	-5.8	-6.62	-0.13
1770	1/22/01	14:50:00	-6.54	-5.64	-5.68	-12.83	-9.44	-5.81	-6.6	-0.3
1771	1/22/01	15:00:00	-6.56	-5.65	-5.72	-12.85	-9.46	-5.83	-6.64	-0.48
1772	1/22/01	15:10:00	-6.54	-5.65	-5.69	-12.81	-9.44	-5.82	-6.62	-0.62
1773	1/22/01	15:20:00	-6.54	-5.65	-5.7	-12.83	-9.45	-5.82	-6.65	-0.78
1774	1/22/01	15:30:00	-6.56	-5.68	-5.74	-12.85	-9.47	-5.86	-6.67	-0.95
1775	1/22/01	15:40:00	-6.54	-5.65	-5.7	-12.82	-9.46	-5.83	-6.64	-1.08
1776	1/22/01	15:50:00	-6.56	-5.66	-5.72	-12.83	-9.47	-5.85	-6.65	-1.24
1777	1/22/01	16:00:00	-6.54	-5.66	-5.71	-12.8	-9.46	-5.84	-6.64	-1.39
1778	1/22/01	16:10:00	-6.53	-5.64	-5.7	-12.78	-9.44	-5.83	-6.64	-1.53
1779	1/22/01	16:20:00	-6.54	-5.65	-5.7	-12.78	-9.44	-5.84	-6.64	-1.69
1780	1/22/01	16:30:00	-6.54	-5.66	-5.71	-12.78	-9.44	-5.84	-6.65	-1.85

Tidal Study Data
January 10-25, 2001

1781	1/22/01	16:40:00	-6.54	-5.66	-5.72	-12.78	-9.44	-5.85	-6.65	-2.01
1782	1/22/01	16:50:00	-6.54	-5.66	-5.72	-12.78	-9.44	-5.85	-6.67	-2.18
1783	1/22/01	17:00:00	-6.55	-5.66	-5.73	-12.78	-9.44	-5.86	-6.67	-2.34
1784	1/22/01	17:10:00	-6.54	-5.67	-5.73	-12.78	-9.44	-5.86	-6.67	-2.49
1785	1/22/01	17:20:00	-6.54	-5.66	-5.72	-12.78	-9.44	-5.85	-6.67	-2.64
1786	1/22/01	17:30:00	-6.54	-5.65	-5.72	-12.78	-9.44	-5.85	-6.67	-2.79
1787	1/22/01	17:40:00	-6.57	-5.69	-5.75	-12.81	-9.47	-5.88	-6.7	-3.03
1788	1/22/01	17:50:00	-6.57	-5.68	-5.75	-12.81	-9.47	-5.88	-6.7	-3.16
1789	1/22/01	18:00:00	-6.59	-5.7	-5.78	-12.83	-9.49	-5.9	-6.72	-3.33
1790	1/22/01	18:10:00	-6.59	-5.71	-5.77	-12.83	-9.49	-5.89	-6.72	-3.46
1791	1/22/01	18:20:00	-6.59	-5.7	-5.77	-12.83	-9.49	-5.89	-6.72	-3.62
1792	1/22/01	18:30:00	-6.58	-5.69	-5.77	-12.83	-9.49	-5.89	-6.72	-3.74
1793	1/22/01	18:40:00	-6.59	-5.69	-5.77	-12.83	-9.49	-5.89	-6.72	-3.87
1794	1/22/01	18:50:00	-6.59	-5.7	-5.77	-12.8	-9.49	-5.9	-6.72	-3.98
1795	1/22/01	19:00:00	-6.59	-5.7	-5.78	-12.8	-9.49	-5.89	-6.72	-4.06
1796	1/22/01	19:10:00	-6.6	-5.71	-5.78	-12.8	-9.49	-5.9	-6.72	-4.11
1797	1/22/01	19:20:00	-6.6	-5.7	-5.79	-12.79	-9.49	-5.9	-6.72	-4.16
1798	1/22/01	19:30:00	-6.58	-5.69	-5.76	-12.77	-9.47	-5.87	-6.7	-4.1
1799	1/22/01	19:40:00	-6.58	-5.68	-5.76	-12.77	-9.47	-5.87	-6.7	-3.97
1800	1/22/01	19:50:00	-6.59	-5.7	-5.77	-12.79	-9.49	-5.88	-6.72	-3.68
1801	1/22/01	20:00:00	-6.6	-5.69	-5.77	-12.77	-9.49	-5.87	-6.72	-3.37
1802	1/22/01	20:10:00	-6.6	-5.7	-5.77	-12.77	-9.49	-5.86	-6.72	-3
1803	1/22/01	20:20:00	-6.6	-5.7	-5.77	-12.77	-9.49	-5.85	-6.72	-2.75
1804	1/22/01	20:30:00	-6.6	-5.7	-5.77	-12.77	-9.49	-5.84	-6.72	-2.45
1805	1/22/01	20:40:00	-6.59	-5.69	-5.76	-12.75	-9.46	-5.82	-6.69	-2.13
1806	1/22/01	20:50:00	-6.59	-5.7	-5.75	-12.74	-9.46	-5.81	-6.72	-1.9
1807	1/22/01	21:00:00	-6.6	-5.69	-5.76	-12.72	-9.47	-5.8	-6.72	-1.65
1808	1/22/01	21:10:00	-6.58	-5.68	-5.73	-12.7	-9.44	-5.76	-6.67	-1.38
1809	1/22/01	21:20:00	-6.57	-5.67	-5.73	-12.7	-9.44	-5.75	-6.68	-1.13
1810	1/22/01	21:30:00	-6.57	-5.67	-5.72	-12.7	-9.44	-5.74	-6.67	-0.91
1811	1/22/01	21:40:00	-6.57	-5.67	-5.72	-12.7	-9.44	-5.73	-6.65	-0.71
1812	1/22/01	21:50:00	-6.56	-5.66	-5.71	-12.67	-9.43	-5.72	-6.66	-0.52
1813	1/22/01	22:00:00	-6.55	-5.66	-5.69	-12.65	-9.41	-5.7	-6.62	-0.31
1814	1/22/01	22:10:00	-6.54	-5.64	-5.68	-12.65	-9.37	-5.67	-6.62	-0.1
1815	1/22/01	22:20:00	-6.56	-5.66	-5.7	-12.67	-9.39	-5.69	-6.64	0.08
1816	1/22/01	22:30:00	-6.54	-5.63	-5.67	-12.64	-9.37	-5.66	-6.62	0.27
1817	1/22/01	22:40:00	-6.54	-5.64	-5.67	-12.64	-9.37	-5.66	-6.62	0.46
1818	1/22/01	22:50:00	-6.53	-5.64	-5.66	-12.64	-9.37	-5.64	-6.62	0.62
1819	1/22/01	23:00:00	-6.53	-5.64	-5.65	-12.64	-9.37	-5.64	-6.57	0.78
1820	1/22/01	23:10:00	-6.52	-5.63	-5.64	-12.64	-9.37	-5.62	-6.59	0.92
1821	1/22/01	23:20:00	-6.54	-5.65	-5.66	-12.66	-9.38	-5.64	-6.59	1.02
1822	1/22/01	23:30:00	-6.52	-5.63	-5.64	-12.64	-9.34	-5.61	-6.57	1.15
1823	1/22/01	23:40:00	-6.52	-5.63	-5.63	-12.64	-9.36	-5.61	-6.57	1.24
1824	1/22/01	23:50:00	-6.53	-5.64	-5.63	-12.64	-9.34	-5.62	-6.57	1.32
1825	1/23/01	0:00:00	-6.53	-5.65	-5.63	-12.64	-9.34	-5.61	-6.57	1.4
1826	1/23/01	0:10:00	-6.53	-5.64	-5.63	-12.64	-9.36	-5.61	-6.57	1.46
1827	1/23/01	0:20:00	-6.52	-5.64	-5.62	-12.64	-9.34	-5.62	-6.57	1.5
1828	1/23/01	0:30:00	-6.52	-5.64	-5.62	-12.65	-9.34	-5.63	-6.57	1.53
1829	1/23/01	0:40:00	-6.53	-5.65	-5.63	-12.65	-9.36	-5.64	-6.57	1.5
1830	1/23/01	0:50:00	-6.5	-5.63	-5.61	-12.62	-9.34	-5.63	-6.54	1.47
1831	1/23/01	1:00:00	-6.51	-5.63	-5.62	-12.62	-9.34	-5.66	-6.54	1.39
1832	1/23/01	1:10:00	-6.52	-5.66	-5.64	-12.64	-9.36	-5.7	-6.56	1.26

Tidal Study Data
January 10-25, 2001

1833	1/23/01	1:20:00	-6.52	-5.65	-5.65	-12.64	-9.34	-5.7	-6.56	1.13
1834	1/23/01	1:30:00	-6.52	-5.65	-5.65	-12.62	-9.34	-5.72	-6.56	0.97
1835	1/23/01	1:40:00	-6.52	-5.66	-5.66	-12.64	-9.38	-5.74	-6.58	0.82
1836	1/23/01	1:50:00	-6.51	-5.66	-5.65	-12.64	-9.38	-5.76	-6.59	0.64
1837	1/23/01	2:00:00	-6.51	-5.66	-5.66	-12.62	-9.38	-5.78	-6.59	0.48
1838	1/23/01	2:10:00	-6.52	-5.67	-5.68	-12.64	-9.39	-5.79	-6.59	0.27
1839	1/23/01	2:20:00	-6.52	-5.68	-5.68	-12.64	-9.39	-5.8	-6.59	0.1
1840	1/23/01	2:30:00	-6.52	-5.69	-5.7	-12.64	-9.41	-5.82	-6.64	-0.09
1841	1/23/01	2:40:00	-6.53	-5.69	-5.71	-12.64	-9.41	-5.83	-6.64	-0.27
1842	1/23/01	2:50:00	-6.53	-5.69	-5.72	-12.64	-9.41	-5.84	-6.62	-0.42
1843	1/23/01	3:00:00	-6.53	-5.7	-5.73	-12.64	-9.41	-5.85	-6.64	-0.57
1844	1/23/01	3:10:00	-6.54	-5.71	-5.74	-12.64	-9.41	-5.85	-6.64	-0.73
1845	1/23/01	3:20:00	-6.54	-5.71	-5.74	-12.66	-9.41	-5.86	-6.64	-0.87
1846	1/23/01	3:30:00	-6.55	-5.7	-5.74	-12.64	-9.41	-5.87	-6.64	-1.01
1847	1/23/01	3:40:00	-6.54	-5.7	-5.74	-12.64	-9.41	-5.87	-6.64	-1.18
1848	1/23/01	3:50:00	-6.52	-5.69	-5.73	-12.61	-9.41	-5.85	-6.63	-1.27
1849	1/23/01	4:00:00	-6.53	-5.69	-5.74	-12.61	-9.41	-5.86	-6.63	-1.44
1850	1/23/01	4:10:00	-6.51	-5.68	-5.73	-12.59	-9.39	-5.85	-6.64	-1.58
1851	1/23/01	4:20:00	-6.52	-5.7	-5.74	-12.59	-9.39	-5.87	-6.64	-1.75
1852	1/23/01	4:30:00	-6.53	-5.69	-5.74	-12.59	-9.39	-5.87	-6.64	-1.91
1853	1/23/01	4:40:00	-6.53	-5.7	-5.75	-12.59	-9.39	-5.88	-6.64	-2.06
1854	1/23/01	4:50:00	-6.53	-5.69	-5.74	-12.61	-9.39	-5.87	-6.66	-2.19
1855	1/23/01	5:00:00	-6.52	-5.69	-5.75	-12.59	-9.39	-5.87	-6.64	-2.33
1856	1/23/01	5:10:00	-6.52	-5.69	-5.75	-12.59	-9.39	-5.87	-6.67	-2.5
1857	1/23/01	5:20:00	-6.55	-5.71	-5.77	-12.61	-9.41	-5.89	-6.66	-2.65
1858	1/23/01	5:30:00	-6.54	-5.71	-5.77	-12.61	-9.41	-5.89	-6.68	-2.81
1859	1/23/01	5:40:00	-6.53	-5.7	-5.76	-12.59	-9.39	-5.87	-6.67	-2.96
1860	1/23/01	5:50:00	-6.55	-5.71	-5.78	-12.61	-9.41	-5.9	-6.69	-3.12
1861	1/23/01	6:00:00	-6.55	-5.72	-5.78	-12.62	-9.42	-5.91	-6.69	-3.27
1862	1/23/01	6:10:00	-6.58	-5.74	-5.8	-12.64	-9.44	-5.93	-6.72	-3.44
1863	1/23/01	6:20:00	-6.52	-5.7	-5.76	-12.59	-9.39	-5.88	-6.66	-3.55
1864	1/23/01	6:30:00	-6.53	-5.71	-5.76	-12.59	-9.39	-5.89	-6.67	-3.72
1865	1/23/01	6:40:00	-6.55	-5.72	-5.78	-12.61	-9.43	-5.91	-6.69	-3.83
1866	1/23/01	6:50:00	-6.54	-5.71	-5.77	-12.59	-9.44	-5.89	-6.67	-3.93
1867	1/23/01	7:00:00	-6.54	-5.72	-5.78	-12.59	-9.42	-5.9	-6.67	-4.01
1868	1/23/01	7:10:00	-6.55	-5.71	-5.77	-12.59	-9.44	-5.9	-6.67	-4.09
1869	1/23/01	7:20:00	-6.54	-5.71	-5.78	-12.59	-9.44	-5.89	-6.67	-4.12
1870	1/23/01	7:30:00	-6.54	-5.71	-5.78	-12.59	-9.44	-5.89	-6.67	-4.08
1871	1/23/01	7:40:00	-6.54	-5.71	-5.78	-12.59	-9.44	-5.89	-6.67	-3.93
1872	1/23/01	7:50:00	-6.54	-5.72	-5.78	-12.59	-9.42	-5.89	-6.67	-3.64
1873	1/23/01	8:00:00	-6.54	-5.72	-5.78	-12.59	-9.41	-5.89	-6.67	-3.29
1874	1/23/01	8:10:00	-6.54	-5.72	-5.78	-12.59	-9.44	-5.88	-6.67	-2.9
1875	1/23/01	8:20:00	-6.55	-5.71	-5.78	-12.57	-9.42	-5.85	-6.67	-2.58
1876	1/23/01	8:30:00	-6.54	-5.71	-5.77	-12.57	-9.39	-5.82	-6.67	-2.24
1877	1/23/01	8:40:00	-6.54	-5.7	-5.75	-12.57	-9.39	-5.8	-6.65	-1.93
1878	1/23/01	8:50:00	-6.51	-5.66	-5.72	-12.52	-9.34	-5.75	-6.62	-1.64
1879	1/23/01	9:00:00	-6.53	-5.68	-5.73	-12.54	-9.36	-5.76	-6.64	-1.39
1880	1/23/01	9:10:00	-6.53	-5.68	-5.73	-12.54	-9.36	-5.75	-6.64	-1.15
1881	1/23/01	9:20:00	-6.53	-5.68	-5.72	-12.54	-9.36	-5.74	-6.63	-0.91
1882	1/23/01	9:30:00	-6.54	-5.7	-5.74	-12.56	-9.39	-5.76	-6.66	-0.72
1883	1/23/01	9:40:00	-6.54	-5.69	-5.73	-12.56	-9.36	-5.73	-6.64	-0.51
1884	1/23/01	9:50:00	-6.52	-5.68	-5.71	-12.54	-9.37	-5.72	-6.62	-0.3

Tidal Study Data
January 10-25, 2001

1885	1/23/01	10:00:00	-6.49	-5.66	-5.69	-12.51	-9.34	-5.69	-6.59	-0.1
1886	1/23/01	10:10:00	-6.5	-5.66	-5.69	-12.47	-9.34	-5.68	-6.59	0.09
1887	1/23/01	10:20:00	-6.5	-5.66	-5.68	-12.51	-9.33	-5.67	-6.57	0.28
1888	1/23/01	10:30:00	-6.49	-5.66	-5.67	-12.47	-9.31	-5.66	-6.57	0.45
1889	1/23/01	10:40:00	-6.48	-5.64	-5.65	-12.46	-9.28	-5.64	-6.56	0.65
1890	1/23/01	10:50:00	-6.48	-5.64	-5.65	-12.46	-9.28	-5.63	-6.54	0.81
1891	1/23/01	11:00:00	-6.48	-5.64	-5.64	-12.44	-9.28	-5.63	-6.54	0.97
1892	1/23/01	11:10:00	-6.48	-5.65	-5.64	-12.44	-9.28	-5.63	-6.54	1.1
1893	1/23/01	11:20:00	-6.48	-5.64	-5.64	-12.44	-9.28	-5.61	-6.54	1.24
1894	1/23/01	11:30:00	-6.49	-5.65	-5.64	-12.44	-9.28	-5.61	-6.54	1.36
1895	1/23/01	11:40:00	-6.49	-5.65	-5.63	-12.44	-9.28	-5.59	-6.54	1.48
1896	1/23/01	11:50:00	-6.46	-5.61	-5.6	-12.43	-9.25	-5.56	-6.51	1.61
1897	1/23/01	12:00:00	-6.44	-5.61	-5.58	-12.41	-9.23	-5.55	-6.49	1.72
1898	1/23/01	12:10:00	-6.44	-5.61	-5.59	-12.41	-9.23	-5.55	-6.48	1.8
1899	1/23/01	12:20:00	-6.45	-5.61	-5.58	-12.43	-9.23	-5.54	-6.48	1.89
1900	1/23/01	12:30:00	-6.43	-5.61	-5.57	-12.41	-9.21	-5.54	-6.47	1.97
1901	1/23/01	12:40:00	-6.44	-5.61	-5.57	-12.41	-9.21	-5.54	-6.47	2.04
1902	1/23/01	12:50:00	-6.41	-5.59	-5.55	-12.38	-9.18	-5.51	-6.44	2.11
1903	1/23/01	13:00:00	-6.42	-5.6	-5.56	-12.38	-9.18	-5.52	-6.44	2.13
1904	1/23/01	13:10:00	-6.39	-5.56	-5.51	-12.34	-9.16	-5.48	-6.39	2.2
1905	1/23/01	13:20:00	-6.38	-5.56	-5.52	-12.34	-9.16	-5.5	-6.41	2.17
1906	1/23/01	13:30:00	-6.39	-5.58	-5.53	-12.34	-9.16	-5.52	-6.44	2.09
1907	1/23/01	13:40:00	-6.4	-5.58	-5.54	-12.34	-9.19	-5.55	-6.43	1.97
1908	1/23/01	13:50:00	-6.4	-5.58	-5.54	-12.34	-9.21	-5.57	-6.44	1.85
1909	1/23/01	14:00:00	-6.41	-5.6	-5.56	-12.34	-9.21	-5.61	-6.44	1.69
1910	1/23/01	14:10:00	-6.41	-5.61	-5.58	-12.36	-9.21	-5.63	-6.46	1.51
1911	1/23/01	14:20:00	-6.4	-5.59	-5.56	-12.31	-9.21	-5.64	-6.45	1.37
1912	1/23/01	14:30:00	-6.39	-5.6	-5.57	-12.33	-9.21	-5.66	-6.45	1.18
1913	1/23/01	14:40:00	-6.4	-5.6	-5.58	-12.33	-9.25	-5.68	-6.46	0.99
1914	1/23/01	14:50:00	-6.4	-5.61	-5.6	-12.33	-9.25	-5.7	-6.5	0.77
1915	1/23/01	15:00:00	-6.42	-5.61	-5.61	-12.33	-9.26	-5.72	-6.5	0.56
1916	1/23/01	15:10:00	-6.41	-5.62	-5.62	-12.33	-9.28	-5.73	-6.5	0.36
1917	1/23/01	15:20:00	-6.42	-5.62	-5.63	-12.33	-9.28	-5.74	-6.5	0.15
1918	1/23/01	15:30:00	-6.42	-5.63	-5.64	-12.33	-9.28	-5.75	-6.5	-0.04
1919	1/23/01	15:40:00	-6.41	-5.62	-5.63	-12.31	-9.26	-5.74	-6.51	-0.22
1920	1/23/01	15:50:00	-6.43	-5.64	-5.66	-12.33	-9.28	-5.78	-6.5	-0.42
1921	1/23/01	16:00:00	-6.43	-5.64	-5.67	-12.33	-9.28	-5.77	-6.53	-0.6
1922	1/23/01	16:10:00	-6.45	-5.65	-5.68	-12.33	-9.28	-5.79	-6.53	-0.75
1923	1/23/01	16:20:00	-6.45	-5.65	-5.68	-12.33	-9.28	-5.79	-6.54	-0.92
1924	1/23/01	16:30:00	-6.4	-5.6	-5.65	-12.3	-9.23	-5.75	-6.51	-1.02
1925	1/23/01	16:40:00	-6.42	-5.61	-5.66	-12.31	-9.27	-5.76	-6.52	-1.2
1926	1/23/01	16:50:00	-6.44	-5.63	-5.68	-12.31	-9.26	-5.79	-6.54	-1.37
1927	1/23/01	17:00:00	-6.42	-5.62	-5.66	-12.29	-9.27	-5.78	-6.54	-1.5
1928	1/23/01	17:10:00	-6.4	-5.61	-5.66	-12.3	-9.26	-5.77	-6.53	-1.64
1929	1/23/01	17:20:00	-6.41	-5.62	-5.66	-12.28	-9.26	-5.78	-6.53	-1.81
1930	1/23/01	17:30:00	-6.43	-5.63	-5.68	-12.32	-9.27	-5.79	-6.54	-1.99
1931	1/23/01	17:40:00	-6.43	-5.63	-5.69	-12.34	-9.27	-5.8	-6.54	-2.15
1932	1/23/01	17:50:00	-6.42	-5.63	-5.68	-12.33	-9.26	-5.79	-6.53	-2.32
1933	1/23/01	18:00:00	-6.42	-5.63	-5.68	-12.31	-9.26	-5.8	-6.53	-2.47
1934	1/23/01	18:10:00	-6.43	-5.63	-5.69	-12.31	-9.26	-5.8	-6.53	-2.64
1935	1/23/01	18:20:00	-6.43	-5.63	-5.7	-12.3	-9.26	-5.81	-6.53	-2.8
1936	1/23/01	18:30:00	-6.43	-5.63	-5.71	-12.31	-9.26	-5.82	-6.53	-2.95

Tidal Study Data
January 10-25, 2001

1937	1/23/01	18:40:00	-6.43	-5.63	-5.7	-12.33	-9.26	-5.82	-6.56	-3.11
1938	1/23/01	18:50:00	-6.43	-5.63	-5.71	-12.33	-9.26	-5.82	-6.56	-3.26
1939	1/23/01	19:00:00	-6.43	-5.64	-5.71	-12.33	-9.26	-5.82	-6.54	-3.4
1940	1/23/01	19:10:00	-6.43	-5.64	-5.71	-12.3	-9.26	-5.82	-6.56	-3.52
1941	1/23/01	19:20:00	-6.43	-5.64	-5.72	-12.33	-9.26	-5.83	-6.56	-3.67
1942	1/23/01	19:30:00	-6.43	-5.63	-5.72	-12.33	-9.26	-5.83	-6.56	-3.83
1943	1/23/01	19:40:00	-6.43	-5.64	-5.72	-12.31	-9.26	-5.83	-6.56	-3.99
1944	1/23/01	19:50:00	-6.44	-5.65	-5.71	-12.3	-9.26	-5.82	-6.56	-4.01
1945	1/23/01	20:00:00	-6.45	-5.65	-5.73	-12.3	-9.28	-5.84	-6.56	-4.03
1946	1/23/01	20:10:00	-6.45	-5.65	-5.72	-12.3	-9.28	-5.83	-6.56	-4.05
1947	1/23/01	20:20:00	-6.45	-5.65	-5.72	-12.28	-9.28	-5.83	-6.56	-4.05
1948	1/23/01	20:30:00	-6.45	-5.65	-5.73	-12.28	-9.3	-5.83	-6.56	-3.89
1949	1/23/01	20:40:00	-6.45	-5.65	-5.73	-12.28	-9.3	-5.83	-6.56	-3.64
1950	1/23/01	20:50:00	-6.45	-5.65	-5.72	-12.28	-9.28	-5.81	-6.56	-3.21
1951	1/23/01	21:00:00	-6.46	-5.65	-5.73	-12.28	-9.3	-5.8	-6.56	-2.83
1952	1/23/01	21:10:00	-6.46	-5.65	-5.73	-12.28	-9.28	-5.78	-6.56	-2.53
1953	1/23/01	21:20:00	-6.47	-5.65	-5.72	-12.28	-9.28	-5.76	-6.56	-2.24
1954	1/23/01	21:30:00	-6.43	-5.62	-5.69	-12.25	-9.27	-5.72	-6.53	-1.93
1955	1/23/01	21:40:00	-6.44	-5.63	-5.7	-12.26	-9.26	-5.72	-6.54	-1.68
1956	1/23/01	21:50:00	-6.41	-5.59	-5.67	-12.23	-9.21	-5.68	-6.51	-1.41
1957	1/23/01	22:00:00	-6.43	-5.62	-5.68	-12.23	-9.23	-5.69	-6.53	-1.22
1958	1/23/01	22:10:00	-6.42	-5.59	-5.66	-12.21	-9.21	-5.67	-6.51	-0.98
1959	1/23/01	22:20:00	-6.42	-5.6	-5.66	-12.21	-9.21	-5.65	-6.51	-0.78
1960	1/23/01	22:30:00	-6.42	-5.59	-5.66	-12.21	-9.21	-5.64	-6.51	-0.59
1961	1/23/01	22:40:00	-6.42	-5.6	-5.66	-12.21	-9.21	-5.65	-6.51	-0.41
1962	1/23/01	22:50:00	-6.42	-5.6	-5.65	-12.21	-9.21	-5.65	-6.51	-0.24
1963	1/23/01	23:00:00	-6.42	-5.6	-5.65	-12.21	-9.21	-5.62	-6.51	-0.06
1964	1/23/01	23:10:00	-6.42	-5.6	-5.65	-12.21	-9.21	-5.61	-6.51	0.11
1965	1/23/01	23:20:00	-6.42	-5.6	-5.64	-12.2	-9.21	-5.61	-6.49	0.28
1966	1/23/01	23:30:00	-6.43	-5.6	-5.64	-12.21	-9.21	-5.6	-6.48	0.44
1967	1/23/01	23:40:00	-6.42	-5.59	-5.63	-12.21	-9.21	-5.6	-6.48	0.6
1968	1/23/01	23:50:00	-6.42	-5.59	-5.63	-12.21	-9.21	-5.59	-6.48	0.72
1969	1/24/01	0:00:00	-6.4	-5.58	-5.6	-12.19	-9.19	-5.58	-6.46	0.87
1970	1/24/01	0:10:00	-6.41	-5.58	-5.61	-12.19	-9.19	-5.57	-6.46	0.98
1971	1/24/01	0:20:00	-6.4	-5.57	-5.6	-12.18	-9.18	-5.55	-6.45	1.08
1972	1/24/01	0:30:00	-6.4	-5.57	-5.6	-12.2	-9.17	-5.56	-6.45	1.16
1973	1/24/01	0:40:00	-6.4	-5.57	-5.6	-12.2	-9.15	-5.56	-6.45	1.21
1974	1/24/01	0:50:00	-6.4	-5.57	-5.59	-12.2	-9.15	-5.57	-6.45	1.28
1975	1/24/01	1:00:00	-6.39	-5.58	-5.59	-12.2	-9.15	-5.57	-6.45	1.28
1976	1/24/01	1:10:00	-6.4	-5.58	-5.6	-12.22	-9.18	-5.58	-6.45	1.31
1977	1/24/01	1:20:00	-6.4	-5.58	-5.59	-12.23	-9.18	-5.58	-6.45	1.29
1978	1/24/01	1:30:00	-6.39	-5.57	-5.59	-12.25	-9.18	-5.59	-6.45	1.24
1979	1/24/01	1:40:00	-6.39	-5.58	-5.6	-12.25	-9.18	-5.6	-6.45	1.17
1980	1/24/01	1:50:00	-6.4	-5.59	-5.6	-12.25	-9.18	-5.62	-6.45	1.08
1981	1/24/01	2:00:00	-6.4	-5.59	-5.62	-12.27	-9.18	-5.64	-6.45	0.96
1982	1/24/01	2:10:00	-6.39	-5.59	-5.62	-12.27	-9.2	-5.66	-6.45	0.83
1983	1/24/01	2:20:00	-6.39	-5.6	-5.63	-12.27	-9.2	-5.67	-6.46	0.67
1984	1/24/01	2:30:00	-6.4	-5.6	-5.63	-12.27	-9.22	-5.69	-6.48	0.53
1985	1/24/01	2:40:00	-6.41	-5.61	-5.64	-12.27	-9.22	-5.7	-6.48	0.37
1986	1/24/01	2:50:00	-6.41	-5.61	-5.65	-12.27	-9.22	-5.72	-6.48	0.21
1987	1/24/01	3:00:00	-6.41	-5.61	-5.65	-12.28	-9.23	-5.72	-6.48	0.04
1988	1/24/01	3:10:00	-6.41	-5.62	-5.66	-12.31	-9.23	-5.74	-6.48	-0.14

