REVISED REMEDIAL INVESTIGATION REPORT
SITE 113 (DIAMOND SITE)
KEARNY, NEW JERSEY

VOLUME I OF III – REPORT TEXT

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LIST OF ACRONYMS

Acronym	Description
AEM	Applied Environmental Managment
ACD	Allergic Contact Dermatitis
ACO	Administrative Consent Order
Af	Artificial Fill
Alum	Alumina Hydrate
ARS	Alternative Remediation Standard
AVS	Acid Volatile Sulfides
BC	Brown and Caldwell
BEE	Baseline Ecological Evaluation
BTEX	Benzene, Toluene, Ethylbenzene, and Xylene
BWA	Bureau of Water Allocation
Chemrisk	A division of McLaren/Hart
COC	Chemical of concern
CoPCs	Chemicals of potential environmental concern
Cr	Chromium
Cr(III)	Trivalent chromium
Cr(VI)	Hexavalent chromium
COPR	Chromite ore processing residue
CLP	Contract laboratory program
DGA	Dense graded aggregate
DNAPL	Dense non-aqueous phase liquid
DO	Dissolved Oxygen
EDP	Equipment Decontamination Plan
ERA	Ecological Risk Assessment
ERMs	Sediment screening, Effects Range Medium
ERMQ	Effects Range Medium Quotiet
GIS	Geographic Information System
HASP	Health and Safety Plan
HazSite	Hazardous Site Database Submittal System
IRM	Interim Remedial Measure
IC	Ion chromatography
LOAEL	Lowest-observed-adverse-effect levels
LWBZ	Lower water-bearing zone
McLaren/Hart	McLaren/Hart Environmental Engineering Corporation
MSL	Mean sea level
NJDEP	New Jersey Department of Environmental Protection
NJ SRS	New Jersey Non-residential Direct Contact Soil Remediation Standard
NJGWQC	New Jersey Ground Water Quality Criteria/Criterion
NJGS	New Jersey Geological Survey
NJSWQC	New Jersey Surface Water Quality Criteria
NGVD	National Geodetic Vertical Datum
NOAA	National Oceanic and Atmospheric Administration
NOAEL	No-observed-adverse-effect levels
NRD	Natural Resource Damages

Acronym	Description
OCC	Occidental Chemical Corporation
ORP	Oxidation-Reduction Potential
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Level
PAH	Polycyclic aromatic hydrocarbons
PCBs	Polychlorinated biphenyls
Qal	Quarternary Alluvium Deposits
QAPP	Quality Assurance Project Plan
Qhkl	Quarternary Glacial Lake Hackensack Lake Bottom Deposits
Qm	Quaternary Tidal Marsh Deposits
RBC	Risk-based concentration
RCP	Reinforced Concrete Pipe
RI	Remedial Investigation
RIWP	Remedial Investigation Work Plan
RRI	Revised Remedial Investigation
SIM	Selected Ion Monitoring
SIPP	Standard Investigative Procedures Plan
SRIWP	Supplemental Remediation Investigation Work Plan
SRS	New Jersey Direct Contact Health Based Criteria and Soil Remediation Standards
SVOCs	Semi-volatile organic compounds
TAL	Target analyte list
2,3,7,8-TCDD	2,3,7,8-tetrachlorodibenzo-*p*-dioxin
TDS	Total dissolved solids
TOC	Total organic carbon
TPH	Total petroleum hydrocarbons
TRV	Toxicity Reference Values
TSI	Tierra Solutions Inc.
TSP	Total Suspended Particles
UCL	Upper Confidence Level
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UWBZ	Upper Water-bearing Zone
VOCs	Volatile organic compounds
Wehran	Wehran Engineering Corporation
WDR	Wetlands Delineation Report

EXECUTIVE SUMMARY

A two-phased Remedial Investigation (RI) has been performed at Site 113 (Diamond Site) located in Kearny, New Jersey on behalf of Tierra Solutions, Inc. (TSI). The findings and data associated with the Phase I and Phase II activities are presented and summarized in this Revised Remedial Investigation (RI) Report.

The initial phase (Phase I) of the RI was completed in 1999 and was reported in the document titled, "Remedial Investigation Report, Site 113 (Diamond) (Revised)", (Brown and Caldwell, 2001).

The New Jersey Department of Environmental Protection (NJDEP) provided comments on the Phase I RI report in late 2005 and, following detailed discussion with the agency, a document titled "Supplemental Remedial Investigation Work Plan (SRIWP), Site 113 (Diamond Site), Revision 2" was submitted to NJDEP in July 2007 (Brown & Caldwell, 2007). Supplemental RI activities, referred to herein as Phase II, were performed in 2007 and 2008 by Brown and Caldwell.

RI Objectives

The objectives of the RI as listed in Appendix B of the Administrative Consent Order (ACO) are to:

- "Fully characterize COPR, Chromium (Cr), and its compounds, whether or not any hazardous substances or pollutants are intermingled therewith, which are, or may be the source(s) of air, soil, surface water, and groundwater pollution at the Site.
- Fully determine the nature, type, and physical states of air, soil, surface water, and groundwater pollution at the Site, emanating from the Site or which has emanated from the Site.
- Fully determine the horizontal and vertical extent of pollution at the Site, emanating from the Site or which has emanated from the Site.
- Fully determine migration paths of pollutants through air, soil, groundwater, surface water and sediment.
- Fully determine the impact of air, soil, surface water, and groundwater pollution on human health and the environment.
- Address the potential for natural resource injuries by conducting an ecological risk evaluation.
- Collect, present, and discuss all data necessary to adequately support the development of a feasibility study and the selection of a remedial action alternative that will remedy the adverse impacts of pollution on human health and the environment."

The supplemental data objectives identified for the Phase II RI data evaluation are as follows:

- Provide additional data coverage in the interior and southwestern portions of the Site regarding hydrostratigraphic conditions and chemical constituents contained within soils and groundwater.
- Provide additional information on the presence and character of the Tidal Marsh Deposits (Qm) in the area of the former channel of Dead Horse Creek and present the potential implications of the character, presence or absence of that unit on the oxidation-reduction and water quality conditions within the underlying Alluvial Sands (Qal).

- Provide data to define the geologic conditions of the Artificial Fill (Af), Tidal Marsh Deposits and Alluvial sands including thickness and lateral continuity.
- Provide two (2) rounds of groundwater quality data to define chemical constituent distribution within the subsurface of the Site.
- Provide additional geotechnical data to characterize the varved clay, which is identified as the Lake Hackensack lake bottom deposits (Qhkl), including grain size distribution, Atterberg limits, and laboratory permeability.
- Provide additional confirmatory surface water quality data for the Hackensack River near Site 113.

RI Scope

The combined scope of the Phase I and Phase II RI field investigations is summarized as follows:

Surface Soil Investigation

- Surface soil samples were collected from 96 locations, 86 during the Phase I RI and 10 during Phase II. These locations are presented on Figure 113-02-02.
- Surface soil samples were analyzed for total Cr, Cr(VI), pH, ORP, pesticides/PCBs, semi-volatile organic compounds (SVOCs), six metals of interest to NJDEP, including antimony (Sb), arsenic (As), beryllium (Be), cadmium (Cd), nickel (Ni), and vanadium (V), plus the target analyte list (TAL) metals.

Subsurface Soil Investigation

- 54 subsurface soil borings were drilled, 37 of which were during Phase I and 17 were during Phase II. These locations are presented on Figure 113-02-02.
- Subsurface soil samples were analyzed for total Cr, Cr(VI), pH, ORP, pesticides/PCBs, volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH), SVOCs, the six metals of interest, and other TAL metals.

Groundwater Investigation

- Twenty-nine (29) monitoring wells currently exist at Site 113, of which 15 are screened in the saturated Artificial Fill (upper water-bearing zone: UWBZ) and 14 are screened in the Alluvial sands (lower water-bearing zone: LWBZ). Monitoring well locations are presented on Figure 113-02-02.
- Groundwater samples were collected twice from each monitoring well during each phase of the RI. Following the initial groundwater monitoring efforts in 1992-1996, groundwater samples were collected using the low flow sampling methodology as described in the NJDEP's April 2005 Field Sampling Procedures Manual (NJDEP, 2005).
- Groundwater samples were analyzed for filtered and unfiltered Cr(VI), filtered and unfiltered total Cr, and unfiltered pH, ORP, and VOCs during each event.
- Groundwater samples collected during Phase I were also analyzed for SVOCs, metals, and pesticides/PCBs.
- Groundwater samples collected during Phase II were also analyzed in the laboratory for chlorides, sodium, and TDS, and in the field for pH and DO.

Surface Water, Sediment, and Porewater Investigation

Surface Water

- Phase I surface water samples were collected from three locations each along 5 transects in the Hackensack River. Each of the Phase I surface water samples was analyzed for total Cr, Cr(VI), total petroleum hydrocarbons, SVOCs, pesticides/PCBs and TAL metals. These locations are presented on Figure 113-02-02.
- During Phase II, six surface water samples were collected in locations that were co-located with the porewater samples. Each surface water sample was analyzed for total Cr, Cr(VI), and pH, and field measurement of ORP. These locations are presented on Figure 113-02-02.

Sediment

- Phase I sediment samples were generally collected at three locations per transect. These locations are presented on Figure 113-02-02.
- Results of the sediment toxicity study showed that chromium in sediments at the study site had limited bioavailability and showed no strong relationship with sediment toxicity, indicating that chromium can be present in sediments at highly elevated concentrations without resulting in sediment toxicity.
- A single sediment sample was collected during Phase II that was co-located with two vertically-spaced surface water samples. This sample is presented on Figure 113-02-02.
- Sediment samples were analyzed for total Cr, Cr(VI), pH, ORP, and percent moisture. Samples collected during Phase I were also analyzed for SVOCs, VOCs, metals, pesticides and PCBs.

Porewater

- Porewater samples were collected during Phase II from five (5) locations at intervals approximately equally-spaced along the eastern boundary of Site 113 in the Hackensack River. These locations are presented on Figure 113-02-02.
- Porewater samples were analyzed for dissolved Cr(VI), dissolved total Cr, chloride, pH, DO, and ORP.

Air Sampling

- Air sampling activities were performed on September 20-22 and October 4-5, 1989, and again on April 18-19, 1990 and in June, July, and August 1990.
- Air samples were analyzed for total Cr(VI), respirable Cr(VI), total Cr, and total suspended particles (TSP).

Laboratory Analysis Methods

Soil samples obtained during Phase I and Phase II were analyzed for total Cr using USEPA CLP procedures.

- Cr(VI) was analyzed in Phase I via NJDEP-modified Methods 3060/7196A. If NJDEP-modified Methods 3060/7196A produced results with higher than desired detection limits [e.g., >100 mg/kg Cr(VI)], or if interference problems (e.g., turbidity or color) were encountered due to the nature of the matrix, US EPA SW-846 Method 7199 (ion chromatography (IC)] was employed in place of NJDEP-Modified Method 7196A to enhance the sensitivity of Cr(VI) quantification.
- US EPA SW-846 Methods 3060A/7199 were used exclusively for Cr(VI) analyses in Phase II.

Water samples were analyzed for total Cr by USEPA CLP or US EPA SW-846 (porewater analysis in Phase II only) procedures.

- In Phase I, analysis for Cr(VI) was by NJDEP-Modified Method 7196A. If NJDEP-Modified Method 7196A produced results with high detection limits [>10 µg/L Cr(VI)] or interference problems (e.g., color or turbidity) were encountered due to the nature of the matrix, Method 7199 was employed in place of NJDEP-Modified Method 7196A to enhance the sensitivity of Cr(VI) quantification.
- Cr(VI) analysis in the Phase II RI was accomplished using US EPA SW-846 Method 7199 exclusively.

Soil and groundwater samples were periodically analyzed for a variety of other parameters during Phase I and Phase II, including TCL and TAL parameters, which were analyzed by CLP or SW-846 methods.

Site Location and Description

Location

Site 113 is located at 1015 Belleville Turnpike on Block 287, Lots 46 and 47, in Kearny, New Jersey, as shown in Figures 113-02-01 and 113-02-02. The Site covers approximately 27 acres in an industrialized area located between Belleville Turnpike to the west and the Hackensack River to the east. The Amtrak Northeast Corridor railway line and associated embankment is located parallel to the northern property boundary, and the Site is bordered to the south by property of the Standard Chlorine Chemical Company (Site 116). With the exception of two existing (permanent) structures, the Site has been razed.

Manufacturing History

The Site was used for chromium chemicals manufacturing from 1916 until 1976, initially by the Martin Dennis Company and later by Diamond Shamrock. The facility initially engaged in the processing of imported chromite ore for the purpose of producing sodium bichromate for sale and for use in the manufacturing of other chromium chemicals. Chromium chemicals manufactured in the plant included chrome-based leather tanning agents, specifically a product sold under the trade name "Tanolin", and chromic acid. Production of chromic acid began in 1952 at the facility. Processing of chromite ore for the production of sodium bichromate continued until November 1971. However, Tanolins and chromic acid continued to be produced at the facility until 1976. Production at the plant ceased in December 1976 and the majority of the buildings were razed in 1978.

The manufacturing operations resulted in the placement of various anthropogenic fill materials on top of the tidal marsh deposits including soil, chromite ore processing residue (COPR), and alum. The eastern portion of the property is now entirely covered with asphalt overlying geotextile liner, which was installed as part of IRM activities implemented in the 1990s.

Dead Horse Creek

Prior to 1974, an anthropogenic tidal channel named Dead Horse Creek traversed the Site from southwest to northeast and discharged into the Hackensack River. The location of the Dead Horse Creek channel has been constant over time dating back to at least the late 1880s. In 1974, an alternate drainage conduit in the form of a 48-inch concrete storm drain was installed parallel to the southern Site 113 property line to convey surface drainage formerly carried by the creek across the Site to the Hackensack River, after which the Dead Horse Creek channel was filled.

Hydrogeologic Conditions

The following categorized statements summarize the hydrogeologic conditions at Site 113:

Stratigraphic Conditions

Four stratigraphic units were encountered beneath Site 113 as depicted in Figures 113-02-07 and 113-02-08.

- A heterogeneous mixture of Artificial Fill, ranging in thickness from 5 to 16 feet, with an average thickness of 9 to 10 feet.
- Tidal Marsh Deposits consisting of a peat subunit and an organic silt and clay subunit. Thickness ranged from 0.5 to 9 feet, with an average thickness of 3 feet.
- Post-Glacial Fluvial Deposits represented by a laterally continuous layer of sand. Thickness of these deposits ranged from 3 to 5 feet. With an average thickness of 4 to 5 feet.
- Lake Clay deposits represented by the Glacial Lake Hackensack Lake Bottom Deposits (Qhkl) consisting of a thick, varved clay unit interbedded with silts and sand. While the thickness of these deposits have not been directly measured at the Site, literature (Stanford, 1993) notes that these deposits are up to 50 feet thick.

Hydrostratigraphic Units

The four encountered stratigraphic units correspond to the following hydrostratigraphic units, including:

- Upper Water-Bearing Zone (UWBZ) within the Artificial Fill unit.
- Tidal Marsh Deposit semi-confining unit located between the UWBZ and the Lower Water-Bearing Zone (LWBZ). The primary importance of the unit is that it serves as a geochemical barrier given its chemical reducing conditions.
- LWBZ that is semi-confined within the fine sand of the Post-Glacial Fluvial Deposits.
- Clay Aquitard represented by the Glacial Lake Hackensack Lake Bottom that continuously underlies the LWBZ. The Clay aquitard and the underlying glacial till serve as a regionally extensive aquitard that overlie the Brunswick bedrock aquifer.

Groundwater Flow

Groundwater beneath Site 113 can be summarized by the following:

- The UWBZ is controlled by the interaction of the shallow groundwater with the surface water features that surround the site. The source of groundwater to the UWBZ is primarily the infiltration of incident precipitation. Accordingly, the groundwater flow pattern in the UWBZ is manifested as a radial groundwater flow pattern with a mound roughly in the center of the Site that flows radially outward and discharges to the surrounding surface water bodies, as shown on Figures 113-02-09 and 113-02-10.
- The potentiometric surface configuration of the LWBZ slopes to the north and the east suggesting groundwater discharges to the tidal marsh located north of the Amtrak railroad tracks and the Hackensack River to the east, as shown on Figures 113-02-11 and 113-02-12.
- A substantial downward vertical hydraulic gradient exist from the UWBZ to the underlying LWBZ. The groundwater flow rate to the underlying LWBZ is limited to a degree by the intervening Tidal Marsh Deposit semi-confining unit.

- Groundwater in the LWBZ at the Site is influenced by the tidal conditions of the Hackensack River, particularly in the eastern portion of the Site. The results of tidal studies indicate, however, that the daily tidal fluctuations have little, if any, influence on the direction or rate of groundwater flow at the Site.

Analytical Data Evaluation

Chemical concentrations in various media were screened against available regulatory values. Chemical constituent data are summarized for the following media:

Soil

The New Jersey Non-Residential Direct Contact Health Based Criteria and Soil Remediation Standards (NJ SRS) per N.J.A.C 7:26D (NJ SRS) are used as benchmarks for the characterization of soil data. Tables 113-02-06 through 113-02-12 and Figures 113-02-16 through 113-02-26 present the data discussed below.

Surface Soils

- Total Cr data in surface soils, including the COPR fill, range from 5.5 to 27,200 mg/kg. There is no NJ SRS for total Cr.
- Cr(VI) data range from <0.41 mg/kg to 5,200 mg/kg. There is no NJ SRS for Cr(VI).
- The majority of pesticide/PCBs results in surface soils were not detected. None of the sample results exceeded NJ SRS, with the exception of a small discrete area in the western part of the Site.
- Numerous polycyclic aromatic hydrocarbons (PAHs) were detected as SVOCs in the shallow soils. Many of these results exceed the NJ SRS. It is well recognized that PAHs are ubiquitous in anthropogenic fill and asphalt which is used as an IRM on much of the Site.
- Other metals of interest and TAL metals in shallow soils do not generally exceed the NJ SRS with the minor exceptions of several samples for arsenic and lead, and vanadium.

Subsurface Soils

- Total Cr results in subsurface soils, including the COPR fill, range from 7.2 mg/kg to 66,400 mg/kg.
- The Cr(VI) results for subsurface soil samples range from <0.41 mg/kg to 19,100 mg/kg.
- Elevated levels of total Cr and Cr(VI) above the tidal marsh deposits result from historical COPR filling that occurred on Site during its use as a Cr chemicals manufacturing facility.
- The relative concentrations of Cr(VI) in COPR are several orders of magnitude larger than the Cr(VI) concentrations found below the Tidal Marsh Deposits, demonstrating the role the Tidal Marsh Deposits have in reducing Cr(VI) to Cr(III). These results and field observations during RI activities corroborate historical accounts that COPR fill was not placed below the tidal marsh deposits.
- Pesticides and PCBs were not detected above the NJ SRS subsurface soil samples with the exception of a small discrete area in the western part of the Site.
- VOC results for subsurface soils resulted in no exceedances of the NJ SRS.
- TPH was detected in various subsurface soil samples with no discernable pattern to the spatial distribution.
- PAHs were detected in a number of subsurface soil samples, most of which did not exceed the NJ SRS.
- TAL metals, including a group of six metals of interest, were detected in various subsurface soil samples.

Groundwater

Chromium

Groundwater data are described on the basis of the comprehensive rounds of Phase II data. Tables 113-02-13 through 113-02-19 and Figures 113-02-27 through 113-02-41 present the data discussed below.

- Total Cr results exceeded the New Jersey Groundwater Quality Criterion (NJGWQC) of 70 µg/L in most of the UWBZ samples, which ranged up to 279,000 µg/L. The lowest levels of total Cr in the UWBZ were generally observed along the southern border and in the interior of the Site.
- Total Cr was detected in each of the LWBZ wells. In approximately half of the wells, the total Cr concentrations were substantially lower than the total Cr concentrations in the corresponding UWBZ wells. The variable vertical attenuation of total Cr in the LWBZ likely reflects the variability in the physical characteristics of the Tidal Marsh Deposit semi-confining unit to reduce Cr(VI) and precipitate Cr(III) in the UWBZ, thereby limiting downward, vertical migration of Cr in groundwater from the overlying UWBZ.
- Cr(VI) was detected in approximately half of the UWBZ wells at the Site, most of which are located along the northern boundary and west-central portions of the Site. Detected Cr(VI) concentrations ranged from 119 µg/L to 310,000 µg/L (113-W-303S). Most of the affected wells are screened directly within COPR-affected soils.
- Cr(VI) is absent from the LWBZ with the exception of four (4) deep monitoring wells in which relatively low levels were periodically detected. The concentrations of Cr(VI) in these samples, typically less than 40 µg/L are up to four orders of magnitude lower than the Cr(VI) concentrations in the corresponding UWBZ wells.
- The reduction of Cr(VI) to Cr(III) as groundwater moves from the UWBZ to the LWBZ was further investigated and groundwater samples were sent to SECOR Geochemistry in Sacramento, CA for analysis of total Cr, Cr(III), and Cr(VI). The results of the SECOR analysis are summarized as follows. The elevated total Cr concentrations in the LWBZ reflect predominantly Cr(III) that is believed to have precipitated as a metallic hydroxide and complexed with organic compounds in the tidal marsh deposits, resulting in low levels of soluble, slightly mobile Cr(III) in the groundwater immediately below the tidal marsh deposits. However, this mobility appears to be limited as the deeper samples generally contained lower concentrations of Cr(III). Furthermore, the soils beneath the tidal marsh deposits did not contain detectable levels of Cr(VI) and total Cr was at background levels.