Tidal Study Data
January 10-25, 2001

1989	1/24/01	3:20:00	-6.41	-5.62	-5.67	-12.28	-9.25	-5.75	-6.48	-0.31
1990	1/24/01	3:30:00	-6.41	-5.63	-5.68	-12.28	-9.23	-5.76	-6.48	-0.48
1991	1/24/01	3:40:00	-6.41	-5.62	-5.68	-12.31	-9.25	-5.77	-6.51	-0.62
1992	1/24/01	3:50:00	-6.41	-5.63	-5.7	-12.31	-9.25	-5.77	-6.51	-0.78
1993	1/24/01	4:00:00	-6.42	-5.63	-5.69	-12.31	-9.25	-5.78	-6.51	-0.91
1994	1/24/01	4:10:00	-6.42	-5.63	-5.69	-12.31	-9.25	-5.78	-6.53	-1.05
1995	1/24/01	4:20:00	-6.4	-5.61	-5.7	-12.29	-9.23	-5.77	-6.51	-1.19
1996	1/24/01	4:30:00	-6.38	-5.61	-5.67	-12.27	-9.21	-5.77	-6.49	-1.3
1997	1/24/01	4:40:00	-6.39	-5.61	-5.68	-12.27	-9.21	-5.75	-6.49	-1.46
1998	1/24/01	4:50:00	-6.38	-5.61	-5.67	-12.26	-9.2	-5.77	-6.5	-1.6
1999	1/24/01	5:00:00	-6.38	-5.6	-5.68	-12.26	-9.2	-5.77	-6.5	-1.76
2000	1/24/01	5:10:00	-6.39	-5.61	-5.69	-12.26	-9.2	-5.77	-6.48	-1.91
2001	1/24/01	5:20:00	-6.39	-5.62	-5.7	-12.29	-9.21	-5.78	-6.52	-2.08
2002	1/24/01	5:30:00	-6.39	-5.62	-5.7	-12.27	-9.21	-5.79	-6.51	-2.23
2003	1/24/01	5:40:00	-6.41	-5.64	-5.71	-12.31	-9.23	-5.81	-6.56	-2.39
2004	1/24/01	5:50:00	-6.41	-5.64	-5.73	-12.31	-9.23	-5.8	-6.54	-2.55
2005	1/24/01	6:00:00	-6.39	-5.62	-5.71	-12.29	-9.21	-5.79	-6.54	-2.69
2006	1/24/01	6:10:00	-6.4	-5.61	-5.71	-12.29	-9.22	-5.8	-6.54	-2.83
2007	1/24/01	6:20:00	-6.4	-5.62	-5.72	-12.29	-9.22	-5.8	-6.54	-2.99
2008	1/24/01	6:30:00	-6.4	-5.62	-5.72	-12.31	-9.22	-5.8	-6.54	-3.14
2009	1/24/01	6:40:00	-6.4	-5.62	-5.72	-12.31	-9.22	-5.79	-6.54	-3.28
2010	1/24/01	6:50:00	-6.4	-5.62	-5.71	-12.31	-9.21	-5.8	-6.54	-3.43
2011	1/24/01	7:00:00	-6.4	-5.62	-5.72	-12.31	-9.22	-5.79	-6.54	-3.56
2012	1/24/01	7:10:00	-6.44	-5.66	-5.76	-12.35	-9.26	-5.83	-6.58	-3.71
2013	1/24/01	7:20:00	-6.43	-5.66	-5.76	-12.35	-9.25	-5.83	-6.58	-3.81
2014	1/24/01	7:30:00	-6.42	-5.65	-5.75	-12.35	-9.25	-5.83	-6.58	-3.9
2015	1/24/01	7:40:00	-6.43	-5.65	-5.75	-12.35	-9.25	-5.83	-6.56	-3.97
2016	1/24/01	7:50:00	-6.42	-5.65	-5.75	-12.35	-9.25	-5.82	-6.58	-4.02
2017	1/24/01	8:00:00	-6.42	-5.64	-5.75	-12.35	-9.25	-5.82	-6.56	-4.03
2018	1/24/01	8:10:00	-6.42	-5.65	-5.75	-12.35	-9.25	-5.82	-6.55	-3.94
2019	1/24/01	8:20:00	-6.42	-5.65	-5.74	-12.35	-9.25	-5.82	-6.58	-3.71
2020	1/24/01	8:30:00	-6.42	-5.64	-5.74	-12.35	-9.25	-5.79	-6.55	-3.36
2021	1/24/01	8:40:00	-6.42	-5.64	-5.73	-12.35	-9.25	-5.78	-6.55	-2.99
2022	1/24/01	8:50:00	-6.42	-5.63	-5.73	-12.35	-9.25	-5.77	-6.56	-2.64
2023	1/24/01	9:00:00	-6.42	-5.63	-5.72	-12.35	-9.25	-5.75	-6.56	-2.33
2024	1/24/01	9:10:00	-6.41	-5.62	-5.72	-12.35	-9.25	-5.73	-6.53	-2.1
2025	1/24/01	9:20:00	-6.41	-5.62	-5.72	-12.35	-9.25	-5.71	-6.53	-1.77
2026	1/24/01	9:30:00	-6.42	-5.61	-5.71	-12.35	-9.25	-5.7	-6.53	-1.51
2027	1/24/01	9:40:00	-6.41	-5.62	-5.71	-12.35	-9.25	-5.69	-6.53	-1.26
2028	1/24/01	9:50:00	-6.41	-5.61	-5.69	-12.35	-9.25	-5.67	-6.51	-1.02
2029	1/24/01	10:00:00	-6.41	-5.61	-5.69	-12.33	-9.22	-5.66	-6.51	-0.79
2030	1/24/01	10:10:00	-6.41	-5.61	-5.69	-12.36	-9.23	-5.66	-6.51	-0.59
2031	1/24/01	10:20:00	-6.41	-5.61	-5.68	-12.33	-9.22	-5.64	-6.5	-0.37
2032	1/24/01	10:30:00	-6.41	-5.61	-5.68	-12.33	-9.22	-5.63	-6.51	-0.18
2033	1/24/01	10:40:00	-6.41	-5.61	-5.67	-12.33	-9.22	-5.62	-6.48	0.02
2034	1/24/01	10:50:00	-6.41	-5.6	-5.66	-12.33	-9.22	-5.62	-6.48	0.22
2035	1/24/01	11:00:00	-6.41	-5.61	-5.66	-12.33	-9.22	-5.6	-6.48	0.4
2036	1/24/01	11:10:00	-6.41	-5.61	-5.66	-12.31	-9.18	-5.6	-6.48	0.59
2037	1/24/01	11:20:00	-6.37	-5.58	-5.62	-12.29	-9.16	-5.55	-6.44	0.81
2038	1/24/01	11:30:00	-6.36	-5.57	-5.61	-12.26	-9.13	-5.54	-6.43	1
2039	1/24/01	11:40:00	-6.37	-5.57	-5.61	-12.26	-9.13	-5.53	-6.43	1.16
2040	1/24/01	11:50:00	-6.36	-5.57	-5.6	-12.26	-9.13	-5.52	-6.43	1.31

Tidal Study Data
January 10-25, 2001

2041	1/24/01	12:00:00	-6.36	-5.57	-5.59	-12.26	-9.13	-5.51	-6.43	1.43
2042	1/24/01	12:10:00	-6.36	-5.57	-5.59	-12.26	-9.13	-5.5	-6.41	1.56
2043	1/24/01	12:20:00	-6.37	-5.57	-5.58	-12.26	-9.13	-5.48	-6.43	1.69
2044	1/24/01	12:30:00	-6.35	-5.55	-5.56	-12.26	-9.11	-5.47	-6.41	1.82
2045	1/24/01	12:40:00	-6.36	-5.56	-5.56	-12.26	-9.11	-5.46	-6.39	1.93
2046	1/24/01	12:50:00	-6.32	-5.52	-5.52	-12.23	-9.08	-5.42	-6.35	2.07
2047	1/24/01	13:00:00	-6.33	-5.53	-5.52	-12.23	-9.08	-5.42	-6.35	2.16
2048	1/24/01	13:10:00	-6.33	-5.52	-5.52	-12.23	-9.08	-5.42	-6.35	2.25
2049	1/24/01	13:20:00	-6.32	-5.53	-5.52	-12.25	-9.08	-5.41	-6.35	2.33
2050	1/24/01	13:30:00	-6.33	-5.52	-5.52	-12.25	-9.08	-5.41	-6.35	2.41
2051	1/24/01	13:40:00	-6.33	-5.53	-5.52	-12.25	-9.08	-5.4	-6.35	2.47
2052	1/24/01	13:50:00	-6.32	-5.52	-5.52	-12.25	-9.08	-5.41	-6.35	2.49
2053	1/24/01	14:00:00	-6.33	-5.53	-5.51	-12.25	-9.08	-5.42	-6.35	2.5
2054	1/24/01	14:10:00	-6.33	-5.52	-5.52	-12.25	-9.08	-5.43	-6.35	2.46
2055	1/24/01	14:20:00	-6.31	-5.53	-5.52	-12.25	-9.08	-5.46	-6.35	2.37
2056	1/24/01	14:30:00	-6.33	-5.54	-5.52	-12.25	-9.08	-5.48	-6.35	2.23
2057	1/24/01	14:40:00	-6.32	-5.55	-5.54	-12.26	-9.12	-5.52	-6.35	2.07
2058	1/24/01	14:50:00	-6.33	-5.55	-5.55	-12.25	-9.12	-5.54	-6.35	1.92
2059	1/24/01	15:00:00	-6.31	-5.53	-5.54	-12.26	-9.1	-5.54	-6.36	1.75
2060	1/24/01	15:10:00	-6.33	-5.56	-5.56	-12.3	-9.15	-5.58	-6.38	1.57
2061	1/24/01	15:20:00	-6.33	-5.56	-5.58	-12.3	-9.15	-5.6	-6.38	1.38
2062	1/24/01	15:30:00	-6.33	-5.56	-5.58	-12.3	-9.15	-5.62	-6.38	1.2
2063	1/24/01	15:40:00	-6.34	-5.56	-5.59	-12.3	-9.15	-5.64	-6.38	1.01
2064	1/24/01	15:50:00	-6.34	-5.57	-5.61	-12.3	-9.15	-5.65	-6.4	0.8
2065	1/24/01	16:00:00	-6.34	-5.57	-5.62	-12.3	-9.18	-5.66	-6.41	0.61
2066	1/24/01	16:10:00	-6.34	-5.56	-5.62	-12.3	-9.18	-5.68	-6.43	0.41
2067	1/24/01	16:20:00	-6.34	-5.56	-5.62	-12.3	-9.2	-5.68	-6.43	0.22
2068	1/24/01	16:30:00	-6.34	-5.57	-5.64	-12.3	-9.2	-5.7	-6.43	0.02
2069	1/24/01	16:40:00	-6.34	-5.57	-5.64	-12.3	-9.2	-5.7	-6.43	-0.15
2070	1/24/01	16:50:00	-6.33	-5.57	-5.65	-12.31	-9.2	-5.72	-6.45	-0.35
2071	1/24/01	17:00:00	-6.34	-5.56	-5.66	-12.31	-9.2	-5.71	-6.46	-0.51
2072	1/24/01	17:10:00	-6.34	-5.57	-5.66	-12.31	-9.2	-5.71	-6.46	-0.68
2073	1/24/01	17:20:00	-6.34	-5.56	-5.66	-12.3	-9.2	-5.72	-6.46	-0.82
2074	1/24/01	17:30:00	-6.34	-5.56	-5.67	-12.31	-9.2	-5.73	-6.46	-0.98
2075	1/24/01	17:40:00	-6.34	-5.57	-5.68	-12.31	-9.2	-5.72	-6.48	-1.15
2076	1/24/01	17:50:00	-6.34	-5.57	-5.68	-12.31	-9.2	-5.73	-6.48	-1.29
2077	1/24/01	18:00:00	-6.34	-5.58	-5.68	-12.31	-9.2	-5.73	-6.48	-1.46
2078	1/24/01	18:10:00	-6.34	-5.58	-5.69	-12.31	-9.2	-5.74	-6.48	-1.62
2079	1/24/01	18:20:00	-6.35	-5.57	-5.68	-12.31	-9.2	-5.74	-6.48	-1.78
2080	1/24/01	18:30:00	-6.35	-5.57	-5.69	-12.31	-9.2	-5.75	-6.48	-1.92
2081	1/24/01	18:40:00	-6.36	-5.57	-5.69	-12.31	-9.21	-5.74	-6.48	-2.07
2082	1/24/01	18:50:00	-6.36	-5.57	-5.7	-12.31	-9.21	-5.75	-6.48	-2.23
2083	1/24/01	19:00:00	-6.34	-5.56	-5.69	-12.31	-9.21	-5.75	-6.48	-2.37
2084	1/24/01	19:10:00	-6.38	-5.59	-5.72	-12.34	-9.24	-5.79	-6.51	-2.57
2085	1/24/01	19:20:00	-6.38	-5.59	-5.72	-12.34	-9.24	-5.78	-6.51	-2.71
2086	1/24/01	19:30:00	-6.35	-5.56	-5.69	-12.31	-9.21	-5.75	-6.49	-2.85
2087	1/24/01	19:40:00	-6.35	-5.57	-5.7	-12.31	-9.21	-5.75	-6.51	-2.97
2088	1/24/01	19:50:00	-6.35	-5.56	-5.7	-12.31	-9.23	-5.76	-6.49	-3.1
2089	1/24/01	20:00:00	-6.35	-5.57	-5.7	-12.31	-9.21	-5.75	-6.48	-3.25
2090	1/24/01	20:10:00	-6.36	-5.57	-5.72	-12.32	-9.22	-5.77	-6.5	-3.36
2091	1/24/01	20:20:00	-6.36	-5.56	-5.71	-12.31	-9.23	-5.76	-6.49	-3.42
2092	1/24/01	20:30:00	-6.39	-5.59	-5.74	-12.33	-9.26	-5.79	-6.52	-3.57

Tidal Study Data
January 10-25, 2001

2093	1/24/01	20:40:00	-6.36	-5.57	-5.71	-12.3	-9.23	-5.76	-6.49	-3.61
2094	1/24/01	20:50:00	-6.36	-5.56	-5.71	-12.3	-9.23	-5.76	-6.51	-3.61
2095	1/24/01	21:00:00	-6.37	-5.57	-5.71	-12.3	-9.23	-5.75	-6.51	-3.43
2096	1/24/01	21:10:00	-6.37	-5.56	-5.71	-12.3	-9.23	-5.74	-6.51	-3.19
2097	1/24/01	21:20:00	-6.36	-5.56	-5.71	-12.3	-9.23	-5.73	-6.51	-2.85
2098	1/24/01	21:30:00	-6.36	-5.56	-5.7	-12.3	-9.21	-5.71	-6.51	-2.49
2099	1/24/01	21:40:00	-6.36	-5.55	-5.7	-12.3	-9.21	-5.69	-6.48	-2.19
2100	1/24/01	21:50:00	-6.36	-5.55	-5.69	-12.3	-9.2	-5.67	-6.48	-1.9
2101	1/24/01	22:00:00	-6.36	-5.55	-5.69	-12.3	-9.2	-5.65	-6.48	-1.64
2102	1/24/01	22:10:00	-6.36	-5.54	-5.68	-12.3	-9.2	-5.64	-6.48	-1.36
2103	1/24/01	22:20:00	-6.35	-5.54	-5.67	-12.28	-9.2	-5.61	-6.48	-1.09
2104	1/24/01	22:30:00	-6.35	-5.55	-5.67	-12.25	-9.2	-5.59	-6.48	-0.84
2105	1/24/01	22:40:00	-6.36	-5.53	-5.65	-12.26	-9.2	-5.59	-6.45	-0.62
2106	1/24/01	22:50:00	-6.36	-5.53	-5.65	-12.25	-9.18	-5.58	-6.46	-0.41
2107	1/24/01	23:00:00	-6.35	-5.52	-5.65	-12.25	-9.16	-5.56	-6.43	-0.2
2108	1/24/01	23:10:00	-6.35	-5.52	-5.64	-12.25	-9.15	-5.55	-6.43	-0.01
2109	1/24/01	23:20:00	-6.35	-5.52	-5.63	-12.25	-9.15	-5.55	-6.43	0.16
2110	1/24/01	23:30:00	-6.34	-5.52	-5.63	-12.25	-9.15	-5.54	-6.43	0.32
2111	1/24/01	23:40:00	-6.33	-5.51	-5.62	-12.25	-9.15	-5.53	-6.43	0.48
2112	1/24/01	23:50:00	-6.33	-5.5	-5.6	-12.25	-9.15	-5.51	-6.41	0.65
2113	1/25/01	0:00:00	-6.32	-5.5	-5.6	-12.25	-9.15	-5.49	-6.41	0.8
2114	1/25/01	0:10:00	-6.34	-5.51	-5.61	-12.24	-9.14	-5.5	-6.42	0.94
2115	1/25/01	0:20:00	-6.33	-5.5	-5.59	-12.23	-9.13	-5.49	-6.38	1.08
2116	1/25/01	0:30:00	-6.32	-5.5	-5.59	-12.23	-9.12	-5.48	-6.38	1.21
2117	1/25/01	0:40:00	-6.31	-5.49	-5.57	-12.23	-9.12	-5.47	-6.38	1.31
2118	1/25/01	0:50:00	-6.32	-5.49	-5.56	-12.23	-9.12	-5.47	-6.38	1.41
2119	1/25/01	1:00:00	-6.32	-5.49	-5.57	-12.25	-9.12	-5.46	-6.38	1.5
2120	1/25/01	1:10:00	-6.31	-5.49	-5.56	-12.23	-9.1	-5.46	-6.38	1.58
2121	1/25/01	1:20:00	-6.31	-5.49	-5.56	-12.25	-9.1	-5.45	-6.36	1.63
2122	1/25/01	1:30:00	-6.31	-5.48	-5.56	-12.25	-9.1	-5.46	-6.35	1.67
2123	1/25/01	1:40:00	-6.31	-5.48	-5.56	-12.25	-9.1	-5.47	-6.35	1.71
2124	1/25/01	1:50:00	-6.31	-5.48	-5.56	-12.25	-9.12	-5.47	-6.35	1.72
2125	1/25/01	2:00:00	-6.31	-5.48	-5.55	-12.26	-9.1	-5.48	-6.35	1.69
2126	1/25/01	2:10:00	-6.31	-5.48	-5.55	-12.3	-9.1	-5.49	-6.35	1.66
2127	1/25/01	2:20:00	-6.31	-5.48	-5.55	-12.3	-9.12	-5.51	-6.35	1.56
2128	1/25/01	2:30:00	-6.3	-5.48	-5.56	-12.3	-9.12	-5.53	-6.36	1.45
2129	1/25/01	2:40:00	-6.31	-5.49	-5.56	-12.3	-9.12	-5.54	-6.35	1.32
2130	1/25/01	2:50:00	-6.31	-5.49	-5.57	-12.31	-9.15	-5.57	-6.36	1.18
2131	1/25/01	3:00:00	-6.31	-5.5	-5.58	-12.31	-9.15	-5.59	-6.38	1.03
2132	1/25/01	3:10:00	-6.31	-5.5	-5.59	-12.31	-9.15	-5.6	-6.38	0.86
2133	1/25/01	3:20:00	-6.31	-5.5	-5.6	-12.31	-9.15	-5.61	-6.38	0.69
2134	1/25/01	3:30:00	-6.31	-5.5	-5.61	-12.31	-9.15	-5.63	-6.38	0.51
2135	1/25/01	3:40:00	-6.31	-5.51	-5.62	-12.31	-9.15	-5.64	-6.4	0.34
2136	1/25/01	3:50:00	-6.32	-5.52	-5.62	-12.33	-9.15	-5.65	-6.38	0.15
2137	1/25/01	4:00:00	-6.32	-5.52	-5.63	-12.31	-9.2	-5.66	-6.41	-0.02
2138	1/25/01	4:10:00	-6.32	-5.52	-5.63	-12.33	-9.2	-5.67	-6.41	-0.19
2139	1/25/01	4:20:00	-6.32	-5.52	-5.64	-12.33	-9.2	-5.68	-6.43	-0.36
2140	1/25/01	4:30:00	-6.32	-5.52	-5.65	-12.33	-9.2	-5.68	-6.43	-0.52
2141	1/25/01	4:40:00	-6.32	-5.52	-5.65	-12.33	-9.2	-5.68	-6.43	-0.66
2142	1/25/01	4:50:00	-6.32	-5.52	-5.65	-12.33	-9.2	-5.68	-6.43	-0.81
2143	1/25/01	5:00:00	-6.33	-5.53	-5.66	-12.34	-9.21	-5.69	-6.44	-0.97
2144	1/25/01	5:10:00	-6.32	-5.51	-5.66	-12.35	-9.2	-5.69	-6.43	-1.11

2145	1/25/01	5:20:00	-6.35	-5.55	-5.69	-12.36	-9.23	-5.72	-6.46	-1.29
2146	1/25/01	5:30:00	-6.35	-5.55	-5.69	-12.38	-9.23	-5.72	-6.46	-1.44
2147	1/25/01	5:40:00	-6.33	-5.53	-5.67	-12.37	-9.21	-5.71	-6.44	-1.56
2148	1/25/01	5:50:00	-6.35	-5.55	-5.69	-12.39	-9.23	-5.73	-6.48	-1.72
2149	1/25/01	6:00:00	-6.37	-5.56	-5.71	-12.41	-9.25	-5.74	-6.48	-1.88
2150	1/25/01	6:10:00	-6.36	-5.55	-5.71	-12.41	-9.25	-5.74	-6.48	-2.04
2151	1/25/01	6:20:00	-6.36	-5.56	-5.71	-12.41	-9.25	-5.74	-6.48	-2.18
2152	1/25/01	6:30:00	-6.36	-5.56	-5.71	-12.41	-9.25	-5.74	-6.48	-2.33
2153	1/25/01	6:40:00	-6.36	-5.56	-5.71	-12.41	-9.25	-5.74	-6.48	-2.49
2154	1/25/01	6:50:00	-6.36	-5.55	-5.71	-12.41	-9.25	-5.74	-6.48	-2.64
2155	1/25/01	7:00:00	-6.36	-5.55	-5.7	-12.41	-9.25	-5.75	-6.48	-2.79
2156	1/25/01	7:10:00	-6.36	-5.55	-5.72	-12.41	-9.25	-5.75	-6.48	-2.93
2157	1/25/01	7:20:00	-6.36	-5.55	-5.71	-12.43	-9.25	-5.75	-6.48	-3.09
2158	1/25/01	7:30:00	-6.36	-5.55	-5.71	-12.43	-9.25	-5.73	-6.48	-3.21
2159	1/25/01	7:40:00	-6.36	-5.54	-5.7	-12.43	-9.23	-5.74	-6.48	-3.34
2160	1/25/01	7:50:00	-6.35	-5.54	-5.7	-12.43	-9.21	-5.73	-6.48	-3.45
2161	1/25/01	8:00:00	-6.36	-5.54	-5.71	-12.44	-9.21	-5.73	-6.49	-3.56
2162	1/25/01	8:10:00	-6.38	-5.56	-5.73	-12.46	-9.23	-5.76	-6.51	-3.72
2163	1/25/01	8:20:00	-6.39	-5.58	-5.75	-12.48	-9.25	-5.77	-6.53	-3.77
2164	1/25/01	8:30:00	-6.39	-5.57	-5.75	-12.48	-9.25	-5.77	-6.53	-3.77

Delaware River-cont. - http://co-ops.nos.noaa.gov/tab2ec2b.html#38

Woodbury Creek, N.J. -0 19 -0 23 *0.93 *0.93 Philadelphia

Verified High/Low Water Level Data (W3)
- http://co-ops.nos.noaa.gov/cgi-bin/co-ops_qry.cgi

Station -- Unique seven character identifier for the station
Date Time -- Date and time the data were collected by the DCP
WL_Value -- Water level height

Ty -- Designation of Water level height. LL = lower low water,
L = low water, H = High water, HH Higher High water

I -- A flag that indicates that the water level value has been inferred.

L -- A flag that when set to 1 indicates that either the maximum or minimum expected water level height limit was exceeded

Data are in Meters above MSL
Times are on UTC (GMT)

8545240 PHILADELPHIA, DELAWARE RIVER, PA from 20000905 to 20010202

Station	Date	Time	WL	TY	I	L
8545240	2000/09/05	06:36	-0.879	LL	0	0
8545240	2000/09/05	12:00	0.682	H	0	0
8545240	2000/09/05	18:06	-0.606	L	0	0
8545240	2000/09/06	00:18	1.228	HH	0	0
8545240	2000/09/06	07:24	-0.542	L	0	0
8545240	2000/09/06	12:42	0.883	H	0	0
8545240	2000/09/06	19:18	-0.651	LL	0	0
8545240	2000/09/07	01:06	1.094	HH	0	0
8545240	2000/09/07	08:18	-0.609	L	0	0
8545240	2000/09/07	13:36	0.781	H	0	0
8545240	2000/09/07	20:18	-0.839	LL	0	0
8545240	2000/09/08	02:06	1.019	HH	0	0
8545240	2000/09/08	09:30	-0.797	L	0	0
8545240	2000/09/08	14:36	0.636	H	0	0
8545240	2000/09/08	21:18	-0.926	LL	0	0
8545240	2000/09/09	03:00	0.941	HH	0	0
8545240	2000/09/09	10:24	-0.973	L	0	0
8545240	2000/09/09	15:36	0.628	H	0	0
8545240	2000/09/09	22:18	-0.995	LL	0	0
8545240	2000/09/10	04:00	1.022	HH	0	0
8545240	2000/09/10	11:12	-0.930	LL	0	0
8545240	2000/09/10	16:30	0.715	H	0	0
8545240	2000/09/10	22:54	-0.919	L	0	0
8545240	2000/09/11	04:42	1.164	HH	0	0
8545240	2000/09/11	11:54	-0.801	L	0	0

Woodbury Creek, N.J. -0 19 -0 23 *0.93 *0.93 Philadelphia

8545240	2000/09/11	17:00	0.840	H	0 0
8545240	2000/09/11	23:42	-0.848	LL	0 0
8545240	2000/09/12	05:24	1.178	HH	0 0
8545240	2000/09/12	12:36	-0.813	L	0 0
8545240	2000/09/12	17:48	0.906	H	0 0
8545240	2000/09/13	00:30	-0.834	LL	0 0
8545240	2000/09/13	06:00	1.119	HH	0 0
8545240	2000/09/13	13:12	-0.844	L	0 0
8545240	2000/09/13	18:18	0.833	H	0 0
8545240	2000/09/14	01:18	-1.063	LL	0 0
8545240	2000/09/14	06:42	1.014	HH	0 0
8545240	2000/09/14	13:42	-0.885	L	0 0
8545240	2000/09/14	18:54	0.975	H	0 0
8545240	2000/09/15	01:42	-0.890	LL	0 0
8545240	2000/09/15	07:30	1.383	HH	0 0
8545240	2000/09/15	14:30	-0.584	L	0 0
8545240	2000/09/15	19:30	0.978	HH	0 0
8545240	2000/09/16	02:36	-0.899	LL	0 0
8545240	2000/09/16	07:42	0.936	H	0 0
8545240	2000/09/16	14:54	-0.938	L	0 0
8545240	2000/09/16	20:18	1.053	HH	0 0
8545240	2000/09/17	03:24	-0.944	LL	0 0
8545240	2000/09/17	08:30	0.942	H	0 0
8545240	2000/09/17	15:36	-0.961	L	0 0
8545240	2000/09/17	20:54	0.985	HH	0 0
8545240	2000/09/18	04:06	-0.964	LL	0 0
8545240	2000/09/18	09:12	0.759	H	0 0
8545240	2000/09/18	16:30	-1.154	LL	0 0
8545240	2000/09/18	21:48	0.845	HH	0 0
8545240	2000/09/19	04:54	-1.061	L	0 0
8545240	2000/09/19	10:06	0.780	H	0 0
8545240	2000/09/19	16:48	-1.006	LL	0 0
8545240	2000/09/19	22:30	1.154	HH	0 0
8545240	2000/09/20	06:30	-0.890	L	0 0
8545240	2000/09/20	11:24	0.668	H	0 0
8545240	2000/09/20	18:00	-1.021	LL	0 0
8545240	2000/09/20	23:30	1.042	HH	0 0
8545240	2000/09/21	06:54	-0.938	L	0 0
8545240	2000/09/21	12:06	0.785	H	0 0
8545240	2000/09/21	19:12	-1.043	L	0 0
8545240	2000/09/22	00:36	0.915	HH	0 0
8545240	2000/09/22	08:12	-1.102	LL	0 0
8545240	2000/09/22	13:30	0.585	H	0 0
8545240	2000/09/22	19:54	-1.082	LL	0 0
8545240	2000/09/23	01:36	1.066	HH	0 0
8545240	2000/09/23	09:00	-0.927	L	0 0
8545240	2000/09/23	14:24	0.839	H	0 0
8545240	2000/09/23	21:00	-0.897	L	0 0
8545240	2000/09/24	02:48	1.153	HH	0 0
8545240	2000/09/24	10:18	-0.902	LL	0 0
8545240	2000/09/24	15:30	0.869	H	0 0
8545240	2000/09/24	22:18	-0.990	L	0 0
8545240	2000/09/25	03:48	1.082	HH	0 0
8545240	2000/09/25	11:24	-1.098	LL	0 0
8545240	2000/09/25	16:42	0.853	H	0 0

Woodbury Creek, N.J. -0 19 -0 23 *0.93 *0.93 Philadelphia

8545240	2000/09/25	23:18	-0.936	LL	0	0
8545240	2000/09/26	05:00	1.256	H	0	0
8545240	2000/09/26	12:06	-0.715	L	0	0
8545240	2000/09/26	17:36	1.378	HH	0	0
8545240	2000/09/27	00:42	-0.665	LL	0	0
8545240	2000/09/27	06:06	1.398	HH	0	0
8545240	2000/09/27	13:06	-0.651	L	0	0
8545240	2000/09/27	18:12	1.211	H	0	0
8545240	2000/09/28	01:24	-0.815	L	0	0
8545240	2000/09/28	06:36	1.251	HH	0	0
8545240	2000/09/28	13:54	-0.870	LL	0	0
8545240	2000/09/28	19:06	1.092	H	0	0
8545240	2000/09/29	02:06	-0.987	LL	0	0
8545240	2000/09/29	07:18	0.979	H	0	0
8545240	2000/09/29	14:24	-0.957	L	0	0
8545240	2000/09/29	19:54	1.108	HH	0	0
8545240	2000/09/30	02:42	-0.822	L	0	0
8545240	2000/09/30	08:00	1.055	H	0	0
8545240	2000/09/30	15:06	-0.870	LL	0	0
8545240	2000/09/30	20:24	1.105	HH	0	0
8545240	2000/10/01	03:36	-0.853	L	0	0
8545240	2000/10/01	08:48	0.965	H	0	0
8545240	2000/10/01	15:48	-0.893	LL	0	0
8545240	2000/10/01	21:18	1.065	HH	0	0
8545240	2000/10/02	04:12	-0.843	L	0	0
8545240	2000/10/02	09:24	0.882	H	0	0
8545240	2000/10/02	16:24	-0.877	LL	0	0
8545240	2000/10/02	22:00	1.088	HH	0	0
8545240	2000/10/03	04:54	-0.709	L	0	0
8545240	2000/10/03	10:06	0.909	H	0	0
8545240	2000/10/03	17:00	-0.838	LL	0	0
8545240	2000/10/03	22:36	1.045	HH	0	0
8545240	2000/10/04	05:48	-0.810	L	0	0
8545240	2000/10/04	11:00	0.771	H	0	0
8545240	2000/10/04	17:36	-0.840	LL	0	0
8545240	2000/10/04	23:24	1.079	HH	0	0
8545240	2000/10/05	06:48	-0.786	LL	0	0
8545240	2000/10/05	11:54	0.653	H	0	0
8545240	2000/10/05	18:18	-0.784	L	0	0
8545240	2000/10/06	00:12	1.078	HH	0	0
8545240	2000/10/06	07:30	-0.705	LL	0	0
8545240	2000/10/06	12:54	0.817	H	0	0
8545240	2000/10/06	19:18	-0.659	L	0	0
8545240	2000/10/07	01:00	1.006	HH	0	0
8545240	2000/10/07	08:48	-0.985	LL	0	0
8545240	2000/10/07	14:12	0.594	H	0	0
8545240	2000/10/07	20:18	-0.826	L	0	0
8545240	2000/10/08	02:06	0.831	HH	0	0
8545240	2000/10/08	09:36	-1.076	LL	0	0
8545240	2000/10/08	15:00	0.681	H	0	0
8545240	2000/10/08	21:36	-0.934	L	0	0
8545240	2000/10/09	03:18	0.831	HH	0	0
8545240	2000/10/09	10:24	-1.039	LL	0	0
8545240	2000/10/09	15:42	0.622	H	0	0
8545240	2000/10/09	22:30	-1.001	L	0	0

Woodbury Creek, N.J. -0 19 -0 23 *0.93 *0.93 Philadelphia

8545240	2000/10/10	04:24	0.883	HH	0 0
8545240	2000/10/10	11:06	-0.896	L	0 0
8545240	2000/10/10	16:24	0.823	H	0 0
8545240	2000/10/10	23:36	-0.960	LL	0 0
8545240	2000/10/11	04:54	0.898	HH	0 0
8545240	2000/10/11	12:24	-1.040	L	0 0
8545240	2000/10/11	17:12	0.469	H	0 0
8545240	2000/10/12	00:24	-1.385	LL	0 0
8545240	2000/10/12	05:48	0.615	HH	0 0
8545240	2000/10/12	12:36	-1.214	LL	0 0
8545240	2000/10/12	18:00	0.694	H	0 0
8545240	2000/10/13	00:48	-1.171	L	0 0
8545240	2000/10/13	06:06	0.845	HH	0 0
8545240	2000/10/13	13:12	-1.065	L	0 0
8545240	2000/10/13	18:36	0.842	HH	0 0
8545240	2000/10/14	01:36	-1.091	LL	0 0
8545240	2000/10/14	06:42	0.802	H	0 0
8545240	2000/10/14	13:48	-1.108	LL	0 0
8545240	2000/10/14	19:18	0.869	HH	0 0
8545240	2000/10/15	02:18	-1.088	L	0 0
8545240	2000/10/15	07:30	0.846	H	0 0
8545240	2000/10/15	14:30	-1.073	L	0 0
8545240	2000/10/15	19:54	0.931	HH	0 0
8545240	2000/10/16	03:00	-1.100	LL	0 0
8545240	2000/10/16	08:18	0.805	H	0 0
8545240	2000/10/16	15:00	-1.069	LL	0 0
8545240	2000/10/16	20:42	1.071	HH	0 0
8545240	2000/10/17	03:36	-0.888	L	0 0
8545240	2000/10/17	09:00	1.002	H	0 0
8545240	2000/10/17	15:42	-0.774	LL	0 0
8545240	2000/10/17	21:24	1.228	HH	0 0
8545240	2000/10/18	04:36	-0.727	L	0 0
8545240	2000/10/18	09:54	0.984	H	0 0
8545240	2000/10/18	16:42	-0.780	L	0 0
8545240	2000/10/18	22:12	1.136	HH	0 0
8545240	2000/10/19	05:48	-0.890	LL	0 0
8545240	2000/10/19	10:54	0.709	H	0 0
8545240	2000/10/19	17:36	-0.987	LL	0 0
8545240	2000/10/19	23:12	0.929	HH	0 0
8545240	2000/10/20	06:42	-0.966	L	0 0
8545240	2000/10/20	12:00	0.723	H	0 0
8545240	2000/10/20	18:30	-0.923	L	0 0
8545240	2000/10/21	00:18	1.084	HH	0 0
8545240	2000/10/21	08:00	-0.936	LL	0 0
8545240	2000/10/21	13:12	0.678	H	0 0
8545240	2000/10/21	19:54	-0.996	L	0 0
8545240	2000/10/22	01:30	0.954	HH	0 0
8545240	2000/10/22	09:06	-1.047	LL	0 0
8545240	2000/10/22	14:18	0.639	H	0 0
8545240	2000/10/22	20:48	-1.010	LL	0 0
8545240	2000/10/23	02:54	1.111	HH	0 0
8545240	2000/10/23	10:12	-0.891	L	0 0
8545240	2000/10/23	15:12	0.772	H	0 0
8545240	2000/10/23	22:06	-0.991	LL	0 0
8545240	2000/10/24	03:48	1.036	HH	0 0

Woodbury Creek, N.J. -0 19 -0 23 *0.93 *0.93 Philadelphia

8545240	2000/10/24	11:00	-0.936	L	0	0
8545240	2000/10/24	16:18	0.897	H	0	0
8545240	2000/10/24	23:24	-0.997	L	0	0
8545240	2000/10/25	04:36	0.913	HH	0	0
8545240	2000/10/25	11:54	-1.088	LL	0	0
8545240	2000/10/25	17:12	0.815	H	0	0
8545240	2000/10/26	00:12	-1.086	LL	0	0
8545240	2000/10/26	05:30	0.913	H	0	0
8545240	2000/10/26	12:36	-1.040	L	0	0
8545240	2000/10/26	18:06	0.986	HH	0	0
8545240	2000/10/27	01:00	-0.945	L	0	0
8545240	2000/10/27	06:12	0.963	H	0	0
8545240	2000/10/27	13:18	-0.977	LL	0	0
8545240	2000/10/27	18:48	1.067	HH	0	0
8545240	2000/10/28	01:54	-0.906	LL	0	0
8545240	2000/10/28	07:00	0.994	HH	0	0
8545240	2000/10/28	13:54	-0.852	L	0	0
8545240	2000/10/28	19:00	0.844	H	0	0
8545240	2000/10/29	02:48	-1.222	LL	0	0
8545240	2000/10/29	08:06	0.613	H	0	0
8545240	2000/10/29	14:30	-0.982	L	0	0
8545240	2000/10/29	20:00	0.856	HH	0	0
8545240	2000/10/30	03:18	-1.129	LL	0	0
8545240	2000/10/30	08:30	0.687	H	0	0
8545240	2000/10/30	14:54	-0.926	L	0	0
8545240	2000/10/30	20:30	0.878	HH	0	0
8545240	2000/10/31	03:42	-1.008	L	0	0
8545240	2000/10/31	09:00	0.682	H	0	0
8545240	2000/10/31	16:00	-1.009	LL	0	0
8545240	2000/10/31	21:42	0.973	HH	0	0
8545240	2000/11/01	04:18	-0.811	LL	0	0
8545240	2000/11/01	09:48	0.840	H	0	0
8545240	2000/11/01	16:24	-0.784	L	0	0
8545240	2000/11/01	22:06	1.031	HH	0	0
8545240	2000/11/02	05:06	-0.729	LL	0	0
8545240	2000/11/02	10:36	0.843	H	0	0
8545240	2000/11/02	17:00	-0.673	L	0	0
8545240	2000/11/02	23:00	1.140	HH	0	0
8545240	2000/11/03	06:00	-0.656	LL	0	0
8545240	2000/11/03	11:24	0.858	H	0	0
8545240	2000/11/03	17:42	-0.591	L	0	0
8545240	2000/11/03	23:36	1.162	HH	0	0
8545240	2000/11/04	06:54	-0.644	L	0	0
8545240	2000/11/04	12:18	0.808	H	0	0
8545240	2000/11/04	18:36	-0.679	LL	0	0
8545240	2000/11/05	00:30	1.052	HH	0	0
8545240	2000/11/05	08:00	-0.793	L	0	0
8545240	2000/11/05	13:24	0.749	HH	0	0
8545240	2000/11/05	20:06	-0.865	LL	0	0
8545240	2000/11/06	01:42	0.652	H	0	0
8545240	2000/11/06	08:36	-0.969	LL	0	0
8545240	2000/11/06	14:18	0.735	H	0	0
8545240	2000/11/06	20:36	-0.752	L	0	0
8545240	2000/11/07	02:30	0.957	HH	0	0
8545240	2000/11/07	09:30	-0.886	LL	0	0

Woodbury Creek, N.J. -0 19 -0 23 *0.93 *0.93 Philadelphia

8545240	2000/11/07	15:06	0.910	H	0	0
8545240	2000/11/07	21:54	-0.785	L	0	0
8545240	2000/11/08	03:30	1.002	HH	0	0
8545240	2000/11/08	10:18	-0.809	LL	0	0
8545240	2000/11/08	15:54	1.040	H	0	0
8545240	2000/11/08	22:42	-0.695	L	0	0
8545240	2000/11/09	04:12	1.084	HH	0	0
8545240	2000/11/09	11:12	-0.794	LL	0	0
8545240	2000/11/09	16:42	1.037	H	0	0
8545240	2000/11/09	23:24	-0.695	L	0	0
8545240	2000/11/10	05:00	1.205	HH	0	0
8545240	2000/11/10	11:36	-0.454	L	0	0
8545240	2000/11/10	17:00	1.244	HH	0	0
8545240	2000/11/11	00:36	-0.785	LL	0	0
8545240	2000/11/11	05:36	0.875	H	0	0
8545240	2000/11/11	13:00	-1.095	L	0	0
8545240	2000/11/11	18:06	0.688	H	0	0
8545240	2000/11/12	01:18	-1.174	LL	0	0
8545240	2000/11/12	06:42	0.725	HH	0	0
8545240	2000/11/12	13:06	-0.972	LL	0	0
8545240	2000/11/12	19:00	1.247	HH	0	0
8545240	2000/11/13	02:06	-0.802	L	0	0
8545240	2000/11/13	07:06	1.009	H	0	0
8545240	2000/11/13	14:00	-0.886	LL	0	0
8545240	2000/11/13	19:30	1.250	HH	0	0
8545240	2000/11/14	02:54	-0.775	L	0	0
8545240	2000/11/14	08:00	0.993	H	0	0
8545240	2000/11/14	14:36	-0.791	L	0	0
8545240	2000/11/14	20:12	1.257	HH	0	0
8545240	2000/11/15	04:00	-0.924	LL	0	0
8545240	2000/11/15	08:54	0.609	H	0	0
8545240	2000/11/15	15:36	-1.003	L	0	0
8545240	2000/11/15	21:06	0.934	HH	0	0
8545240	2000/11/16	05:00	-1.116	LL	0	0
8545240	2000/11/16	09:54	0.480	H	0	0
8545240	2000/11/16	16:30	-1.169	LL	0	0
8545240	2000/11/16	22:12	0.963	HH	0	0
8545240	2000/11/17	05:48	-0.983	L	0	0
8545240	2000/11/17	10:42	0.566	H	0	0
8545240	2000/11/17	17:42	-1.141	L	0	0
8545240	2000/11/17	23:06	0.713	HH	0	0
8545240	2000/11/18	07:00	-1.360	LL	0	0
8545240	2000/11/18	12:12	0.401	H	0	0
8545240	2000/11/18	18:48	-1.206	LL	0	0
8545240	2000/11/19	00:24	0.779	HH	0	0
8545240	2000/11/19	07:48	-1.135	L	0	0
8545240	2000/11/19	13:00	0.560	H	0	0
8545240	2000/11/19	19:36	-1.061	L	0	0
8545240	2000/11/20	01:24	0.830	HH	0	0
8545240	2000/11/20	08:42	-1.063	LL	0	0
8545240	2000/11/20	14:12	0.764	H	0	0
8545240	2000/11/20	20:42	-0.839	L	0	0
8545240	2000/11/21	02:12	0.913	HH	0	0
8545240	2000/11/21	10:00	-1.143	LL	0	0
8545240	2000/11/21	15:24	0.670	H	0	0

Woodbury Creek, N.J. -0 19 -0 23 *0.93 *0.93 Philadelphia

8545240	2000/11/21	22:12	-1.094	L	0 0
8545240	2000/11/22	03:24	0.452	HH	0 0
8545240	2000/11/22	11:00	-1.450	LL	0 0
8545240	2000/11/22	16:24	0.306	H	0 0
8545240	2000/11/22	23:18	-1.373	L	0 0
8545240	2000/11/23	04:36	0.455	HH	0 0
8545240	2000/11/23	12:00	-1.523	LL	0 0
8545240	2000/11/23	17:06	0.344	H	0 0
8545240	2000/11/23	23:48	-1.340	LL	0 0
8545240	2000/11/24	05:12	0.621	H	0 0
8545240	2000/11/24	12:00	-1.196	L	0 0
8545240	2000/11/24	17:42	0.934	HH	0 0
8545240	2000/11/25	00:54	-1.035	L	0 0
8545240	2000/11/25	05:54	0.709	H	0 0
8545240	2000/11/25	12:48	-1.130	LL	0 0
8545240	2000/11/25	18:36	0.925	HH	0 0
8545240	2000/11/26	01:30	-1.006	LL	0 0
8545240	2000/11/26	06:48	0.795	H	0 0
8545240	2000/11/26	13:00	-0.689	L	0 0
8545240	2000/11/26	19:00	1.358	HH	0 0
8545240	2000/11/27	02:30	-0.680	L	0 0
8545240	2000/11/27	07:24	0.891	H	0 0
8545240	2000/11/27	14:00	-0.821	LL	0 0
8545240	2000/11/27	19:30	1.029	HH	0 0
8545240	2000/11/28	03:00	-1.002	L	0 0
8545240	2000/11/28	08:06	0.579	H	0 0
8545240	2000/11/28	14:36	-1.086	LL	0 0
8545240	2000/11/28	20:18	0.871	HH	0 0
8545240	2000/11/29	03:30	-1.037	L	0 0
8545240	2000/11/29	08:36	0.453	H	0 0
8545240	2000/11/29	15:06	-1.128	LL	0 0
8545240	2000/11/29	21:00	0.894	HH	0 0
8545240	2000/11/30	04:06	-0.856	L	0 0
8545240	2000/11/30	09:00	0.638	HH	0 0
8545240	2000/11/30	16:06	-0.977	LL	0 0
8545240	2000/11/30	21:48	0.330	H	0 0

APPENDIX E
Purge Logs from Round 1, Round 2, and Round 3

Ground Water Sampling Log

Well No.:	**MW1**	Date:	12/8/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	17.3'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**11.44**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1540	Start Pump:	1439
Sample Analyses:	Full TCL/TAL	Stop Pump:	1521
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	4 gallons		Kris Nagy

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1439	Initial	4.05	0.131	-10	3.8	14.1	11.44	
1449	1	3.91	0.138	134	2.28	16.1	12.95	
1500	2	3.82	0.149	115	2.37	16.7	13.30	
1510	3	3.77	0.168	-10	2.57	16.9	13.31	
1521	4	3.78	0.183	-10	2.71	16.9	13.31	
1540	Sample	3.85	0.189	372	3.44	13.8	11.62	

Ground Water Sampling Log

Well No.:	**MW2**	Date:	12/5/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	17.0'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**12.42**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1632	Start Pump:	1545
Sample Analyses:	Full TCL/TAL	Stop Pump:	1616
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	3.2 gallons		Kris Nagy

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1545	Initial	5.18	0.030	-10	5.37	14.2	12.42	
1553	1	5.13	0.031	-10	4.19	15	13.53	
1600	2	5.14	0.032	-10	5.15	15.4	13.75	
1609	3	5.19	0.034	-10	6.39	15.5	13.86	
1616	4	5.19	0.034	-10	6.9	15.6	13.88	
1632	Sample	5.07	0.035	-10	6.32	13.2	12.55	

Ground Water Sampling Log

Well No.:	**MW3**	Date:	12/8/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	17.0'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**12.19**	Sampling Device:	Disposable Teflon Bailer
Sample Time	905	Start Pump:	842
Sample Analyses:	Full TCL/TAL	Stop Pump:	852
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	3.2 gallons		Kris Nagy

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
842	Initial	4.66	0.123	71	6.91	12.1	12.19	
846	1	5.33	0.097	-10	5.63	13.4	14.11	
849	2	5.23	0.045	-10	5.78	13.8	14.67	
852	3	5.23	0.045	-10	5.87	14	15.97	
905	Sample	5.27	0.047	-10	5.64	12.6	12.57	

Ground Water Sampling Log

Well No.:	**MW4**	Date:	12/8/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	15.4'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**11.05**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1645	Start Pump:	1038
Sample Analyses:	Full TCL/TAL	Stop Pump:	1048
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	3 gallons		Kris Nagy

Note: Slow recharge, purged dry.

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1038	Initial	4.87	0.095	-10	6.32	125	11.05	
1042	1	4.84	0.099	-10	3.96	12.8	13.15	
1048	2	4.85	0.098	-10	2.28	13.7	14.50	
1645	Sample	4.87	0.084	-10	5.7	10.9	11.09	

Ground Water Sampling Log

Well No.:	**MW5**	Date:	12/8/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	17.1'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**11.01**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1620	Start Pump:	933
Sample Analyses:	Full TCL/TAL	Stop Pump:	1031
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	4.06 gallons		Kris Nagy

Note: Very slow recharge.

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
933	Initial	4.6	0.158	37	3.78	14.2	11.01	
948	1	4.6	0.172	9	1.87	17.6	13.05	
1008	2	4.62	0.263	-10	0.53	18.5	14.35	
1031	3	4.66	0.464	2	0.86	18.3	15.97	
1620	Sample	4.55	0.381	354	5.29	14.3	11.13	

Ground Water Sampling Log

Well No.:	**MW6**	Date:	12/7/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	15.2'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**9.28**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1535	Start Pump:	1215
Sample Analyses:	Full TCL/TAL	Stop Pump:	1255
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	4 gallons		Kris Nagy

Note: Possibly tidally influenced, slow recovery, purged dry.

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1215	Initial	5.83	0.176	55	3.03	12.3	9.28	
1224	1	5.67	0.174	40	0.59	13.8	11.50	
1247	2	5.65	0.175	-10	-0.45	15.2	13.46	
1255	~2.5	5.68	0.175	-10	-0.87	15.2	14.45	
1535	Sample	5.58	0.179	377	5	11.7	12.95	

Ground Water Sampling Log

Well No.:	**MW7**	Date:	12/5/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	17.0'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**9.08**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1515	Start Pump:	1436
Sample Analyses:	Full TCL/TAL	Stop Pump:	1459
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	5.4 gallons		Kris Nagy

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1436	Initial	5.05	0.063	250	5.17	12.4	9.08	
1443	1	4.99	0.060	94	3.26	13.1	10.63	
1450	2	4.92	0.060	20	3.63	13.2	11.33	
1459	3	4.89	0.061	114	4.2	13.2	11.60	
1515	Sample	5.02	0.063	164	3.82	11.4	9.25	

Ground Water Sampling Log

Well No.:	**MW8**	Date:	12/7/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	22.5'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**19.31**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1500	Start Pump:	1121
Sample Analyses:	Full TCL/TAL	Stop Pump:	1152
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	2.2 gallons		Kris Nagy

Note: Slow recovery, problem with pump flow, purged dry.