Other Parameters

- PCBs and pesticides were generally not detected in the UWBZ.
- A total of ten pesticide/PCB compounds exceeded their NJGWQC in the LWBZ.
- VOCs in UWBZ groundwater cannot be attributed to on-site sources since wells with VOC exceedances are located along the property boundary with the Standard Chlorine site (Site 116) and are characteristic of VOCs identified by others at Site 116.
- Several VOCs were detected in the LWBZ wells located downgradient and adjacent to Site 116.
- With the exception of the PAHs, naphthalene and benzo(b)fluoranthene, SVOCs were not detected above NJGWQC in the UWBZ wells.
- Several SVOCs were detected in the LWBZ, including several PAHs and chlorobenzene compounds. These are likely related to the Standard Chlorine site.

- Several other metals exceeded the respective NJGWQC in both the UWBZ and LWBZ, most notably, arsenic, beryllium, sodium, and aluminum. These are not considered to be COPR-related constituents and may be due to natural conditions or Site fill materials unrelated to COPR.

Surface Water, Sediment, and Porewater Data

The analytical data for surface water, sediment, and sediment porewater samples collected from the Hackensack River adjacent to the Site are presented in Tables 113-02-20 through 113-02-32 and Figures 113-02-16 through 113-02-24, 113-02-26, 113-02-27, 113-02-29 and 113-02-36 through 113-02-41 and described as follows:

Surface Water

- Total Cr was not detected in any of the filtered or unfiltered surface water samples collected during Phase II with the exception of a duplicate sample of a single sample at 3.4 μg/L, which is far below the human health NJSWQC for total Cr of 750 μg/L.
- Cr(VI) was not detected in any of the Phase II surface water samples.
- None of the tested surface water samples contained detectable pesticides, PCBs, TPH, and SVOCs.

Sediment and Sediment Porewater

- Total Cr concentrations in sediment ranged from 29.3 to 3,660 mg/kg.
- The maximum Cr(VI) concentration detected in the sediment was 19 mg/kg.
- Other constituents, including pesticides, PCBs, TPH, and a number of VOCs and SVOCs were detected in sediments.
- A sediment toxicity study revealed that chromium in sediments had limited bioavailability and no strong relationship with sediment toxicity, indicating that chromium can be present in sediments at elevated concentrations without resulting in sediment toxicity. These toxicity study results are generally consistent with the observation that measurable concentrations of acid volatile sulfides (AVS) are typically associated with low concentrations of Cr(VI).
- Porewater samples revealed that Cr(VI) is not present at measurable concentrations in porewater of sediments of the Hackensack River adjacent to Site 113.
- The porewater data, along with the sediment toxicity data, indicate that total Cr in sediments has limited mobility, bioavailability, and toxicity. Moreover, Cr from Site 113 does not pose a hazard to the benthic environment of the Hackensack River adjacent to Site 113.

Air

- The highest concentration of Cr(VI) detected in Site air samples (3.4 ng/m^3 from Area 4) is at least 1,470 times below the Occupational Safety and Health Administration (OSHA) Permissible Exposure Level (PEL) of 5,000 ng/m^3 for Cr(VI), and is approximately 29 times below the EPA Reference Concentration (RfC) of 100 ng/m^3.
- The maximum outdoor air total Cr concentration at 14 ng/m^3. While there currently is no OHSA PEL for total Cr, the maximum concentration of 14 ng/m^3 is substantially lower than both the Cr(VI) PEL of 5000 ng/m^3 and the Cr(III) PEL of 500,000 ng/m^3. Total suspended particulate levels ranged from 0.05 to 3 mg/m^3.

Ecological Risk Assessment

An Ecological Risk Assessment (ERA) was performed for the wetland areas to examine whether chemicals of potential concern (CoPCs) in the collective 0.61 acre of Site wetlands pose a potentially unacceptable risk of adverse ecological effects to wildlife that forage in the wetlands. The following conclusions were drawn from the ERA:

- Modeling results indicate that Metals and PAHs are a potential risk to invertivorous birds, invertivorous mammals, and herbivorous mammals, although this determination used very conservative and unlikely assumptions.
- Exposure of ecological receptors to CoPCs in the wetlands is expected to be eliminated as part of the NJDEP-approved Interim Response Action and final remediation activities.

1. INTRODUCTION

1.1 Authority

A two-phased Remedial Investigation (RI) has been performed at Site 113 (Diamond Site) located in Kearny, New Jersey by Brown and Caldwell on behalf of Tierra Solutions, Inc. (TSI). The initial phase (Phase I) of the RI was completed in 1999 and was reported in the document titled, "Remedial Investigation Report, Site 113 (Diamond) (Revised)", (Brown and Caldwell, 2001) (hereafter "Phase I RI Report"). The New Jersey Department of Environmental Protection (NJDEP) provided comments on the Phase I RI report in late 2005 and, following a detailed discussion with the agency, a document titled "Supplemental Remedial Investigation Work Plan (SRIWP), Site 113 (Diamond Site), Revision 2" was submitted to NJDEP in July 2007 (Brown & Caldwell, 2007). Supplemental RI activities, referred to herein as Phase II, were performed in 2007 and 2008 by Brown and Caldwell. The findings and data associated with the Phase I and Phase II activities are presented and summarized in this Revised Remedial Investigation (RRI) Report.

On April 17, 1990, Occidental Chemical Corporation (OCC), a successor to Diamond Shamrock Chemicals Company, and Chemical Land Holdings, Inc. (CLH)[1] executed an Administrative Consent Order (ACO) with the NJDEP in the matter of chromite ore processing residue (COPR) sites (ACO, 1990). The NJDEP determined that COPR, a byproduct from the production of chromium (Cr) chemicals, had been distributed as fill material for use in certain construction and development projects and represented a potential threat to human health and the environment. The ACO requires that a remedial investigation be implemented to address the extent of chromium contamination in the soils, groundwater, air, surface waters, and sediments, and to assess potential impacts on human health and the environment.

In accordance with the provisions of Section III of Appendix B of the ACO, the April 2001 RI Report and this RI report provide an assessment of the horizontal and vertical extent of Cr in various Site media as well as other chemicals of concern (COCs). The primary criteria for comparison were applicable New Jersey soil and groundwater standards. Because Site 113 is not currently used for residential purposes and will continue to be restricted to non-residential development, COCs in soil at the Site are compared to the New Jersey Non-Residential Direct Contact Health Based Criteria and Soil Remediation Standards (NJ SRS) per N.J.A.C. 7:26D. COCs in groundwater were compared to the NJDEP Ground Water Quality Standards (NJGWQC) per N.J.A.C 7:9C, which was readopted on October 4, 2005. It should be noted, however, that groundwater at the Site is not potable and would be unsuitable as a drinking water supply for various reasons including the naturally occurring saline conditions due to the proximity to the tidally influenced Hackensack River.

Appendix A presents the signed report certifications as required by the ACO and the New Jersey Technical Requirements for Site Remediation. Appendix B provides the grace period checklist as recommended by the grace period rules, and a checklist of NJDEP comments to the previous RI report.

1.2 Objectives

The objectives of the RI as listed in Appendix B of the ACO are to:

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[1] Chemical Land Holdings, Inc. (CLH) is now known as Tierra Solutions, Inc. (TSI).

- "Fully characterize COPR, Cr, and its compounds, whether or not any hazardous substances or pollutants are intermingled therewith, which are, or may be the source(s) of air, soil, surface water, and groundwater pollution at the Site.
- Fully determine the nature, type, and physical states of air, soil, surface water, and groundwater pollution at the Site, emanating from the Site or which has emanated from the Site.
- Fully determine the horizontal and vertical extent of pollution at the Site, emanating from the Site or which has emanated from the Site.
- Fully determine migration paths of pollutants through air, soil, groundwater, surface water and sediment.
- Fully determine impact of air, soil, surface water, and groundwater pollution on human health and the environment.
- Address the potential for natural resource injuries by conducting an ecological risk evaluation.
- Collect, present, and discuss all data necessary to adequately support the development of a feasibility study and the selection of a remedial action alternative that will remedy the adverse impacts of pollution on human health and the environment."

Additional, Phase II RI activities were identified by NJDEP in a letter to Tierra Solutions, Inc. (TSI) dated December 23, 2005. In response, TSI submitted the following documents which form the basis of the Phase II activities:

- Response to the December 23, 2005 letter in the document titled "Response to NJDEP Comments, Site 113 (Diamond Site), Remedial Investigation Report", prepared by Brown and Caldwell, (February 2006) and submitted by Tierra Solutions, Inc.
- "The Supplemental Remedial Investigation Work Plan, Site 113 (Diamond Site) Revision 2" (SRIWP), prepared by Brown and Caldwell, (July 2007) and approved by the NJDEP in September, 2007.
- "Work Plan: *In Situ* Porewater Study of Sediments in the Hackensack River, New Jersey" prepared by Exponent, (July, 2007), and approved by the NJDEP in March, 2008.

The data objectives identified for the Phase II RI data evaluation are as follows:

- Provide additional data coverage in the interior and southwestern portions of the Site regarding hydrostratigraphic conditions and chemical constituents contained within soils and groundwater.
- Provide additional information on the presence and character of the tidal marsh deposits (the peat portion of which has been locally referred to as the "meadow mat") in the area of the former Dead Horse Creek and potential implications with respect to oxidation-reduction and water quality conditions within the underlying Alluvial Sand (Qal).
- Provide data to define the geologic conditions of the Artificial Fill (Af), Tidal Marsh deposits (Qm), and Alluvial sands including thickness and lateral continuity.
- Provide two (2) rounds of groundwater quality data to define chemical constituent distribution within the subsurface of the Site.
- Provide geotechnical data for the varved clay, which is identified as the Lake Hackensack lake bottom deposits (Qhkl), including grain size distribution, Atterberg limits, and laboratory permeability.
- Provide additional confirmatory surface water quality data for the Hackensack River near Site 113.

- Determine whether Cr(VI) is present in the porewater of the sediments of the Hackensack River at concentrations in excess of the NJSWC for Cr(VI) (the acute marine criterion is 1,100 μg/L, and the chronic marine criterion is 50 μg/L).

The initial RI activities were conducted in accordance with the NJDEP-approved RI Work Plan (McLaren/Hart, 1992a). The specific methods and procedures used during implementation of the Remedial Investigation Work Plan (RIWP) and the SRIWP are presented in a group of documents that are collectively described as the "Project Control Documents". The Project Control Documents include the following:

- "Standard Investigative Procedures Plan (SIPP), for Remedial Investigation at the Chromite Ore Processing Residue Sites, New Jersey", (McLaren/Hart Environmental Engineering Corp, 1992b).
- "Equipment Decontamination Plan (EDP), for Remedial Investigation at the Chromite Ore Processing Residue Sites, New Jersey", (McLaren/Hart Environmental Engineering Corp, 1992c).
- "Quality Assurance Project Plan (QAPP), for Remedial Investigation at the Chromite Ore Processing Residue Sites, New Jersey", (McLaren/Hart Environmental Engineering Corp, 1992d).
- "Health and Safety Plan (HASP) for Remedial Investigation at the Chromite Ore Processing Residue Sites, New Jersey", (McLaren/Hart Environmental Engineering Corp, 1992e).

Various addenda to the Project Control Documents previously have been prepared and approved by NJDEP for use during RI activities. These addenda have been prepared to address changes in available field method technology, to comply with the updated Field Sampling Procedures Manual, (NJDEP, 2005), and to provide updates, as appropriate, to the HASP.

- "Addendum to Project Control Documents, Use of Direct Push Samplers (GeoProbe®) at COPR Sites", (Brown and Caldwell, 2001c).
- "Addendum to Project Control Documents, Health and Safety Plan Quick Reference Guide", (Brown and Caldwell, 2006).
- "Addendum to Project Control Documents, Modifications to the SIPP including Use of the Low Flow Groundwater Sampling Technique", (Brown and Caldwell, 2006).

1.3 RI Approach and Scope

As indicated above, the RI field investigation was performed in two phases, as follows.

1.3.1 Phase I RI Field Investigation

The Phase I RI was conducted in accordance with the RIWP for Chromite Ore Processing Residue Sites, New Jersey, approved in a letter received from NJDEP on October 16, 1992. The RI involved the investigation of air, soils, sediments, surface water and groundwater media, as appropriate, to assess potential pathways for Cr migration associated with COPR-bearing soils. The procedures in the RIWP were developed to use existing data on Site histories and characteristics, previously completed Interim Remedial Measures (IRMs), and on-site reconnaissance, as a basis for defining the additional information necessary to characterize the Site.

Soil and groundwater samples were analyzed for total Cr and hexavalent Cr [Cr(VI)] in accordance with procedures described in Section 1.4. Selected samples were also analyzed for organic and inorganic

parameters (e.g., volatile organic compounds, semi-volatile organic compounds) where Site history suggested the potential use, storage, or deposition of such material, or where field observations or measurements raised concern for their possible presence in the RI samples.

Initial Phase I RI field efforts were carried out by representatives of the Warren, New Jersey office of McLaren/Hart Environmental Engineering Corporation (McLaren/Hart). Representatives of the Mahwah, New Jersey office of Brown and Caldwell (formerly Eckenfelder, Inc.) conducted subsequent in-field delineation sampling. Sample location surveying was provided by CME Associates of Parlin, New Jersey. The work was conducted in accordance with the SIPP which was approved as part of the RIWP. Laboratory analyses of soil and water samples were performed by Lancaster Laboratories, Inc. of Lancaster, PA, Accutest Laboratories of Dayton, New Jersey, IEA of Monroe, Connecticut, and Enseco-Rocky Mountain Analytical of Arvada, Colorado in accordance with the September 1992 NJDEP-approved QAPP, and the NJDEP-approved standard operating procedures for the individual parameters analyzed at each laboratory. Laboratory analysis of air samples was performed by West Coast Analytical Services, Inc. in accordance with the NJDEP-approved 1990 air QAPP (ChemRisk, 1990a). Air samples were collected and analytical data were, reviewed, evaluated, and reported by the ChemRisk division of McLaren/Hart.

The Phase I RI used the following direct measurement techniques:

- **Surface Soil Sampling and Analysis** – Samples were collected from ground surface to a depth of 0.5 feet to determine the horizontal extent of Cr(VI) and total Cr.
- **Soil Borings and Analysis** – Soil borings were used to define the vertical extent of COPR-bearing soils and to characterize the stratigraphy of the subsurface.
- **Surface Water and Sediment Investigation** – Surface water and sediments contained within Site 113 along the Hackensack River were sampled. These samples were collected to evaluate the potential presence and/or impact of COPR-bearing soils and other chemicals.
- **Groundwater** – Samples were collected from monitoring wells installed to define the impact of Cr-bearing soils and the impact of other chemicals on the groundwater.
- **Air Monitoring** – Airborne Cr sampling activities were conducted to characterize ambient indoor and outdoor Cr levels under typical "baseline" Site conditions.
- **Baseline Ecological Evaluation (BEE)** – A baseline ecological evaluation was conducted at this Site in accordance with draft NJDEP guidance at the time.

1.3.2 Phase II RI Field Investigation

The Phase II RI was conducted in accordance with the SRIWP submitted in July 2007 (Brown and Caldwell, 2007) and approved in a letter received from NJDEP on September 24, 2007. The collection of porewater during the Phase II RI was conducted in accordance with the Work Plan: *In-Situ* Porewater Study of Sediments in the Hackensack River, New Jersey, prepared by Exponent, submitted to the NJDEP in July 2007 and approved in a letter received on March 17, 2008 from NJDEP. The collective RI activities were performed to provide additional information on the distribution of chemical constituents, and subsurface conditions.

The Phase II RI field efforts were carried out by representatives of the Brown and Caldwell office in Allendale, NJ. Sample location surveying was provided by CME Associates of Parlin, NJ. Consistent with prior RI activities, laboratory analyses of soil, sediment, groundwater, porewater and surface water samples

were performed by Lancaster Laboratories. Laboratory analyses of undisturbed samples of the glacial lake deposits to quantify geotechnical characteristics (e.g. grain size, Atterberg limits, etc.) were performed by PTS Laboratories, Inc. of Santa Fe Springs, CA.

Soil and groundwater samples were analyzed for total Cr, Cr(VI), pH and oxidation/reduction potential (ORP). Field analysis of pH and ORP was also performed. Selected samples were also analyzed to measure six (6) metals of interest at a rate of one (1) in ten (10). Soil samples 113-B-116A through 113-B-116G were analyzed for Polychlorinated biphenyls (PCBs) at specific sample depths based on PCB sample results from Phase I soil boring 113-B-116. Samples were analyzed in accordance with procedures described in Section 1.4.

The Phase II RI field investigation utilized the following direct measurement techniques:

- **Surface Soil Sampling and Analysis** – Surface soil samples were collected from each soil boring location from the ground surface to a depth of 0.5 feet. These samples were analyzed for total Cr, Cr(VI), pH, and ORP and were intended to further determine the horizontal extent of total Cr and Cr(VI).
- **Soil Borings and Analysis** – Soil borings were advanced at 14 locations to further examine subsurface conditions beneath the former Dead Horse Creek channel and to provide additional data to quantify the vertical extent of total Cr and Cr(VI) and to document the stratigraphy in the interior portion of the Site.
- **Surface Water and Sediment Investigation** – Six (6) surface water samples and one (1) sediment sample were collected along the eastern boundary of Site 113. Five (5) surface water samples were collected from a depth no greater than 6 inches. One (1) surface water sample was collected at a depth immediately above the sediment sample location. These samples were collected to evaluate the potential presence and/or impact of total Cr and Cr(VI). Sample locations were co-located with the porewater samples.
- **Groundwater** – Samples were collected from both new and previously installed monitoring wells to further define the impact of COPR-bearing soils and to verify the presence of chlorobenzene in the groundwater.
- **Porewater** – *In-Situ* porewater samplers called passive diffusion samplers (peepers) were placed in shallow sediments at five (5) locations offshore along the eastern boundary of Site 113 to quantify the concentrations of dissolved Cr(VI) and total Cr in porewater. The peepers remained in the sediment for four (4) weeks to allow diffusion of Cr from the porewater to the peepers. Samples from the peepers were then analyzed to measure dissolved Cr(VI), dissolved total Cr, chloride, dissolved oxygen (DO) concentrations. ORP and pH were also measured.

1.4 Analytical Method Description and Sample Selection Process

Each soil sample obtained during the implementation of the Phase I and Phase II RI was analyzed for total Cr using U.S. Environmental Protection Agency (USEPA) contract laboratory program (CLP) procedures. In Phase I, Cr(VI) was analyzed via NJDEP-modified Methods 3060/7196A. If NJDEP-modified Methods 3060/7196A produced results with higher than desired detection limits [e.g., >100 mg/kg Cr(VI)], or if interference problems (e.g., turbidity or color) were encountered due to the nature of the matrix, US EPA SW-846 Method 7199 (ion chromatography (IC)] was employed in place of NJDEP-Modified Method 7196A to enhance the sensitivity of Cr(VI) quantification. US EPA SW-846 Methods 3060A/7199 were used exclusively for Cr(VI) analyses in Phase II. Appendix C presents a detailed discussion of the analytical methodology for chromium quantification.

The soil and sediment sample Cr(VI) results presented in Tables 113-02-06 and 113-02-25 of this report were derived from the utilization of NJDEP - Modified Methods 3060/7196A or US EPA SW-846 Methods 3060A/7199 which produced either definitive results or non-detected results (e.g., <10 mg/kg). For samples analyzed for Cr(VI) by NJDEP - Modified Methods 3060/7196A , non-detected results reported at sensitivity limits >10 mg/kg of Cr(VI) , Method 7199 was typically employed to obtain definitive results and, where available, both the NJDEP-Modified Methods 3060/7196A and Method 7199 results are presented in the table.

Prior to implementation of the RI, many surface soil samples were collected and submitted for total Cr and Cr(VI) analysis in connection with the IRM program described in Section 2. Most of the IRM samples, particularly those collected before mid-1990, were analyzed for Cr(VI) using a neutral digestion methodology. Subsequent method evaluation studies by Vitale, *et al.* (1994) and method comparison studies performed by James, *et al.* (1995, 1996) and Vitale, *et al.* (1997) showed that alkaline digestion is superior to other digestion procedures, including neutral digestion, for extracting and subsequently quantifying the total amount of Cr(VI) in solid samples.