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1121	Initial	5.04	0.081	-10	2.97	12.5	19.31	
1128	1	5.02	0.085	-10	0.67	15.3	20.66	
1139	2	4.98	0.127	-3	0.35	16.8	21.00	
1152	<3	4.96	0.140	15	0.41	16.9	21.08	
1500	Sample	4.95	0.142	150	3.02	12.4	19.37	

Ground Water Sampling Log

Well No.:	**MW9**	Date:	12/6/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	17.0'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**13.36**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1402	Start Pump:	1338
Sample Analyse:	Full TCL/TAL	Stop Pump:	1420
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	2.4 gallons		Kris Nagy

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1338	Initial	5.02	0.086	-10	3.34	13.6	13.36	
1341	1	5	0.085	8	4.47	13	14.86	
1353	2	5.01	0.102	45	2.37	16.2	14.21	
1402	3	4.98	0.101	47	3.59	16.3	16.24	
1420	Sample	5.1	0.107	160	5.35	12.4	13.41	

Ground Water Sampling Log

Well No.:	**MW10**	Date:	12/6/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	17.2'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**12.40**	Sampling Device:	Disposable Teflon Bailer
Sample Time	MW-5S @ 1540	Start Pump:	1247
Sample Analyses:	1315	Stop Pump:	1304
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	3.2 gallons		Kris Nagy

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1247	Initial	6.14	0.109	-10	3.63	14.4	12.4	
1253	1	5.94	0.107	122	2.23	15.5	13.14	
1258	2	5.91	0.108	142	1.92	15.8	13.15	
1304	3	5.89	0.109	-10	1.82	15.9	13.15	
1315	Sample	5.96	0.108	590	2.93	13.5	12.44	

Ground Water Sampling Log

Well No.:	**MW11**	Date:	12/6/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	15.2'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**11.85**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1230	Start Pump:	1149
Sample Analyses:	Full TCL/TAL	Stop Pump:	1212
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	2.2 gallons		Kris Nagy

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1149	Initial	6.76	0.201	55	2.27	13.8	11.85	
1155	1	6.7	0.200	999	0.87	15.2	13.70	
1204	2	6.69	0.205	555	1.41	16.2	13.61	
1212	3	6.71	0.207	43	1.68	16.3	13.58	
1230	Sample	6.8	0.208	580	4.39	13.1	12.00	

Ground Water Sampling Log

Well No.:	**MW12**	Date:	12/6/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	15.3'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**11.52**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1515	Start Pump:	1444
Sample Analyses:	Full TCL/TAL	Stop Pump:	1455
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	2.6 gallons		Kris Nagy

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1444	Initial	6.47	0.189	-10	9.78	10.2	11.52	
1448	1	6.62	0.190	166	7.13	11.9	12.21	
1451	2	6.64	0.190	999	6.7	12.3	12.23	
1455	3	6.65	0.192	663	6.48	12.4	12.26	
1515	Sample	6.74	0.192	839	5.64	9.5	11.57	

Ground Water Sampling Log

Well No.:	**MW13S**	Date:	12/7/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	17.3'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**9.63**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1622	Start Pump:	1336
Sample Analyses:	Full TCL/TAL	Stop Pump:	1407
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	5.2 gallons		Kris Nagy

Note: slow recovery, purged dry.

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1336	Initial	5.08	0.445	-10	1.34	10.6	9.63	
1345	1	5.01	0.454	-10	0.77	12.5	12.22	
1400	2	5.03	0.428	-10	0.75	12.5	14.61	
1407	~2.8	5.06	0.440	-10	2.09	12.8	16.45	
1622	Sample	5.28	0.454	232	5.04	10.5	13.62	

Ground Water Sampling Log

Well No.:	**MW13D**	Date:	12/7/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	79.5'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**25.05**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1557	Start Pump:	1331
Sample Analyses:	Full TCL/TAL	Stop Pump:	1416
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	36.2 gallons		Kris Nagy

Note: slight odor

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1331	Initial	6.87	0.264	-10	1.91	12.6	25.05	
1344	1	6.85	0.267	-10	-1.03	13.7	25.12	
1359	2	6.83	0.268	-10	-0.78	13.6	25.12	
1416	3	6.84	0.266	-10	-1.06	13.7	25.14	
1557	Sample	6.82	0.257	34	0.48	11.4	25.05	

Ground Water Sampling Log

Well No.:	**MW14S**	Date:	12/4/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	25.2'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**14.31**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1645	Start Pump:	1540
Sample Analyses:	Full TCL/TAL	Stop Pump:	1557
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	7 gallons		Kris Nagy

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1540	Initial	6.99	0.232	578	4.61	12.8	14.31	
1545	1	6.14	0.123	44	2.48	13.9	17.93	
1550	2	6.4	0.161	418	-1.01	14.2	22.31	
1557	3	6.42	0.160	415	-1.02	14.2	24.98	
1645	Sample	6.26	0.106	202	7.05	11	15.30	

Ground Water Sampling Log

Well No.:	**MW14D**	Date:	12/4/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	17.3'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**37.15**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1500	Start Pump:	1400
Sample Analyses:	Full TCL/TAL	Stop Pump:	1450
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	34 Gallons		Kris Nagy
Notes:	Collect MS/MSD		

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1400	Initial	5.79	0.411	999	2.03	12.6	37.15	
1420	1	6.82	0.358	29	-1.31	13.6	37.91	
1435	2	6.73	0.358	-10	-0.49	13.6	37.91	
1450	3	6.74	0.359	-10	-0.49	13.6	37.91	

Ground Water Sampling Log

Well No.:	**MW15S**	Date:	12/7/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	15.2'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**10.10**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1100	Start Pump:	836
Sample Analyses:	Full TCL/TAL	Stop Pump:	854
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	3.4 gallons		Kris Nagy

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
836	Initial	5.25	0.100	-10	3.16	11.3	10.1	
839	1	4.49	0.099	-10	0.39	12.6	12.37	
846	2	4.6	0.099	-10	0.25	13.8	13.76	
854	3	4.62	0.099	-10	0.18	13.9	14.08	
1100	Sample	5.13	0.094	-10	1.96	11.2	10.45	

Ground Water Sampling Log

Well No.:	**MW15D**	Date:	12/7/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	70.5'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**15.26**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1025	Start Pump:	915
Sample Analyses:	Full TCL/TAL	Stop Pump:	958
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	37 gallons		Kris Nagy

Note: Slow recovery.

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
915	Initial	6.33	0.326	551	0.06	13	15.26	
930	1	6.59	0.252	-10	1.07	13.4	15.49	
944	2	6.61	0.250	-10	1.06	13.3	15.48	
958	3	6.6	0.248	-10	-0.61	13.2	15.48	
1025	Sample	6.67	0.232	28	0.64	9.5	15.26	

Ground Water Sampling Log

Well No.:	**MW16S**	Date:	12/8/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	15.2'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**7.30**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1400	Start Pump:	1230
Sample Analyses:	Full TCL/TAL	Stop Pump:	1259
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	5.2 gallons		Kris Nagy

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1230	Initial	6.88	0.044	-10	0.78	13.1	7.3	
1239	1	6.93	0.442	999	-0.87	14.5	10.75	
1248	2	6.96	0.444	999	-0.74	14.6	11.00	
1259	3	7.28	0.438	387	1.08	14	11.06	
1400	Sample	7	0.430	-10	1.2	12.7	7.26	

Ground Water Sampling Log

Well No.:	**MW16D**	Date:	12/8/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	71.3'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**15.23**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1250	Start Pump:	1127
Sample Analyses:	Full TCL/TAL	Stop Pump:	1222
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	37 gallons		Kris Nagy

Note: Collect MS/MSD and MWDUP-2

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1127	Initial	6.41	0.200	9	-0.04	13.3	15.23	
1146	1	6.64	0.200	-5	-0.7	14.1	15.72	
1204	2	6.61	0.201	-10	-1.03	14.3	15.74	
1222	3	6.6	0.203	-10	-0.47	14.2	15.70	
1250	Sample	6.99	0.196	40	1.34	13.7	15.23	

Ground Water Sampling Log

Well No.:	**MW17S**	Date:	12/5/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	15.2'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**6.53**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1320	Start Pump:	1135
Sample Analyses:	Full TCL/TAL	Stop Pump:	1149
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	6 gallons		Kris Nagy
Note:	collect MWDUP-1		

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1135	Initial	4.95	0.138	47	3.35	10.6	6.53	
1140	1	5.6	0.084	248	0.61	10.7	8.85	
1144	2	5.69	0.087	625	0.42	10.8	9.83	
1149	3	5.68	0.091	447	1.66	10.9	10.15	
1320	Sample	5.86	0.093	418	3.86	9.6	6.51	

Ground Water Sampling Log

Well No.:	**MW17D**	Date:	12/5/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	72.3'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**15.12**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1340	Start Pump:	1202
Sample Analyses:	Full TCL/TAL	Stop Pump:	1257
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	38 gallons		Kris Nagy

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1202	Initial	5.99	0.202	6	1.82	13.8	15.12	
1221	1	6.4	0.000	68	11.58	8.7	15.43	
1239	2	6.12	0.207	69	-1.11	14.3	15.44	
1257	3	6.14	0.209	66	-0.57	14.2	15.43	
1340	Sample	6.16	0.196	123	1.56	12.4	NA	

Ground Water Sampling Log

Well No.:	**MW18S**	Date:	12/6/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	15.3'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**11.08**	Sampling Device:	Disposable Teflon Bailer
Sample Time	950	Start Pump:	906
Sample Analyses:	Full TCL/TAL	Stop Pump:	917
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	2.8 gallons		Kris Nagy

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
906	Initial	5.34	0.204	202	2.27	13.1	11.08	
911	1	5.54	0.200	179	-0.42	14.6	11.49	
914	2	5.59	0.198	17	-0.57	14.8	11.51	
917	3	5.61	0.197	-10	-0.67	14.9	11.52	
950	Sample	6.18	0.197	146	1.14	13.4	11.08	

Ground Water Sampling Log

Well No.:	**MW18D**	Date:	12/6/00
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	71.5'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**11.25**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1100	Start Pump:	938
Sample Analyses:	Full TCL/TAL	Stop Pump:	1049
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	40.4 gallons		Kris Nagy

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
938	Initial	6.74	0.273	525	1.18	14.1	11.25	
1006	1	6.31	0.211	0	-0.97	14.1	11.57	
1028	2	6.32	0.217	-10	-0.97	14.1	11.61	
1049	3	6.34	0.219	-10	-0.97	14	11.62	
1100	Sample	6.28	0.185	36	0.98	12.9	11.37	

Ground Water Sampling Log

Well No.: **MW1**
Project: New Jersey Department of Environmental Protection
Well Depth: 17.3'
Well Diameter: 4"
Measuring Poi: Top of PVC
Water Level: **11.15**
Sample Time 1130
Sample Analys: Full TCL/TAL

Date: 2/2/01
Site: Matteo Iron & Metal
West Deptford, New Jersey
Casing Type: PVC
Screen Length: 10'
Tubing Type: Teflon Lined
Pump: 2" Grunfos
Start Pump: 1025
Stop Pump: 1125
Sample Personnel: Brian Jankauskas
Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1025	4.16	0.254	60.2	4.94	10.54	443	11.46	125	
1030	4.3	0.253	52.9	4.71	10.59	449	11.45	175	
1035	4.33	0.252	51.5	4.94	10.59	456	11.43	200	
1040	4.35	0.251	50.3	5.21	10.65	460	11.43	200	
1045	4.36	0.251	48.6	5.65	10.77	462	11.43	200	
1050	4.34	0.250	48.6	6.13	10.91	463	11.43	200	
1055	4.32	0.250	48.7	6.37	11.02	463	11.39	175	
1100	4.28	0.250	49.0	5.93	11.22	463	11.37	150	
1105	4.27	0.249	48.3	5.79	11.33	461	1.36	150	
1110	4.26	0.246	48.2	5.69	11.42	461	11.33	150	
1115	4.24	0.243	48.2	5.51	11.5	461	11.33	175	
1120	4.24	0.243	48.5	5.21	11.6	461	11.33	150	
1125	4.24	0.243	48.5	5.05	11.65	461	11.32	200	

Ground Water Sampling Log

Well No.:	**MW2**	Date:	1/26/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	17.0'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Poin	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**11.71**	Pump:	2" Grunfos
Sample Time	1100	Start Pump:	915
Sample Analys	Full TCL/TAL	Stop Pump:	1045
		Sample Personnel:	Brian Jankauskas
Note:	collect dup and ms/msd		Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min	Remarks
915							11.98	300	
930							11.92	200	slow rate
935	3.34	0.105	6.6	12.46	9.41	250.6	12.05	225	
940	3.39	0.083	6.9	12.47	9.60	258.2	12.07	375	slow rate
945	3.50	0.066	6.6	12.50	9.78	256.5	12.01	250	
950	3.60	0.064	6.0	12.20	9.82	265.1	11.99	250	
955	3.68	0.064	5.9	12.10	9.84	270.0	11.95	250	
1000	3.77	0.060	6.3	12.08	9.93	273.0	11.88	200	
1005	3.76	0.058	6.2	12.67	10.84	248.0	11.95	250	
1010	3.93	0.055	5.9	12.56	11.32	253.2	11.92	200	
1015	4.03	0.055	6.1	12.26	11.39	259.3	11.92	200	
1020	4.06	0.055	6.2	12.16	11.48	261.4	11.86	200	
1025	3.97	0.053	6.0	11.97	11.55	262.1	12.02	250	
1030	4.03	0.051	6.0	11.73	11.49	267.1	12.00	250	
1035	4.18	0.053	6.3	11.63	13.24	271.7	11.94	200	
1040	4.22	0.049	6.3	11.60	13.15	272.4	11.88	200	
1045	4.25	0.050	6.0	11.58	12.92	270.3	11.71	200	

Ground Water Sampling Log

Well No.: **MW3**
Project: New Jersey Department of Environmental Protection
Well Depth: 17.0'
Well Diameter 4"
Measuring Poi Top of PVC
Water Level: **11.18**
Sample Time 1130
Sample Analys Full TCL/TAL

Date: 2/1/01
Site: Matteo Iron & Metal
West Deptford, New Jersey
Casing Type: PVC
Screen Length: 10'
Tubing Type: Teflon Lined
Pump: 2" Grunfos
Start Pump: 1040
Stop Pump: 1125
Sample Personnel: Brian Jankauskas
Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1040	5.48	0.071	1.0	12.69	9.10	319	11.36	250	
1045	5.43	0.071	0.7	12.55	9.04	345	11.34	175	
1050	5.40	0.071	0.5	12.48	9.05	359	11.32	150	
1055	5.39	0.071	0.5	12.51	9.10	371	11.31	150	
1100	5.30	0.072	14.0	12.27	10.19	384	11.29	150	
1105	5.30	0.071	0.7	12.23	10.73	385	11.36	225	
1110	5.30	0.071	0.5	12.28	10.93	391	11.33	175	
1115	5.29	0.071	0.6	12.23	11.09	396	11.28	125	
1120	5.27	0.071	0.7	12.12	11.26	400	11.28	125	
1125	5.26	0.071	0.8	12.04	11.36	403	11.28	175	

Ground Water Sampling Log

Well No.:	**MW4**	Date:	2/1/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	15.4'	Casing Type:	PVC
Well Diameter	4"	Screen Length:	10'
Measuring Poi	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**10.78**	Pump:	2" Grunfos
Sample Time	MW-5S @ 1540	Start Pump:	940
Sample Analys	Full TCL/TAL	Stop Pump:	1035
		Sample Personnel:	Brian Jankauskas
			Kris Nagy

Note: DO didn't stabilize

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
940	6.32	0.135	1	6.05	9.6	10.0	10.92	250	
945	6.18	0.135	1	5.75	10.1	9.8	10.87	200	
950	6.08	0.135	-1	5.51	10.9	8.5	10.92	250	
955	6.04	0.133	-2	5.84	11.2	9.1	10.91	200	
1000	4.53	0.142	0	5.45	11.3	13.4	10.91	200	
1005	4.24	0.142	0	5.31	11.4	13.6	10.91	200	
1010	4.13	0.142	0	5.01	11.4	13.8	10.92	200	
1015	4.16	0.142	0	5.13	11.6	14.0	10.91	200	
1020	3.74	0.136	0	5.00	11.4	14.1	10.91	200	
1025	3.71	0.137	0	4.98	11.3	14.1	10.88	200	
1030	3.71	0.138	0	5.06	11.2	14.3	10.91	200	
1035	3.72	0.137	0	5.11	11.2	14.1	10.91	200	

Ground Water Sampling Log

Well No.:	**MW5**	Date:	1/31/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	17.1'	Casing Type:	PVC
Well Diameter	4"	Screen Length:	10'
Measuring Poi	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**10.33**	Pump:	2" Grunfos
Sample Time	1515	Start Pump:	1420
Sample Analy:	Full TCL/TAL	Stop Pump:	1500
		Sample Personnel:	Brian Jankauskas Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1420	5.2	0.148	94	4.92	12.3	-9.9	11.10	250	
1425	4.85	0.111	9	4.58	13.5	-8.5	11.30	200	
1430	4.73	0.115	68	4.34	14.0	-8.7	11.37	250	
1435	4.63	0.118	57	4.02	13.8	-7.3	11.37	250	
1440	4.60	0.117	52	3.88	14.0	-6.8	11.36	250	
1445	4.56	0.120	50	3.77	14.1	-6.6	11.37	250	
1450	4.55	0.122	50	3.63	14.3	-6.6	11.38	200	
1455	4.55	0.122	48	3.62	14.1	-6.8	11.37	200	
1500	4.56	0.123	48	3.59	14.3	-6.6	11.36	200	

Ground Water Sampling Log

Well No.: **MW6**
Project: New Jersey Department of Environmental Protection
Well Depth: 15.2'
Well Diameter: 4"
Measuring Poi: Top of PVC
Water Level: **6.57**
Sample Time: 1545
Sample Analy: Full TCL/TAL

Date: 1/31/01
Site: Matteo Iron & Metal
West Deptford, New Jersey
Casing Type: PVC
Screen Length: 10'
Tubing Type: Teflon Lined
Pump: 2" Grunfos
Start Pump: 1445
Stop Pump: 1535
Sample Personnel: Brian Jankauskas
Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1445	5.19	0.280	1.0	6.81	8.94	400	6.99	125	
1450	5.15	0.280	1.2	6.49	8.99	404	7.03	175	
1455	5.15	0.280	1.2	6.68	9.06	408	7.06	125	
1500	5.14	0.280	1.4	6.58	9.15	411	7.08	125	
1505	5.14	0.280	1.5	6.55	9.22	413	7.09	125	
1510	5.12	0.280	1.8	6.31	9.70	411	7.17	125	
1515	5.12	0.280	1.9	6.31	9.94	411	7.17	100	
1520	5.12	0.280	2.1	6.35	10.03	411	7.50	100	
1525	5.14	0.283	2.6	6.37	10.22	410	7.27	150	
1530	5.13	0.284	3.4	6.32	10.5	409	7.28	175	
1535	5.13	0.284	4.2	6.34	10.73	411	7.28	200	

Ground Water Sampling Log

Well No.:	**MW7**	Date:	2/1/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	17.0'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Poi	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**7.74**	Pump:	2" Grunfos
Sample Time	915	Start Pump:	830
Sample Analys	Full TCL/TAL	Stop Pump:	905
		Sample Personnel:	Brian Jankauskas Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
830	4.87	0.109	17	5.73	7.2	7.4	7.85	250	
835	4.65	0.073	26	5.21	9.2	6.2	7.91	250	
840	4.41	0.068	22	4.94	9.6	4.4	7.91	250	
845	4.18	0.066	18	4.55	9.8	4.6	7.91	250	
850	4.06	0.065	15	4.57	9.9	4.6	7.91	250	
855	4.10	0.065	14	4.55	10.2	4.9	7.91	250	
900	4.11	0.065	13	4.25	10.2	5.2	7.91	250	
905	4.12	0.065	10	4.25	10.2	5.2	7.91	250	

Ground Water Sampling Log

Well No.:	**MW8**	Date:	2/2/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	22.5'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Poi	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**18.99**	Pump:	2" Grunfos
Sample Time	1130	Start Pump:	1430
Sample Analys	Full TCL/TAL	Stop Pump:	1115
		Sample Personnel:	Brian Jankauskas

Note: odor detected, GW is turbid - hard to establish flow. Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1430	4.46	0.129	5.1	9.60	11.24	271.5	13.71	250	
1435	4.42	0.130	5.4	9.34	10.92	280.0	13.55	200	
1440	4.36	0.134	5.8	8.25	11.18	287.3	13.00	300	
1445	4.28	0.138	6.1	7.44	12.15	280.4	13.60	300	
1450	4.19	0.148	5.8	6.60	12.80	281.8	13.58	300	
1455	4.14	0.148	6.0	6.54	13.53	286.4	13.68	300	
1500	4.12	0.150	6.2	5.96	13.53	295.5	13.56	250	
1505	4.14	0.152	6.3	5.93	13.59	298.2	13.69	250	
1510	4.14	0.152	6.3	5.93	13.57	296.7	13.60	250	

Ground Water Sampling Log

Well No.:	**MW9**	Date:	1/26/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	17.0'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Poi	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**13.31**	Pump:	2" Grunfos
Sample Time	1515	Start Pump:	1430
Sample Analy:	Full TCL/TAL	Stop Pump:	1510
		Sample Personnel:	Brian Jankauskas Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1430	4.46	0.129	5.1	9.60	11.24	271.5	13.71	250	
1435	4.42	0.130	5.4	9.34	10.92	280.0	13.55	200	
1440	4.36	0.134	5.8	8.25	11.18	287.3	13.00	300	
1445	4.28	0.138	6.1	7.44	12.15	280.4	13.60	300	
1450	4.19	0.148	5.8	6.60	12.80	281.8	13.58	300	
1455	4.14	0.148	6.0	6.54	13.53	286.4	13.68	300	
1500	4.12	0.150	6.2	5.96	13.53	295.5	13.56	250	
1505	4.14	0.152	6.3	5.93	13.59	298.2	13.69	250	
1510	4.14	0.152	6.3	5.93	13.57	296.7	13.60	250	

Ground Water Sampling Log

Well No.: **MW10**
Project: New Jersey Department of Environmental Protection
Well Depth: 17.2'
Well Diameter: 4"
Measuring Poi: Top of PVC
Water Level: **12.38**
Sample Time 1510
Sample Analys: Full TCL/TAL

Date: 1/26/01
Site: Matteo Iron & Metal
West Deptford, New Jersey
Casing Type: PVC
Screen Length: 10'
Tubing Type: Teflon Lined
Pump: 2" Grunfos
Start Pump: 1430
Stop Pump: 1510
Sample Personnel: Brian Jankauskas
Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1430	5.13	0.159	24	7.31	9.64	238.7	12.57	350	
1435	5.01	0.160	18	6.95	9.47	238.7	12.52	350	
1440	4.94	0.159	19	6.74	9.54	237.7	12.48	175	
1445	4.79	0.157	55	6.96	10.56	225.3	12.45	175	
1450	4.65	0.153	3	6.94	11.59	253.6	12.44	150	
1455	4.73	0.155	4.7	7.00	11.48	249.0	12.46	150	
1500	4.70	0.154	4.6	7.04	11.55	249.4	12.42	150	
1505	4.68	0.154	4.8	6.96	11.62	248.8	12.46	150	
1510	4.83	0.155	6.5	6.02	11.95	230.5	12.40	150	

Ground Water Sampling Log

Well No.:	**MW11**	Date:	1/31/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	15.2'	Casing Type:	PVC
Well Diameter	4"	Screen Length:	10'
Measuring Poi	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**12.22**	Pump:	2" Grunfos
Sample Time	1700	Start Pump:	1545
Sample Analys	Full TCL/TAL	Stop Pump:	1635
		Sample Personnel:	Brian Jankauskas
			Kris Nagy

Note: DO didn't stabilize

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1545	5.98	0.347	1.5	8.84	9.80	369	12.22	225	
1550	5.95	0.345	3.0	8.93	10.03	373	12.19	225	
1555	5.94	0.346	14.8	9.16	10.18	374	12.14	175	
1600	5.97	0.354	20.0	9.19	10.32	375	12.25	250	
1605	5.94	0.360	7.3	7.51	11.48	374	12.32	275	
1610	5.95	0.359	6.6	7.36	11.62	374	12.25	225	
1615	5.95	0.368	6.9	7.70	11.67	375	12.23	225	
1620	5.95	0.368	9.5	8.00	11.74	376	12.21	225	
1625	5.95	0.368	12.7	8.01	11.80	376	12.17	125	
1630	5.95	0.368	13.4	8.09	11.83	376	12.21	250	
1635	5.95	0.368	13.3	8.11	11.85	376	12.21	250	

Ground Water Sampling Log

Well No.:	**MW12**	Date:	2/1/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	15.3'	Casing Type:	PVC
Well Diameter	4"	Screen Length:	10'
Measuring Poi	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**11.48**	Pump:	2" Grunfos
Sample Time	1530	Start Pump:	1450
Sample Analys	Full TCL/TAL	Stop Pump:	1530
		Sample Personnel:	Brian Jankauskas Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1450	4.68	0.187	8.0	10.25	8.30	-1.1	11.54	250	
1455	4.43	0.183	7.0	10.44	9.20	-2.7	11.56	200	
1500	4.17	0.184	7.0	10.00	9.50	-3.3	11.58	200	
1505	4.00	0.183	6.0	9.83	9.90	-3.8	11.61	200	
1510	3.92	0.183	6.0	9.56	10.00	-3.8	11.61	200	
1515	3.87	0.185	6.0	9.55	10.00	-3.6	11.62	200	
1520	3.77	0.184	6.0	9.42	10.30	-3.6	11.61	200	
1525	3.78	0.184	6.0	9.30	10.40	-3.5	11.61	200	
1530	3.78	0.184	6.0	9.37	10.30	-2.9	11.61	200	

Ground Water Sampling Log

Well No.: **MW13S**
Project: New Jersey Department of Environmental Protection
Well Depth: 17.3'
Well Diameter: 4"
Measuring Poi: Top of PVC
Water Level: **9.09**
Sample Time: 1525
Sample Analy: Full TCL/TAL

Note: DO didn't stabilize

Date: 1/29/01
Site: Matteo Iron & Metal
West Deptford, New Jersey
Casing Type: PVC
Screen Length: 10'
Tubing Type: Teflon Lined
Pump: 2" Grunfos
Start Pump: 1345
Stop Pump: 1515
Sample Personnel: Brian Jankauskas
Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1345	4.8	0.328	6	1.16	8.7	143.0	9.85	125	
1350	4.7	0.328	7	1.65	9.2	NA	9.92	250	
1355	4.65	0.329	9	1.57	10.8	142.6	10.03	250	
1400									adjust pump
1405	4.65	0.328	9	1.31	10.8	156.1	10.05	100	
1410									adjust pump
1415	4.63	0.328	11	1.36	13.6	NA	10.40	150	
1420	4.62	0.327	13	1.54	14.3	NA	10.54	300	
1425									adjust pump
1430									adjust pump
1435	4.58	0.324	15	1.43	14.7	NA	10.65	250	
1455	4.58	0.325	39	1.3	14.6	145.7	11.9	250	
1500	4.58	0.338	52	0.93	14	168	12.2	175	
1515	4.58	0.338	43	0.71	13.8	168	12.21	125	

Ground Water Sampling Log

Well No.: **MW13D**
Project: New Jersey Department of Environmental Protection
Well Depth: 79.5'
Well Diameter: 4"
Measuring Poi: Top of PVC
Water Level: **24.81**
Sample Time 1455
Sample Analys: Full TCL/TAL

Note: problem with pump

Date: 1/29/01
Site: Matteo Iron & Metal
West Deptford, New Jersey
Casing Type: PVC
Screen Length: 10'
Tubing Type: Teflon Lined
Pump: 2" Grunfos
Start Pump: 1345
Stop Pump: 1450
Sample Personnel: Brian Jankauskas
Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1345	6.07	0.380	39.8	4.63	9.39	-60.5	24.78	200	
1350	6.13	0.385	43.5	4.74	9.29	-71.5	24.75	250	
1355	6.17	0.383	29.1	4.72	9.14	-75.0	24.73	250	
1400	6.18	0.384	25.1	4.50	9.11	-75.8	24.75	250	
1405	6.18	0.386	22.7	4.29	9.09	-79.3	24.72	250	
1410	6.19	0.387	19.5	4.19	9.07	-74.5	24.76	200	
1415	6.21	0.389	15.6	3.91	9.05	-69.3	24.76	200	
1420	6.22	0.391	14.3	3.48	9.00	-68.7	24.75	200	
1425	6.22	0.405	10.0	2.73	9.84	-75.1	24.70	200	
1430	6.24	0.406	9.6	2.58	9.89	-78.1	24.74	200	
1435	6.24	0.406	6.6	2.92	10.52	-79.8	24.72	200	
1440	6.25	0.41	7	2.02	10.56	-86.7	24.75	250	
1445	6.26	0.41	6.8	1.57	10.56	-88.6	24.71	250	
1450	6.26	0.41	6.8	1.53	10.55	-87.8	24.74	250	

Ground Water Sampling Log

Well No.:	**MW14S**	Date:	1/29/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	25.2'	Casing Type:	PVC
Well Diameter	4"	Screen Length:	10'
Measuring Poi	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**14.23**	Pump:	2" Grunfos
Sample Time	1205	Start Pump:	1030
Sample Analy	Full TCL/TAL	Stop Pump:	1200
		Sample Personnel:	Brian Jankauskas

Note: very slow recovery, never reached steady state. Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1030									
1035									
1040									
1045	5.61	0.124	15	2.33	10.40	99.6	14.80	175	
1050	5.66	0.120	12	2.16	11.00	104.3	14.91	175	
1055	Stopped pumping - water dropped below standard								
1100	Continue to pump - slow recharge								
1105	5.79	0.121	8	2.26	10.40	102.7	14.91	100	
1110	5.77	0.117	7	2.28	10.80	296.7	15.01	175	
1115	5.78	0.116	5	2.21	12.2	NA	15.11	100	
1120	5.79	0.116	3	2.02	12.2	NA	15.15	100	
1125	5.78	0.115	3	2.23	12.9	NA	15.26	200	
1130	5.79	0.116	2	2.13	13.2	NA	15.31	150	
1135	5.8	0.116	1	2.13	13.5	NA	15.38	200	
1140	5.82	0.115	1	2.01	13.8	NA	15.44	150	
1145	5.81	0.116	1	2	13.9	132.5	15.51	175	
1150	5.8	0.116	1	1.98	14.1	136.7	15.55	150	
1155	5.8	0.116	0	2	14.2	140	15.6	175	
1200	5.8	0.116	0	1.98	14.3	143	15.63	175	

Ground Water Sampling Log

Well No.:	**MW14D**	Date:	1/29/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	86.3'	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Poi:	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**36.71**	Pump:	2" Grunfos
Sample Time	1145	Start Pump:	1030
Sample Analys:	Full TCL/TAL	Stop Pump:	1135
		Sample Personnel:	Brian Jankauskas Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1030	5.71	0.586	6.5	5.25	7.70	-27.0	36.77	200	
1035	5.86	0.588	6.5	4.25	7.65	NA	36.75	175	
1040	5.91	0.587	6.6	4.21	7.70	-31.7	37.07	300	
1045	0.98	0.584	6.9	3.78	7.85	-29.1	36.76	175	
1050	6.02	0.581	7.0	2.95	8.06	-31.9	36.74	175	
1055	6.07	0.579	7.8	2.88	8.30	-32.5	36.75	200	
1100	6.10	0.576	8.8	2.74	8.45	-33.2	36.75	175	
1105	6.13	0.573	9.4	3.21	8.57	-32.3	36.75	200	
1110	6.15	0.569	9.8	3.50	8.70	-60.9	36.77	250	
1115	6.19	0.567	9.4	2.89	8.84	-61.5	36.74	175	
1130	6.2	0.566	9.3	2.8	8.94	-62.2	36.74	150	
1135	6.2	0.565	9.3	2.87	9.11	-65.7	36.74	150	

Ground Water Sampling Log

Well No.:	**MW15S**	Date:	1/31/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	15.2'	Casing Type:	PVC
Well Diameter	4"	Screen Length:	10'
Measuring Poi	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**9.55**	Pump:	2" Grunfos
Sample Time	1310	Start Pump:	1040
Sample Analys	Full TCL/TAL	Stop Pump:	1220
		Sample Personnel:	Brian Jankauskas

Note: Attempted Low flow, problems sustaining flow and WL. Kris Nagy
Switch to Stand purge techniques, purge dry.