Each water sample obtained during implementation of the RI was analyzed for total Cr via USEPA CLP or US EPA SW-846 (porewater analysis in Phase II only) procedures. In Phase I analysis for Cr(VI) was by NJDEP-Modified Method 7196A. If NJDEP-Modified Method 7196A produced results with high detection limits [>10 μg/L Cr(VI)] or interference problems (e.g., color or turbidity) were encountered due to the nature of the matrix, Method 7199 was employed in place of NJDEP-Modified Method 7196A to enhance the sensitivity of Cr(VI) quantification. Cr(VI) analysis in the Phase II RI was accomplished using US EPA SW-846 Method 7199 exclusively.

The water sample Cr(VI) results presented in Table 113-02-13 were derived from the utilization of the methodology indicated above, which produced either definitive results or non-detected results of <10 μg/L. If non-detected results were reported with a reported sensitivity >10 μg/L of Cr(VI) by NJDEP-Modified Method 7196A and Method 7199 was employed to obtain definitive results, both the NJDEP-Modified Method 7196A and Method 7199 results were presented.

Soil and groundwater samples were periodically analyzed for a variety of other parameters during Phase I and Phase II RI activities. The parameters and the methodology utilized to perform the analyses are tabulated below.

Analytical Method References

	Phase I		Phase II	
Analyte	**Aqueous Method***	**Soil/Sediment Method***	**Aqueous Method***	**Soil/Sediment Method***
TCL Volatiles	U.S. EPA CLP SOW	U.S. EPA CLP SOW	SW 846 Method 8260B	SW 846 Method 8260B
TCL Semivolatiles	U.S. EPA CLP SOW	U.S. EPA CLP SOW	NA	NA
TCL Pesticides/Aroclors	U.S. EPA CLP SOW	U.S. EPA CLP SOW	NA	SW 846 Method 8082
Metals	U.S. EPA CLP SOW	U.S. EPA CLP SOW	U.S. EPA CLP SOW or US EPA Method 6020	U.S. EPA CLP SOW
Hexavalent Chromium	As Noted in Text	As Noted in Text	As Noted in Text	As Noted in Text
Alkalinity	CAWW Method 310.1	NA	NA	NA
Chloride	CAWW Method 325.1	NA	SM 4500 Cl	NA
TSS	CAWW Method 160.2	NA	NA	NA
Total Dissolved Solids (TDS)	CAWW Method 160.1	NA	SM 2540C	NA

	Phase I		Phase II	
Analyte	**Aqueous Method***	**Soil/Sediment Method***	**Aqueous Method***	**Soil/Sediment Method***
Total Petroleum Hydrocarbons	CAWW Method 418.1	SW846 Method 9071, then CAWW Method 418.1	NA	NA
Sulfides	CAWW Method 376.1	SW846 Method 9030 (modified)	NA	NA
Oxidation Reduction Potential	ASTM D1498	SW 846 Method 9045 then ASTM D1498	ASTM D1498	SW 846 Method 9045 then ASTM D1498
pH	CAWW Method 150.1	SW846 Method 9045	SM 4500 H/B	SW846 Method 9045
PCDDs/PCDFs	SW846 Method 8280 or 8290	SW846 Method 8280 or 8290		

ASTM – ASTM International, West Conshohocken, PA

CAWW – Chemical Analysis of Water and Wastes, (Methods and Guidance for Analysis of Water, USEPA), updated periodically online

**CLP - Refers to the version of the USEPA Contract Laboratory Program Statement of Work (SOW) in effect at the time of analysis. The CLP SOW undergoes periodic modifications.*

NA – Not analyzed

SM – Standard Methods for the Examination of Water & Wastewater, Amer. Public Health Assoc.

1.5 RI Report Structure

This Revised RI report includes a comprehensive presentation of data collected during both the Phase I and Phase II RI field investigations. Accordingly, the report presents: 1) the results of analysis of the samples collected during the Phase I RI conducted by McLaren/Hart, and associated delineation sampling by Brown and Caldwell, 2) the results of the analysis of the samples collected during the Phase II RI conducted by Brown and Caldwell, 3) stratigraphic logs for soil borings and monitoring wells advanced/installed during the Phase I and Phase II RI activities, 4) geotechnical data, including grain size, Atterberg Limits and permeability for selected samples from both phases of the RI, 5) as-built construction diagrams and Form As and Bs for monitoring wells constructed after the Phase I RI, as-built construction diagrams monitoring wells constructed during Phase I are also included 6) well casing elevations surveyed to the nearest hundredth (0.01) foot above mean sea level (MSL) for each monitoring well associated with the Site, and 7) supporting technical data in tabular and graphical form. Analytical data generated during the Phase II RI have been provided on disk in Appendix D in accordance with the NJDEP's Hazardous Site Database Submittal System (HazSite) format. Finally, this report provides a discussion of the data collected to characterize the Site, including a comparison of the COCs to the current NJDEP SRS and GWQS.

Section 1 presents a brief overview of the scope and structure of this RRI report. Section 2 provides site-specific information including background information, the field sampling program, analytical results, and data evaluation. In this latter section and Appendix N, soil data are compared to the associated NJDEP site remediation standards (e.g. non-residential soil remediation standards).

Section 3 summarizes the results and presents conclusions relative to the comparison of Site data to the associated NJDEP SRS. This is followed by a list of selected references and appendices. CLP data deliverable packages for total Cr, Cr(VI) and supplemental parameters for data related to the Phase I RI were previously submitted to the NJDEP. Data packages for the Phase II RI are provided in Appendix E.

1.6 Overview

This report focuses on Cr contamination associated with the presence of COPR and/or alumina hydrate (alum) within fill materials that are present on Site 113. Cr is a naturally occurring, non-volatile, trace metallic

element found in the earth's crust, ranging from 1 to 2,000 mg/kg in U.S. soils (Dragun and Chiasson, 1991). It may be found in the environment in two valence states, trivalent chromium [Cr(III)] and hexavalent chromium [Cr(VI)] (Nieboer and Jusys, 1988) (World Health Organization, 1988). The oxidized form, Cr(VI) is almost exclusively the result of industrial processes and is classified as a human carcinogen following inhalation of high concentrations (Sheehan, *et al.*, 1991). Cr(III) in low concentrations, on the other hand, is an essential dietary element for humans (Anderson, 1989). Thus, Cr(VI) is significantly more toxic than Cr(III). The significant difference in toxicity between the two common valence states of chromium is reflected in various standards/soil cleanup criteria published by regulatory agencies. For example, the USEPA (2008) Region III's risk-based concentration (RBC) table indicates that the RBC for soil ingestion of Cr(III) for industrial exposure scenarios is 1,500,000 mg/kg and for Cr(VI) is 3,100 mg/kg. Similarly, for residential exposure scenarios, the USEPA Region III RBC for soil ingestion for Cr(III) is 120,000 mg/kg and for Cr(VI) is 230 mg/kg.

Beginning early last century, three chemical plants were operating in Hudson County, New Jersey, that produced Cr chemicals. The plants produced sodium dichromate and related products by roasting a crushed mixture of chromite ore (chromium oxide) with ground limestone and soda ash at approximately 1,200°C in a strongly oxidizing atmosphere. The chromium in the chromite ore was typical chromium–iron oxide containing up to 50 percent Cr_2O_3, the balance of the major metallic oxides being principally FeO, A_2O_3, CaO, and MgO (Austin, 1984). Following reaction in the kiln, the sintered mass was crushed and leached with hot water, producing solutions of sodium chromate which were acidified, producing sodium dichromate and other solutions of sodium chemicals. COPR is a byproduct of chromate chemical production. Between 1950 and mid-1970s, the three chemical plants were closed. The COPR, resulting from the roasting process, contained unreacted Cr(III) and Cr(VI) that was not removed in the leaching step, plus essentially non-toxic oxides of other metals (e.g., iron, aluminum, calcium and magnesium). COPR is characterized as alkaline (with a typical pH of 10 to 12), having a reddish-brown color, and varying in size from gravel to fine silt. The COPR was considered to be excellent fill material and its use as fill material continued into the 1970s prior to determination by regulatory authorities in the early 1980s that the Cr in COPR-bearing soils was potentially harmful to human health and the environment.

Another product of the chromium industry is alum (alumina hydrate). Unlike COPR, alum is a white, paste-like material that was sold to the aluminum sulfate industry for use in water treatment.

2. SITE 113 (DIAMOND SITE)

2.1 Site Location and Description

2.1.1 Site Description

Site 113 is located at 1015 Belleville Turnpike on Block 287, Lots 46 and 47, in Kearny, New Jersey. The Site covers approximately 27 acres in an industrialized area located between Belleville Turnpike to the west and the Hackensack River to the east. The Amtrak Northeast Corridor railway line and associated embankment (also referred to as the Amtrak High Line) is located parallel to the northern property boundary, and the Site is bordered to the south by the Standard Chlorine Chemical Company (Site 116). A 30-foot wide former Erie-Lackawanna Railroad easement crosses the Site in a north-south direction approximately 250 feet west of the river. The Site location is shown on Figure 113-02-01.

With the exception of the two existing (permanent) structures, the Site has been razed. Prior to 1974, an anthropogenic tidal channel named Dead Horse Creek traversed the Site from southwest to northeast and discharged into the Hackensack River. In 1974, an alternate drainage conduit in the form of a 48-inch concrete storm drain was installed parallel to the southern Site 113 property line to convey drainage formally carried by the creek across the Site to the Hackensack River. Subsequently, the tide gate at the mouth of Dead Horse Creek was sealed with concrete. The culvert from the mouth of the creek to the tide gate was filled with a mixture of clay and concrete. The remaining section of Dead Horse Creek, from the tide gate back along the railroad tracks and up to, and including the 30-inch culvert under Belleville Turnpike, was filled to grade level. The first 50 to 75 linear feet nearest the river was filled with clay. The remaining filling was accomplished by scraping small quantities of materials from the top of the banks into the creek bed and then completing the fill to grade with clay. The eastern portion of the property is now entirely covered with asphalt overlying geotextile liner, which was installed as part of the IRM activities.

The operational and ownership history of Site 113 is documented below:

Start and End Dates of Ownership/Operation

Owner	Operator	Start Date	End Date
Martin Dennis Company	Martin Dennis Company	1916	1947
Martin Dennis Company /US Government	Martin Dennis Company and US Government *	1945	1948
Diamond Alkali Co. (subsequently named Diamond Shamrock Corporation, then Diamond Shamrock Chemicals Company)	Diamond Alkali Co. (subsequently named Diamond Shamrock Corporation, then Diamond Shamrock Chemicals Company)	1948	1986
Tierra Solutions, Inc,(formerly Chemical Land Holdings, Inc. and Diamond Shamrock Chemical Land Holdings, Inc.)	Tierra Solutions, Inc,(formerly Chemical Land Holdings, Inc. and Diamond Shamrock Chemical Land Holdings, Inc.)	1986	Present (no operations; title holders only)

* *For the period of 1945 – 1948 the US government, through the Reconstruction Finance Corporation, held title to 9.907 acres comprising Plancor 2245.*

Current Address of Owner/Operator

Tierra Solutions, Inc.
Two Tower Center Boulevard
Floor 10
East Brunswick, New Jersey 08816

2.1.2 Historic Alignment of Dead Horse Creek

Dead Horse Creek was a tidal creek that existed at the Site prior to being filled and replaced in the mid-1970s by a 48-inch diameter storm water pipe as described above. An analysis of the historic presence and alignment of Dead Horse Creek was performed as part of the SRIWP (Brown and Caldwell, 2007). The findings of this analysis served as the basis for further investigation during the Phase II, which included evaluating the lateral continuity of the tidal marsh deposits beneath the former alignment of Dead Horse Creek. The historic analysis of the position of Dead Horse Creek involved a review of various historic topographic maps, site maps, and aerial photographs. These include historic topographic maps dating from 1887 through 1935 and aerial photographs from 1947 to the present. These historical maps and aerial photographs reveal that Dead Horse Creek has an anthropogenic origin and a location that appears to have been constant over time. The earliest record reviewed depicting the location and alignment of Dead Horse Creek was a USGS quadrangle map dated 1887. This quadrangle indicates that a separate natural stream channel with a meandering character did not precede the man-made Dead Horse Creek channel. This observation was important providing with a high level of confidence the locations of borings and monitoring wells that were intended to define the lateral continuity of the tidal march deposits in the location of the former Dead Horse Creek channel.

2.1.3 Site History

The Martin Dennis Company constructed a chromate chemical manufacturing facility on the Site in 1916. The facility engaged in the processing of imported chromite ore for the purpose of producing sodium bichromate for sale and for use in the manufacturing of other chromium chemicals. Chromium chemicals manufactured in the plant included chrome-based leather tanning agents, specifically a product sold under the trade name "Tanolin", and chromic acid. Production of chromic acid began in 1952 at the facility. Processing of chromite ore for the production of sodium bichromate continued until November 1971. However, Tanolins and chromic acid continued to be produced at the facility until 1976. Production at the plant ceased in December 1976 and the majority of the buildings were razed in 1978.

From 1952 through 1955, a by-product of the chromic acid manufacturing process was sodium bisulfate. The majority of this material was sold to tanneries; however, some was used in the Tanolin process. The remainder, perhaps up to 100 tons per year, may have been placed on Site along with the COPR. Other byproducts of the manufacture of sodium bichromate were sodium sulfate and alum. Prior to the mid- or late 1960's, the alum was sold for beneficial reuse; however, from the late 1960's to 1971 when the bichromate process ceased, it was accumulated on the plant property.

Since the location of Site 113 was once a portion of the Meadowlands tidal marsh, the commercial operations discussed above were conducted on fill materials placed on top of the tidal marsh deposits. Filling apparently began with the construction of a chemical plant circa 1916. A study of aerial photographs suggests that between 1940 and 1963, low-lying areas at Site 113 were filled. Borings conducted during the RI indicate that the majority of this fill material contains COPR. In the late 1960s it became necessary to stockpile alum

byproduct on the northern part of the Site. Aerial photographs taken in 1966 show a 140-foot long by 28-foot wide pile; by 1971, the dimensions had increased to 1,050 feet long by 170 feet wide. COPR was stockpiled in the eastern part of the Site.

In 1972, following approval by NJDEP, Diamond Shamrock contracted T.E.K. Carriers for removal of the alum pile. Approximately 5,000 to 7,000 cubic yards of alum were moved to a site in Secaucus, New Jersey (Site 40). However, due to objections by the Town of Secaucus regarding the placement of the alum at Site 40, the majority of the alum was returned to the Diamond Site. In 1973-1974, treatment of the remaining alum at Site 113 was subsequently conducted by applying a fixation process that used a sodium silicate solution, Portland cement, and a pickle liquor reducing agent. The treated material was graded across the Site, thereby eliminating the alum pile.

2.1.4 Interim Remedial Measures (IRMs)

In accordance with Appendix A of the ACO, an IRM Work Plan is required for conducting interim measures designed to (1) prevent the discharge of Cr and its compounds by way of the routes of potential human exposure, and (2) allow present uses of the Site to continue to the greatest extent possible. Prior to the implementation of the IRM, air sampling was conducted at selected locations at Site 113 in accordance with the work plan and Quality Assurance Project Plan (ChemRisk, 1990a).

In accordance with the IRM Work Plan for Site 113, it was determined based on field inspections and preliminary sampling that certain areas of the Site required certain types of IRMs (French & Parrello, 1992a). Along the eastern section of the property, parallel to Belleville Turnpike, an IRM was installed that consisted of a geotextile fabric/geomembrane liner composite underlying 4 inches of dense graded aggregate (DGA), that was placed over existing soils (IRM Type-B). This same IRM design was used in two central areas of the Site and along the Amtrak embankment in the northeast corner of the Site. Along the bank of the Hackensack River, the IRM consists of geotextile fabric/geomembrane liner composite that is overlain by rip-rap. The majority of the eastern portion of the Site is covered with IRM Type-A, which consists of 4 inches of asphaltic concrete (asphalt) over 4 inches of DGA underlain by geotextile fabric over existing soils. Along the entrance roadway and within a portion of the Site around the former production buildings, the IRM consists of two-inches of asphalt over existing pavement (IRM Type-C). IRM Type-D is utilized on the western portion of the Site connecting IRM Type B to the paved access road. IRM Type D consists of four inches of DGA over geotextile fabric/geomembrane liner composite over six to 12 inches of 1.5-inch stone. The location of the various IRMs is shown on Figure 113-02-02 and the details of the IRM construction are provided in the Interim Remedial Measures Final Implementation Report, dated September 17, 1992 by French & Parrello Associates, P.A. (French & Parrello, 1992b).

2.1.5 Site Topography and Surface Water Features

The ground surface at the Site slopes from a high elevation of about +13 feet MSL at the northwest corner to approximately +6 feet MSL along the former location of Dead Horse Creek. The area of the Site, southeast of former Dead Horse Creek, is relatively flat, ranging from approximately +6 to +4 feet MSL.

The dominant, regional surface drainage feature is the Hackensack River, which forms the eastern Site boundary. The Hackensack River is a saline tidal estuary (classified as SE-2 by NJDEP) in the Site vicinity. The normal tidal excursion range is approximately 5 to 6 feet. Mean low water occurs at an elevation of approximately +1.5 feet MSL, and mean high tide reaches an elevation of about +3.5 feet MSL. Nautical charts indicate that the river could be as deep as 25 to 30 feet below MSL offshore from the Site.

The most severe flooding reportedly results from storm-induced tidal surges. The 100-year flood elevation for the Site area is reported to be at an elevation of +9 feet MSL based on the 1995 Flood Insurance Rate Map for the Hackensack Meadowlands District (FEMA, 1995).

2.1.6 Regional Geologic Setting

The characteristics and extent of the stratigraphic (geologic) materials encountered within the Kearny area are described in this section. To place the Site into perspective within the larger geologic framework of the region and to describe the geologic history that led to the formation of the major strata, a brief discussion of the regional geology is presented herein and on Figure 113-02-03. Laboratory reports of the geotechnical analysis are provided in Appendix F. The discussion of the regional geology is based upon the published geologic literature for the area.

Briefly, the unconsolidated sediments, or overburden, underlying the eastern two-thirds of the Kearny area consists of artificial fill overlying post-glacial estuarine tidal marsh deposits that are composed of organic rich silts and clays and peat. The peat, or meadow mat, overlies a thin glaciofluvial sand deposit that, in turn, is underlain by a thick sequence of glaciolacustrine clays and glacial till. The bedrock underlying these unconsolidated sediments consists of Triassic and Jurassic aged sedimentary shale and siltstone and also igneous, intrusive diabase. The individual geologic units are described in additional detail below.

Artificial Fill

Artificial fill was deposited in estuary areas located in and around Kearny during the 19th through the mid 20th centuries in order to fill the tidal marshlands and raise the land surface to accommodate development. This layer is comprised of soils and debris ranging from sand, clay and rock fragments to anthropogenic materials such as wood, slag, and trash. This layer generally ranges in thickness from approximately 5 to 10 feet thick in the vicinity (Stanford, 1993). Because of the heterogeneous mixture of materials that make up this unit, hydraulic conductivity and other hydraulic characteristics of the fill can be expected to be highly variable.

Tidal Marsh Deposits

Tidal marsh material that underlies the fill is present beneath much of lowland areas that comprise the eastern two-thirds of the Kearny Township. Tidal marshes are flat, low lying coastal areas that become regularly inundated during high tide periods. Sediments that have formed in the marsh areas in the vicinity of the Sites include organic rich silts and clays, as well as peat. The peat, typically consists of a horizontal layer of roots of salt tolerant plants in various stages of biological decomposition. The peat occurs in varying states of weathering and consolidation. Peat typically weathers to organic silt and clay. Thus, it is not unusual to encounter the organic silt and clay beneath peat at the base of the tidal marsh deposits. Fine to coarse grained, well sorted sand sediment that formed as the result of eolian (e.g., wind-blown) deposition may be interbedded with the organic clay and peat (Stanford, 1993). At the site, each soil boring advanced during both Phase I and Phase II revealed the presence of Tidal Marsh Deposits. At some locations, the peat portion of the tidal marsh deposits was not present.

Post-Glacial Fluvial Deposits

During the Pleistocene Epoch, two glacial lakes existed in the Kearny area that significantly influenced local stratigraphy. These lakes included glacial Lake Hackensack and glacial Lake Bayonne. At the end of the Pleistocene Epoch, during the period of deglaciation, the water within glacial Lake Bayonne drained northward into nearby glacial Lake Hackensack, resulting in the emptying of Lake Bayonne. This event

allowed the Passaic River to erode a channel into deltaic sand that had formed upriver of Lake Bayonne between Newark and Paterson. The sediments scoured from this new channel were re-deposited as terrace deposits (Qpt) upon the former Lake Bayonne lake-bed. As Lake Hackensack was also drained thereafter, the Passaic River further eroded into the deltaic sediments and the more recently deposited terrace sand, and re-deposited these materials as a sandy alluvium along the length of the present Passaic River channel, as well as on the beds of the drained glacial Lakes Bayonne and Hackensack (Stanford, 1993). This sandy alluvium deposit is generally encountered beneath the estuarine marsh deposits.