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1040	4.48	0.179	5.3	6.03	7.73	405	9.50	200	
1045	4.5	0.178	5.6	6.35	7.75	423	9.70	200	
1050	4.50	0.177	6.7	6.44	7.78	433	9.77	200	
1055	4.52	0.176	7.1	6.36	7.86	443	9.96	200	
1100	4.56	0.178	7.3	6.80	8.04	449	10.11	150	
switch to standard purge techniques.									
1120	4.40	0.180	3.1	10.69	10.68	444	13.95	3.5	
1125									purge dry
1135	4.05	0.191	2.4	3.06	9.16	437	13.95	7	
1200	4.26	0.181	3.3	7.01	9.28	392	NA	10.5	
1220	4.11	0.177	1.9	7.98	9.26	407	NA	14	

Ground Water Sampling Log

Well No.:	**MW15D**	Date:	1/31/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	70.5'	Casing Type:	PVC
Well Diamete	4"	Screen Length:	10'
Measuring Po	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**14.98**	Pump:	2" Grunfos
Sample Time	1135	Start Pump:	1045
Sample Analy	Full TCL/TAL	Stop Pump:	1130
		Sample Personnel:	Brian Jankauskas Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min	Remarks
1045	6.49	0.257	31	2.42	11.7	-11.0	14.99	150	
1050	6.39	0.258	26	2.32	11.6	-11.5	14.99	150	
1055	6.32	0.260	27	2.16	11.3	-11.7	14.99	200	
1100	6.25	0.260	37	0.04	11.5	-12.4	14.99	200	
1105	6.22	0.258	34	0.40	11.9	-14.5	14.99	225	
1110	6.21	0.263	30	0.48	11.9	-15.3	14.99	200	
1115	6.22	0.265	27	0.56	11.9	-16.2	14.99	200	
1120	6.23	0.266	26	0.63	11.9	-16.9	14.99	200	
1125	6.21	0.266	24	0.69	11.9	-18.1	14.99	200	
1130	6.2	0.266	22	0.72	11.9	-19.2	14.99	NA	

Ground Water Sampling Log

Well No.:	**MW16S**	Date:	1/30/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	15.2'	Casing Type:	PVC
Well Diameter	4"	Screen Length:	10'
Measuring Poi	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**6.73**	Pump:	2" Grunfos
Sample Time	1015	Start Pump:	905
Sample Analy	Full TCL/TAL	Stop Pump:	1005
		Sample Personnel:	Brian Jankauskas
			Kris Nagy

Note: GW smelled, REDOX didn't stabilize.

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
905	6.88	0.517	0	1.24	9.80	NA	6.77	250	
910	6.89	0.515	0	1.33	10.20	-58.8	6.78	250	
915	6.90	0.507	0	1.35	10.80	-87.0	6.78	250	
920	6.88	0.509	0	1.33	11.10	-98.9	6.78	250	
925	6.89	0.514	0	1.24	10.90	NA	6.79	250	
930	6.88	0.508	0	1.33	11.20	-105.8	6.77	300	
935	6.89	0.509	0	1.29	11.10	-107.8	6.74	175	
940	6.87	0.510	3	1.08	10.40	-84.7	6.77	175	pump error
945	6.82	0.509	4	-0.58	10.70	-90.4	6.77	200	
950	6.81	0.51	4	-0.74	11.4	-96.2	6.77	175	
955	6.87	0.511	3	-0.83	11.9	-98.8	6.78	200	
1000	6.81	0.512	1	-0.87	11.9	-99.8	6.76	175	
1005	6.81	0.511	1	-0.86	11.8	-102	6.76	200	

Ground Water Sampling Log

Well No.:	**MW16D**	Date:	2/1/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	71.3'	Casing Type:	PVC
Well Diameter	4"	Screen Length:	10'
Measuring Poi	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**15.11**	Pump:	2" Grunfos
Sample Time	920	Start Pump:	820
Sample Analys	Full TCL/TAL	Stop Pump:	915
		Sample Personnel	Brian Jankauskas Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
820	5.96	0.304	4.7	9.96	10.20	174	15.14	225	
825	6.03	0.308	2.7	11.02	9.92	143	15.14	225	
830	6.06	0.308	2.3	10.72	9.71	129	15.14	150	
835	6.05	0.307	2.4	9.84	9.61	125	15.14	150	
840	6.04	0.306	2.3	9.88	9.53	125	15.14	150	pump stopped
845	6.05	0.316	1.7	6.96	10.27	122	15.15	125	
850	6.04	0.316	1.5	7.49	10.59	139	15.16	150	pump stopped
855	6.05	0.315	1.4	8.29	10.56	133	15.16	175	
900	6.06	0.315	1.2	7.36	10.56	89	15.16	200	
905	6.06	0.315	1.3	6.59	10.56	79	15.16	225	
910	6.06	0.314	1.5	6.41	10.56	81	15.16	175	
915	6.06	0.314	1.5	7.02	10.54	86	15.16	150	

Ground Water Sampling Log

Well No.: **MW17S**
Project: New Jersey Department of Environmental Protection
Well Depth: 15.2'
Well Diameter: 4"
Measuring Poi: Top of PVC
Water Level: **6.74**
Sample Time: 935
Sample Analy: Full TCL/TAL

Date: 1/31/01
Site: Matteo Iron & Metal
West Deptford, New Jersey
Casing Type: PVC
Screen Length: 10'
Tubing Type: Teflon Lined
Pump: 2" Grunfos
Start Pump: 835
Stop Pump: 930
Sample Personnel: Brian Jankauskas
Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
835	5.47	0.107	19	2.23	5.5	-39.1	6.87	200	
840	5.48	0.099	24	1.99	6.8	-33.1	6.87	250	
845	5.49	0.098	20	2.07	7.3	-28.7	6.84	175	
850	5.44	0.097	19	1.83	7.7	-22.4	6.82	175	
855	5.40	0.097	17	1.71	7.9	-19.4	6.81	175	
900	5.35	0.097	16	1.61	8.3	-15.7	6.81	175	
905	5.31	0.097	14	1.47	8.7	-13.1	6.80	200	
910	5.27	0.098	13	1.34	8.8	-11.4	6.80	175	
915	5.26	0.098	11	1.19	9.0	-9.9	6.79	175	
920	5.24	0.098	11	1.19	9.0	-9	6.79	175	
925	5.24	0.098	10	1.19	9.0	-8.6	6.79	175	
930	5.24	0.099	10	1.19	9.2	-8.9	6.79	175	

Ground Water Sampling Log

Well No.: **MW17D**
Project: New Jersey Department of Environmental Protection
Well Depth: 72.3'
Well Diameter: 4"
Measuring Poin Top of PVC
Water Level: **14.60**
Sample Time 915
Sample Analys Full TCL/TAL

Date: 1/31/01
Site: Matteo Iron & Metal
West Deptford, New Jersey
Casing Type: PVC
Screen Length: 10'
Tubing Type: Teflon Lined
Pump: 2" Grunfos
Start Pump: 835
Stop Pump: 910
Sample Personnel: Brian Jankauskas
Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
835	5.66	0.307	2.9	5.80	9.52	34.5	14.62	200	
840	5.65	0.309	2.3	6.42	9.34	354	14.61	250	
845	5.64	0.310	1.1	6.13	9.06	365	14.63	200	
850	5.67	0.309	0.5	6.23	8.96	369	14.62	250	
855	5.67	0.308	0.0	7.20	8.87	372	14.63	250	
900	5.67	0.308	-0.2	7.02	8.80	374	14.63	250	
905	5.67	0.305	-0.3	7.42	8.76	375	14.62	200	
910	5.66	0.305	-0.4	7.39	8.78	376	14.64	200	

Ground Water Sampling Log

Well No.:	**MW18S**	Date:	1/26/01
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	15.3'	Casing Type:	PVC
Well Diameter	4"	Screen Length:	10'
Measuring Poi	Top of PVC	Tubing Type:	Teflon Lined
Water Level:	**11.11**	Pump:	2" Grunfos
Sample Time	1720	Start Pump:	1645
Sample Analy:	Full TCL/TAL	Stop Pump:	1715
		Sample Personnel:	Brian Jankauskas Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min	Remarks
1645	4.86	0.265	4.4	3.76	10.17	213.6	11.18	300	
1650	4.84	0.264	5.1	4.04	10.72	216.7	11.15	250	
1655	5.21	0.275	5.2	6.30	9.58	168.3	11.37	200	
1700	4.85	0.264	5.1	3.51	10.52	144.7	11.18	200	
1705	4.82	0.263	3.2	2.89	11.30	170.1	11.16	200	
1710	4.82	0.265	4.0	2.93	11.14	169.3	11.16	200	
1715	4.97	0.262	1.0	2.10	11.29	NA	11.16	200	

Ground Water Sampling Log

Well No.: **MW18D**
Project: New Jersey Department of Environmental Protection
Well Depth: 71.5'
Well Diameter: 4"
Measuring Poir Top of PVC
Water Level: **11.28**
Sample Time 1715
Sample Analys Full TCL/TAL

Date: 1/26/01
Site: Matteo Iron & Metal
West Deptford, New Jersey
Casing Type: PVC
Screen Length: 10'
Tubing Type: Teflon Lined
Pump: 2" Grunfos
Start Pump: 1640
Stop Pump: 1710
Sample Personne Brian Jankauskas
Kris Nagy

Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Redox (mV)	Depth to Water (ft.)	Pumping Rate (mL/min)	Remarks
1640	5.19	0.268	3.0	6.51	9.07	215.5	11.36	300	
1645	5.14	0.275	5.2	14.01	9.45	218.8	11.39	300	
1650	4.89	0.265	5.4	3.41	10.67	183.5	11.14	250	
1655	5.06	0.279	4.8	5.96	7.96	87.8	11.40	250	
1700	5.02	0.289	3.8	5.91	7.89	168.4	11.41	250	
1705	4.98	0.286	3.0	5.05	7.93	172.2	11.20	250	
1710	5.07	0.284	2.3	5.15	7.96	172.7	11.41	250	

Ground Water Sampling Log

Well No.:	**MW-10D**	Date:	10/23/2002
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	67.3 ft	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Poly
Water Level:	**12.82 ft**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1345	Start Pump:	1250
Sample Analyses:	TCL VOC	Stop Pump:	1334
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	36.5 gallons		Justin Lottig

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1250	Initial	10.96	0.450	84	1.72	20.2	12.82	
1304	1	7.70	0.343	309	0.20	16.3	13.18	
1319	2	7.15	0.345	299	1.50	16.1	13.16	
1334	3	6.91	0.342	380	1.09	16.0	13.16	
1345	Sample	9.74	0.304	74	3.11	18.1	12.71	MS/MSD &
								MWDUP

Ground Water Sampling Log

Well No.:	**MW-11D**	Date:	10/23/2002
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	65.6 ft	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Poly
Water Level:	**12.45 ft**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1445	Start Pump:	1340
Sample Analyses:	TCL VOC	Stop Pump:	1440
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	35 gallons		Justin Lottig

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1340	Initial	7.15	0.316	58	2.88	18.5	12.45	
1405	1	6.68	0.283	87	1.50	15.5	12.65	
1422	2	6.56	0.277	19	1.05	14.9	12.67	
1440	3	6.39	0.281	9	1.25	14.8	12.67	
1445	Sample	6.43	0.288	18	0.60	15.9	12.31	

Ground Water Sampling Log

Well No.:	**MW-14D**	Date:	10/23/2002
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	85.9 ft	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Poly
Water Level:	**38.54 ft**	Sampling Device:	Disposable Teflon Bailer
Sample Time	940	Start Pump:	855
Sample Analyses:	TCL VOC	Stop Pump:	935
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	32 Gallons		Justin Lottig
Notes:			

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
855	Initial	6.77	0.552	68	1.67	11.9	38.50	
905	1	6.86	0.546	186	0.63	13.3	39.40	
915	2	6.94	0.539	36	1.21	13.3	39.42	
925	3	6.96	0.536	15	1.06	13.3	39.43	
935	4	6.97	0.532	8	0.80	13.3	39.43	
940	Sample	6.97	0.527	47	0.92	13.5	38.62	

Ground Water Sampling Log

Well No.:	**MW-15D**	Date:	10/23/2002
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	70.00 ft	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Poly
Water Level:	**16.28 ft**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1645	Start Pump:	1600
Sample Analyses:	TCL VOC	Stop Pump:	1636
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	35 gallons		Justin Lottig

Note: Slow recovery.

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1600	Initial	7.09	0.254	67	0.81	15.7	16.28	
1612	1	6.81	0.273	28	0.24	14.5	16.47	
1624	2	6.92	0.271	21	0.72	14.3	16.45	
1636	3	6.78	0.270	10	0.82	14.3	16.47	
1645	Sample	6.88	0.254	84	1.17	15.7	16.20	

Ground Water Sampling Log

Well No.:	**MW-16D**	Date:	10/23/2002
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	68.8 ft	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Poly
Water Level:	**15.97 ft**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1555	Start Pump:	1455
Sample Analyses:	TCL VOC	Stop Pump:	1526
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	36 gallons		Justin Lottig

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1455	Initial	7.9	0.259	140	0.96	15.2	15.97	
1502	1	6.44	0.317	12	0.91	14.8	16.54	
1514	2	6.55	0.324	3	0.56	14.8	16.55	
1526	3	6.59	0.321	2	0.52	14.8	16.55	
1555	Sample	6.45	0.258	65	2.55	15.3	16.01	

Ground Water Sampling Log

Well No.:	**MW-18D**	Date:	10/23/2002
Project:	New Jersey Department of Environmental Protection	Site:	Matteo Iron & Metal West Deptford, New Jersey
Well Depth:	71.2 ft	Casing Type:	PVC
Well Diameter:	4"	Screen Length:	10'
Measuring Point:	Top of PVC	Tubing Type:	Poly
Water Level:	**10.83 ft**	Sampling Device:	Disposable Teflon Bailer
Sample Time	1150	Start Pump:	1040
Sample Analyses:	TCL VOC	Stop Pump:	1120
Pump:	2" Grunfos	Sample Personnel:	Brian Jankauskas
1 Volume:	40 gallons		Justin Lottig

Time	Volume	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp. (°C)	Depth to Water (ft.)	Remarks
1040	Initial	6.97	0.280	41	3.98	16.4	10.83	
1050	1	6.58	0.305	999	1.29	14.8	11.50	
1100	2	6.48	0.322	672	1.13	14.8	11.46	
1110	3	6.50	0.338	126	0.56	14.9	11.44	
1120	4	6.47	0.337	52	1.00	14.8	11.42	
1150	Sample	6.55	0.328	52	1.14	16.8	10.91	

APPENDIX F
Hydraulic Conductivity Data

MW-17D - Matteo Iron and Metal

West Deptford, New Jersey

Bouwer & Rice Slug Test Solution

Bouwer, H. and R. C. Rice 1976. Water Resources Res., Vol. 14, pp. 1068-1074

PARAMETER	DESCRIPTION	VALUE
INPUT FROM FIELD DATA RESULTS:		
r_c	Well Casing radius in inches =	2.00
r_w	Borehole Radius in inches =	5.00
Le	Length of Saturated Well Screen or Open Borehole in feet =	10.00
Lw	Distance from top of watertable to bottom of well in feet =	57.61
h*	Distance from top of watertable to bottom of aquifer in feet =	100.00
INPUT FROM GRAPHICAL RESULTS (attached):		
t	time between H_0 and H_t in minutes =	0.25
H_0	Drawdown at t_0 in feet =	0.39
H_t	Drawdown at t_1 in feet =	0.22
CALCULATED VALUES:		
Le/r_w	Calculated value from above values (feet) =	24.00
A	Calculated value from Le/r_w (dimensionless) =	2.30
B	Calculated value from Le/r_w (dimensionless) =	0.34
C	Calculated value from Le/r_w (dimensionless) =	1.66
CALCULATED K VALUE (Use non-zero value):		
$\ln(R_e/r_w)$	Calculated value of $\ln(R_e/r_w)$ when (Lw < h) =	2.60
K	Hydraulic conductivity (feet/day) =	1.19E+01
$\ln(R_e/r_w)$	Calculated value of $\ln(R_e/r_w)$ when (Lw = h) =	0.00
K	Hydraulic conductivity (feet/day) =	0.00E+00

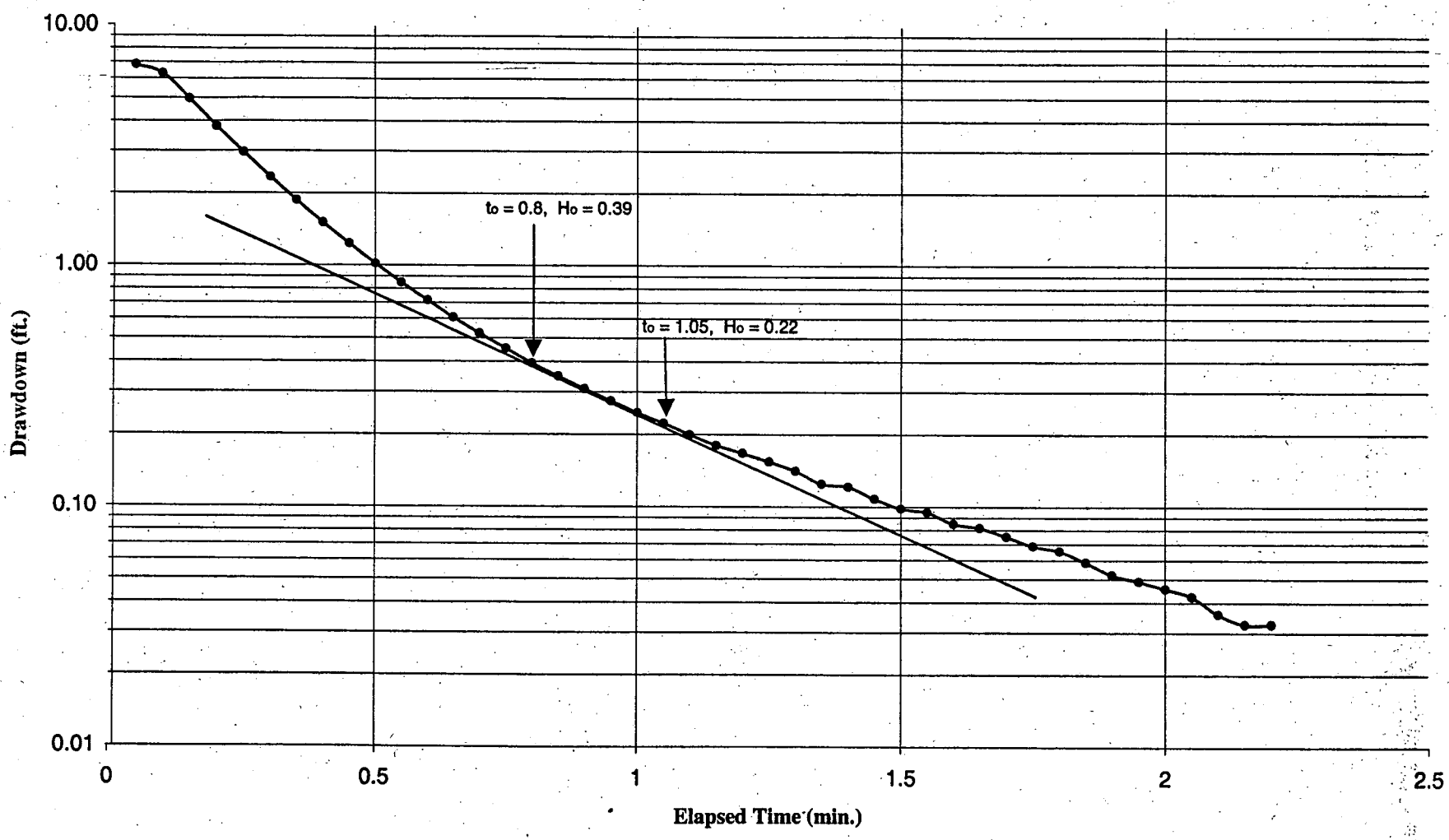
* = Denotes h is based on deepest boring installed at the site

Excel sheet developed by JFarrell for Louis Berger Group - May, 2000

MW-17D

New Jersey Department of Environmental Protection

Matteo Iron and Metal, West Deptford, New Jersey



MW-16D - Matteo Iron and Metal

West Deptford, New Jersey

Bouwer & Rice Slug Test Solution

Bouwer, H. and R. C. Rice 1976. Water Resources Res., Vol. 14, pp. 1068-1074

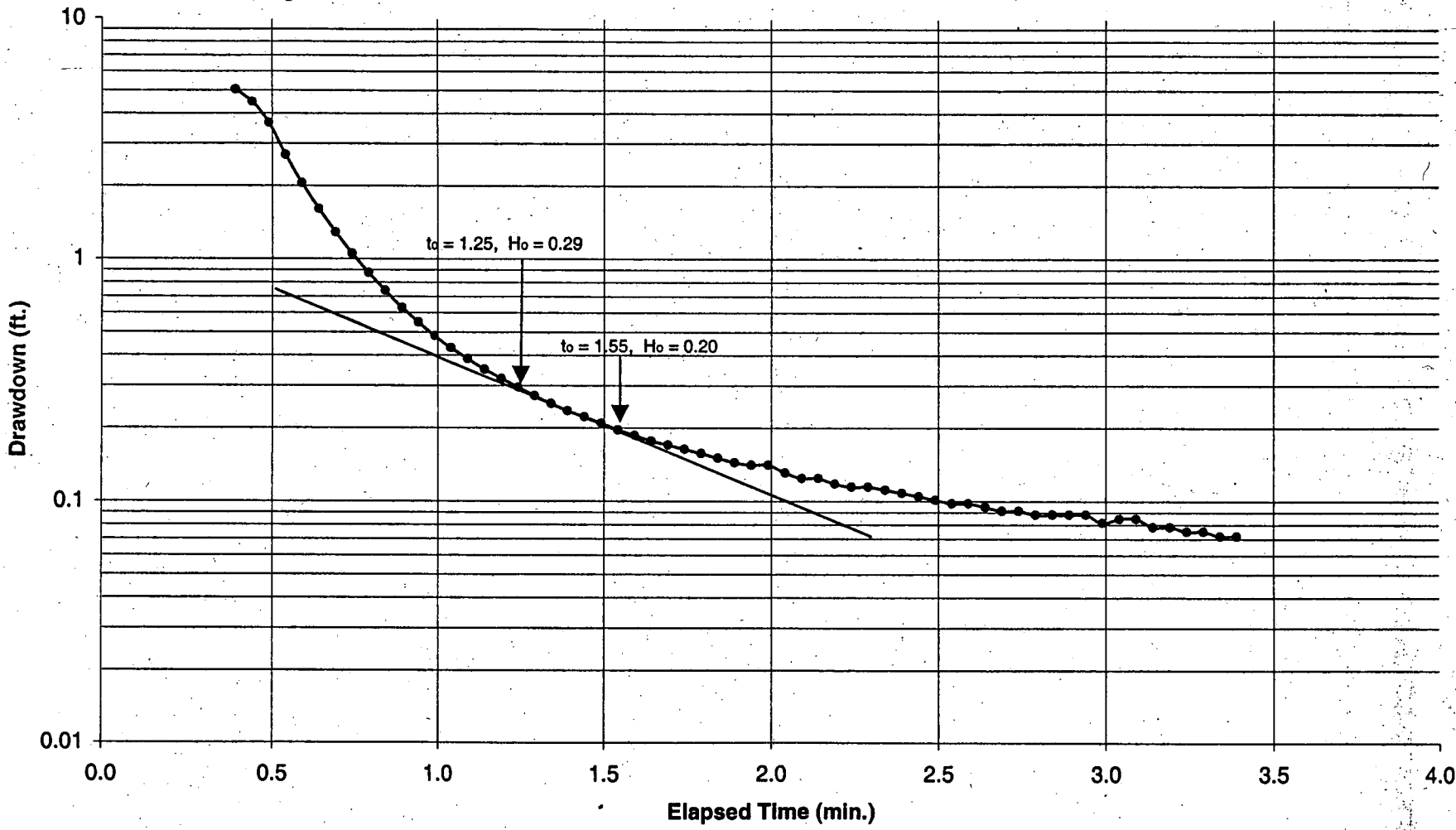
PARAMETER	DESCRIPTION	VALUE
INPUT FROM FIELD DATA RESULTS:		
r_c	Well Casing radius in inches =	2.00
r_w	Borehole Radius in inches =	5.00
Le	Length of Saturated Well Screen or Open Borehole in feet =	10.00
Lw	Distance from top of watertable to bottom of well in feet =	56.50
h*	Distance from top of watertable to bottom of aquifer in feet =	100.00
INPUT FROM GRAPHICAL RESULTS (attached):		
t	time between H_0 and H_t in minutes =	0.30
H_0	Drawdown at t_0 in feet =	0.29
H_t	Drawdown at t_1 in feet =	0.20
CALCULATED VALUES:		
Le/r_w	Calculated value from above values (feet) =	24.00
A	Calculated value from Le/r_w (dimensionless) =	2.30
B	Calculated value from Le/r_w (dimensionless) =	0.34
C	Calculated value from Le/r_w (dimensionless) =	1.66
CALCULATED K VALUE (Use non-zero value):		
$\ln(R_e/r_w)$	Calculated value of $\ln(R_e/r_w)$ when (Lw < h) =	2.59
K	Hydraulic conductivity (feet/day) =	6.43E+00
$\ln(R_e/r_w)$	Calculated value of $\ln(R_e/r_w)$ when (Lw = h) =	0.00
K	Hydraulic conductivity (feet/day) =	0.00E+00

* = Denotes h is based on deepest well at the site

MW-16D

New Jersey Department of Environmental Protection

Matteo Iron and Metal, West Deptford, New Jersey



MW-14D - Matteo Iron and Metal

West Deptford, New Jersey

Bouwer & Rice Slug Test Solution

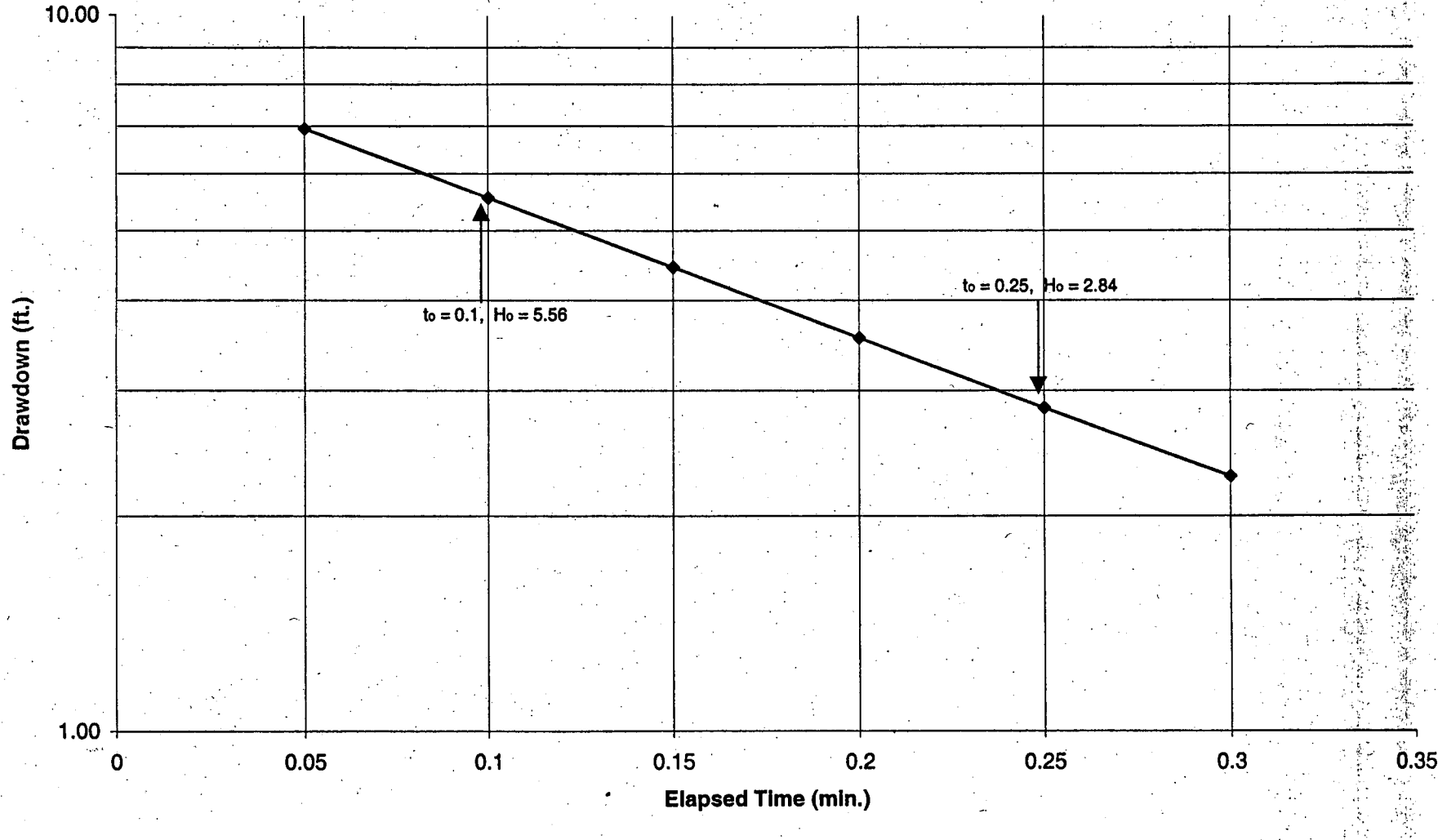
Bouwer, H. and R. C. Rice 1976. Water Resources Res., Vol. 14, pp. 1068-1074

PARAMETER	DESCRIPTION	VALUE
INPUT FROM FIELD DATA RESULTS:		
r_c	Well Casing radius in inches =	2.00
r_w	Borehole Radius in inches =	5.00
Le	Length of Saturated Well Screen or Open Borehole in feet =	10.00
Lw	Distance from top of watertable to bottom of well in feet =	48.91
h*	Distance from top of watertable to bottom of aquifer in feet =	100.00
INPUT FROM GRAPHICAL RESULTS (attached)**:**		
t	time between H_0 and H_t in minutes =	0.15
H_0	Drawdown at t_0 in feet =	5.56
H_t	Drawdown at t_1 in feet =	2.84
CALCULATED VALUES:		
Le/r_w	Calculated value from above values (feet) =	24.00
A	Calculated value from Le/r_w (dimensionless) =	2.30
B	Calculated value from Le/r_w (dimensionless) =	0.34
C	Calculated value from Le/r_w (dimensionless) =	1.66
CALCULATED K VALUE (Use non-zero value):		
$\ln(R_e/r_w)$	Calculated value of $\ln(R_e/r_w)$ when (Lw < h) =	2.54
K	Hydraulic conductivity (feet/day) =	2.27E+01
$\ln(R_e/r_w)$	Calculated value of $\ln(R_e/r_w)$ when (Lw = h) =	0.00
K	Hydraulic conductivity (feet/day) =	0.00E+00

* = Denotes h is based on deepest boring installed at the site

Excel sheet developed by JFarrell for Louis Berger Group - May, 2000

MW-14D
New Jersey Department of Environmental Protection
Matteo Iron and Metal, West Deptford, New Jersey



APPENDIX G
Surface Soil Sample Descriptions

Surface Soil Sample Descriptions

Sample Location	Sample ID	Depth ft	USCS	Description
SS22	SS22B	1-1.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, dry.
	SS22C	2-2.5	FILL	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, trace medium to fine Gravel, with waste, dry.
	SS22D	3-3.5	SP-SM	Dark yellowish orange (10YR6/6) fine SAND, little Silt, trace fine Gravel, moist.
S22N1	S22N1A	0-0.5	SP-SM	Brown fine SAND, little Silt, little fine Gravel, dry
S22N3	S22N3A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
S22N6	S22N6A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
	S22N6B	1-1.5	SP-SM	Dark yellowish brown (10YR4/2) medium fine SAND, little Silt, trace fine Gravel, dry.
S22N9	S22N9A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, dry.
S22N12	S22N12A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, dry.
	S22N12B	1-1.5	FILL	Dusky yellowish brown (10YR2/2) fine SAND, little Silt, with waste.
S22N15	S22N15A	0-0.5	SM	Dark yellowish brown (10YR4/2) fine SAND, some Silt, trace fine Gravel, moist.
S22N18	S22N18A	0-0.5	SP-SM	(10YR5/6) fine SAND, little Silt, trace fine Gravel, moist.
	S22N18B	3-3.5	SP	Dusky yellowish brown (10YR2/2) fine SAND, trace Silt, dry.
S22N21	S22N21A	0-0.5	SP-SM	(10YR4/4) fine SAND, little Silt, trace fine Gravel, moist.
S22N24	S22N24A	0-0.5	SP	Dusky yellowish brown (10YR2/2) fine SAND, trace Silt, dry.
	S22N24B	1-1.5	FILL	Dusky yellowish brown (10YR2/2) SILT, trace fine Sand, with waste, dry.
	S22N24C	2-2.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, trace fine Gravel, dry.
S22NE6	S22NE6A	0-0.5	FILL	(10YR4/1) fine SAND, little Silt, trace fine Gravel, with waste (batteries), moist.
	22NE6B	1-1.5	FILL	Grayish Black (N2) Waste (wood, plastic), dry.
22NE12	22NE12A	0-0.5	ML	Dusky yellowish brown (10YR2/2) SILT, trace fine Sand, moist.
	22NE12B	1-1.5	FILL	Dark yellowish brown (10YR4/2) SILT, trace fine Sand, with waste (batteries, wood)
S22E1	S22E1A	0-0.5	SM	Brown fine SAND, and Silt, little fine medium Gravel, dry.
S22E3	S22E3A	0-0.5	ML	Dark yellowish brown (10YR4/2) SILT, little fine Sand, dry.
S22SE6	S22SE6A	0-0.5	SP-SM	(10YR5/2) fine SAND, some clayey Silt, moist.
	S22SE6B	1-1.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
	S22SE6C	2-2.5	FILL	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, with waste, dry.
S22SE12	22SE12A	0-0.5	SP	Dusky yellowish brown (10YR2/2) fine SAND, trace Silt, moist.
	22SE12B	1-1.5	FILL	Dark yellowish brown (10YR4/2) fine SAND, little Silt, with waste, dry.
	22SE12C	2-2.5	FILL	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, with waste, dry.
22SE18	22SE18A	0-0.5	SP	Pale yellowish brown (10YR6/2) fine SAND, trace Silt, dry.
S22S1	S22S1A	0-0.5	ML	Brown SILT, some fine Sand, trace fine Gravel, dry.
S22S3	S22S3A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, moist.
S22S6	S22S6A	0-0.5	SP-SM	Moderate yellowish brown (10YR5/4) fine SAND, little Silt, dry.
	S2256B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace fine Gravel, dry.
	S22S6C	2-2.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace fine Gravel, dry.
S22S9	S22S9A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, dry.
S22S12	S22S12A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, trace fine Gravel, dry.
	S22S12B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace fine Gravel, dry.
	S22S12C	2-2.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace fine Gravel, dry.
S22S15	S22S15A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt, moist.
S22S18	S22S18A	0-0.5	SM	Dark yellowish brown (10YR4/2) fine SAND, and Silt, moist.
	S22S18B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, little fine Gravel, dry.
	S22S18C	2-2.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace medium fine Gravel, dry.
S22S21	S22S21A	0-0.5	SP-SM	(10YR5/2) fine SAND, little Silt, moist.
S22S30	S22530A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, dry.
S22SW6	S22SW6A	0-0.5	SP	(10YR5/2) fine SAND, trace fine Gravel, moist.
	S22SW6B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, little medium fine Gravel, dry.
	S22SW6C	2-2.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, little medium fine Gravel, dry.
22SW12	22SW12A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, trace fine Gravel, dry.
	22SW12B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace fine Gravel, dry.
	22SW12C	2-2.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace fine Gravel, dry.
S22W1	S22W1A	0-0.5	FILL	Brown fine SAND, some Silt, trace fine Gravel, with waste (glass), dry.
S22W3	S22W3A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
	S22W3B	1-1.5	SP	Dark yellowish brown (10YR6/6), Moderate yellowish brown (10YR4/2) fine SAND, trace Silt.
	S22W3C	2-2.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, little coarse to fine Gravel, dry.
S22W6	S22W6A	0-0.5	SP-SM	Dusky yellowish brown (10YR2/2) fine SAND, little Silt, dry.
S22W9	S22W9A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, dry.
	S22W9B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, little fine Gravel, dry.
	S22W9C	2-2.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, little medium to fine Gravel, dry.
S22W12	S22W12A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, dry.
S22W15	S22W15A	0-0.5	SM	Dark yellowish brown (10YR4/2) fine SAND, some Silt, moist.
	S22W15B	0-0.5	SP	Moderate yellish brown (10YR5/4) fine SAND, trace Silt, trace fine Gravel, dry.
	S22W15C	2-2.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace fine Gravel, dry.
	S22W15D	3-3.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, little medium to fine Gravel, dry.
S22W18	S22W18A	0-0.5	SM	Dark yellowish brown (10YR4/2) fine SAND, and Silt, moist.
S22W21	S22W21A	0-0.5	SP	(10YR3/1) fine SAND, moist.
	S22W21B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, dry.
S22NW6	S22NW6A	0-0.5	SP	(10YR3/1) fine SAND, trace fine Gravel, moist.
22NW12	22NW12A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, dry.
	22NW12B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, some medium to fine Gravel, dry.
22NW18	22NW18A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, trace fine Gravel, dry.
SS25	SS25B	1-1.5	SM	Brown fine medium SAND, some Silt.
	SS25C	2-2.5	SP	Brown fine medium SAND, trace Silt, dry.
S25N1	S25N1A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S25N3	S25N3A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S25N7	S25N7A	0-0.5	ML	Dusky yellowish brown (10YR2/2) SILT trace fine sand, trace fine Gravel, dry.
	S25N7B	1-1.5	FILL	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, trace medium to fine Gravel, with waste (plastic), dry.
S25N9	S25N9A	0-0.5	SP-SM	Dark yellowish orange (10YR6/6) medium to fine SAND, little Silt, little medium to fine Gravel, moist.

Sample Location	Sample ID	Depth ft	USCS	Description
S25NE6	S25NE6A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, trace fine Gravel, dry.
	S25NE6B	1-1.5	FILL	Dusky yellowish brown (10YR2/2) SILT, trace fine Sand, with waste (plastic), dry.
	S25NE6C	2-2.5	FILL	Dark yellowish brown fine SAND, little Silt, with waste (plastic pebbles), dry.
	S25NE6D	3-3.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace medium fine Gravel, dry.
S25NE8	S25NE8A	0-0.5	SP-SM	Dark yellowish orange (10YR6/6) coarse to fine SAND, little Silt, little medium to fine Gravel, moist.
S25E1	S25E1A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S25E5	S25E5A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S25E7	S25E7A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
S25SE6	S25SE6A	0-0.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, trace fine Gravel, dry.
	S25SE6B	1-1.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, little fine Gravel, dry.
	S25SE6C	2-2.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, trace fine Gravel, dry.
	S25SE6D	3-3.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, little medium fine Gravel, dry.
S25SE0	S25SE0A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt, trace fine Gravel, moist.
	S25SE0B	1-1.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, some medium fine Gravel, dry.
S25S1	S25S1A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S25S3	S25S3A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S25S8	S25S8A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt, trace fine Gravel, moist.
	S25S8B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace fine Gravel, dry.
S25S10	S25S10A	0-0.5	SM	(10YR4/3) fine SAND, some Silt, moist.
S25W1	S25W1A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S25W4	S25W4A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S26N1	S26N1A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
	S26N1B	1-1.5	SM	Brown fine medium SAND, some Silt, dry.
	S26N1C	2-2.5	SM	Dark brown fine medium SAND, some Silt.
S26N2	S26N2A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
	S26N2B	1-1.5	SP	Brown fine SAND, trace Silt, dry.
S26N3	S26N3A	0-0.5	SP-SM	Brown fine medium SAND, little Silt, dry.
S26N11	S26N11A	0-0.5	SM	Moderate brown (5YR4/4) medium to fine SAND, some Silt, trace fine Gravel, moist.
S26N13	S26N13A	0-0.5	SM	Dark yellowish brown (10YR4/2) fine SAND, and Silt, moist.
S26NE2	S26NE2A	0-0.5	SP-SM	Brown fine medium SAND, little Silt, dry.
S26NE4	S26NE4A	0-0.5	SP	Brown fine SAND, trace Silt, dry.
S26NE6	S26NE6A	0-0.5	SP	Dark brown fine medium SAND, trace Silt, dry.
	S26NE6B	1-1.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, trace medium fine Gravel, dry.
S26NE9	S26NE9A	0-0.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, dry.
S26NE0	S26NE0A	0-0.5	ML	Dusky yellowish brown (10YR2/2) SILT, trace fine Sand, trace fine Gravel, dry.
S26E1	S26E1A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S26E5	S26E5A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S26E7	S26E7A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
S26S1	S26S1A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
S26W1	S26W1A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
	S26W1B	1-1.5	FILL	Brown fine medium SAND, some Silt, with waste, dry.
S26W2	S26W2A	0-0.5	SM	Orange brown fine medium SAND, some Silt, dry.
S26NW2	S26NW2A	0-0.5	SP-SM	Brown fine medium SAND, little Silt, dry.
S26NW4	S26NW4A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
	S26NW4B	1-1.5	FILL	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, trace fine Gravel, with waste (plastic), dry.
	S26NW4C	2-2.5	SP	Dark yellowish brown fine SAND, trace Silt, trace fine Gravel, dry.
S26NW6	S26NW6A	0-0.5	SM	Orange brown fine medium SAND, some Silt, dry.
26NW11	26NW11A	0-0.5	ML	(10YR3/2) SILT, and fine Sand, moist.
SS27	SS27C	2-2.5	SM	Orange brown medium SAND, some Silt.
S27N1	S27N1A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
	S27N1B	1-1.5	SM	Gray brown fine medium SAND, some Silt, dry.
	S27N1C	2-2.5	SM	Gray brown fine medium SAND, some Silt.
S27N2	S27N2A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
	S27N2B	1-1.5	SM	Brown fine medium SAND, some Silt, dry.
	S27N2C	2-2.5	SM	Brown fine medium SAND, some Silt, dry.
S27NE2	S27NE2A	0-0.5	SP-SM	Brown fine medium SAND, little Silt, dry.
S27E1	S27E1A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
	S27E1B	1-1.5	SM	Brown fine medium SAND, some Silt, dry.
S27E2	S27E2A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
S27SE3	S27SE3A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S27SE5	S27SE5A	0-0.5	SP	Light brown fine SAND, trace Silt, dry.
	27SE5B	1-1.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, little fine Gravel, dry.
	27SE5C	2-2.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, little fine Gravel, dry.
S27SE7	S27SE7A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
S27S1	S27S1A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
	S27S1B	1-1.5	SM	Orange brown fine medium SAND, some Silt, dry.
	S27S1C	2-2.5	SM	Orange brown medium SAND, some Silt.
S27S2	S27S2A	0-0.5	SM	Orange brown fine medium SAND, some Silt, dry.
S27S5	S27S5A	0-0.5	SP	Gray brown fine medium SAND, trace Silt, dry.
S27S7	S27S7A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
	S27S7B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace fine Gravel, dry.
S27S0	S27S0A	0-0.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, dry.
S27S12	S27S12A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt, moist.
S27S14	S27S14A	0-0.5	ML	(10YR3/1) SILT, and fine Sand, moist.
	S27S14B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, little medium fine Gravel, dry.
S27S16	S27S16A	0-0.5	ML	(10YR3/2) SILT, some fine Sand, moist.
S27SW2	S27SW2A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
S27SW4	S27SW4A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.

Sample Location	Sample ID	Depth ft	USCS	Description
S27SW6	S27SW6A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
	27SW6B	1-1.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, little fine Gravel, dry.
	27SW6C	2-2.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, little fine Gravel, dry.
S27W1	S27W1A	0-0.5	SP	Brown fine SAND, trace Silt, dry.
	S27W1B	1-1.5	SM	Brown fine medium SAND, some Silt, dry.
	S27W1C	2-2.5	SM	Orange brown medium SAND, some Silt.
S27W2	S27W2A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
	S27W2B	1-1.5	SM	Orange brown medium SAND, some Silt, dry.
S27W3	S27W3A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
S27NW2	S27NW2A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
SS28	SS28B	1-1.5	SM	Brown fine medium SAND, some Silt, dry.
	SS28C	2-2.5	SP	Gray brown fine medium SAND, trace Silt, dry.
S28N1	S28N1A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S28N3	S28N3A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S28N8	S28N8A	0-0.5	SP	Dark yellowish brown (10YR6/6) fine SAND, trace Silt, trace fine Gravel, dry.
S28E1	S28E1A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S28E2	S28E2A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
	S28E2B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace medium fine Gravel, dry.
S28S1	S28S1A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S28S2	S28S2D	3-3.5	SM	Orange brown fine medium SAND, some Silt, dry.
S28S3	S28S3A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S28S5	S28S5A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S28S7	S28S7A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
	S28S7B	1-1.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, trace medium fine Gravel, dry.
	S28S7C	2-2.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, trace fine Gravel, dry.
	S28S7D	3-3.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, trace fine Gravel, dry.
S28S0	S28S0A	0-0.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, trace medium to fine Gravel, dry.
S28S12	S28S12A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt, moist.
S28S14	S28S14A	0-0.5	ML	(10YR3/2) SILT, some fine Sand, trace Gravel, moist.
	S28S14B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace fine Gravel, dry.
S28S16	S28S16A	0-0.5	SP-SM	(10YR4/6) fine SAND, little Silt, little fine Gravel, moist.
S28SW5	S28SW5A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S28SW7	S28SW7A	0-0.5	SM	Brown fine medium SAND, some Silt, dry.
	S28SW7B	1-1.5	SP	Grayish orange (10YR7/4) fine SAND, trace Silt, little medium Gravel, dry.
	S28SW7C	2-2.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, little medium fine Gravel, dry.
	S28SW7D	3-3.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, little medium fine Gravel, dry.
S28SW0	S28SW0A	0-0.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, trace fine Gravel, dry.
28SW12	28SW12A	0-0.5	SP	Dark yellowish orange (10YR6/6) coarse to fine SAND, trace Silt, little medium to fine Gravel, moist.
	28SW12B	1-1.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, trace medium fine Gravel, waste (staining), dry.
	28SW12C	2-2.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt trace fine Gravel, dry.
	28SW12D	3-3.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace medium fine Gravel, dry.
28SW14	28SW14A	0-0.5	SM	(10YR5/3) fine SAND, some Silt, trace fine Gravel, moist.
28SW16	28SW16A	0-0.5	SM	(10YR4/6) fine SAND, some Silt, trace fine Gravel, moist.
S28W1	S28W1A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S28W3	S28W3A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
S28W5	S28W5A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
	S28W5B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace fine Gravel, dry.
S28W7	S28W7A	0-0.5	SP	Light orange brown fine medium SAND, trace Silt, dry.
S28NW4	S28NW4A	0-0.5	SP	Brown fine medium SAND, trace Silt, dry.
	S28NW4B	1-1.5	SP	Very pale orange (10YR8/2) fine SAND, trace Silt, trace fine Gravel, dry.
S28NW6	S28NW6A	0-0.5	SP	Light orange brown fine medium SAND, trace Silt, dry.
SS34	SS34B	1-1.5	SP	Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt, dry.
	SS34C	2-2.5	SP	Dark yellowish orange (10YR6/6) medium to fine SAND, trace Silt, trace fine Gravel, moist.
S34N1	S34N1A	0-0.5	ML	Brown, SILT, some fine SAND, dry.
S34N3	S34N3A	0-0.5	SP-SM	Dusky yellowish brown (10YR2/2) fine SAND, little Silt, dry.
	S34N3B	1-1.5	FILL	Dark yellowish brown (10YR4/2) fine SAND, little Silt, trace fine Gravel, with waste, dry.
S34N6	S34N6A	0-0.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace medium to fine Gravel, dry.
S34NE6	S34NE6A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, trace fine Gravel, dry.
	S34NE6B	1-1.5	FILL	Dark yellowish brown (10YR4/2) w/ spots of White (N9) SILT, trace fine Sand, dry.
S34E1	S34E1A	0-0.5	ML	Brown, SILT, and fine Sand, trace fine Gravel, dry.
S34E3	S34E3A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, moist.
S34E6	S34E6A	0-0.5	SP-SM	Dusky yellowish brown (10YR2/2) fine SAND, little Silt, dry.
	S34E6B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace fine Gravel, dry.
S34E9	S34E9A	0-0.5	FILL	(10YR3/3) fine SAND, trace fine Gravel, with waste (batteries)
S34E12	S34E12A	0-0.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, moist.
	S34E12B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace fine Gravel, dry.
S34SE6	S34SE6A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, dry.
34SE12	34SE12A	0-0.5	SP	Dusky yellowish brown (10YR2/2) fine SAND, trace Silt, dry.
	34SE12B	1-1.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, trace fine Gravel, dry.
S34SE15	S34SE15A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, dry.
S34S1	S34S1A	0-0.5	SM	Brown, fine SAND, some Silt, dry.
S34S6	S34S6A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, dry.
S34W1	S34W1A	0-0.5	SM	Brown, fine SAND, and Silt, dry.
SS35	SS35B	1-1.5	SP	Dark yellowish brown (10YR4/2) medium to fine SAND, trace Silt, dry.
	SS35C	2-2.5	SM	Moderate yellowish brown (10YR5/4) medium to fine SAND, some clayey Silt, trace medium to fine Gravel, moist.
S35N1	S35N1A	0-0.5	FILL	Brown, fine SAND, some Silt, with waste (glass), dry.
	S35N1B	1-1.5	SP-SM	Dark yellowish orange (10YR6/6) coarse to fine SAND, little Silt, dry.
	S35N1C	2-2.5	SP-SM	Dark yellowish orange (10YR6/6) medium fine SAND, little Silt, trace medium Gravel, dry.
S35N3	S35N3A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.