Glacial Lake Deposits

Glacial Lake Hackensack and glacial Lake Bayonne, as mentioned above, were formed at the margins of Pleistocene glaciers and collected vast amounts of the sediment that flowed southward within glacial meltwater. As a result, thick deposits of glaciolacustrine sediments, including deltaic deposits and varved clay accumulated within these lakes. These lakes formed sequentially, with Glacial Lake Bayonne forming first, and then drained northward into Glacial Lake Hackensack as the glaciers receded northward. Because these glacial lakes formed at different times, Lake Hackensack deposits are generally found at a higher elevation than Lake Bayonne deposits (Stanford, 1993). Each of these lake deposits is discussed further below:

- **Glacial Lake Hackensack Lake Bottom Deposits (Qhkl):** Glacial Lake Hackensack Lake Bottom deposits are characterized as varved clays that consist of clay interspersed with thin laminations of fine sand. Generally, this layer has been estimated to be as much as 30 feet thick.
- **Glacial Lake Bayonne Lake Deposits (Qbnl, Qbn, Qbnf):** Glacial Lake Bayonne lake deposits include Lake Bottom deposits (Qbnl), Deltaic deposits (Qbn), and Lacustrine Fan deposits (Qbnf). The Lake Bottom deposits are varved clays and are characterized by interlaminated silts, clays and trace amounts of fine sands. The deltaic and lacustrine fan deposits are coarser, being composed of sand and silt. These lake deposits have been found to be as thick as 200 feet. Based upon cross sections prepared as part of this study from boring logs published by the New Jersey Geological Survey (NJGS), these deposits have been estimated to be as thick as 22 feet in the vicinity of the Site.

Rahway Till

The Rahway till was deposited by glaciers during the late Pleistocene prior to the formation of glacial Lakes Bayonne and Hackensack, and therefore underlies the glaciolacustrine deposits. The till consists of a red-brown mixture of sand, gravel and silt of varying proportions. This glacial till has been reported to be regionally as thick as 90 feet.

Bedrock

The unconsolidated deposits are underlain by Triassic-Jurassic aged sedimentary rock. The rocks formed following the close of the Paleozoic Era (225 million years ago), when compressive forces that formed the Appalachian Mountains relaxed, and extensional forces associated with the rifting and spreading of the Atlantic Ocean began. A series of isolated troughs called grabens formed east of the Appalachian Chain extending from Nova Scotia to North Carolina. As spreading of the ocean progressed, large blocks of crust down-faulted along extensional fault zones. Synchronous with the down faulting, large quantities of continental sediments produced from the erosion of the Appalachian Mountains were deposited in these troughs. The continued accumulation of sediments overloaded the troughs and contributed to their subsidence. This sinking effect allowed for the thick accumulation of Triassic sediments that exist in the Newark Basin. During the early Jurassic Period (180 million years ago), as rifting continued, faults in the area

became progressively deeper and intersected the earth's mantle. Consequently, volcanism occurred in the form of extrusive basalt flows over parts of the basin, forming the Watchung Mountains of New Jersey. Three separate episodes of basalt flows occurred, interrupted by periods of continental sedimentation (Faust, 1975).

Nine formations comprising the Newark Supergroup resulted from the lithification of these basin sediments and volcanic flows (Olsen, 1980). The formations from oldest to youngest are as follows: the Stockton, the Lockatong, the Passaic, the Orange Mountain Basalt, the Feltsville, the Preakness Basalt, the Towaco, the Hook Mountain Basalt, and the Boonton. Contemporaneous with the basalt flow events, intrusive sills and feeder dikes formed the Palisades Diabase. This unit is not classified as part of the Supergroup, despite its stratigraphic presence within the Newark Basin formations.

One of the nine Supergroup formations, the Passaic Formation (JTp), is present below the Site. In this area, the Passaic Formation is comprised of two facies: the sand and siltstone facies to the northwest and mudstone facies to the southeast of the area. The Kearny, NJ COPR sites are underlain by the mudstone facies. The bedrock formations located in the Kearny vicinity that are relevant to the formation of the Newark Basin are:

- **Passaic Formation (JTp):** According to (Olsen 1980), the Passaic formation, representing flood bank and fluvial deposits, reaches a thickness of approximately 20,000 feet. This unit consists of reddish brown mudstone (a non fissile equivalent of shale), siltstone, and sandstone interbedded with conglomeratic sandstones along the basin margins. Typically these sediments form cyclic sequences of cross bedded units that grade upward from coarser to finer grain size. The dominant facies in the formation are siltstone (≈60%) and mudstone (≈40%) with the coarser grained sandstones and conglomerates comprising a small fraction of the total percentage. Generally, the overall sequence of the formation becomes finer from bottom to top, with mudstone becoming more and siltstone becoming less prevalent higher in the stratigraphic column (Houghton, 1986). A coarser-grained sandstone and siltstone facies forms the ridge to the west of the Lakes Bayonne and Hackensack basin.
- **Lockatong Formation (Tl):** The Lockatong Formation, which conformably underlies the Passaic Formation, is approximately 3,800 feet thick in west central New Jersey and thins laterally to the northeast and southwest. This formation was deposited as a large lacustrine lens composed of gray and black shales with argillite, flagstone and impure limestone layers (Wolff, 1977). Regionally, the lower members of the Lockatong Formation are intruded by the Palisades diabase as a sill.
- **Jurassic Diabase (Jd):** The Jurassic Diabase is the remnant of an igneous intrusion that was injected between the Lockatong Formation and the underlying Stockton Formation. It forms a nearly vertical dike that is partially responsible for the ridge upon which Jersey City is located. During the Pleistocene Epoch, this ridge formed a natural "dam" that was, along with moraines and ice blockages, responsible for formation of Lakes Bayonne and Hackensack. This diabase ridge defines the eastern border for the glaciolacustrine and Tidal Marsh Deposits in the region.

2.1.7 Hydrostratigraphic Units

The geological units described above have been separated into six (6) distinct hydrostratigraphic units based upon hydrogeologic characteristics and behavior. These units are depicted on Figure 113-02-03 and defined as follows:

Upper Water-Bearing Zone (UWBZ)

This hydrostratigraphic unit is comprised of the artificial fill layer, which is present in major portions of the lowland areas that comprise the eastern two-thirds of Kearny, NJ. This unit is considered to be generally transmissive, albeit its hydraulic conductivity is variable due to the heterogeneity of the materials from which it is comprised. The UWBZ is recharged by rainfall, with the infiltration rate varying in accordance with the permeability of the ground cover material and the nature of the fill itself. Groundwater flowing within this unit is expected to discharge laterally to the Hackensack River, its tributaries, and local sewer lines, and vertically to the underlying marsh and alluvial sediments.

Tidal Marsh Semi-Confining Unit

This unit is comprised of the Tidal Marsh Deposit, which is nearly ubiquitous across the Kearny, NJ area where the COPR sites are located. The Tidal Marsh Deposit is a semi-confining layer situated between the fill and the underlying alluvial sand. It contains poorly transmissive lithologies, such as the organic clay and silt, which impede the flow of groundwater from the fill to the underlying alluvium. It also contains more transmissive peat (known locally as the meadow mat) and eolian sand members, which can readily transmit groundwater from the fill to the underlying alluvium.

Based on the available scientific literature hydraulic conductivities in a peat can range from 2.7×10^{-5} cm/sec to 6.6×10^{-1} cm/sec (Todd, 1980; Spitz and Moreno, 1996; Almendinger and Leete, 1998; Schlotzhauer and Price, 1999). However, the upper end of this range assumes an unweathered and unconsolidated peat. The Tidal Marsh deposits occurring in Kearny are weathered, as indicated by the common occurrence of organic silt and clay, and also have been consolidated to various degrees by overlying fill and buildings. As a result, the hydraulic conductivity of the peat is not expected to be as high as the highest values cited in the literature.

In addition to the transmission of water through the Tidal Marsh Deposit media itself, leakage of groundwater from the fill to the underlying alluvial sand deposits (LWBZ) can occur in locations where the Tidal Marsh Deposit has been disturbed by anthropogenic activities such as waterway channeling, drainage structure installation, or foundation construction. This does not appear to be the case at Site 113 as Tidal Marsh Deposits have been observed in each soil boring advanced at the Site.

Lower Water-Bearing Zone (LWBZ)

The LWBZ consists of the Alluvial Sand Deposits and the Lower Passaic Terrace (Qpt) Deposits. These formations form a thin aquifer beneath the Tidal Marsh Deposits and above the glaciolacustrine clays that underlie the Site area. The scientific literature (Stanford, 1993) indicates that both these units are permeable, with hydraulic conductivities ranging from 1×10^{-3} cm/sec to 1×10^{-1} cm/sec (Stanford, 1993). The LWBZ is considered a semi-confined unit that is recharged by seepage through the overlying Tidal Marsh Deposit. Groundwater within this unit discharges to the Passaic and Hackensack Rivers and may locally discharge to tributaries that discharge to these rivers.

Clay Aquitard

The Clay Aquitard is situated below the LWBZ and provides hydraulic separation between it and underlying aquifers including the Lower Sand Aquifer, where present, and the Brunswick (bedrock) Aquifer. The Clay Aquitard is comprised of glacial lake bottom deposits from Lake Hackensack (Qhkl) and Lake Bayonne (Qbnl). It also includes the Rahway Till (Qr). The glaciolacustrine clays that comprise the lake bottom deposits have been found to have low hydraulic conductivities ranging from 1×10^{-9} cm/sec to

1 x 10^{-7} cm/sec (Stanford, 1993). Because of these low hydraulic conductivities, the Clay Aquitard provides a high degree of hydraulic separation of the UWBZ and LWBZ from the underlying Lower Sand Aquifer and the Brunswick Aquifer.

Lower Sand Aquifer

The Lower Sand Aquifer is comprised of the Deltaic (Qbn) and Lacustrine Fan (Qbnf) Deposits that are associated with former glacial Lake Bayonne. This unit is not likely present beneath Site 113, as it is principally located in the western extent of the tidal marsh in Kearny. The available literature indicates that hydraulic conductivities in the Deltaic and Lacustrine Fan Deposits are relatively high, ranging from 1 x 10^{-3} cm/sec to 1 x 10^{-1} cm/sec (Stanford, 1993). The Lower Sand Aquifer is isolated from the overlying LWBZ and the UWBZ by the Clay Aquitard.

Brunswick (Bedrock) Aquifer

The Brunswick Aquifer consists of the bedrock that is locally represented by the Passaic and the Lockatong Formations of the Newark Supergroup. Groundwater flow in this unit is different from that found in the overlying overburden units in that groundwater flow occurs primarily through fractures and bedding plane partings and not through pore spaces between formation particles. The bedrock represents an aquifer that is confined by the overlying glaciolacustrine clay and glacial till of the Clay Aquitard. Hydraulic conductivities in the Brunswick Aquifer have been found to range from 6.9 x 10^{-7} cm/sec to 7.6 x 10^{-3} cm/sec (New Jersey Geological Survey, 2004; Michalski, et al., 1992). Groundwater in the Brunswick Aquifer is discharged to the Passaic and Hackensack Rivers, and to private production wells that exploit this unit.

2.1.8 Prior Investigations

In 1974, Wehran Engineering Corporation (Wehran) conducted a subsurface soil investigation at Site 113 (Wehran, 1974). The purpose of this investigation was to determine subsurface soil types and soil conditions in the area adjacent to the southern boundary of Site 113 and Dead Horse Creek for the installation of a 48-inch storm sewer. Twelve test pits were excavated, averaging 12 feet in depth (McLaren/Hart, 1992d).

In 1981, Ground/Water Technology, Inc. conducted a hydrogeological investigation that included nine soil borings. These borings were converted into dual-level groundwater sampling points (Ground/Water Technology, Inc, 1981). In 1982, Geoengineering, Inc. conducted a supplementary hydrogeological investigation that included four additional soil borings and monitoring wells in the southwestern portion of the Site. Each of these wells was abandoned in accordance with NJDEP protocol and approval in the early 1990's. Detail regarding the sampling performed by Ground/Water Technology, Inc. were obtained via a Freedom of Information Act (FOIA) submitted to the NJDEP in 1990.

Based on the results of these two investigations, it was concluded that groundwater at the Site occurs in two distinct water-bearing zones: the UWBZ, representing the water table within the fill material, and the LWBZ, represented by the sand layer between the tidal marsh deposits and the clayey confining layer. The piezometric levels in the LWBZ were reported to be lower than the levels in the UWBZ, indicating a potential for downward flow. All three previous investigations indicated that the groundwater within the UWBZ is not influenced by tidal fluctuations.

On May 13, 1985, E. C. Jordan Co. collected 6 surficial soil samples at the request of the NJDEP to be analyzed for 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) as part of a dioxin investigation. A copy of the report produced by E.C. Jordan Co. is provided in Appendix G. The samples were analyzed using the USEPA September 1983 statement of work, "Dioxin Analysis, Soil/Sediment Matrix Multi-Concentration

using Selected Ion Monitoring (SIM) GC/MS Analysis with Jar Extraction Procedure". All sample results were non-detect for the compound and it was therefore decided that no further investigation was warranted. A copy of this report is included in Appendix G.

The proposed surficial soil sampling locations for 2,3,7,8-TCDD testing that were identified and discussed with NJDEP for that effort focused on specific areas based on a Site visit, consideration of historical Site use, and site-specific characteristics. The sample locations were selected as follows:

- Near catch basins on the perimeter access road
- Near surface runoff points along the Hackensack River
- Behind (north) former production building
- Adjacent to former warehouse facilities

A section of the dioxin report addressed the rationale for the selected sampling locations. The justification for the location of each sample collected is summarized on Page A-5 of Appendix G, which indicates that there was a distinct bias in attempting to collect samples where 2,3,7,8-TCDD might be present on the property. The screening action level for 2,3,7,8-TCDD at the time, which continues as a guideline to the present, was 1 μg/kg (ppb). Among the bases for sample location selection were: (a) topographically low catch basins where dioxin-contaminated soil may have accumulated, (b) runoff points along the river associated with surface soil erosion, (c) near former production area building where spills may have occurred, and (d) near former warehouse in a topographically low area. The report states that it is not certain that dioxin-related chemicals were ever present at the Diamond Site. The basis for sampling at the Diamond Site appears to have been primarily its location adjacent to the Standard Chlorine Chemicals Co., a Site known to contain dioxin.

The aforementioned dioxin investigation was performed as part of a nationally-coordinated effort in the mid-1980s explicitly to identify sites with potential dioxin contamination. Furthermore, there is no evidence that the Diamond Site was ever used for the storage or production of substances that represent potential precursors to the formation of dioxin. The industrial processes utilized at the Diamond Site involved the production of sodium dichromate and related products by roasting a crushed mixture of chromite ore (chromium oxide) with ground limestone and soda ash in a kiln under a strongly oxidizing (alkaline) atmosphere. The chromium in the chromite ore was typical chromium–iron oxide containing up to 50 percent Cr_2O_3, the balance of the major metallic oxides being principally FeO, A_2O_3, CaO, and MgO (Austin, 1984). The sintered mass from the kiln was crushed and leached with hot water, producing solutions of sodium chromate, which were acidified to produce sodium dichromate and other solutions of sodium chemicals. A byproduct material, alum (alumina hydrate), was generated and sold to the aluminum sulfate industry for use in water treatment. Thus, the raw materials, intermediates, end products, and associated operations at the Diamond Site were not conducive either directly or indirectly to the formation of dioxin.

It appears that the Jordan (1985) investigators at the Diamond Site came to a similar conclusion, and thus, focused concern on whether dioxin may have been spread inadvertently from operations at adjacent Standard Chlorine Chemical Site, where it had been identified in process residues, sludges, and soils. Based on these factors, the dioxin results in the Jordan (1985) report should be considered relevant and significant, even though they were obtained more than 20 years ago. Accordingly, if concern lingers to the present, it may be reasonable to investigate the potential presence of dioxin near the perimeter of Site 113 in conjunction with supplemental remedial investigations for the Standard Chlorine Chemical Site.

2.1.9 Deviations from the RI Work Plan

Phase I RI

No significant deviations were required from the planned number and location of samples collected during the Phase I RI. A total of 50 surficial soil samples (designated by "SS"), 37 vertical delineation borings (designated by "B"), 18 groundwater monitoring wells (designated by "W"), and 15 surface water (designated by "S") along five transects in the Hackensack River were conducted as planned. Of the 15 planned sediment samples (designated by "SE"), 13 were collected; two could not be physically collected due to lack of available sediment. Figure 113-02-02 presents the surveyed locations of the actual sample points and monitoring wells on Site 113. Table 113-02-01 lists the grid coordinate location of each sample location as defined on Figure 113-02-02.

Phase II RI

No significant deviations were required from the planned number and location of samples collected during the Phase II RI. A total of 11 surficial soil samples, 14 vertical delineation borings (B-), 8 groundwater monitoring wells (W-), 6 surface water (SW-) samples, 5 porewater (PW-), and one (1) sediment (SE-) sample were conducted as planned. Monitoring wells previously labeled 113-W-122(D) and 113-W-123(D) were inadvertently changed to 113-W-304(D) and 113-W-305(D). Surface water samples previously labeled 113-SW-301 through 113-SW-306 were inadvertently changed to 113-SW-01 through 113-SW-06. Sediment sample previously labeled 113-SE-301 was inadvertently changed to 113-SE-01.

PCB delineation sample locations 113-B-116(D), 113-B-116(A), and 113-B-116(B) were inadvertently repositioned, relative to location 113-B-116. Additional samples were collected from nearby locations 113-B-116(E), 113-B-116(F), and 113-B-116(G) for delineation. Figure 113-02-02 presents the surveyed locations of the surveyed sample locations and monitoring wells on Site 113.

2.2 Field Investigation

The field sampling discussion below includes both the Phase I and Phase II of the RI. The analytical data from each of the RI phases are presented on Tables 113-02-06 through 113-02-33. Figures 113-02-16 through 113-02-41 present the sampling locations as well as distribution of select constituents.

The discussion below presents the logistics of sampling by medium; surface soil, subsurface soil, groundwater, surface water, sediment, porewater, and air.

2.2.1 Surface Soil Investigation

The surface soils from 96 locations (86 Phase I RI and 10 Phase II RI) were sampled at the Site. Generally surface samples are defined as being collected within 0.5 feet of the ground surface; however, when samples were collected through the IRM, surface samples are defined at the 0.5 feet below the asphalt and DGA layer. Surface soil samples were analyzed for total Cr, Cr(VI), pH, ORP, Pesticides/PCBs, semi-volatile organic compounds (SVOCs), the six metals of interest, and target analyte list (TAL) metals. The six metals of interest are antimony (Sb), arsenic (As), beryllium (Be), cadmium (Cd), nickel (Ni), and vanadium (V). Analytical results associated with surface soil samples are presented in Tables 113-02-06 through 113-02-12. Constituent distribution maps for select constituents are presented in Figures 113-02-16 through 113-02-26. CLP-like data packages, which include laboratory analysis data sheets, quality control data, and chain-of-custody forms from Phase II are provided in Appendix E. Phase I RI data packages were previously

provided to the NJDEP. Each of the surface soil samples is compared to the respective NJ SRSs per N.J.A.C. 7:26D, as applicable. The non-residential standards are appropriate as the Site is not zoned for residential use and will continue to be restricted to non-residential uses. The future use of the Site will remain industrial and the appropriate engineering and institutional controls will be implemented in the future.

2.2.2 Subsurface Soil Investigation

A total of 54 soil borings (37 Phase I RI and 17 Phase II RI) were advanced at the Site. Subsurface soil samples were analyzed for total Cr, Cr(VI), pH, ORP, pesticides/PCBs, volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH), SVOCs, the six metals of interest, and other TAL metals. Analytical results associated with subsurface soil sample analyses are presented in Tables 113-02-06 and 113-02-12. Select constituent distribution maps are presented in Figures 113-02-16 through 113-02-26.

2.2.3 Groundwater Investigation

Currently there are 29 monitoring wells installed at Site 113. Of these 29 monitoring wells, 15 are screened in the UWBZ and 14 are screened in the LWBZ. Monitoring well locations are shown on Figure 113-02-02 and on Figures 113-02-09 through 113-02-12. A total of eight monitoring wells were installed as part of the Phase II RI, 18 had been installed during the Phase I RI, and 3 were installed in December 2005. Groundwater samples were collected twice from each monitoring well during each phase of the RI. Following the initial groundwater monitoring efforts in 1992-1996, groundwater samples were collected using the low flow sampling methodology as described in the NJDEP's April 2005 Field Sampling Procedures Manual (NJDEP, 2005). Groundwater samples were analyzed for filtered and unfiltered Cr(VI), filtered and unfiltered total Cr, and unfiltered pH, ORP, and VOCs during each event. Samples collected during Phase I were also analyzed for SVOCs, metals, and pesticides/PCBs. Samples collected during Phase II were also analyzed for chlorides, sodium, and TDS. As a result of changes to the NJDEP Field Sampling Procedures Manual (updated 2005), samples collected during Phase II were also analyzed in the field for pH and DO. These field analyses were conducted by Brown and Caldwell, a NJ-certified laboratory (NJDEP OQA laboratory identification #02023). There have been five sampling events conducted at the Site; these are:

- June 7 through June 10, 1993 (Phase I RI)
- May 23 through May 30, 1996 (Phase I RI)
- June 3 through June 5, 1996 (Phase I RI)
- October 25 through October 31, 2007 (Phase II RI)
- January 14 through January 18, 2008 (Phase II RI)

The analytical results from each round of sampling are presented in Tables 113-02-13 through 113-02-19. The areal distributions of select sample results have been depicted on Figures 113-02-27 through 113-02-41. Synoptic rounds of groundwater elevation measurements were collected three times, once in November of 1996, and before each sampling round during Phase II. The groundwater elevations are provided in Table 113-02-04, and the two most recent rounds have been contoured and are presented on Figures 113-02-09 through 113-02-12. The corresponding groundwater contour map report forms are provided in Appendix H. In-situ hydraulic conductivity (slug) tests were conducted on 26 of the 29 wells; these results are presented on Table 113-02-02. Appendix I presents the slug test results. Monitoring well construction drawings for both Phase I and II monitoring wells and well certification forms A and B for Phase II monitoring well are provided in Appendix I. Phase I well certification forms were provided in the initial RI report (Brown and Caldwell, 2001)

2.2.4 Surface Water, Sediment, and Porewater Investigation

Surface water samples were collected during Phase I from three locations each along of the 5 transects in the Hackensack River. Each of the surface water samples collected was analyzed for total Cr, Cr(VI), total petroleum hydrocarbons, SVOCs, pesticides/PCBs and TAL metals. During Phase II, six surface water samples were collected. The Phase II surface water samples were co-located with the porewater samples discussed below. Each surface water sample was analyzed for total Cr, Cr(VI), and pH. Surface water samples collected during Phase II were also subjected to ORP field measurement These data are provided in Table 113-02-20 through 113-02-24. Figures 113-02-27, 113-02-29, and 113-02-36 through 113-02-41 present the locations and areal distribution of these samples.

Phase I sediment samples were also collected at three locations per transect, with the exception of transect 113-SE-122. Only the near-shore location (location "a") was physically suitable for sample collection due to the lack of recoverable sediments further from the shoreline. A single sediment sample was collected during Phase II; this sample was co-located with surface water samples SW-02 and SW-03. SW-02 and SW-03 were collected from the same location but at different depths in the water column; SW-02 was collected from just beneath the surface, and SW-03 was collected directly above the river bed. Sediment samples were analyzed for total Cr, Cr(VI), pH, ORP, and percent moisture. Samples collected during Phase I were also analyzed for SVOCs, VOCs, metals, pesticides and PCBs. The data for these samples are provided in Tables 113-02-25 through 113-02-30. Figures 113-02-16 through 113-02-24, and 113-02-26 show the areal distribution of selected constituents for the sediment samples.

Porewater samples were collected from five (5) locations (see Figure 113-02-02) during Phase II at approximately equal-spaced intervals along the eastern boundary of Site 113 in the Hackensack River and including one sample near the far southern boundary of the Site in proximity to the stormwater drainage pipe discharge. The results of the porewater sample analyses for dissolved Cr(VI), dissolved total Cr, chloride, pH, DO, and ORP are presented in Table 113-02-31. A comparison of chromium concentrations to NJDEP surface water quality criteria (NJSWQC) is presented in Table 113-02-32.

2.2.5 Air Sampling

McLaren/Hart/ChemRisk conducted air sampling activities on September 20-22 and October 4-5, 1989, and again on April 18-19, 1990 and in June, July, and August 1990. Air samples were analyzed for total Cr(VI), respirable Cr(VI), total Cr, and total suspended particles (TSP). These data are presented in 113-02-33. The total Cr and Cr(VI) concentrations detected in both the indoor and outdoor samples were summarized in the report titled Airborne Chromium Sampling Report, Diamond Plant Site, Site 113, dated December 31, 1990, (ChemRisk, 1990b) which was previously submitted to the NJDEP. Three indoor areas (Areas 4, 5, and 6) were located in separate rooms inside the Site 113 office in Building 6, which was subsequently razed after the building was damaged by fire. Area 4 was in the front room near the south entrance to the building. Area 5 was located in the equipment room. Area 6 was in the conference room at the north end of the building. Areas 1, 2, and 3 were outdoor sampling locations. Area 1 was approximately 200 feet northeast of Building 5. Areas 2 and 3 were 200 feet northeast and 15 feet north of Building 6, respectively.

A field validation study was also conducted on the Site by ChemRisk (1992) (Finley, *et al*, 1993). The objective of the study was to compare the results of three different collection methods to Cr concentrations measured in Site soils. Six sampling locations were chosen (D1 through D6) from which air and surface soil samples were collected under a variety of meteorological conditions. The results are presented in the report entitled "Comparison of Airborne Chromium Data" (McLaren/Hart, 1995) that was submitted to the

NJDEP on January 6, 1995. The report concludes that the impinger train method is sufficiently reproducible to satisfy ambient Cr(VI) monitoring needs and that there was no correlation between Cr(VI) concentrations measured in the air verses that measured in the soil at the Site. The air monitoring data are presented in Table 113-02-33.

2.3 Site-Specific Geologic Conditions

The regional geologic setting was previously presented in Section 2.1.6. The discussion presented below describes the site-specific geologic conditions based upon an interpretation of data generated during this and previous field investigations at Site 113. Four (4) lithologic units are observed beneath the Site, including:

- A heterogeneous mixture of Artificial Fill.
- Tidal Marsh Deposits consisting of a peat subunit and an organic silt and clay subunit.
- Post-Glacial Fluvial Deposits are represented by a laterally continuous layer of Sand.
- Lake Clay deposits represented by the Glacial Lake Hackensack Lake Bottom Deposits (Qhkl) consisting of a thick, varved clay unit interbedded with silts and sand.

The upper surface of the tidal marsh deposits (base of fill), Post-Glacial Fluvial Deposits, and the glacial lake clay, are depicted on Figures 113-02-04 (Artificial Fill), 113-02-05 (Alluvial Sand Deposits), and 113-02-06 (Glacial Lake Bottom Deposits), respectively. These surfaces have been contoured based on data obtained from site-specific borehole data.

The aforementioned geologic units are also shown on two (2) representative geologic cross sections, Figures 113-02-07 and 113-02-08. The orientation of the cross sections is provided on the same figure. The cross sections are constructed with a vertical scale exaggeration of ten times (10X). The cross-sections are prepared through the integration of the four surfaces representing the ground surface, and the top of the stratigraphic units presented in Figures 113-02-04 through 113-02-06. The cross-sections are carried through soil borings completed as deep monitoring wells to provide a geologic representation of the major stratigraphic units, including artificial fill, tidal marsh deposits, glacial fluvial sand, and glacial lake clay along parallel alignments that generally trend east to west.

Detailed descriptions of the materials as they were encountered in the individual boreholes can be obtained from the boring logs contained in Appendix J. Generalized descriptions of the units are provided below.

2.3.1 Artificial Fill

The entire Site is covered with a layer of artificial fill that continuously overlies the natural tidal marsh soils. This layer is comprised of soils and debris ranging from sand, clay and rock fragments to anthropogenic materials. The artificial fill ranges in thickness from 4 to 16 feet with an average thickness of about 9 feet. Because of the heterogeneous mixture of materials that make up this unit, hydraulic conductivity and other hydraulic characteristics of the fill can be expected to be highly variable. More recently, compacted soil fill was placed in the former Dead Horse Creek channel (Wehran Engineering Corp, 1974).

Samples collected of the artificial fill, based on laboratory geotechnical testing, were described as poorly sorted with a wide range of particle sizes. A typical sample had 10.4% passing through the No. 200 sieve. Based on laboratory analysis of the grain-size distribution, the samples collected from the artificial fill were classified as poorly sorted Sand with some Silt, or SP-SM in the Unified Soil Classification [USC] system.

2.3.2 Tidal Marsh Deposits

The Tidal Marsh Deposits can be separated into two subunits, the Peat subunit and the Organic Silt and Clay subunit.

The peat subunit is described as brown to black, loose, fibrous, very soft, and water saturated. The peat is also locally referred as "Meadow Mat", a term that has been used in previous Site documents. The peat is formed from the decomposition of plant remains. Hydrogen sulfide, a natural by-product of decomposing organic matter, is commonly evident in this subunit. Minor amounts of fine-grained sand and black organic silt and clay are mixed with the peat. This layer grades vertically downward into the underlying organic silt and clay subunit and forms a transitional contact between the two subunits. Tidal marsh deposits have been observed at every soil boring advanced at the Site; the peat subunit has not been observed in some soil borings.

The organic silt and clay subunit is typically described as: "Gray to black SILT and CLAY, none to some fine Sand". These sediments were deposited when fine-grained sediments flocculated by brackish tidal waters were subsequently deposited (Anderson, 1968). In addition, it is possible that some of these sediments represent backswamp deposits, silts, and clays that were deposited in flood basins of rivers and streams during abnormally high water conditions.

The position of the top surface of the tidal marsh deposits is depicted in Figure 113-02-04. This map was prepared using the kriging method over each of the available borehole data points. The top of the tidal marsh deposits is also depicted on the two (2) geologic cross sections (Figures 113-02-07 and 113-02-08) and is continuous at each of the sampled locations.

The top of the tidal marsh deposits ranges in elevation from -0.89 to -7.26 feet MSL. The surface is highly irregular with no particular pattern and likely results from the differential settlement due to the placement of the overlying artificial fill.

Former Dead Horse Creek Channel

Available borehole data demonstrate that the tidal marsh deposits are laterally continuous beneath the man-made Dead Horse Creek channel, the determination of which was a primary focus of the Phase II RI. Specifically, five (5) soil borings were drilled to target the historical alignment of Dead Horse Creek as determined from an analysis of historical USGS quadrangle maps and aerial photographs. The Dead Horse Creek soil borings included 113-B-301, 113-B-116F, 113-B-303, 113-B-104, and 113-B-310; listed from west to east. While the tidal marsh deposits were found to be present in each of these borings, the unit was often thinner and/or the peat subunit was occasionally absent beneath the former Dead Horse Creek channel. Specifically, the thickness of the tidal marsh deposits beneath the former Dead Horse Creek channel ranged from approximately 1.0 foot (113-B-310) to approximately 6 feet (113-B-303). The peat subunit was observed at 113-B-303 and was approximately 2 feet thick, but was absent from boring 113-B-304, which is a location where the organic silt and clay portion of the tidal marsh deposits were present at a thickness of about 4 feet

It is concluded that the construction of the Dead Horse Creek channel likely removed the upper portion of the Tidal Marsh deposits in some locations but was not so extensive to cause a complete breach of the unit. Accordingly, the remaining silt and clay portion of the tidal marsh deposits serves as a geochemical barrier in a similar manner as the peat. Therefore, the absence of the peat along the Dead Horse Creek channel is not anticipated to have a major impact on the downward migration of Cr(VI) from the UBWZ to the LWBZ.

2.3.3 Post-Glacial Fluvial Deposits

The Post-Glacial Fluvial Deposits continuously underlies the tidal marsh deposits. This unit can be described as cmf SAND, some Silt, trace Gravel. The thickness of the Post-Glacial Fluvial Deposits ranges from approximately 2 to 7 feet with an average thickness of approximately 5 feet. The structural contours of the surface of this unit are depicted on Figure 113-02-05.

2.3.4 Glacial Lake Hackensack Lake Bottom Deposits (Qhkl)

Glacial Lake Hackensack Lake Bottom deposits are characterized as varved clays that consist of clay interspersed with thin laminations of fine sand. While a direct measurement of the varved clay thickness has not been made on Site, this layer has been estimated to be on the order of 30 feet thick in the Site vicinity based on available published literature (Stanford, 1993). This layer is relatively impermeable and, as such, functions as a confining layer and barrier to the downward migration of contaminants. Figure 113-02-06 presents structural contours of the upper surface of the lake bottom deposits.

Geotechnical samples were collected from the lake bottom deposits during both phases of the RI. Samples collected from the lake bottom deposits, based on laboratory analysis of grain-size distribution, are classified as CL (USC: Low-Plasticity Clay) and CL-ML (USC: Low Plasticity Silty Clay). The samples collected from these deposits had a liquid limit ranging from 22.2 to 28.5 percent, a plastic limit of 10.8 to 22.1 percent, a plastic index of 5.2 to 17.7 percent and a moisture content ranging from 14.6 to 29.5 percent.

2.4 Site-Specific Hydrogeologic Conditions

The geologic conditions beneath the Site have been described in the preceding section. In this section, the manner in which the various geologic units combine to form distinct water-bearing zones is described in the context of the geologic setting.

2.4.1 Groundwater Occurrence

Four hydrostratigraphic units have been investigated at the Site, including:

- **Upper Water-Bearing Zone (UWBZ)** within the Artificial Fill unit.
- **Tidal Marsh Deposit** semi-confining unit located between the UWBZ and the LWBZ.
- **Lower Water-Bearing Zone (LWBZ)** that is semi-confined within the fine sand of the Post-Glacial Fluvial Deposits.
- **Clay Aquitard** represented by the Glacial Lake Hackensack Lake Bottom that continuously underlies the LWBZ.

The site-specific groundwater conditions within the UWBZ and the LWBZ have been investigated through the installation and testing of groundwater monitoring wells in each zone. Furthermore, the hydrogeologic conditions of the Clay Aquitard have been evaluated using borehole data and laboratory testing of undisturbed soil samples.

The UWBZ occurs within the fill material. The thickness of fill, where present, ranges from 5 to 16 feet, with an average thickness of 9 to 10 feet.

The Tidal Marsh Deposits semi-confining unit includes the Organic Silt and Clay and Peat subunits (where present). This unit provides partial hydraulic separation between the UWBZ and the underlying LWBZ. The primary importance the Tidal Marsh Deposits semi-confining unit is that it serves as a geochemical barrier given its chemical reducing conditions.

The LWBZ occurs within the fine Sands and Silt of the Post-Glacial Fluvial Deposits. This unit is semi-confined by the overlying Tidal Marsh Deposits aquitard.

The Clay Aquitard is constituted by a thick and laterally continuous glacial lake clay. This and the underlying glacial till provide robust hydraulic separation between the aforementioned water-bearing zones and the underlying bedrock aquifer.

2.4.2 Hydraulic Conductivity

Hydraulic conductivity (K) is a coefficient of proportionality that describes the rate at which water can move through a permeable medium. The hydraulic conductivity of the artificial fill, which constitute the UWBZ, and the Post-Glacial Fluvial Deposits, which constitute the LWBZ, have been determined by rising head and falling head, *in-situ* (slug) tests. The hydraulic conductivity test data are provided in Table 113-02-02. The hydraulic conductivity data plots are presented in Appendix I. The hydraulic conductivity of the Clay aquitard was determined by laboratory testing of undisturbed soil samples. The results of the laboratory tests on the Clay aquitard are presented in Table 113-02-03.

Upper Water-Bearing Zone

The hydraulic conductivity of the UWBZ is highly variable based on the slug testing conducted during the investigation (Phase I and Phase II). Slug test data from a total of 12 wells screened within the UWBZ indicate a hydraulic conductivity that ranges from 4.9×10^{-5} cm/sec to 1.8×10^{-1} cm/sec, with a geometric mean of 1.4×10^{-3} cm/sec. This range of hydraulic conductivity is consistent with the range of grain size that characterizes the artificial fill soil.

Tidal Marsh Semi-Confining Unit

Hydraulic conductivity data were not directly obtained for the tidal marsh semi-confining unit at Site 113. However, it is assumed that the hydraulic conductivity of this unit is somewhat lower than that of the overlying artificial fill comprising the UWBZ and the sands that comprise the underlying LWBZ based the visual character of the material and the measured groundwater elevation differences across the unit.

Lower Water-Bearing Zone

The hydraulic conductivity of the LWBZ is somewhat less variable and slightly lower than that of the UWBZ, consistent with a visual comparison of the grain sizes of these units. The hydraulic conductivity values ranged from 5.7×10^{-5} cm/sec to 2.4×10^{-3} cm/sec with a geometric mean of 5.50×10^{-4} cm/sec. This is somewhat lower than the regional values reported for this unit by Stanford (1993), likely due the more fine-grained local character of the unit.

Clay Aquitard

The hydraulic conductivity of the underlying Clay Aquitard was measured in the laboratory on six (6) "undisturbed" borehole samples (Shelby-tubes). The geometric mean of these laboratory tests (Table 113-02-03) is 1.1×10^{-5} cm/sec which is many orders of magnitude greater than the regional values reported for this unit by Stanford (1993). This is explicable by the likely weathering of the upper surface of

the glacial lake clay that was sampled for laboratory testing, which would substantially increase the hydraulic conductivity. It is expected, however, that laboratory tests of samples collected deeper into the clay would yield hydraulic conductivity values less than 1 x 10^{-7} cm/sec, consistent with the published regional data.

2.4.3 Groundwater Flow

Groundwater flow is described below for the two primary water-bearing units underlying the Site.

Upper Water-bearing Zone

The potentiometric (water table) surface of the UWBZ has been defined on the basis of contemporaneous water level data obtained on various dates, as presented in Table 113-02-04. Potentiometric surface maps from two dates, November 1, 2007 and January 14, 2008, are presented on Figures 113-02-09 and 113-02-10, respectively.

The water table configuration, as shown in the UWBZ, is essentially controlled by the interaction of the shallow groundwater with the surface water features including the Hackensack River to the east, the 48" stormwater sewer to the south, the ditch along Bellville Turnpike to the east, and the tidal marsh north of the Amtrak railroad tracks to the north. This groundwater flow pattern is consistent with prior data.

The source of groundwater to the UWBZ is primarily the infiltration of incident precipitation. Accordingly, the groundwater flow pattern in the UWBZ is manifested as a radial groundwater flow pattern with a mound roughly in the center of the Site. The position of the center of the groundwater mound and also the maximum observed groundwater elevations is observed to vary substantially between the surfaces mapped on November 1, 2007 and January 14, 2008. This likely reflects the variable groundwater infiltration relationship in which groundwater levels were approximately 2 ½ feet higher in January 2008 after a period of increased precipitation and reduced evapotranspiration.

Lower Water-Bearing Zone

The potentiometric surface of the semi-confined LWBZ has been defined on the basis of contemporaneous water level data obtained on various dates, as presented in Table 113-02-04. Potentiometric surface maps from two dates, November 1, 2007 and January 14, 2008, are presented on Figures 113-02-11 and 113-02-12, respectively.

The potentiometric surface configurations of the LWBZ are observed to slope to the north and the east. This suggests that it is flowing toward and discharging to the tidal marsh located north of the Amtrak railroad tracks and the Hackensack River to the east. This groundwater flow pattern is consistent with prior data.

Comparison of the potentiometric surfaces in the LWBZ and the UWBZ on corresponding dates reveals that a substantial downward gradient exists across the tidal marsh semi-confining unit across the entire Site, except for the margin along the Hackensack River. The establishment of this gradient demonstrates that the Tidal Marsh Deposits semi-confining layer provides a measure of hydraulic separation between the two water-bearing zones.

Groundwater within the LWBZ flows horizontally from the adjacent Standard Chlorine Site located to the south. In addition, the LWBZ receives a component of downward vertical flow from the overlying UWBZ. The rate of this vertical flow is limited, however, by the hydraulic conductivity of the intervening Tidal Marsh Deposits semi-confining layer. Some seasonal variation in groundwater levels is evident in the LWBZ, but to a smaller degree than the overlying UWBZ.

2.4.4 Tidal Assessment

The impact of tidal fluctuations on groundwater levels was assessed in 1994 (Brown and Caldwell, 2001a). Tides within the Lower Hackensack River Basin are semi-diurnal, with two high waters and two low waters per day. According to published National Oceanic and Atmospheric Administration (NOAA) tide tabulations, the mean astronomical tide range within the estuary varies from 5 feet near the mouth to 6.5 feet near the head. The tides within the system are nearly equal in amplitude or slightly amplified relative to the tides at the open boundary. The tidal bulge arrives at the city of Hackensack (10 miles upstream) approximately 85 minutes after arrival at the mouth of the river. Due to the 85-minute lag time, the Hackensack River tides are partially progressive waves and capable of vigorous mixing.