Sample Location	Sample ID	Depth ft	USCS	Description
S35E1	S35E1A	0-0.5	SP-SM	Dark brown, fine SAND, little Silt, dry.
	S35E1B	1-1.5	SP-SM	Dark yellowish orange (10YR6/6) coarse to fine SAND, little Silt, dry.
S35E3	S35E3A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, moist.
S35S1	S35S1A	0-0.5	ML	Dark brown, SILT, some fine SAND, dry.
	S35S1B	1-1.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, trace medium Gravel, dry.
S35S3	S35S3A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
S35W1	S35W1A	0-0.5	SP-SM	Light brown fine SAND, little Silt, trace medium to fine Gravel, dry.
	S35W1B	1-1.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
	S35W1C	2-2.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt & Clay, dry.
S35W3	S35W3A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, moist.
PCB 1	PCB 1A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
PCB 2	PCB 2A	0-0.5	FILL	Dark yellowish brown (10YR4/2) fine SAND, and Silt, with waste (brick), moist.
PCB 3	PCB 3A	0-0.5	SM	Dark yellowish brown (10YR4/2) fine SAND, some Silt, dry.
PCB 4	PCB 4A	0-0.5	FILL	Dark yellowish brown (10YR4/2) fine SAND, some Silt, with waste (batteries), dry.
PCB 5	PCB 5A	0-0.5	ML	Pale yellowish brown (10YR6/2) SILT, little fine Sand, moist.
PCB 6	PCB 6A	0-0.5	SM	Dark yellowish brown (10YR4/2) fine SAND, some Silt, dry.
PCB 7	PCB 7A	0-0.5	SM	Dark yellowish brown (10YR4/2) fine SAND, some Silt, dry.
PCB 8	PCB8A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
PCB 9	PCB 9A	0-0.5	SP-SM	Moderate yellowish brown (10YR5/4) medium to fine SAND, little Silt, little medium Gravel, wet.
PCB 10	PCB 10A	0-0.5	FILL	Pale yellowish brown (10YR6/2) fine SAND, some Silt, with waste (batteries), moist.
PCB 11	PCB11A	0-0.5	ML	Dark yellowish brown (10YR4/2) SILT, moist.
	PCB11B	1-1.5	FILL	Dark yellowish brown (10YR4/2) fine SAND, and Silt, some waste (brick), dry.
	PCB11C	2-2.5	FILL	Dusky yellowish brown (10YR2/2) SILT, trace fine Sand, with waste (brick), dry.
	PCB11D	3-3.5	SM	Dark yellowish brown (10YR4/2) fine SAND, some Silt, dry.
PB11N1	PB11N1A	0-0.5	SM	Dusky yellowish brown (10YR2/2) medium to fine Sand, some Silt, dry.
	PB11N1B	1-1.5	FILL	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, brick, dry.
PB11E1	PB11E1A	0-0.5	SM	Dusky yellowish brown (10YR2/2) medium to fine Sand, some Silt, dry.
	PB11E1B	1-1.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, dry.
PB11E3	PB11E3A	0-0.5	SM	Dark yellowish brown (10YR4/2) fine SAND, some Silt, dry.
PB11S1	PB11S1A	0-0.5	SM	Dusky yellowish brown (10YR2/2) medium to fine Sand, some Silt, dry.
PB11S3	PB11S3A	0-0.5	SM	Dark yellowish brown (10YR4/2) fine SAND, some Silt, dry.
PB11W1	PB11W1A	0-0.5	SM	Dusky yellowish brown (10YR2/2) medium to fine Sand, some Silt, dry.
	PB11W1B	1-1.5	Fill	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, with waste (brick), dry.
PB11W3	PB11W3A	0-0.5	ML	Dark yellowish brown (10YR4/2) SILT, little fine Sand, moist.
P11NW3	P11NW3A	0-0.5	ML	Pale yellowish brown (10YR6/2) SILT, trace fine Sand, moist.
PCB12	PCB12A	0-0.5	FILL	Dark yellowish brown (10YR4/2) SILT, trace fine Sand, trace waste (glass), moist.
	PCB12B	1-1.5	ML	Pale yellowish brown (10YR4/2) SILT, some fine Sand, dry.
	PCB12C	2-2.5	FILL	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, with waste, dry.
	PCB12D	3-3.5	FILL	Light brown (5YR5/6) fine SAND, some Silt, with waste (batteries, plastic, glass), dry.
	PCB12E	4-4.5	FILL	(5YR3/4) SILT, trace fine Sand, with waste, moist.
PB12N1	PB12N1A	0-0.5	SM	Moderate yellowish brown (10YR4/2) medium to fine Sand, some Silt, dry.
PB12N3	PB12N3A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
PB12E1	PB12E1A	0-0.5	SM	Dusky yellowish brown (10YR2/2) medium to fine Sand, some Silt, dry.
PB12E3	PB12E3A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
P12SE2	P12SE2A	0-0.5	ML	Dusky yellowish brown (10YR2/2) SILT, trace fine Sand, moist.
PB12S1	PB12S1A	0-0.5	SM	Dusky yellowish brown (10YR2/2) medium to fine Sand, some Silt, dry.
PB12S3	PB12S3A	0-0.5	SP-SM	Dusky yellowish brown (10YR2/2) fine SAND, little Silt, dry.
PB12S6	PB12S6A	0-0.5	ML	Pale yellowish brown (10YR6/2) SILT, some fine Sand, dry.
P12SW6	P12SW6A	0-0.5	FILL	(10YR3/2) fine SAND, some Silt, trace waste (glass, plastic), moist.
P12SW9	P12SW9A	0-0.5	ML	Dusky yellowish brown (10YR2/2) SILT, trace fine Sand, with waste (batteries, household), moist.
PB12W1	PB12W1A	0-0.5	SM	Dusky yellowish brown (10YR2/2) medium to fine Sand, some Silt, dry.
PB12W3	PB12W3A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
PB12W6	PB12W6A	0-0.5	FILL	Grayish brown (5YR3/2) SILT, some waste (wood, glass), dry.
PB12W9	PB12W9A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, dry.
P12NW6	P12NW6A	0-0.5	FILL	(10YR3/2) SILT, some waste (glass, plastic), moist.
PCB13	PCB13A	0-0.5	ML	Dusky yellowish brown (10YR2/2) SILT, some fine Sand, moist.
	PCB12B	1-1.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
	PCB13C	2-2.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, trace fine Gravel, dry.
PB13N1	PB13N1A	0-0.5	SP	Dusky yellowish brown (10YR2/2) medium to fine Sand, trace Silt, dry.
PB13N3	PB13N3A	0-0.5	SP-SM	Dusky yellowish brown (10YR2/2) fine SAND, little Silt, dry.
	P13N3B	1-1.5	SP	Moderate yellowish brown (10YR5/4) fine SAND, trace Silt, trace fine medium Gravel, dry.
PB13N6	PB13N6A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
P13NE4	P13NE4A	0-0.5	SP	(10YR3/1) fine SAND, moist.
PB13E1	PB13E1A	0-0.5	SM	Moderate yellowish brown (10YR4/2) medium to fine Sand, some Silt, dry.
PB13S1	PB13S1A	0-0.5	SP	Dusky yellowish brown (10YR2/2) medium to fine Sand, trace Silt, dry.
PB13W1	PB13W1A	0-0.5	SP	Dusky yellowish brown (10YR2/2) medium to fine Sand, trace Silt, dry.
P13NW6	P13NW6A	0-0.5	SP	(10YR3/1) fine SAND, moist.
PCB14	PCB 14A	0-0.5	ML	Dark yellowish brown (10YR4/2) SILT, little fine Sand, dry.
PCB15	PCB15A	0-0.5	SP	Pale yellowish brown (10YR6/2) fine SAND, trace Silt, dry.
PCB16	PCB16A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, trace fine Gravel, dry.
P16SE3	P16SE3A	0-0.5	SP	Dark yellowish orange (10YR6/6) fine SAND, trace Silt, dry.
PCB17	PCB17A	0-0.5	ML	Dark yellowish brown (10YR4/2) SILT, little fine Sand, dry.
PCB18	PCB18A	0-0.5	SP-SM	Moderate yellowish brown (10YR5/4) fine SAND, little Silt, trace medium to fine Gravel, dry.
P18SW3	P18SW3A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, trace fine Gravel, dry.
PCB19	PCB19A	0-0.5	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, trace fine Gravel, dry.
PCB20	PCB20A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, dry.
PCB21	PCB21A	0-0.5	SP	Moderate brown (5YR4/4) fine SAND, trace Silt, dry.
PCB22	PCB22A	0-0.5	SP	Dark yellowish brown (10YR4/2) fine SAND, trace Silt, dry.
PCB23	PCB23A	0-0.5	ML	Pale yellowish brown (10YR6/2) SILT, some fine Sand, dry.

Appendix G

Matteo Iron and Metal

Surface Soil Sample Descriptions

Sample Location	Sample ID	Depth ft	USCS	Description
FULL-1	FULL-1	0.7	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, trace Organics, dry.
FULL-2	FULL-2	0.5-0.8	FILL	Medium light gray (N6) fine SAND, some clayey Silt, with waste (metal, unusual soil texture), moist.
FULL-3	FULL-3	0.8-1.2	FILL	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt, with waste (yellow material, metal), moist.
FULL-4	FULL-4	0.5-1	FILL	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt, with waste (yellow material, near drum), dry.
FULL-5	FULL-5	0.5-1	SM	Dark yellowish brown (10YR4/2) fine SAND, some Silt, trace Organics, dry.
TPSS-A	TPSS-A1	0-0.5	SM	Dark brown, fine SAND, some Silt, dry.
	TPSS-A2	3.5-4.5	SP-SM	Light brown, fine SAND, little Silt, dry.
TPSS-B	TPSS-B1	0-0.5		No Description
TPSS-C	TPSS-C1	0-0.5		No Description
TPSS-D	TPSS-D1	0-0.5		No Description
TPSS-E	TPSS-E1	0-0.5		No Description
TPSS-F	TPSS-F1	0-0.5		No Description
TPSS-G	TPSS-G1	0-0.5		No Description
TPSS-H	TPSS-H1	0-0.5		No Description
TPSS-I	TPSS-I1	0.5-0.8	SP-SM	Dark yellowish brown (10YR4/2) medium to fine SAND, little Silt, with staining, dry.
TPSS-J	TPSS-J1	0.5-0.8	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
TPSS-K	TPSS-K1	0.5-0.8	SP-SM	Dark yellowish brown (10YR4/2) fine SAND, little Silt, dry.
TPSS-L	TPSS-L1	0.5-0.8	FILL	Dusky yellowish brown (10YR2/2) SILT, trace fine Sand, and waste (batteries, wood, plastic, tire), moist.
TPSS-M	TPSS-M1	0.5-0.8	SM	Dark yellowish orange (10YR6/6) fine SAND, some Silt, dry.

APPENDIX H
Well Search Data

 CONTAMINATED SITES WITHIN 5.0 MILES OF 395120 LAT. 751024 LON. AS OF 03/21/95 (IN ORDER BY SITE NUMBER) - 03/09/01

SITE#	NAME	ADDRESS	MUN	COUNTY	CSL#	CASE#	LAT	LON	DISTANCE	CONTAC
11	FISH FACTORY	GREAT BAY	LITTLE EGG HARBOR TOWNSHIP	OCEAN	NJL000046136	920840	394854	750902	3.0	BC
152	GULF & WESTERN NATURAL RESOURCES GROUP	851 WATER ST	GLOUCESTER CITY	CAMDEN	NJD002347664	E85016	395314	750802	3.0	BEECRA
153	LIQUID CARBONIC SPECIALTY GAS CORP	560 S BROADWAY	GLOUCESTER CITY	CAMDEN	NJL500019351	E91294	395311	750713	3.5	BEECRA
154	PRODUCTS RESEARCH & CHEMICAL CORPORATION	410 JERSEY AVE	GLOUCESTER CITY	CAMDEN	NJD002329647	E89546	395336	750735	3.6	BEECRA
155	WOODLAND OXYGEN COMPANY INCORPORATED	560 S BROADWAY	GLOUCESTER CITY	CAMDEN	NJL500035068	E90729	395311	750712	3.5	BEECRA
290	ESSEX CHEMICAL CORPORATION	100 THOMAS LN	PAULSBORO BOROUGH	GLOUCESTER	NJD980769723	E88900	395056	751408	3.3	BEECRA
291	EXXON COMPANY USA	3RD ST & BILLINGSPORT RD	PAULSBORO BOROUGH	GLOUCESTER	NJD011635414	E89947	395046	751441	3.8	BEECRA
292	PAULSBORO PACKAGING INCORPORATED	UNIVERSAL RD	PAULSBORO BOROUGH	GLOUCESTER	NJD980653141	E86286	394948	751446	4.2	BEECRA
294	ARCO PETROLEUM PRODUCTS COMPANY	RTE 44 (CROWN POINT RD)	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD075522904	E86682	395142	750907	1.2	BEECRA
295	ATOCHEM INCORPORATED	S COLUMBIA ST	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD002330322	E87916	395002	751008	1.5	BEECRA
296	COASTAL EAGLE POINT OIL COMPANY	RTES 130 & 295 & CROWN POINT RD	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD990753162	E84158	395142	750904	1.2	BEECRA
297	GULF OIL PRODUCTS COMPANY WOODBURY	SALEM AVE & JESSUP RD	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD000595066	E85624	394915	751041	2.4	BEECRA
298	ICI AMERICAS INCORPORATED	286 MANTUA GROVE RD	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD000692970	E92677	395124	751105	0.6	BEECRA
299	PENNWALT CORPORATION	CROWN POINT RD	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD980753875	E89231	395046	751233	2.0	BEECRA
300	SEAVIEW OIL COMPANY	MANTUA GROVE RD	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD980237408	E90905	395028	751334	2.9	BEECRA
301	W R GRACE & COMPANY INCORPORATED	2000 NOLTE DR	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD071630131	E85458	394923	751247	3.1	BEECRA
302	SL WABER INCORPORATED	300 HARVARD AVE	WESTVILLE BOROUGH	GLOUCESTER	NJL500029897	E88518	395140	750803	2.1	BEECRA
303	AEROPLATING	661 EVERGREEN AVE S	WOODBURY HEIGHTS BOROUGH	GLOUCESTER	NJD000831677	E90449	394936	750917	2.2	BEECRA
861	BELL HARBOR INCORPORATED LANDFILL	HARDING AVE (OFF CREEK RD)	BELLMAWR BOROUGH	CAMDEN	NJL900000084	941102210745	395217	750539	4.3	BFCM
906	MOBIL OIL CORPORATION PAULSBORO REFINERY	800 BILLINGSPORT RD	PAULSBORO BOROUGH	GLOUCESTER	NJD002342426	NJD002342426	394951	751513	4.5	BFCM
908	GENERAL ENGINES COMPANY INCORPORATED	RTE 295	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD982728487	NJD982728487	395102	751021	0.3	BFCM
909	PSE&G COMPANY WEST DEPTFORD TOWNSHIP	RAILROAD AVE	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJL000037226	551	395124	751105	0.6	BFCM
910	WOODBURY CITY COAL GAS (PSE&G)	MAPLE & LAUREL STS	WOODBURY CITY	GLOUCESTER	NJD986615599	NJD986615599	395020	750849	1.8	BFCM
911	WOODBURY HEIGHTS COAL GAS	500 ELM AVE	WOODBURY HEIGHTS BOROUGH	GLOUCESTER	NJD981084833	NJD981084833	394904	750900	2.9	BFCM
1204	US POSTAL SERVICE	421 BENIGNO BLVD	BELLMAWR BOROUGH	CAMDEN	NJL600105571	0065748	395132	750543	4.1	BFCM-6
1206	D ANDREA TIRE INCORPORATED	100 NEW BROADWAY	BROOKLAWN BOROUGH	CAMDEN	NJL600104954	940883	395243	750722	3.1	BFCM-6
1215	BO BET MOTEL	310 BLACKHORSE PK N	MOUNT EPHRAIM BOROUGH	CAMDEN	NJL800122145	NJL800122145-001	395304	750514	4.9	BFCM-6
1263	AXCEL SERVICE STATION FRANKLIN TOWNSHIP	2623 S DELSEA DR.	FRANKLIN TOWNSHIP	GLOUCESTER	NJL600228043	950277	394914	750729	3.5	BFCM-6
1267	COASTAL EAGLE POINT OIL COMPANY	RTES 130 & 295 & CROWN POINT RD	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD990753162	E84158	395142	750904	1.2	BFCM-6
1571	BELLMAWR BOROUGH SANITARY LANDFILL	CREEK RD & RTE 295	BELLMAWR BOROUGH	CAMDEN	NJD000535401	930480	395135	750643	3.2	BFD-CA
1572	FAZZIO SANITARY LANDFILL	204 HARDING AVE	BELLMAWR BOROUGH	CAMDEN	NJD980505127	930836	395149	750557	3.9	BFD-CA
1611	MAC SANITARY LANDFILL INCORPORATED	RTE 41 & CLEMENTS BRIDGE RD	DEPTFORD TOWNSHIP	GLOUCESTER	NJD980529374	9301115	395032	750509	4.7	BFD-CA
1622	NATIONAL PARK LANDFILL	GROVE AVE	NATIONAL PARK BOROUGH	GLOUCESTER	NJD980505515	930685	395130	751058	0.5	BFD-CA
1625	ESSEX CHEMICAL CORPORATION	100 THOMAS LN	PAULSBORO BOROUGH	GLOUCESTER	NJD980769723	E88900	395056	751408	3.3	BFD-CA
1626	WOODBURY CREEK WETLAND MITIGATION BANK	CROWN POINT & JOBSTOWN RDS	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJL800080145	940812110216	395032	751149	1.5	BFD-CA
1723	GREAT BAY PLAZA	232 NATHISTOWN RD	LITTLE EGG HARBOR TOWNSHIP	OCEAN	NJD982742454	NJD982742454	394854	750902	3.0	BFD-CA
2540	INTERSTATE INDUSTRIAL PARK	400 BENIGNO BLVD	BELLMAWR BOROUGH	CAMDEN	NJL800053373	940706170304	395132	750541	4.1	BFD-S
2565	FOGARTY INDUSTRIES	5TH & WALNUT & CHARLES & 7TH STS	GLOUCESTER CITY	CAMDEN	NJD986578169	930234	395322	750733	3.4	BFD-S
2566	INDCO INCORPORATED	RAILROAD AVE N & ESSEX ST	GLOUCESTER CITY	CAMDEN	NJL600156731	940826170106	395403	750706	4.2	BFD-S
2576	MOUNT EPHRIAM BOROUGH	CLEVELAND AVE	MOUNT EPHRAIM BOROUGH	CAMDEN	NJL800023699	9302261028	395304	750534	4.7	BFD-S
2656	100 WILSHIRE AVENUE	100 WILSHIRE AVE	DEPTFORD TOWNSHIP	GLOUCESTER	NJL000051342	921144	394909	750648	4.0	BFD-S
2657	1327 TURKEY HILL ROAD	1327 TURKEY HILL RD	DEPTFORD TOWNSHIP	GLOUCESTER	NJD980769442	86041101	395020	750718	2.9	BFD-S
2658	DEPTFORD TOWNSHIP DEPT OF PUBLIC WORKS	RTE 41	DEPTFORD TOWNSHIP	GLOUCESTER	NJL000051334	901207SP02	394914	750729	3.5	BFD-S
2660	NJ DEPARTMENT OF TRANSPORTATION	CEDAR AVE	DEPTFORD TOWNSHIP	GLOUCESTER	NJL800047631	940330070124	394914	750729	3.5	BFD-S
2673	234 TWIN LAKES DRIVE	234 TWIN LAKES DR	MANTUA TOWNSHIP	GLOUCESTER	NJL000040915	930258	394736	751102	4.3	BFD-S
2681	GATX TERMINAL CORPORATION	3RD ST & BILLINGSPORT RD	PAULSBORO BOROUGH	GLOUCESTER	NJD986574986	9302271312	395046	751441	3.8	BFD-S
2682	LILLY INDUSTRIAL COATINGS INCORPORATED	1991 NOLTE DR	PAULSBORO BOROUGH	GLOUCESTER	NJD067362087	930909113102	394923	751246	3.0	BFD-S
2683	SUN PAULSBORO TERMINAL	825 CLONMELL RD	PAULSBORO BOROUGH	GLOUCESTER	NJD980650162	931051	395043	751455	4.0	BFD-S
2686	1139 HESSIAN AVENUE	1139 HESSIAN AVE	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJL800044042	940311164229	395148	751018	0.5	BFD-S
2687	COLONIAL PIPELINE COMPANY	MANTUA GROVE RD	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD980206957	920208152553	395028	751334	2.9	BFD-S
2688	DANA CONTAINER INCORPORATED	RTE 44 (CROWN POINT RD)	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJL860001809	9209281800	395142	750907	1.2	BFD-S
2689	MID ATLANTIC INDUSTRIAL PARK	1250 METROPOLITAN AVE	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJL800023426	931203144305	394936	751215	2.6	BFD-S
2690	SHELL CHEMICAL COMPANY	CROWN POINT & MANTUA GROVE RDS	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD982533598	9503154	394937	751310	3.1	BFD-S
2691	307 WOODBINE AVENUE	307 WOODBINE AVE	WESTVILLE BOROUGH	GLOUCESTER	NJL000060814	9304021505	395219	750749	2.5	BFD-S

SITE#	NAME	ADDRESS	MUN	COUNTY	CSL#	CASE#	LAT	LON	DISTANCE	CONTAC
2693	651 EVERGREEN AVENUE	651 EVERGREEN AVE	WOODBURY CITY	GLOUCESTER	NJL800059289	940510150338	395040	750839	1.7	BFD-S
2694	BP PIPELINE TERMINAL	JESSUP RD	WOODBURY CITY	GLOUCESTER	NJD079488821	8803312154	394913	751029	2.4	BFD-S
2695	BROAD STREET & ROUTE 45	BROAD ST & RTE 45	WOODBURY CITY	GLOUCESTER	NJL000064287	9305050946	394914	750729	3.5	BFD-S
2696	WOODBURY NISSAN	439 MANTUA AVE	WOODBURY CITY	GLOUCESTER	NJD986611549	931194	394854	750902	3.0	BFD-S
3094	SOUTH JERSEY PORT CORPORATION	2500 BROADWAY	CAMDEN CITY	CAMDEN	NJD002504272	NJD002504272	395445	750710	4.8	BSCN
3096	AMSPEC CHEMICAL COMPANY	WATER ST	GLOUCESTER CITY	CAMDEN	NJD000312371	NJD000312371	395318	750749	3.2	BSCN
3097	GLOUCESTER COAL GAS (PSE&G)	JERSEY AVE & 6TH ST	GLOUCESTER CITY	CAMDEN	NJD981083058	NJD981083058	395330	750724	3.6	BSCN
3098	UNIVERSITY & MEMORIAL AVENUES	UNIVERSITY & MEMORIAL AVES	GLOUCESTER CITY	CAMDEN	NJL000031872	NJL000031872	395338	750633	4.3	BSCN
3135	BP OIL COMPANY PAULSBORO TERMINAL	MANTUA AVE	PAULSBORO BOROUGH	GLOUCESTER	NJD043278787	NJD043278787	395040	751413	3.4	BSCN
3136	MANCHESTER MACHINERY SALVAGE COMPANY	CROWN POINT RD	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD981873474	NJLB60001288	395046	751233	2.0	BSCN
3357	PEABODY CLEAN INDUSTRY INCORPORATED	85 RIVERVIEW AVE	PAULSBORO BOROUGH	GLOUCESTER	NJD067394825	NJD067394825	395101	751433	3.6	BSN
3358	MATTEO IRON & METAL	1708 RTE 130	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD991304072	931143	395119	751024	0.0	BSN
3960	SOUTHLAND MID ATLANTIC BRANCH	CREEK RD	DELANCO TOWNSHIP	BURLINGTON	NJP000869321	0093756	395217	750539	4.3	BUST
4076	BELLMAWR BOROUGH	KARR DR & CREEK RD	BELLMAWR BOROUGH	CAMDEN	NJD982744476	0123121	395217	750539	4.3	BUST
4077	CONSOLIDATED FREIGHTWAYS TERMINAL	651 BENIGNO BLVD	BELLMAWR BOROUGH	CAMDEN	NJL800110348	0128793	395217	750539	4.3	BUST
4078	JERSEY MILLWORK COMPANY	45 HELLER RD	BELLMAWR BOROUGH	CAMDEN	NJL600031918	0049188	395143	750512	4.6	BUST
4079	PSE&G COMPANY	80 HELLER RD	BELLMAWR BOROUGH	CAMDEN	NJL600027338	0041825	395145	750513	4.6	BUST
4080	SHELL SERVICE STATION BELLMAWR BOROUGH	132 BLACK HORSE PK N	BELLMAWR BOROUGH	CAMDEN	NJD986593077	0076250	395213	750451	5.0	BUST
4081	SUNOCO SERVICE STATION BELLMAWR BOROUGH	NORTH-SOUTH FREEWAY & BELL GARDEN AVE	BELLMAWR BOROUGH	CAMDEN	NJD000694117	0145514	395217	750539	4.3	BUST
4091	BROOKLAWN BOROUGH PUBLIC WORKS	HAAKON RD	BROOKLAWN BOROUGH	CAMDEN	NJL000036194	0121286	395325	750704	3.8	BUST
4092	MERIT SERVICE STATION BROOKLAWN BOROUGH	RTE 130 & BROOKLAWN CIR	BROOKLAWN BOROUGH	CAMDEN	NJD981556251	0091262	395325	750704	3.8	BUST
4093	MOBIL SERVICE STATION BROOKLAWN BOROUGH	BROOKLAWN CIR	BROOKLAWN BOROUGH	CAMDEN	NJL600047021	0072470	395325	750704	3.8	BUST
4094	MOBIL SERVICE STATION BROOKLAWN BOROUGH	KINGS HWY & BROWNING RD	BROOKLAWN BOROUGH	CAMDEN	NJL600152730	0231626	395325	750704	3.8	BUST
4095	TEXACO SERVICE STATION BROOKLAWN BOROUGH	KINGS HWY & BROWNING RD	BROOKLAWN BOROUGH	CAMDEN	NJD986580660	0074450	395325	750704	3.8	BUST
4158	SHELL SERVICE STATION GLOUCESTER CITY	CRESCENT BLVD & NICHOLSON RD	GLOUCESTER CITY	CAMDEN	NJD982279499	0076395	395341	750606	4.6	BUST
4159	WAREHOUSE 1331	1331 RTE 130	GLOUCESTER CITY	CAMDEN	NJL600133029	0206273	395325	750704	3.8	BUST
4194	EXXON SERVICE STATION MOUNT EPHRAIM BORO	BLACK HORSE PK	MOUNT EPHRAIM BOROUGH	CAMDEN	NJD986610814	0078618	395304	750534	4.7	BUST
4195	MERIT OIL CORPORATION	BLACK HORSE PK & KINGS HWY	MOUNT EPHRAIM BOROUGH	CAMDEN	NJD982185332	0091271	395253	750509	4.9	BUST
4196	MOBIL SERVICE STATION MOUNT EPHRAIM BORO	6 BLACK HORSE PK & KINGS HWY	MOUNT EPHRAIM BOROUGH	CAMDEN	NJD986605574	0062444	395253	750509	4.9	BUST
4578	DELSEA SERVICE STATION DEPTFORD TOWNSHIP	RTE 47 (DELSEA DR)	DEPTFORD TOWNSHIP	GLOUCESTER	NJP000886663	0073398	394914	750729	3.5	BUST
4579	DEPTFORD TOWNSHIP POLICE SERVICE STATION	1011 COOPER ST	DEPTFORD TOWNSHIP	GLOUCESTER	NJL600190797	NJL600190797-001	394942	750728	3.2	BUST
4580	EXXON SERVICE STATION DEPTFORD TOWNSHIP	COOPER RD & DELSEA DR	DEPTFORD TOWNSHIP	GLOUCESTER	NJD986595684	0083829	394943	750729	3.2	BUST
4581	HESS SERVICE STATION DEPTFORD TOWNSHIP	210 HURFFVILLE RD (RTE 41)	DEPTFORD TOWNSHIP	GLOUCESTER	NJL800021446	0087951	394914	750729	3.5	BUST
4582	GETTY SERVICE STATION EAST GREENWICH TWP	KINGS HWY & BERKLEY RD	EAST GREENWICH TOWNSHIP	GLOUCESTER	NJL600146054	0222987	394836	751242	3.7	BUST
4604	SUNOCO SERVICE STATION DEPTFORD TOWNSHIP	RTE 45 & OGDEN WOODBURY RD	MANTUA TOWNSHIP	GLOUCESTER	NJD000697474	0164117	394914	750729	3.5	BUST
4610	ROUTE 295 TRAVELERS PLAZA	RTE 295 & MOUNT ROYAL EXIT	PAULSBORO BOROUGH	GLOUCESTER	NJL600021281	0032726	394950	751247	2.7	BUST
4628	CUMBERLAND FARMS	MANTUA & WEST AVES	WENONAH BOROUGH	GLOUCESTER	NJD986584597	0058746	394727	750902	4.6	BUST
4629	CONTINENTAL BAKING COMPANY	45 GATEWAY BLVD	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJL800047821	0157575	395142	750811	2.0	BUST
4630	GLOUCESTER CO WASTEWATER TREATMENT PLANT	PARADISE RD	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD981565997	0000622M	395003	751327	3.0	BUST
4631	MOBIL SERVICE STATION WEST DEPTFORD TWP	CROWN PT RD & RED BANK AVE	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD986606556	0037785	395117	750953	0.5	BUST
4632	MOBIL SERVICE STATION WEST DEPTFORD TWP	KINGS HWY & WESTWOOD AVE	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD986606762	0037767	394938	751013	2.0	BUST
4633	PURITAN OIL COMPANY	RTE 295 & RILEY AVE	WEST DEPTFORD TOWNSHIP	GLOUCESTER	NJD986603629	0007274	395135	750922	0.9	BUST
4634	MOBIL SERVICE STATION WOODBURY CITY	212 EVERGREEN & BARBER AVES	WOODBURY CITY	GLOUCESTER	NJD986606846	0037749	395018	750835	2.0	BUST
4635	MOBIL SERVICE STATION WOODBURY CITY	BROAD ST & RED BANK AVE	WOODBURY CITY	GLOUCESTER	NJD986606564	0037730	395036	750858	1.5	BUST
4636	WOODBURY CITY MAINTENANCE FACILITY	29 DELAWARE ST	WOODBURY CITY	GLOUCESTER	NJD986618270	0045038	395018	750915	1.6	BUST
4637	WOODBURY DETAIL & SERVICE	149 BROAD ST S	WOODBURY CITY	GLOUCESTER	NJL600186001	0118569	395009	750918	1.7	BUST
4638	SHELL SERVICE STATION WOODBURY HEIGHTS	501 ELM AVE	WOODBURY HEIGHTS BOROUGH	GLOUCESTER	NJL600175996	0065982	394914	750729	3.5	BUST
4639	SHELL SERVICE STATION WOODBURY HEIGHTS	GLASSBORO & EVERGREEN AVES	WOODBURY HEIGHTS BOROUGH	GLOUCESTER	NJD986596088	0076205	394914	750729	3.5	BUST