Estimates for the tidal prism (intertidal volume) are large relative to the freshwater inflow to the Lower Hackensack River Basin. The total volume influx on two successive flooding tides was calculated by Mattson *et. al.* (1976) to be approximately 13,800 mgd (including contributions from runoff, sewage treatment plant discharges, and upstream discharge). Due to its large tidal prism relative to the freshwater inflow, and its relatively shallow depth (<30 feet), the Lower Hackensack River Basin is generally well-mixed vertically and laterally.

Two tidal studies were conducted to characterize the effects of tidal fluctuations in the Hackensack River on the two water-bearing zones beneath Site 113 (Brown and Caldwell, 2001). The purpose of the first tidal study was to evaluate the magnitude and horizontal extent of tidal influence, if any, on the two water-bearing zones. The second tidal study was conducted to confirm the findings of the first tidal study, and to define the magnitude and horizontal extent of tidal influence observed in the LWBZ.

The first tidal study was conducted on October 15, 1992 on three well couplets, 113-W-102/113-W-114; 113-W-103/113-W-115; 113-W-104/113-W-116, located approximately 1240 feet, 480 feet, and 30 feet, respectively, from the low-tide shoreline of the Hackensack River. Based on the results of the first study, a second confirmatory study was conducted on January 15, 1993 on three well couplets adjacent to the Hackensack River, 113-W-104/113-W-116; 113-W-106/113-W-118; 113-W-105/113-W-117, located approximately 30 feet, 80 feet, and 120 feet, respectively, from the low-tide shoreline of the Hackensack River(Brown and Caldwell, 2001a).

The water elevation in the Hackensack River was continuously monitored during the duration of both tidal studies to determine if tidal fluctuations in the Hackensack River influence water levels in the two water-bearing zones beneath Site 113.

2.4.4.1 First Tidal Study

Monitoring wells 113-W-114, 113-W-115, and 113-W-116 are screened in the UWBZ. Monitoring wells 113-W-102, 113-W-103, and 113-W-104 are screened in the LWBZ. Hydrographs indicating the change in water levels over time for the six monitoring wells and the Hackensack River are shown in Figure 113-02-13. The data collected spanned 4 tide cycles (6000 minutes) to address the effect of the flood and ebb tides.

The hydrographs indicate that the Hackensack River has two high and two low tides that are approximately equal in amplitude within the tidal cycle (24 hours and 50 minutes). These tides are classified as semi-diurnal tides. The tidal period, or the time between two high tides (or two low tides), is 12 hours and 25 minutes.

The shallow monitoring wells did not show a response to tidal fluctuations in the Hackensack River. These results are consistent with the results of tidal studies at other Sites adjacent to the Hackensack River in the area. Thus, the tidal fluctuations in the Hackensack River do not appreciably influence water levels in the UWBZ at the Site.

As shown in Figure 113-02-13, tidal fluctuations in the Hackensack River caused groundwater level fluctuations in only one deep monitoring well, 113-W-104. The ratio of the amplitude of tidal fluctuations in 113-W-104 to the corresponding amplitude of the Hackensack River resulted in tidal efficiency of approximately 27%. The deep monitoring wells further from the river (113-W-103, 480 feet away; and 113-W-102, 1,240 feet away) did not exhibit tidal influence.

2.4.4.2 Second Tidal Study

Based on the results from the first study, a second confirmatory study was conducted on three well couplets adjacent to the Hackensack River, 113-W-116/113-W-104; 113-W-118/113-W-106; 113-W-117/113-W-105, located approximately 30 feet, 80 feet, and 120 feet respectively, from the Hackensack River.

Monitoring wells 113-W-116, 113-W-117, and 113-W-118 are screened in the UWBZ. Monitoring wells 113-W-104, 113-W-105, and 113-W-106 are screened in the LWBZ. Hydrographs indicating the change in water levels over time for all six wells and the Hackensack River are shown in Figure 113-02-14. The data collected spanned 2.6 tidal cycles (4000 minutes) to balance the effect of the flood and ebb tides.

As with the first study, none of the shallow wells indicated a response to the tidal fluctuations during this study period. However, each of the three deep monitoring wells exhibited tidal fluctuations as follows:

Well Number	Tidal Efficiency
113-W-104	27%
113-W-105	10%
113-W-106	13%

The results of these tidal studies indicate that the daily fluctuations in the stage of the Hackensack River have little, if any, influence on the direction or rate of groundwater flow at the Site.

2.4.5 Groundwater Usage/Well Search

Groundwater in Kearny, NJ is saline, and is not usable as a potable drinking water source. This has been confirmed by a well record search from the NJDEP Bureau of Water Allocation (BWA) to locate permitted wells within a two-mile radius of Site 113. The search was completed in September 1999, and a total of approximately 1,700 wells were identified. Of these wells, none are likely used for potable water supply.

The well records provided by BWA including the well permit number, the date installed, the map grid coordinates, the well's owner, and listed use. Of the 1,700 wells, the vast majority are identified as either monitoring wells or landfill gas wells. Since the objective of the well search was to identify potential groundwater users, monitoring wells and landfill gas wells were removed from consideration. A well record search was repeated in May 2007, which did not reveal any additional water supply wells that were not included in the prior search. A summary of the pertinent information obtained from the well records is provided on Table 113-02-05. The results indicate that of the 30 wells, 14 were listed as "recovery" wells, 10 were listed as "industrial", and two were listed as "cooling". There was one well listed as "public" and one

well listed as "domestic". The records do not indicate if the wells are still active. Based on a review of Figure 113-02-15, only one well is within the vicinity of Site 113 (well #8). However, the reported location of this well on the south side of Belleville Turnpike does not coincide with any existing structures or operations. Since it was installed over 30 years ago by a construction company for "toilet and washing only", it may have been installed to supply a temporary office trailer, or the like. In any case, the well was reported to be 215 feet deep and was therefore screened in the bedrock. The quality of the water was described as "brackish" on the well record.

2.5 Analytical Data Evaluation

The discussion presented in this section provides a summary of the data results, and comparison to relevant standards. Box-plot style maps have been prepared along with geographical information system (GIS) colored-dot or bubble plots. The GIS bubble plots are used for discussion below, the box-plots are presented in Appendix K.

2.5.1 Pre-IRM Soil Sample Data

Pre-IRM soil sampling was not conducted at Site 113 on the basis that it was understood that COPR was used as artificial fill throughout the Site during and subsequent to its use as a chromium chemicals manufacturing facility.

2.5.2 Pre-IRM Air Sampling Data

A total of 34 air samples for Cr(VI), 5 samples for total Cr and 2 samples for TSP were collected at the Site. Cr(VI) concentrations detected in samples using the impinger method ranged from 0.8 to 3.5 ng/m^3 in the indoor areas. The outdoor Cr(VI) concentrations ranged from 0.4 to 0.6 ng/m^3 and the Cr(VI) concentrations detected during the air flow rate comparison study in Areas 1 and 2 ranged from 0.16 to 2.2 ng/m^3. The highest concentration of Cr(VI) detected in samples (3.4 ng/m^3) is at least 1,470 times below the current Occupational Safety and Health Administration (OSHA) Permissible Exposure Level (PEL) of 5,000 ng/m^3 for Cr(VI), and is approximately 29 times below the EPA Reference Concentration (RfC) of 100 ng/m^3.

Total Cr concentrations ranged from 17 to 300 ng/m^3 in the indoor areas. A single outdoor air sample was analyzed for total Cr, with a result of 14 ng/m^3. While there currently is no OHSA PEL for total Cr, the maximum concentration of 14 ng/m^3 is substantially lower than both the Cr(VI) PEL of 5000 ng/m^3 and the Cr(III) PEL of 500,000 ng/m^3.

The OSHA PEL values are applicable for the evaluation of the potential hazards posed by chromium in soil to Site workers because they are the only promulgated guidance regarding acceptable airborne concentrations for occupational exposures. Thus, the implementation of IRM activities, although not necessary from the OSHA airborne exposure perspective, further reduced the potential for worker exposure to airborne particulates associated with the Site. Table 113-02-33 reproduces the data presented in the December 31, 1990 report "Airborne Chromium Sampling Report, " (ChemRisk, 1990b).

2.5.3 RI Soil Sample Data

Surface and subsurface analytical data are described below. Soil data are presented in Tables 113-02-06 through 113-02-12. Constituent distribution maps are presented in Figures 113-02-16 through 113-02-26.

Generally surface samples are defined as being collected within 0.5 feet of the ground surface; however, when samples were collected through the IRM, surface samples are defined at the 0.5 feet below the asphalt and DGA layer.

2.5.3.1 Surface Soils

The total Cr results for the surface soil samples are presented in Table 113-02-06. The total Cr data range from 5.5 (113-B-306) to 27,200 mg/kg (113-B-113). The duplicate sample total Cr result for 113-B-118D was 30,200 mg/kg, however the primary sample result was 26,700 mg/kg. Select samples from the Phase I RI were analyzed for total Cr at Enseco RMA laboratory. Figure 113-02-16 presents the distribution of total Cr in surficial soil. There is no SRS for total Cr.

The Cr(VI) results for the surface soil samples are presented in Table 113-02-06. The Cr(VI) data range from not detected above 0.41 mg/kg (113-SS-208) to 5,200 mg/kg (113-B-131). Figure 113-02-017 presents the distribution of Cr(VI) in surficial soil. There is no SRS for Cr(VI).

The pesticide/PCB results for the surface soil samples are presented in Table 113-02-07. The majority of pesticide/PCB results were not detected. Only two locations exceeded the current SRS of 1.0 mg/kg for total PCBs, soil boring 113-B-116 for PCB-1260 and soil boring 113-B-130 for PCB-1254. Delineation sampling was conducted in 2007 during the Phase II RI, at which time the New Jersey non-residential direction contact soil clean-up criteria for total PCBs was 2.0 mg/kg. Soil Borings 113-B-116A, E, F, and G surround the original boring in a grid; sample results from the borings do not exceed either the former total PCB criterion of 2.0 mg/kg or the current SRS for total PCB of 1.0 mg/kg. As the sample from 113-B-130 resulted in the detection of PCB-1254 at 1.5 mg/kg when the criterion was 2.0 mg/kg for total PCBs, no delineation sampling was conducted during Phase II at that location. Figure 113-02-018 presents the horizontal distribution of total PCBs in surficial soil samples.

The SVOC results for surface soil samples are presented in Table 113-02-08. Naphthalene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd) pyrene, and dibenzo(a, h)anthracene exceeds the NJ SRS in one or more samples. Naphthalene exceeds the SRS in samples 113-B-107 and 113-B-125. Approximately 37% of the samples analyzed for benzo(a)anthracene exceed the SRS of 2 mg/kg with values ranging from 0.070 (113-B-102) to 66 mg/kg (113-B-123). Chrysene exceeds the SRS of 230 mg/kg in sample 113-B-125. Approximately 48% of the samples analyzed for benzo(b)fluoranthene exceed the SRS of 2 mg/kg with values ranging from 0.074 (113-B-113) to 80 mg/kg (113-B-123). Samples 113-B-130 and 113-B-110 exceed the SRS of 23 mg/kg for benzo(k)fluoranthene. Approximately 71% of the samples analyzed for benzo(a)pyrene exceed the SRS of 0.2 mg/kg with values ranging from 0.079 (113-B-115) to 49 mg/kg (113-B-123). The results for indeno (1,2,3-cd) pyrene and dibenzo(a,h)anthracene do not exceed the SRS with the exception of 113-B-107, 113-B-123, 113-B-130. Several additional samples exceed the SRS. Figures 113-02-19 through 113-02-24 present the horizontal distribution of select SVOCs. Much of the sample area is beneath asphalt, a known source of many of the constituents discussed above, most notably the PAHs.

The metals of interest and TAL metals results are presented in Table 113-02-09 and 113-02-10, respectively. The sample results do not exceed the current NJ SRS with the exceptions of 113-B-119 for arsenic (19 mg/kg) and lead (800 mg/kg), 113-B-111 for lead and samples 113-B-121, 113-B-131, 113-B-135 for vanadium (1,100 mg/kg). Figures 113-02-25 presents the spatial distribution of arsenic.

2.5.3.2 Subsurface Soils

The total Cr results for the soil samples presented in Table 113-02-06 indicate a range from 7.2 mg/kg (113-B-107) to 66,400 mg/kg (113-B-303). The Cr(VI) results for soil samples, presented in Table 113-02-06, indicate a range from <0.41 mg/kg (113-B-107) to 19,100 mg/kg (113-B-121).

Figures 113-02-16 and 113-02-17 illustrate the distribution of total Cr and Cr(VI), respectively, in soils for Site 113; the figures also depict the vertical intervals from which the samples were collected.

Collectively these data indicate the majority of the Site contains elevated levels of total Cr and Cr(VI) above the tidal marsh deposits as a result of the COPR filling that has occurred on-site. The relative concentration of Cr(VI) in COPR compared to the concentration found below the tidal marsh deposits are typically several orders of magnitude larger, demonstrating the role the tidal marsh deposits have in reducing Cr(VI) to Cr(III). This supports the historical accounts and field findings, as documented in the boring logs, that COPR fill was not placed below the tidal marsh deposits.

Pesticides and PCBs were not detected above the current SRS of 1 mg/kg for total PCBs in subsurface soil samples, with one exception. The exception was the detection of PCB-1260 in soil boring 113-B-116 (2-4' bgs) at 1.1 mg/kg. Because the surficial soil sample from soil boring 113-B-116 exceeded 2 mg/kg, as indicated above, delineation sampling was performed as part of the Phase II RI in 2007. Soil borings 113-B-116A, E, F, and G, collected during the Phase II RI completed delineation of the horizontal extent of this exceedance of the current SRS for total PCBs. Table 113-02-07 presents the pesticide/PCBs results. Figure 113-02-18 presents the total PCB areal distribution.

The samples analyzed for VOCs did not result in exceedances of any of the SRSs for VOC constituents. VOC results are presented in Table 113-02-11.

Figure 113-02-26 illustrates the distribution of TPH concentrations in soil. Although there are no current SRSs established for TPH, the NJ Technical Requirements for Site Remediation require that PAHs analysis be conducted on 25% of samples with concentrations of TPH exceeding 100 mg/kg. PAHs and other SVOCs, which may include compounds detected by TPH analysis, are discussed below. Figure 113-02-26 presents the distribution of TPH concentrations. Although there is no discernable pattern to the spatial distribution of the exceedances, the two borings with the highest concentrations (over 5,000 mg/kg in borings 113-B-111 and 113-B-135) are located near the former underground fuel tanks. Table 113-02-12 presents the TPH results.

The majority of samples analyzed for SVOCs did not exceed the NJ SRS. Sample 113-B-109 exceeded the benzo (a) pyrene criterion at 1.9 mg/kg. Sample 113-B-125 exceeded the benzo (a) anthracene criterion at 6.9 mg/kg. Figures 113-02-19 through 113-02-24 present selected SVOCs and total SVOC results. SVOC results are presented in Table 113-02-08.

Although the Phase I RI soil samples were analyzed for the full suite of TAL metals, the NJDEP designated six metals of interest that were specifically included as potential indicators of COPR-enriched soils. These data are summarized on Table 113-02-09 and were the subject of a statistical evaluation conducted in 1996 at the request of the NJDEP. The remaining TAL metals data are presented in Table 113-02-10. The objective of the statistical evaluation was to assess the potential correlation of each of the six metals with either total Cr or Cr(VI) concentrations in soil. The results were submitted to the NJDEP on May 21, 1996 in a report

entitled: "Statistical Correlation Analysis of Selected TAL Metals with Site 113 COPR and Evaluation of 140 mg Cr(VI) Interim Sampling Soil Delineation Goal" (Applied Environmental Management (AEM) & ChemRisk, 1996). A summary of the results is provided below:

- Based on the results of the linear regression analysis of the six TAL metals of interest versus total Cr and Cr(VI), statistically significant relationships exist between Sb and Cr(VI), Ni and total Cr, and Ni and Cr(VI) for the Site 113 soils data. The correlations for Ni are comparable to the correlations of Ca versus total Cr and Mg versus total Cr, which are two major metals in COPR. The correlation for Sb versus Cr(VI) is much weaker than the Ni correlations, and there is a very weak correlation between Sb and total Cr.
- Based on comparison of the Site 113 soils data to published data for the metals of interest, As, Ni, and V in Site 113 soils are statistically greater than their respective concentrations in background soils in New Jersey.
- The six TAL metals of concern are not water extractable from Site 113 COPR (Sb, Be, and Cd were below detection limits in COPR composite sample) according to a standard ASTM leaching procedure, signifying that they are not prone to be mobilized from COPR in typical environmental settings.

During Phase II selected samples were also analyzed for the six (6) metals of interest at a rate of one (1) in ten (10) in accordance with the NJDEP approved SRIWP. These data are presented in Table 113-02-09. The NJ SRS for As was exceeded in 16 samples and the criterion for Be was exceeded in three samples. Sample 113-B-115 exceeds the criterion for V. No other TAL metal was reported above these criteria. Figure 113-02-25 presents the spatial distribution of As.

2.5.4 RI Groundwater Sample Data

The groundwater sampling results obtained from each sampling round are presented on Tables 113-02-13 through 113-02-19. The aerial distribution of selected constituents for groundwater is presented in Figures 113-02-27 through 113-02-41. Each groundwater sample was split into two samples, with one being field filtered through a 0.45-micron filter and the other remaining unfiltered. The filtered and unfiltered samples were analyzed for total Cr and Cr (VI). Although NJDEP policy requires that groundwater quality standards be compared only to unfiltered results, a comparison of the filtered results to the unfiltered results was performed to determine whether turbidity was affecting total Cr results, thereby biasing the unfiltered results artificially high.

Unless otherwise indicated, the analytical discussion below focuses on the Phase II groundwater sampling events. Field data sheets for both rounds of the Phase II RI sampling are presented in Appendix L.

2.5.4.1 Total Chromium

Total Chromium, Upper Water-Bearing Zone

Total Cr results exceeded the New Jersey Groundwater Quality Criterion (NJGWQC) for total Cr of 70 µg/L in each location sampled within the UWBZ during the first sampling round of the Phase II RI with the exception of filtered results from 113-W-301(S) and 113-W-120(S). In the second round of Phase II, sample results for total Cr exceeded the NJGWQC for each well with exception of filtered results from 113-W-119(S), 113-W-120(S), 113-W-121(S), 113-W-122(S), 113-W-301(S) and unfiltered results 113-W-301(S). The highest concentrations were generally in the northwestern portion of the Site as shown on Figures 113-02-27 and 113-02-28. Total Cr concentrations in the UWBZ were found at a maximum value of 279,000 µg/L from the filtered sample collected from 113-W-303(S). Total Cr results are presented in Table 113-02-13.

Total Cr concentrations exhibit somewhat lower values along the southern border and in the interior of the Site, specifically near monitoring wells 113-W-115(S), 113-W-122(S), and 113-W-119(S).

Total Chromium, Lower Water-Bearing Zone

Total Cr is detected in each of the sampled LWBZ wells. Furthermore, most of the LWBZ results for total Cr exceed the NJGWQC of 70 µg/L. In approximately half of the wells, the total Cr concentrations were substantially lower than the total Cr concentrations in the corresponding UWBZ wells. The attenuation of total Cr in the LWBZ likely reflects the variability in the character of the Tidal Marsh Deposit semi-confining unit to restrict downward, vertical groundwater flow from the overlying UWBZ.

Table 113-02-13 presents the Total Cr results for groundwater samples. Samples collected from monitoring wells 113-W-104 and 113-W-109 were found to contain total Cr concentrations less than NJGWQC during both sampling rounds of Phase II. The filtered sample collected during the second round of sampling from monitoring well 113-W-107D was also less than NJGWQC; the unfiltered portion of this sample was slightly greater than NJGWQC of 70 µg/L at 70.1 µg/L. As in previous sampling rounds, the corresponding Cr(VI) results for the remaining samples are substantially lower than the associated total Cr result. This trend implies the presence of Cr(III) instead of Cr(VI). The presence of this apparently soluble Cr(III) below the tidal marsh deposits prompted a supplemental field investigation following Phase I but prior to Phase II. The results of the investigation can be found in Appendix M and are summarized as follows.

Three groundwater monitoring wells located on Site 113, and one monitoring well located on Site 54 (Pfaff Tool) were selected for additional evaluation due to the reported elevated soluble Cr(III) present below the tidal marsh deposits. These wells included 113-W-101, 113-W-102, and 113-W-105 on Site 113 and well 54-W-110. The Site 54 monitoring well was included because a similar phenomenon regarding organics complexing with Cr(III) had been observed in groundwater at Site 54. The groundwater samples analyzed in this evaluation were collected immediately adjacent to these wells using a GeoProbe® sampler. These samples were collected by driving the sampling probe to the desired depth, and then exposing a six-inch long screen to the saturated soil. Each of these "temporary well points" was then purged and sampled using dedicated flexible tubing with a check valve. In this manner, three groundwater samples were collected at each Direct-Push boring location. One sample was collected directly above the tidal marsh deposits, one directly below the tidal marsh deposits, and one in the lower portion of the underlying alluvial sand. In the boring advanced adjacent to well 113-W-101, an additional sample was collected in the UWBZ, just below the water table.

The samples were sent to SECOR Geochemistry in Sacramento, CA for analysis of total Cr, Cr(III), and Cr(VI). The samples were also subjected to reanalysis after filtering in the laboratory with both 0.4 and/or 0.1 micron filters to remove fine particulates from the aqueous phase. Source samples were also analyzed for total organic carbon (TOC) and select cations and anions.

The results are summarized on Table 113-02-14 and are provided in Appendix M. The data indicate that the higher concentrations of total Cr are present in the shallow samples collected from the UWBZ above the tidal marsh deposits with several, including those collected at locations 113-W-102 and 113-W-105, having concentrations exceeding the NJGWQC of 70 µg/L. None of samples collected below the tidal marsh deposits in the LWBZ were found to have total Cr concentrations exceeding the NJGWQC. In the shallow samples above the tidal marsh deposits, the Cr was present almost exclusively as Cr(VI), while in the deeper samples, the predominant form was Cr(III). Filtration of the samples through a 0.4 micron filter did not significantly reduce the amount of Cr in the aqueous phase. However, filtration through a 0.1 micron filter typically decreased the Cr concentration between 20 and 80 percent. TOC was particularly low in samples containing predominantly Cr(VI), and relatively high in samples containing predominantly Cr(III). The

correlation between TOC and Cr(III), in conjunction with the effects of filtration on Cr concentration, indicates that the Cr(III) was likely associated with the organic matter and was not freely dissolved in the aqueous phase. Anion analyses indicating little nitrate and no phosphorous in the samples, coupled with the negative ORP values in the samples, supports a determination that reduction of Cr(VI) to Cr(III) was due primarily to chemical reaction between Cr(VI) and the organic matter, rather than to biological activity.

These results are consistent with the groundwater data provided in Figures 113-02-27 through 113-02-30. The elevated total Cr concentrations in the LWBZ reflect predominantly Cr(III) that is believed to have precipitated as a metallic hydroxide and complexed with organic compounds in the tidal marsh deposits, resulting in low levels of soluble, slightly mobile Cr(III) in the groundwater immediately below the tidal marsh deposits. However, this mobility appears to be limited as the deeper samples generally contained lower concentrations of Cr(III). Furthermore, the soils beneath the tidal marsh deposits did not contain detectable levels of Cr(VI) and total Cr was at background levels.

The general absence of Cr(VI) in the LWBZ, as depicted in Figures 113-02-29 and 113-02-30 support this scenario, with the exceptions of deeper monitoring wells 113-W-102, 113-W-301, and 113-W-304. The reported presence in May 1996 of Cr(VI) in the LWBZ monitoring well 113-W-104 appears to be anomalous particularly since the Phase II sampling rounds both resulted in undetectable concentrations (<10 µg/L). Prior sampling of these wells in 1993 suggests a reversal of this relationship, with the greater concentration of Cr (VI) occurring in the shallower well. Thus, the 1993 data distribution would be consistent with behavior described in the prior paragraph. Based on this, it is assumed that the 1996 event experienced a field error whereby the well identification and/or sampling identification numbers of the shallow and deep wells were inadvertently reversed. A similar error is believed to have occurred in the case of deep well 113-W-107, which exhibited 2,100 µg/L of Cr(VI) in June 1993, but no detectable Cr(VI) in May 1996. The occurrence of these field errors in 1996 has been supported by results from more recent groundwater sampling events. For example, results from both the Phase I and Phase II groundwater sampling rounds confirmed that Cr(VI) is not present in 113-W-104. Thus, the anomalous 1996 data does not conflict with the conceptual model presented in the prior paragraph. Table 113-02-13 presents the total Cr and Cr(VI) data for each sample collected during both phases of the RI.

2.5.4.2 Hexavalent Chromium

Hexavalent Chromium, Upper Water-bearing Zone

Cr(VI) is detected in approximately half of the UWBZ wells, most of which are located along the northern boundary and west-central portions of the Site. Groundwater quality data for Cr(VI) are presented in Table 113-02-13 and are plotted on Figures 113-02-29 and 113-02-30. The 1993, 1996, 2007 and 2008 sampling events are represented on these tables. Figures 113-02-29 and 113-02-30 display the 2007 and 2008 sampling events, respectively. As shown on Figure 113-02-29, concentrations of Cr(VI) in groundwater above the tidal marsh deposits were detected in nine of the fifteen monitoring wells screened in the UWBZ. Detected Cr(VI) concentrations ranged from 119 µg/L (113-W-115S) to 310,000 µg/L (113-W-303S). This is not unexpected considering that these wells are screened directly within COPR or COPR-affected soils. The four of the six wells that did not report Cr(VI) above the detection limit of 10 µg/L (113-W-119S, 113-W-120S, 113-W-121S, and 113-W-301S) are located along the property boundary between Sites 113 and 116. It is noteworthy that the soil samples collected from the four associated borings did not contain elevated levels of Cr(VI). In fact, a comparison between Figures 113-02-29 and 113-02-30 with Figure 113-02-17 indicates a high degree of correlation between Cr(VI) concentrations in soil and groundwater in the UWBZ. This suggests that Cr(VI) does not remain at elevated concentrations in the groundwater beyond the limits of COPR soil deposits. This is consistent with findings at other COPR sites such as Sites 42 (ECIS), 46 (Jenkins), and 48 (Clinton Cartage). It is noteworthy that the Cr(VI) data reported for monitoring well

113-W-116 located in the northeastern corner of the Site indicate elevated concentrations for the 1993 sampling event, but less than the detection limit for the 1996 event. As discussed above, the anomalous distribution in 1996 is believed to be a result of a recording error in the field.

Hexavalent Chromium, Lower Water-Bearing Zone

Cr(VI) is absent from the LWBZ with the exception of four (4) deep monitoring wells. The concentrations of Cr(VI) in these samples are up to four orders of magnitude lower than the concentrations in the corresponding UWBZ wells. For example, the January 2008 Cr(VI) concentration in 113-W-303S was 310,000 μg/L while the result from 113-W-303D from the same date was <10 μg/L. The January 2008 Cr(VI) concentration in 113-W-114 was 19,100 μg/L while the result from 113-W-102 from the same date was 177 μg/L. Generally Cr(VI) was not detected; those samples that had detectable concentrations of Cr(VI) only one, 113-W-102, exhibited a result greater than the NJGWQC for Cr(VI) of 70 μg/L.

These data demonstrate that the Tidal Marsh Deposits semi-confining layer serves as an geochemical barrier to the migration of a substantial amount of Cr(VI) from the UWBZ into the LWBZ.

The LWBZ wells in which Cr(VI) was detected include 113-W-302D in 2007, and 113-W-102D, 113-W-304D, and 113-W-301D in 2008. These data are presented in Table 113-02-13. It is noteworthy that for samples collected at 113-W-301(D) and 302(D) during the first sampling round of the Phase II RI in 2007, the detection limit of 1,000 μg/L was too high for a meaningful assessment on the presence or absence of Cr(VI) at these locations. Detectable concentrations of Cr(VI) may have also been present in those monitoring wells in 2007.

The occurrence of Cr(VI) in these deeper wells could be perceived as contradictory to the conceptual model discussed previously in this report. However, the locations of these particular deeper wells are either below or downgradient of the alignment of former Dead Horse Creek. These data suggest that Cr(VI) may have migrated vertically downward from the UWBZ through portions of the Tidal Marsh Deposits semi-confining layer that may have thinned through the construction of Dead Horse Creek prior to establishing the Cr manufacturing facility on the Site. This pattern is not consistent, however, as 113-W-101, 113-W-103, 113-W-104, and 113-W-303D, which did not have detectable Cr(VI) concentrations during either Phase II sampling events, are also located below or downgradient of the alignment of the former Dead Horse Creek. Furthermore the results from 113-W-302(D) revealed no detectable concentrations (<10 μg/L) of Cr(VI) in 2008, but levels of Cr(VI) at 33 μg/L (unfiltered) and 36.4 μg/L (filtered) during the prior 2007 sampling event. This pattern of detections in some locations but not in others and the temporal changes observed in 113-W-302(D) may indicate that thinning of former Dead Horse Creek may have only been partial, and that this combined with changing flow patterns that commonly occur in aquifers due to variable recharge patterns could explain the concentration variations at 113-W-302(D). The results are variable, however the fact remains that the tidal marsh deposits are acting as an attenuation zone as is evidenced by the large orders of magnitude differences in Cr(VI) concentrations between the UBWZ and the LWBZ.

2.5.4.3 Pesticides/PCBs

Groundwater samples were analyzed for pesticides during the Phase I RI. Table 113-02-15 presents the pesticide data. Samples collected during the Phase II RI were not analyzed for pesticides. Figure 113-02-02 presents the sample locations, which are discussed below.

Pesticides/PCBs, Upper Water-bearing Zone

With the exception of dieldrin in one sample from 113-W-120, pesticides were detected above NJGWQC in samples collected from the upper water-bearing zone. A second round of samples collected during Phase I that included 113-W-120 yielded no pesticides/PCBs that were detected at concentrations above the associated NJGWQC.

Pesticides/PCBs, Lower Water-bearing Zone

A total of ten pesticide/PCB compounds exceeded their respective criteria as shown in Table 113-02-15. The exceedances of the NJGWQC were reported in six of the monitoring wells. PCBs (Aroclors 1242 and 1254) were detected above the NJGWQC for total PCBs in the sample collected from 113-W-104; the duplicate collected from this location exhibited no detections of PCBs. Heptachlor was detected above the NJGWQC in 113-W-015. Seven of the pesticides/PCBs were detected above the NJGWQC in 113-W-106; these were alpha, beta, and gamma BHC, heptachlor, aldrin, 4,4-DDE and 4,4-DDD. Dieldrin was detected above the NJGWQC in 113-W-107 during the 1993 Phase I sampling event; the subsequent 1996 sampling event did not result in an exceedance for dieldrin.

2.5.4.4 Volatile Organic Compounds

Select VOCs are discussed below. These COCs were selected based on exceedance frequency or as requested by NJDEP in the RI comments letter. Only the most recent results, that is the last sampling round from Phase I, and the two VOC samples collected from 113-W-116S and 113-W-104D during Phase II, are included in this discussion. The COCs are as follows: acetone, total 1,2-dichloroethene, trichloroethene, tetrachloroethene, benzene, and chlorobenzene. VOCs are not a Site-related constituent group. As shown in Figures 113-02-31 through 113-02-35, exceedances of NJGWQC are associated with well clusters generally located in the southeastern corner of the Site. Monitoring wells in which exceedances were observed are each either downgradient to or along the border of Site 116.

VOCs were targeted for analysis during both phases of the RI. The Phase II VOC sampling was limited to two wells, and was specifically performed to confirm acetone and chlorobenzene results obtained during the Phase I RI. Unless noted, the discussion below addresses the Phase I VOC results. VOC results are presented in Table 113-02-16.

VOCs, Upper Water-Bearing Zone

Acetone was detected above the then NJGWQC of 700 μg/L at 1,200 μg/L in monitoring well 113-W-116. Since Phase I, the NJGWQC has changed to 6,000 μg/L. This monitoring well was re-sampled during both rounds of Phase II. Acetone was detected at 350 and 440 μg/L, respectively, substantially less than both the previous reported results and the current NJGWQC of 6,000 μg/L.

With the exception of benzene none of the remaining selected VOC constituents exceeded the NJGWQC in the UWBZ. Benzene was detected above the NJGWQC of 1 μg/L in the sample collected from monitoring well 113-W-119(S) during Phase I. Monitoring well 113-W-119(S) is located near the border of Site 116. Benzene was not detected in any other samples collected from the other UWBZ monitoring wells, although the detection limits for each sample were greater than the NJGWQC.

Chlorobenzene had previously been observed in 113-W-116. Although this detection was below the associated NJGWQC, the NJDEP requested that its presence in this monitoring well be confirmed. Phase II RI sampling did not result in a detection of chlorobenzene in 113-W-116.

Based on these results, the presence of VOCs in groundwater in the UWBZ at Site 113 cannot be attributed to on-site sources; samples collected from monitoring wells downgradient from Site 116 resulted in detected concentrations greater than concentrations detected in other monitoring well at Site 113. Wells where VOCs were measured in concentrations exceeding NJGWQC were located along the property boundary with Site 116.

VOCs, Lower Water-bearing Zone

Several VOCs were detected in the LWBZ wells located downgradient adjacent to the Standard Chlorine Site (Site 116). The VOC detections are described below.

Acetone was not detected above the NJGWQC of 6,000 μg/L.

Total 1,2-dichloroethene (total 1,2-DCE) was detected in samples from three monitoring wells, 113-W-105(D) through 113-W-107(D). These wells are downgradient of Site 116. One sample, which was collected from 113-W-106(D), exceeded the NJGWQC for both the *cis* and *trans* congeners of 1,2-DCE (70 and 100 μg/L, respectively). 113-W-106(D) is located near the Site boundary that is shared with Site 116.

Trichloroethene was detected above the NJGWQC of 1 μg/L in monitoring wells 113-W-105(D) through 113-W-107(D). No other wells sampled had detectable concentrations of trichloroethene.

Tetrachloroethene was detected above the NJGWQC of 1 μg/L in monitoring wells 113-W-105(D) and 106(D). No other wells sampled had detectable concentrations of trichloroethene.

Benzene was detected above the NJGWQC of 1 μg/L in monitoring wells 113-W-105(D) through 113-W-107(D). These wells are along the boundary of Site 116. No other wells sampled had detected concentrations of benzene above the NJGWQC.

Chlorobenzene was detected above the NJGWQC of 50 μg/L in monitoring wells 113-W-105(D) and 106(D); these wells are located downgradient of Site 116. Two other wells had detectable concentrations of chlorobenzene; however, these results are less than NJGWQC.

2.5.4.5 Total Petroleum Hydrocarbons

Samples were analyzed for TPH during the Phase I RI. The analytical results are presented in Table 113-02-17 and the areal distribution is presented on Figure 113-02-36.

Upper Water-bearing Zone

The most recent TPH results are depicted on Figure 113-02-36. As shown on this figure TPH was not detected in the UWBZ.

Lower Water-bearing Zone

Measureable concentrations of TPH were detected in three monitoring wells, 113-W-105(D), 113-W-107(D), and 113-W-108(D). Each of the wells is either downgradient or along the boundary with Site 116.

2.5.4.6 Semi-volatile Organic Compounds

Select SVOCs are discussed below. These COCs were selected either based on exceedance frequency, their known prior presence in groundwater at adjacent Site 116, or as requested by NJDEP. The COCs are as

follows: 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, naphthalene, and benzo(b)fluoranthene. SVOCs are not a Site-related constituent. While detections occasionally occurred in the UWBZ, the concentrations detected were less than the NJGWQC and are substantially less than the concentrations measured in the LWBZ. Concentrations in the LWBZ are found either downgradient or along the boundary with Site 116. SVOCs results are presented in Table 113-02-18. Each of the detections/exceedances discussed below occur either downgradient from or along the border of Site 116. The areal distribution of select SVOC data are presented on Figures 113-02-37 through 113-02-41.

SVOCs, Upper Water-Bearing Zone

The following SVOCs were detected in the tested monitoring wells at greater than the NJGWQC: 1,2,4-trichlorobenzene, naphthalene, benzo(a)anthracene, bis(2-ethylhexyl)phthalate, chrysene, and benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1.2,3-cd) pyrene, and dibenz(a,h,i) perylene.

1,2,4-Trichlorobenzene and naphthalene were detected above the NJGWQC of 9.0 and 300 μg/L, respectively, in the sample collected from monitoring well 113-W-118(S) during Phase I. Monitoring well 113-W-118(S) is located near the border of Site 116. Naphthalene was not detected above NJGWQC in any other UWBZ wells. Various COCs in the polycyclic aromatic hydrocarbon (PAH) group were detected above their NJGWQC in wells 113-W-119 through 113-W-121, all of which are located along the boundary with Site 116.

SVOCs, Lower Water-Bearing Zone

Several SVOCs were detected in the LWBZ. Each of these detections/exceedances occurred in wells that are located either downgradient or along the boundary with Site 116, as follows:

- Naphthalene was detected above the NJGWQC of 300 μg/L in monitoring wells 113-W-106(D) and 113-107(D). The distribution of naphthalene is presented on Figure 113-02-37.
- Benzo(b)fluoranthene was detected above the NJGWQC of 0.2 μg/L in monitoring wells 113-W-108(D), and 113-W-109(D). The distribution of benzo(b)fluoranthene is presented on Figure 113-02-38.
- 1,2,4-Trichlorobenzene was detected above the NJGWQC of 9 μg/L in monitoring wells 113-W-105(D) and 113-W-106(D). The distribution of 1,2,4-dichlorobenzene is presented on Figure 113-02-39.
- 1,2-Dichlorobenzene was detected above the NJGWQC of 600 μg/L in monitoring wells 113-W-105(D) and 113-W-106(D). The distribution of 1,2-dichlorobenzene is presented on Figure 113-02-40.
- 1,4-Dichlorobenzene was detected above the NJGWQC of 75 μg/L in monitoring wells 113-W-105(D), 113-W-106(D), and 113-W-108(D). The distribution of 1,4-dichlorobenzene is presented on Figure 113-02-41.

Other Metals

The results of the Phase I metals analyses were not substantially different between the UWBZ and LWBZ. Sodium exceeded its criterion of 50,000 μg/L in each of the 18 Phase I monitoring wells on Site, aluminum exceeded its criterion of 200 μg/L in all but one monitoring well (113-W-119), and iron exceeded its criterion of 300 μg/L in all but two wells (113-W-104 and 113-W-114). Manganese was above its criterion of 50 μg/L in all but one of the deep monitoring wells, but only exceeded the criterion in four of the nine shallow wells. Similarly, arsenic was above its criterion of 3.0 μg/L in eight of the nine deep wells, and in six of the nine shallow wells. Several other inorganics exceeded their respective criteria on less frequent bases as shown in

Table 113-02-19. These include beryllium (nine wells), cadmium (eight wells), cyanide (two wells), lead (five wells), nickel (four wells), and mercury (one well). Samples collected during Phase II were not analyzed for metals.

2.5.5 Comparison of Analytical Results with SRS and Allergic Contact Dermatitis Alternative Remediation Standard

In the 2001 Remedial Investigation (RI) (Brown and Caldwell 2001), Alternative Remediation Standards (ARSs) for soil and groundwater were calculated for COCs measured in soil and groundwater at Site 113. ARS values were determined considering site-specific conditions and were designed to be health protective, using guidance from the USEPA and NJDEP. The COCs for which ARS values were calculated were chemicals detected in at least 5% of samples and with 95% upper confidence limit (UCL) concentrations in excess of the 1998 NJDEP Soil Cleanup Criteria (NJDEP 1998). NJDEP did not approve the approach included in the 2001 RI report, and commented that concentrations of chemicals in soil should be compared to SRS. In order to comply with the comment, measured levels of all COCs in soil at the Site were compared to SRS values for commercial and industrial land uses. Non-residential SRS values were chosen because Site 113 is not currently used for residential purposes, and future land use of the Site will continue to be restricted to non-residential development. Despite the comparisons performed, risk assessment and the development of ARS values for soil and groundwater based on site-specific conditions could serve as a useful tool in the remedial decision making process. Appendix N provides additional information including Tables 1 and 2 which present the COCs that exceed SRSs in soil and groundwater, respectively.

ACD ARS. An ARS for allergic contact dermatitis (ACD) was determined for Site 113 during the Phase I RI. The NJDEP commented that the evaluation should consider best fit curves other than linear regression. In response, the ACD ARS determination was modified to include a power curve, and the revised evaluation is presented in Appendix O.

2.5.6 RI Surface Water, Sediment, and Porewater Data

Surface water and sediment data were collected from the Hackensack River during both Phases I and II; the results of the sampling are discussed below. Surface water results are presented on Tables 113-02-20 through 113-02-24. Sediment results are presented on Tables 113-02-25 through 113-02-30. The porewater data are presented on Tables 113-02-31 and 113-02-32. The areal distribution of select constituents in surface water samples are presented in Figures 113-02-27, 113-02-29, and 113-02-36 through 113-02-41. Sediment data are presented in Figures 113-02-16 through 113-02-24, and 113-02-26.

Phase II surface water, sediment, and porewater samples were each co-located at the request of the NJDEP; surface water samples were designated as "SW", sediment samples were designated as "SE", and porewater samples were designated "PW". Sample grouping and general total Cr, and Cr(VI) results were as follows:

- **113-SW-1, and 113-PW-1** - Total Cr and Cr(VI) were not detected in either 113-SW-1 or 113-PW-1.
- **113-SW-2, 113-SW-3, 113-SE-1, and 113-PW-2** - Total Cr and Cr(VI) were not detected in the surface water samples. The corresponding sediment sample had a reported total Cr concentration of 2,780, Cr(VI) was not detected. The corresponding porewater sample resulted in detected total Cr concentration of 3.9 μg/L, but Cr(VI) was not detected.
- **113-SW-4, and 113-PW-3** – The surface water sample reported no detectable concentration of either total Cr or Cr(VI). The corresponding porewater sample had a detectable total Cr concentration of 5.3 μg/L, and Cr(VI) was not detected.