Number of Observations: 103

 PRELIMINARY SURVEY OF WATER WITHDRAWAL POINTS WITHIN 5.0 MILES OF 395120 LAT. 751024 LON. (IN ORDER BY PERMIT NUMBER) - 03/09/01

NUMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GEO1	GEO2	CAPACITY
10063W	GLOUCESTER CITY BD. OF ED.	3104482	1	395300	750645	F	3.7	07	14	118	GKMR		290
10064W	OUR LADY OF LOURDES MED. CENT.	3104620	1	395532	750525	F	6.5	07	08	257	GKMR		250
10087W	DEPTWOOD SHOPPING CENTER	3102728	1	395004	750740	F	2.8	15	22	221	GKMR		300
10231W	WOODBURY COUNTRY CLUB	3103393	1	394955	751034	F	1.6	15	22	220	GKMR		500
10367W	TRAP ROCK INDUSTRIES, INC.	3104633	2	395134	750457	F	4.8	07	30	222	GKMR		175
10412W	WHITE SWAN TRAILER PARK	3002737	1	394958	751320	F	3.0	15	20	178	GKMR		70
10697W	ELF ATOCHEM NORTH AMERICA INC.	3117980	WELL NO 3	395003	751012	1	1.5	15	20	142	GKMR		200
10752W	CAMDEN COUNTY MUA	3105802	1	394950	750500	U	5.0	07	15	270	GKMR		250
11007W	CAMDEN COUNTY MUA	5154944	WELL 1	395527	750740	T	5.3	07	08	194	GKRM		500
11020W	PARKVIEW APARTMENTS	3152468	WELL 1	395506	750506	T	6.3	07	12	130	GKRM		70
	PARKVIEW APARTMENTS	3152469	WELL 2	395506	750506	T	6.3	07	12	130	GKRM		70
11028W	GIBBSTOWN SOCCER ASSOCIATION	3012748		394920	751600	T	5.4	15	07	100	GKM		100
11100W	HOVEROS WEST DEPTFORD, LLC	3159256	WELL 2	395106	751133	T	1.0	15	20	180	GKMU		40
	HOVEROS WEST DEPTFORD, LLC	3159257	WELL 1	395106	751133	T	1.0	15	20	180	GKMU		40
11101W	WEST DEPTFORD TOWNSHIP	DELAWARE	002	395127	751207		1.5	15	20				600
2148P	MAFCO WORLDWIDE CORP.	3100290	1	395507	750729	F	5.0	07	08	103	GKMR		300
	MAFCO WORLDWIDE CORP.	DELAWARE RIVER		395506	750740	U	4.9	07	08		SDDEL		
	MAFCO WORLDWIDE CORP.	3142789	3R	395508	750740	U	5.0	07	08	149	GKMR		350
2204P	VALERO REFINING CORP-NJ	3001908	RW3	395049	751513	F	4.3	15	07	53	GKMR		310
	VALERO REFINING CORP-NJ	3001910	RW4	395044	751509	F	4.2	15	07	51	GKMU		310
	VALERO REFINING CORP-NJ	3001909	RW5	395038	751501	F	4.1	15	07	53	GKMU		310
	VALERO REFINING CORP-NJ	3001905	RW6	395034	751458	F	4.1	15	07	47.5	GKMU		310
	VALERO REFINING CORP-NJ	3001906	RW8	395022	751459	F	4.2	15	07	49	GKMU		310
	VALERO REFINING CORP-NJ	3001966	RW9	395021	751534	F	4.7	15	07	51	GKMU		323
	VALERO REFINING CORP-NJ	3002336	RW12	395024	751521	F	4.5	15	07	55	GKMU		323
	VALERO REFINING CORP-NJ	3002334	RW14	395012	751508	F	4.3	15	07	55	GKMU		0
	VALERO REFINING CORP-NJ	3002339	RW15	395005	751512	F	4.4	15	07	10	GKMR		24
	VALERO REFINING CORP-NJ	3002341	RW16	395039	751553	F	4.9	15	07	16	GKMR		24
	VALERO REFINING CORP-NJ	3000198	47	395036	751501	F	4.1	15	07	242	GKMR		600
	VALERO REFINING CORP-NJ	DELAWARE RIVER	4PUMPS	395039	751530	F	4.5	15	07		SDDEL		3180
	VALERO REFINING CORP-NJ	3005642	RW-19	395029	751526	F	4.5	15	07	61	GKMR		350
	VALERO REFINING CORP-NJ	3005643	RW-20	395033	751530	F	4.6	15	07	61	GKMU		350
	VALERO REFINING CORP-NJ	3005644	RW-21	395024	751522	F	4.5	15	07	62	GKMR		350
	VALERO REFINING CORP-NJ	3005060	PW-48	394956	751512	F	4.5	15	07	153	GKRM		750
	VALERO REFINING CORP-NJ	3005645	PW-49	395014	751508	F	4.3	15	07	268	GKPL		750
	VALERO REFINING CORP-NJ	3009959	M2204PRW23	394957	751517	F	4.6	15	07	23	GKMU		400
	VALERO REFINING CORP-NJ	3010019	M2204PRW24	395001	751521	F	4.6	15	7	23	GKMU		10
	VALERO REFINING CORP-NJ	3011162	PW50	395016	751454	F	4.1	15	07	152	GKRM		425
	VALERO REFINING CORP-NJ	3011178	RW22	395009	751457	F	4.2	15	07	64	GKMU		323
	VALERO REFINING CORP-NJ	3012907	RW5A	395038	751501	F	4.1	15	07	65	GKMU		310
2205P	COASTAL EAGLE POINT OIL CO.	3100007	1	395217	750913	1	1.5	15	20	288	GKP		800
	COASTAL EAGLE POINT OIL CO.	3100008	3	395223	750918	1	1.5	15	20	288	GKP		600
	COASTAL EAGLE POINT OIL CO.	3110647	4A	395216	750937	1	1.3	15	20	296	GKP		1000
	COASTAL EAGLE POINT OIL CO.	3100028	5	395221	750854	1	1.8	15	20	283	GKP		0
	COASTAL EAGLE POINT OIL CO.	3117788	6A	395154	750943	1	0.9	15	20	335	GKP		1000
	COASTAL EAGLE POINT OIL CO.	3106834	7	395200	750948	1	0.9	15	20	306	GKP		1000
	COASTAL EAGLE POINT OIL CO.	3121839	110-1	395214	750935	S	1.3	15	20	14.1	GKM		25
	COASTAL EAGLE POINT OIL CO.	3123044	MW-143-1	395230	750827	S	2.2	15	20	17	GKM		25
	COASTAL EAGLE POINT OIL CO.		LC-1	395223	750913	U	1.6	15	20	21.7	GKM		25
	COASTAL EAGLE POINT OIL CO.		LC-2	395223	750913	U	1.6	15	20	26.8	GKM		25
	COASTAL EAGLE POINT OIL CO.		LC-3	395221	750917	U	1.5	15	20	16.6	GKM		25
	COASTAL EAGLE POINT OIL CO.		LC-4	395221	750917	U	1.5	15	20	16.7	GKM		25
	COASTAL EAGLE POINT OIL CO.		S-1	395216	750913	U	1.5	15	20	12.1	GKM		25
	COASTAL EAGLE POINT OIL CO.		S-2	395217	750920	U	1.4	15	20	12.5	GKM		25
	COASTAL EAGLE POINT OIL CO.		S-3	395213	750911	U	1.5	15	20	14.2	GKM		25

 PRELIMINARY SURVEY OF WATER WITHDRAWAL POINTS WITHIN 5.0 MILES OF 395120 LAT. 751024 LON. (IN ORDER BY PERMIT NUMBER) - 03/09/01

NUMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GEO1	GEO2	CAPACITY
	COASTAL EAGLE POINT OIL CO.		S-4	395213	750900	U	1.6	15	20	16.3	GKM		25
	COASTAL EAGLE POINT OIL CO.		LF-1	395227	750841	U	2.0	15	20	10	GKM		25
	COASTAL EAGLE POINT OIL CO.		LF-2	395225	750844	U	1.9	15	20	10	GKM		25
	COASTAL EAGLE POINT OIL CO.		TK-26	395148	750902	U	1.3	15	20	10	GKM		25
	COASTAL EAGLE POINT OIL CO.		TK-51	395155	750832	U	1.8	15	20	10	GKM		25
	COASTAL EAGLE POINT OIL CO.		D-1	395208	750832	U	1.9	15	20	10	GKM		25
	COASTAL EAGLE POINT OIL CO.		PH-2	395207	750835	U	1.8	15	20		GKM		25
	COASTAL EAGLE POINT OIL CO.		CC-1	395224	750851	U	1.8	15	20	10	GKM		25
	COASTAL EAGLE POINT OIL CO.	DELAWARE RIVER	DOCK(1ARW)	395242	750913	U	1.9	15	20		SDDEL		2500
	COASTAL EAGLE POINT OIL CO.	DELAWARE RIVER	4(45W)	395217	750912	U	1.5	15	20		SDDEL		2000
	COASTAL EAGLE POINT OIL CO.	DELAWARE RIVER	3(35W)	395217	750912	U	1.5	15	20		SDDEL		2000
	COASTAL EAGLE POINT OIL CO.	DELAWARE RIVER	5 (55W)	395217	750912	U	1.5	15	20		SDDEL		2000
	COASTAL EAGLE POINT OIL CO.	DELAWARE RIVER	FIRE1 (1FW	395217	750912	U	1.5	15	20		SDDEL		500
	COASTAL EAGLE POINT OIL CO.	DELAWARE RIVER	FIRE2 (2FW	395217	750912	U	1.5	15	20		SDDEL		1500
	COASTAL EAGLE POINT OIL CO.	DELAWARE RIVER	FIRE 6 6FW	395217	750912	U	1.5	15	20		SDDEL		1500
	COASTAL EAGLE POINT OIL CO.	DELAWARE RIVER	FIRE 7 (7F	395217	750912	U	1.5	15	20		SDDEL		2500
	COASTAL EAGLE POINT OIL CO.	DELAWARE RIVER	COGEN 1	395217	750912	U	1.5	15	20		SDDEL		3200
2215P	HUNTSMAN CORPORATION	3000898	1	394918	751313	F	1.5	15	20		SDDEL		3200
	HUNTSMAN CORPORATION	3000899	2	394918	751313	F	3.4	15	20	360	GKMR		850
	HUNTSMAN CORPORATION	3000900	3	394922	751302	F	3.4	15	20	290	GKMR		200
	HUNTSMAN CORPORATION	3000901	4	394922	751302	F	3.2	15	20	384	GKMR		850
2234P	AUSIMONT USA,INC.	3001173	418	395028	751302	1	3.2	15	20	159	GKMR		850
	AUSIMONT USA,INC.	3001174	417	395040	751240	1	2.5	15	20	290	GKMR		500
2257P	WESTWOOD GOLF CLUB	3106200	1	394939	751007	T	2.1	15	20	278	GKMR		1000
	WESTWOOD GOLF CLUB	3143251	2	394930	751018	T	1.9	15	20	140	GKMR		450
	WESTWOOD GOLF CLUB	MATHEWS BRANCH	INTAKE 1	394939	751007	U	2.1	15	20	188	GKMR		50
2365P	WHEELABRATOR GLOUCESTER CO. LP	DELAWARE RIVER	RM 95.1	395251	750837	T	1.9	15	20		SD		250
2401P	BP TERMINAL NO. 4555	DUG	AREA 3SUMP	395052	751356	T	2.3	15	20		SDDEL		
	BP TERMINAL NO. 4555	3003430	R-3	395052	751408	T	3.1	15	14	20	GKMR		0050
	BP TERMINAL NO. 4555	3006920	R-4A	395054	751417	T	3.3	15	14	85	GKMR		75
	BP TERMINAL NO. 4555	3007012	R-5A	395050	751412	T	3.4	15	14	82	GKMR		0075
	BP TERMINAL NO. 4555	3007032	R-6A	395100	751417	T	3.4	15	14	38	GKMR		50
	BP TERMINAL NO. 4555	3007013	R-7A	395057	751417	T	3.4	15	14	72	GKMR		75
	BP TERMINAL NO. 4555	3007014	R-8	395049	751418	T	3.4	15	14	40	GKMR		50
	BP TERMINAL NO. 4555	3007015	R-9	395041	751418	T	3.5	15	14	87	GKMR		75
	BP TERMINAL NO. 4555	3007028	R-10	395101	751420	T	3.5	15	14	90	GKMR		75
	BP TERMINAL NO. 4555	3005183	R-7	395050	751412	T	3.5	15	14	39	GKMR		0050
	BP TERMINAL NO. 4555	3005153	51-1A	395057	751413	T	3.4	15	14	0027	GKMR		0050
2425P	CITGO ASPHALT REFINING COM.	5009043	1	395045	751337	F	3.4	15	14	24	GKMR		0050
	CITGO ASPHALT REFINING COM.	MANTUA CREEK		395046	751339	F	2.9	15	20	306	GKMR		200
5010	GLOUCESTER CITY WATER/SEWER DE	3104306	WELL #40	395349	750651	G	2.9	15	20		SDMNT		3000
	GLOUCESTER CITY WATER/SEWER DE	3127737	WELL #41	395359	750654	T	4.2	07	14	262	GKP		1000
	GLOUCESTER CITY WATER/SEWER DE	3105242	WELL #42	395342	750652	G	4.3	07	14	269	GKP		1000
	GLOUCESTER CITY WATER/SEWER DE	3118822	WELL #43	395344	750654	G	4.1	07	14	306	GKP		1000
	GLOUCESTER CITY WATER/SEWER DE	3104903	REDRILLED	395358	750654	G	4.1	07	14	260	GKP		1000
5030	BROOKLAWN BOROUGH WATER DEPT.	3104325	1	395241	750725	G	4.3				GKMR		
	BROOKLAWN BOROUGH WATER DEPT.	3114471	3	395243	750729	G	3.0	07	07	327	GKMR		300
	BROOKLAWN BOROUGH WATER DEPT.	3119765	4	395247	750738	G	3.0	07	07	320	GKMR		350
5130	PAULSBORO BOROUGH	3000069	4	394928	751448	G	2.9	07	07	293	GKMR		350
	PAULSBORO BOROUGH	3000602	5	394946	751422	G	4.4	15	14	220	GKMR		600
	PAULSBORO BOROUGH	3011403	WELL 7	394946	751453	U	3.9	15	14	178	GKMR		900
5142	EAST GREENWICH TOWNSHIP	3000432	2	394753	751327	G	4.3	15	14	281	GKMR		1000
	EAST GREENWICH TOWNSHIP	3001426	3	394820	751250	G	4.8	15	07	218	GKMR		600
5153	NATIONAL PARK BOROUGH	3102555	5	395155	751054	G	4.0	15	07	246	GKMR		1000
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.8	15	12	282	GKMR		700

NUMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GED1	GED2	CAPACITY
5159	WOODBURY HEIGHTS BOROUGH	3106356	1	394857	750848	G	3.1	15	23	235	GKMR		1000
5192	WENONAH BOROUGH	5100065	1	394742	750902	G	4.3	15	19	320	GKMR		550
	WENONAH BOROUGH	3100170	2	394749	750907	G	4.2	15	19	310	GKMR		550
5194	WASHINGTON TOWNSHIP MUA	3106133	4	394730	750449	G	6.6	15	18	418	GKMR		400
5209	COLLINGSWOOD BOROUGH	3104797	7	395425	750516	G	5.7	07	12	318	GKMR		1000
	COLLINGSWOOD BOROUGH	NEWTON CREEK		395425	750515		5.7	07	12		SDCDD		1000
5223	BELLMAWR BOROUGH	5100032	1	395221	750637	G	3.5	07	04	164	GKM		500
	BELLMAWR BOROUGH	3102687	3	395221	750637	G	3.5	07	04	359	GKR		800
	BELLMAWR BOROUGH	3104969	4	395146	750542	G	4.1	07	04	557	GKP		1000
	BELLMAWR BOROUGH	3112315	5	395152	750532	G	4.3	07	04	562	GKP		1000
	BELLMAWR BOROUGH	3119218	6	395219	750640	G	3.5	07	04	386	GKR		1000
5253	GREENWICH TWP. WATER DEPT.	3001776	6	394909	751542	G	5.3	15	07	138	GKMR		1100
	GREENWICH TWP. WATER DEPT.	3009345	4R	394915	751530	T	5.1	15	07	171	GKMR		1000
5302	CAMDEN WATER L.L.C.	5100060	CITY 7	395457	750640	G	5.3	07	08	163	GKMR		1500
	CAMDEN WATER L.L.C.	5100061	CITY 11	395513	750640	G	5.5	07	08	159	GKMR		1010
5304	WEST DEPTFORD WATER DEPT.	3103021	3	394910	751026	G	2.5	15	20	243	GKMR		750
	WEST DEPTFORD WATER DEPT.	3104567	4	394819	751026	G	3.5	15	20	288	GKMR		440
	WEST DEPTFORD WATER DEPT.	3107056	5	394912	751106	G	2.5	15	20	440	GKMR		1000
	WEST DEPTFORD WATER DEPT.	5100063	6	395105	750947	G	0.6	15	20	366	GKMR		1000
	WEST DEPTFORD WATER DEPT.	3117452	7	395126	750856	G	1.3	15	20	363	GKMR		1000
	WEST DEPTFORD WATER DEPT.	3117811	8	394836	751048	G	3.2	15	20	315	GKMR		1000
5314	MANTUA TOWNSHIP M.U.A.	3101140	3	394713	751009	G	4.7	15	10	316	GKM		250
	MANTUA TOWNSHIP M.U.A.	3105309	4	394731	751038	G	4.4	15	10	268	GKM		500
5319	WESTVILLE BOROUGH	3103418	4	395220	750737	G	2.7	15	21	313	GKMR		750
	WESTVILLE BOROUGH	3105689	5	395215	750740	G	2.6	15	21	274	GKMR		1000
	WESTVILLE BOROUGH	3117923	6	395222	750736	G	2.7	15	21	317	GKMR		1000
5336	DEPTFORD TOWNSHIP MUA	3102118	1	394810	750913	G	3.8	15	02	355	GKMR		850
	DEPTFORD TOWNSHIP MUA	3102416	2	394843	750909	G	3.2	15	02	273	GKMR		1000
	DEPTFORD TOWNSHIP MUA	3105513	4	395113	750706	G	2.9	15	02	363	GKMR		700
	DEPTFORD TOWNSHIP MUA	3105514	5	394743	750511	G	6.2	15	02	450	GKMR		700
	DEPTFORD TOWNSHIP MUA	3113385	6	394853	750729	G	3.8	15	02	489	GKMR		1000
	DEPTFORD TOWNSHIP MUA	3122504	7	394740	750809	G	4.6	15	02	324	GKMR		1000
	DEPTFORD TOWNSHIP MUA	3137705	8	395015	750619	G	3.8	15	02	261	GKMR		1000
5347	WOODBURY CITY WATER DEPT.	5100100	3	395011	750923	G	1.6	15	22	188	GKMR		700
	WOODBURY CITY WATER DEPT.	3104059	5	394954	750909	G	2.0	15	22	457	GKMR		1000
	WOODBURY CITY WATER DEPT.	3307973	6	395036	750825	G	1.9	15	22	305	GKMR		1000
BU0079	GARDNER, JOHN J.	5100125	WELL 1	395025	751015	F	1.1	05	32	45	GTCH		1000
	GARDNER, JOHN J.	3213727	WELL 2	395025	751015	F	1.1	05	32	87	GTCH		800
	GARDNER, JOHN J.	POND 3	POND 3	395025	751015	F	1.1	05	32	24	GTCH		1200
GL0122	MARPLE, JOHN	MATTHEWS BR	POND 1	395015	751104	F	1.4	15	20	2	SD		1000
	MARPLE, JOHN	STREAM 1		395015	751104	F	1.4	15	20		SD		1000
GL0127	LEONE, JOSEPH A.	MANTUA CREEK	STREAM 1	394814	751159	F	3.8	15	03		SDMNT		1000
	LEONE, JOSEPH A.	POND 2		394711	751305	F	5.3	15	03	5	SDMNT	GKR	200
	LEONE, JOSEPH A.	MANTUA CREEK	STREAM 2	394912	751350	F	3.9	15	03		SDMNT		1000
GL0132	BANSCHER, JOHN R.	STILL RUN	STREAM 1	394832	751603	F	5.9	15	07		SD		500
GL0134	SHUTE, HAROLD E.	POND	1	394818	751407	F	4.8	15	07	8	GKET		500
GL0152	PATTEN, CALVIN C. SR.	CLONMELL CREEK	STREAM 1	394942	751539	F	5.0	15	07		SD		500
GL0162	DEHART, WILLIAM	WOODBURY CK P1	PUMP 1	395023	751056	F	1.2	15	20		SD		750
	DEHART, WILLIAM	WOODBURY CK P1	PUMP 2	395023	751056	F	1.2	15	20		SD		750
GL0169	HAINES, GEORGE G.	MANTUA CREEK	STREAM 1	394851	751312	F	3.8	15	03		SDMAU		500
GL0209	PLATT JR, CHARLES	POND 1	POND 1	394730	751548	F	6.5	15	03	5	DMNT		200
	PLATT JR, CHARLES	POND 2	POND 2	394730	751548	F	6.5	15	03	4	DMNT		200
	PLATT JR, CHARLES	STREAM 1	STREAM 1	394730	751548	F	6.5	15	03		DMNT		200
	PLATT JR, CHARLES	STREAM 2	STREAM 2	394830	751548	F	5.7	15	03		DMNT		200
GL199R	PLATT, CHARLES JR.	3001042	1	394808	751353	F	4.8	15	03	180	GKMR		250

DWR-138
6/95

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

E
DMQ

Well Permit Number 31 – 52940

Atlas Sheet Coordinates 31 : 11 : 462

OWNER RIEHL, GROVER

Address 1726 THIRD ST.

City THOROFARE State NJ Zip Code

WELL LOCATION ADDRESS CROWN POINT RD. Owner's Well No.

County GLOUCESTER Municipality WEST DEPTFORD T Lot No. 7.02,8 Block No. 325

WELL USE NON PUBLIC

DATE WELL STARTED 1 / 28 / 98

DATE WELL COMPLETED 1 / 28 / 98

WELL CONSTRUCTION

Total Depth Drilled 103 ft.

Finished Well Depth 103 ft.

Borehole Diameter:
Top 8 in.
Bottom 8 in.

Well Casing Begins:
1.5 ft. above grade or
_____ ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	+1.5	93	4	PVC	Sch 40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .020)	93	103	4	PVC	Sch 40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	88	103		#1 Morie	
Grout	0	88		Neat Cement Bentonite	_____ lbs 300 lbs

RECORD OF TEST

Test Date 1 / 30 / 98

Static Water Level 30 ft. below land surface

Water Level Measured Using M-scope

Pumping Water Level 30 ft. below land surface

Well Was Pumped Using Airlift

Well Yield 12 gpm

If Pump Tested: Discharge Rate _____ gpm
Duration of Test _____ hours

Grouting Method Pressure Tremie

Drilling Method Rotary

PERMANENT PUMPING EQUIPMENT

Installed by Uni-Tech Reg. No. WD1399

Pump Type Submersible

Depth of Pump below land surface 16 ft.

Capacity 12 gpm Horsepower 1/2

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company UNI-TECH DRILLING

Well Driller (Print) Joseph Jester

Driller's Signature Joseph Jester

Registration No. WD1399 Date 3 / 2 / 98

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

0-1 Top soil

1-17 Orange tan CMF sand

17-39 Black green clay

39-103 Grey / white CMF sand
F gravels

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.