- **113-SW-5, and 113-PW-4** – Total Cr and Cr(VI) were not detected in either the surface water or the porewater sample.
- **113-SW-6, and 113-PW-5** – Total Cr and Cr(VI) were not detected in either the surface water or the porewater sample.

Individual media, and sample results are further discussed below.

2.5.6.1 Surface Water

Surface water samples were analyzed for Total Cr during both phases of the RI. The analytical results for the surface water samples collected during both phases of the RI are presented in Table 113-02-20. The surface water samples collected during Phase II were co-located with the five porewater samples and a sediment sample discussed below. Six of the fifteen Phase I surface water sampling locations reported total Cr above the detection limit in the unfiltered samples. These included all three locations in transects 113-S-125 and 113-S-126. Of these six samples, the highest concentration was 63 µg/L at 113-S-125A in the unfiltered sample. However, the concentration of total Cr in the associated filtered sample was 9 µg/L, indicating that the majority of the Cr was sorbed onto sediment within the sample. Each of these concentrations is significantly less than the NJDEP human health based surface water quality criterion (NJSWQC) for Cr of 750 µg/L for a SE-2 class stream.

The Phase I total Cr results were not confirmed during Phase II as total Cr was not detected in any of the filtered or unfiltered surface water samples collected, with the exception of the duplicate sample of 113-SW-6. The original sample of 113-SW-6 did not result in a detection of total Cr, however the duplicate resulted in a detection of 3.4 µg/L. This detection is substantially less than the NJSWQC of 750 µg/L.

Surface water samples were analyzed for Cr(VI) during both Phase I and II. Analytical data reported for Cr (VI) in surface water samples collected during both phases are presented in Table 113-02-20. In the Phase I unfiltered surface water samples five of the 15 sampling locations reported Cr(VI) concentrations above the detection limit. Cr(VI) concentrations in samples 113-S-123A and 113-S-124A were 104 µg/L and 13.4 µg/L, respectively. As Cr(VI) does not have an NJSWQC, comparisons to the acute and chronic exposure scenarios for benthic organisms are made in Section 2.6, and in Appendix R.

The Phase II surface water sample distribution of Cr(VI) is depicted in Figure 113-02-29. Each of these samples resulted in no detection of Cr(VI).

None of the surface water samples collected in the Phase I RI resulted in detections of pesticides/PCBs. The detection limits were each above the current NJSWQC for pesticides/PCBs. Surface water samples collected during Phase II were not analyzed for pesticides/PCBs. The results for pesticides/PCBs are presented in Table 113-02-21.

Phase I surface water samples were analyzed for TPHs and the results were non-detect for each sample. TPH results are presented in Table 113-02-22.

SVOCs were analyzed for samples collected during Phase I. The duplicate of sample 113-S-132A exceeds the NJSWQC of 2.2 µg/L for bis(2-ethylhexyl)-phthalate. This constituent was not detected in the primary sample, and is a common laboratory contaminant with relatively low water solubility. The results for all other SVOCs, presented in Table 113-02-23, were below the NJSWQC.

Three TAL metals exceeded NJSWQC: Arsenic (As), manganese (Mn), and mercury (Hg). These data are presented in Table 113-02-24.

2.5.6.2 Sediment

The total Cr and Cr(VI) results for sediment are presented in Table 113-02-25. The maximum Cr(VI) concentration detected in the sediment was 19 mg/kg in sample 113-SE-125A, whereas total Cr concentrations ranged from 29.3 to 3,660 mg/kg (see Figures 113-02-16 and 113-02-17). There are no discernable spatial relationships of the data with respect to the location of the samples within the river. A single sediment sample was collected during Phase II. This sample was co-located with the surface water and porewater samples. The resultant total Cr concentration was 2,780 mg/kg. Cr(VI) was not detected.

Two pesticides (4,4'-DDE and 4,4'-DDD) and two PCBs (PCB-1248 and PCB-1254) were detected in four or more samples. These data are presented in Table 113-02-26 and Figure 113-02-18.

Phase I sediment samples were analyzed for VOCs. Chlorobenzene was detected in four of the 13 sediment sample locations. Two of the samples had reported chlorobenzene concentrations at trace levels (less than 0.005 mg/kg). The other two samples (113-SE-126B and 113-SE-126C) reported chlorobenzene at 120 mg/kg and 340 mg/kg, respectively. These elevated concentrations are from samples collected slightly downstream of Site 113. Sample 113-SE-126B also contained benzene at 0.410 mg/kg. An adjacent sediment sample, 113-SE-125B, exhibited total benzene, toluene, ethylbenzene and xylenes (BTEX) concentration of 0.921 mg/kg. One other sediment sample also contained elevated BTEX concentrations. Sample 113-SE-124B, located adjacent to Site 113, contained a total BTEX concentration of 0.116 mg/kg. VOC data are presented in Table 113-02-27.

Total petroleum hydrocarbons were detected in 13 of 20 samples collected during Phase I. These data are presented in Table 113-02-28 and Figure 113-02-26.

SVOCs were detected in sediment samples; 16 COCs were detected in more than half of the sediment samples collected during Phase I. These SVOCs are 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, naphthalene, acenaphthene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene. bis(2-ethylhexyl)phthalate, chrysene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and benzo(g,h,i)perylene. The results are presented in Table 113-02-29 and Figures 113-02-19 through 113-02-24.

Most of the TAL metals and cyanide (CN) were detected in each sediment sample collected during Phase I; exceptions include Sb, Cd, CN, Selenium (Se), and thallium (Th). Metals data are presented in Table 113-02-30.

Prior to Phase II, a sediment toxicity study was performed using sediment from the Hackensack River adjacent to and north of Site 113. A report including the sample locations and associated data is presented in Appendix P and a more detailed summary is included below in Section 2.6.2.2. Results of this study showed that chromium in sediments at the study site had limited bioavailability and showed no strong relationship with sediment toxicity, indicating that chromium can be present in sediments at elevated concentrations without resulting in sediment toxicity. The maximum no-effect concentration estimated in this study (i.e., 1,310 mg/kg) was considerably greater than existing sediment quality guidelines (e.g., the effects range medium (ERM) of 370 mg/kg), indicating that evaluations of chromium toxicity in the field should address the bioavailability of the metal under site-specific conditions. This study was performed prior to the porewater sampling discussed below.

2.5.6.3 Porewater

Porewater samples were collected from five locations during the Phase II in accordance with the work plan approved by NJDEP. Co-located surface water samples were collected from the same locations at the same time as the porewater samples. In addition, a sediment sample was co-located at one of the sample points. Tables 113-02-31 and 113-02-32 present the analytical data. Total Cr was detected in 113-PW-02 and 113-PW-03. The corresponding surface water locations, 113-SW-02, 03 (for 113-PW-02), and 113-SW-04 (for 113-PW-03) each resulted in no detection of total Cr. Cr(VI) was not present at measurable concentrations (<10 μg/L) in porewater samples at any of the sample locations. The full report on the results and conclusions, including a table of results and a figure depicting sample locations is presented in Appendix Q. A summary of the conclusion is also included below in Section 2.6.2.3.

2.6 Ecological Risk Assessment

The ERA was conducted in response to the December 23, 2005, comments from NJDEP in regard to the Baseline Ecological Evaluation (BEE) contained in the Remedial Investigation Report that was prepared by Brown and Caldwell (April 2001a). The ERA was conducted to examine whether chemicals of potential concern (CoPCs) in the wetlands pose a potentially unacceptable risk of adverse ecological effects to wildlife that forage in the wetlands. Although the collective wetlands occupy a relatively small amount of acreage (0.61 acre) and are fragmented as four discontinuous areas, it is possible that wildlife may forage in these areas of the Site. Other areas of the Site are paved or physically disturbed, and are not expected to provide suitable habitat to wildlife receptors.

The ERA is organized according to the framework for ERA provided in the U.S. EPA guidance (U.S. EPA 1997, 1998). As defined below, the main components of an ERA are: *Problem Formulation*, *Exposure Assessment*, *Ecological Effects Assessment*, and *Risk Characterization*.

Problem Formulation develops a site-specific conceptual model that identifies potentially complete exposure pathways, discusses the environmental transport and fate of the CoPCs, identifies and describes receptors of concern at the site, and selects assessment and measurement endpoints. Assessment endpoints are expressions of the environmental value to be protected at a site. Measurement endpoints are measurable characteristics that reflect the assessment endpoint.

Exposure Assessment describes potential exposure pathways and estimates exposure for the representative receptor organisms.

Ecological Effects Assessment describes the adverse ecological effects of the CoPCs and develops toxicity reference values (TRVs) for assessing risk to the representative receptors.

Risk Characterization summarizes and integrates the exposure assessment and ecological effects assessment into estimates of potential risk. The risk characterization also addresses uncertainty in the analysis of ecological risk.

The full report of the wetland ERA is provided in Appendix R.

2.6.1 Wetland Ecological Risk Assessment

The wildlife receptors of concern for the wetland areas of the Site include invertivorous (e.g., animals that eat invertebrates) birds and mammals and herbivorous mammals. Herbivorous birds are not selected as

receptors of concern at this Site, because the species of plants that are prevalent in the wetlands (e.g., *Phragmites* and *Spartina*) are not typically consumed by herbivorous birds. Predatory species, such as hawks and foxes, were not included as a class of receptors of concern, for two reasons: 1) although predatory species may forage for prey in the wetlands at the Site, the area of and potential for exposure to the wetlands is very small in comparison to the foraging range of predatory species; and 2) the Site-related CoPCs have low potential for bioaccumulation into prey species; thus, the potential for dietary exposure of predatory species is also low. The ERA assumes that wildlife receptors are exposed to surface soil (0–2 ft below surface). Although NJDEP has not published specific guidance on the depth of surficial soil to which receptors are exposed, NJDEP recommends that this depth interval (0–2 ft) be used in an ERA, because that is the depth of soil to which wildlife receptors are typically exposed. Food-chain models were used to estimate the potential dietary dose of CoPCs to which wildlife may be exposed. Bioaccumulation models were used to estimate concentrations of CoPCs in food items that are consumed by wildlife (e.g., soil invertebrates and plants).

The ERA used a subset of 16 surficial (0–2 ft) soil samples that were collected from areas in and near the wetlands of the Diamond Site. Not all samples were analyzed for all analytes, however. For example, although 11 samples were analyzed for total chromium, only 2 samples were analyzed for other metals. Total chromium and hexavalent chromium [Cr(VI)] were detected in 11 samples. Most of the other 25 inorganic CoPCs were detected in at least one of the two samples that were analyzed. Most of the 17 polycyclic aromatic hydrocarbons (PAHs) were detected in at least two of the three samples that were analyzed. Bis(2-ethylhexyl)phthalate, carbazole, dibenzofuran, and di-n-octylphthalate were detected in one of the three samples that were analyzed. Acetone, the only volatile organic compound (VOC) detected, was found in two samples. No pesticides or PCB Aroclors were detected.

Each organic chemical, except acetone (a common laboratory contaminant), that was detected in Site wetland soils was considered to be a CoPC. Because acetone is highly volatile, it is unlikely to persist in surface soils, and unlikely to be taken up by biota; thus, it was not considered to be a CoPC. Concentrations of metals in Site wetland soils were compared to the ambient concentrations of metals in New Jersey urban soils (Sanders 2003) to assess which analytes were measured at concentrations exceeding background and should be considered CoPCs. Although concentrations of calcium, iron, magnesium, and sodium exceeded concentrations in New Jersey urban soils, these chemicals were not included as CoPCs, because they occur naturally and are generally not considered hazardous to wildlife. Aluminum was also excluded as a CoPC, because the pH of the soil at the Site is greater than 5.5, indicating that aluminum bioavailability is limited (U.S. EPA 2003a). CoPCs included barium, cadmium, total chromium, Cr(VI), cobalt, copper, mercury, nickel, silver, thallium, vanadium, zinc, PAHs, bis(2-ethylhexyl)phthalate, carbazole, dibenzofuran, and di-n-octylphthalate.

Dietary doses of CoPCs to wildlife were calculated from measured concentrations of CoPCs in soil, estimated concentrations in food, and estimated rates of consumption of soil and food. Dietary doses of CoPCs were compared to Toxicity Reference Values (TRVs) from the scientific literature. TRVs examined included both no-observed-adverse-effect levels (NOAELs) and lowest-observed-adverse-effect levels (LOAELs). Dietary doses that are less than the NOAEL-based TRV are not likely to result in potential risk to ecological receptors and can be screened out from further consideration. Dietary doses that exceed the LOAEL-based TRV may pose a potential risk to ecological receptors. TRVs for trivalent chromium [Cr(III)] were compared to the doses estimated using the total chromium soils data from the Site. Due to the limited number of samples available for most CoPCs, this ERA used the maximum measured Site concentration to estimate dietary doses to wildlife. For total chromium and Cr(VI), however, which had a larger data set (n= 11 to 12), dietary doses were based on both the average and maximum measured concentrations at the Site. Results are as follows.

- Invertivorous birds (represented by the marsh wren)
  - Maximum doses of the following CoPCs exceeded the NOAEL TRVs: cadmium, total chromium [as Cr(III)], mercury, nickel, zinc, and total PAHs.
  - Maximum doses of the following CoPCs exceeded the LOAEL TRVs: total chromium [as Cr(III)], mercury, nickel, zinc, and total PAH.
  - The average dose of total chromium exceeded the NOAEL and LOAEL TRVs for total chromium [as Cr(III)].
- Invertivorous mammals (represented by the short-tailed shrew)
  - Maximum doses of the following CoPCs exceeded the NOAEL TRVs: cadmium, Cr(VI), cobalt, copper, mercury, nickel, thallium, vanadium, and total PAHs.
  - Maximum doses of the following CoPCs exceeded the LOAEL TRVs: Cr(VI), cobalt, copper, vanadium, and total PAHs.
  - The average doses of total chromium and Cr(VI) were below the NOAEL and LOAEL TRVs.
- Herbivorous mammals (represented by the meadow vole)
  - Maximum doses of the following CoPCs exceeded the NOAEL TRVs: Cr(VI), cobalt, mercury, thallium, vanadium, and total PAHs.
  - Maximum doses of the following CoPCs exceeded the LOAEL TRVs: vanadium and total PAHs.
  - The average doses of total chromium [as Cr(III)] and Cr(VI) were below the NOAEL and LOAEL TRVs.

These results indicate that metals and PAHs may pose a risk to invertivorous birds, invertivorous mammals, and herbivorous mammals. However, it is important to consider that conservative assumptions were used in this evaluation. For example, songbirds and small mammals were assumed to forage only in the small fragmented wetland habitats on the Site, and concentrations of CoPCs in soil were assumed to be 100% bioavailable. In addition, concentrations of CoPCs in plants and soil invertebrates were modeled using peer-reviewed, but conservative, uptake factors or bioaccumulation factors (BAFs). In contrast, Hall and Pulliam (1995) reported low bioavailabilty of chromium from COPR. That study reported that, despite elevated concentrations of total chromium in sediment from a COPR site in the Hackensack Meadowlands, no pattern of higher chromium concentrations was found in biota samples from the study site. Also, exposure of ecological receptors to CoPCs in the wetlands ultimately will be eliminated as part of the NJDEP-approved (NJDEP, 2008) Interim Response Action (Key, 2007a, 2007b) and anticipated final site remediation activities.

2.6.2 Summary of Ecological Risk Assessment Evaluations for Site 113

The Hackensack River borders Site 113 (the Diamond Site) to the east, and marine wetlands (marsh) are located north of the Site, across the elevated railroad tracks and north of Site 50 (Janatex). Environmental investigations, including the 2001 Site 113 Remedial Investigation (RI) (Brown and Caldwell 2001a) and the RI for Hydrogeologic Subregion I Chromite Ore Processing Residue (COPR) sites (Brown and Caldwell 2001b), have demonstrated that the marsh and river sediments in proximity to Site 113 contain elevated levels of chromium associated, at least in part, with COPR. Three ecological risk assessment evaluations—a bioaccumulation study, a sediment toxicity testing study and a study of hexavalent chromium [Cr(VI)] and total Cr in porewater—have been conducted in the river and marsh, in the vicinity of Site 113, to evaluate the potential ecological hazard associated with chromium in these environmental media. These studies have found no evidence that chromium has harmed the ecology of the Hackensack River or is adversely affecting

the aquatic species. This finding is expected, because the sediments provide a reducing environment in which Cr(VI) is generally not stable, and total chromium exists primarily as trivalent chromium [Cr(III)]. Sampling of the river and marsh has demonstrated consistently that Cr(III) predominates, with only low levels of Cr(VI) detected when measurable. Studies of the area have shown that chromium in sediments associated with COPR is of low solubility, bioavailability and toxicity due to the chemical forms of chromium. In this section, the findings of each of the three aquatic ecological studies relevant to the risk assessment of COPR at Site 113 are summarized. Additionally, the results of surface-water sampling conducted in the vicinity of Site 113 are reviewed to provide a comprehensive evaluation of the potential impacts associated with COPR from Site 113 in the Hackensack River.

2.6.2.1 Bioaccumulation Study

In 1993, Eckenfelder conducted an evaluation of the degree to which chromium, lead, and copper were bioaccumulating in plant tissue (*Phragmites australis* roots and shoots), the muscle and hepatopancreas of blue crab (*Callinectes sapidus*), and whole bodies of killifish (*Fundulus sp.*) in the wetlands surrounded on three sides by COPR sites, to the north of Sites 50 (Janatex) and 51 (Kearny Township Site #1), to the south of Site 56 (NJ Turnpike No. 1), and to the west of Site 131 (Hackensack River Access Rd.), which is a narrow dike that separates the wetlands (also referred to as the Janatex marsh) from the Hackensack River. This study was submitted to NJDEP in October, 1993 and approved by NJDEP in November, 1993, and was subsequently published by Hall and Pulliam (1995). Lead, copper, and both Cr(VI) and total chromium were analyzed in sediment and biota samples collected from the Janatex marsh (the study site), and in a reference or background site not affected by COPR. Tidal flushing of the study site was restricted by tidal gates, so the potential existed for metals to accumulate in sediments, as compared to the reference site, due to runoff from anthropogenic sources unrelated to COPR. Lead and copper were analyzed to determine whether metals unrelated to COPR had accumulated in the study site sediments and biota. Physical and chemical characteristics that may have affected metals bioavailability were also studied.

Twenty-seven stations were analyzed in the study, with total chromium levels ranging from 153 to 1,760 mg/kg; copper and lead were measured at concentrations as high as 283 mg/kg and 704 mg/kg, respectively. Eight reference-site stations were analyzed, and total chromium levels ranged from 33 to 180 mg/kg; copper and lead levels were as high as 102 and 122 mg/kg, respectively. Cr(VI) was not detected in sediments from the reference site, and was found in only one of 51 samples analyzed for Cr(VI) from the study site, at a concentration of 2.7 mg/kg. Levels of copper, lead, and chromium in sediments were three to nine times higher at the study site than at the reference area. However, with the exception of the hepatopancreas of the blue crab, the concentration of total Cr in biological tissues did not differ significantly from the concentrations found at the reference site. Tissues from the study site contained statistically significantly lower concentrations of copper in all the biotic samples, and of lead in blue crab hepatopancreas tissues, than corresponding tissues from the reference site. This study demonstrates that, although elevated levels of Cr(III) exist in sediments associated with the COPR sites, the chromium does not bioaccumulate in the tissues of plants of biota. The authors concluded that the metals are tightly bound to the sediments and therefore are not bioavailable, although bioavailability was not measured directly. Study site characteristics that appear to limit bioavailability include high organic carbon content, reducing conditions, high sulfide concentrations, high specific surface areas associated with a high proportion of silt and clay contents, and high cation content.

2.6.2.2 Sediment Toxicity Study

In 2004, a sediment toxicity study was conducted using sediments from the Hackensack River adjacent to the northern border of Site 113 and immediately north of the Amtrak Portal Bridge, along Site 131. This study was published by Becker *et al.* (2006), and a summary report is presented in Appendix P, along with the

published manuscript. This study sought to expand on the work of Hall and Pulliam (1995) in the Hackensack River, and research supported by the U.S. Environmental Protection Agency regarding chromium-related sediment toxicity [as published by Besser *et al.* (2004) and Berry *et al.* (2004)] by evaluating the toxicity and bioavailability of total chromium in sediments of the Hackensack River.

Berry *et al.* (2004) and Besser *et al.* (2004) conducted studies of the potential toxicity of chromium in freshwater and marine sediments, primarily though laboratory experiments in which clean sediments were spiked with known amounts of chromium. These studies found that Cr(VI) should not be present in sediments with measurable concentrations of acid volatile sulfides (AVS), because Cr(VI) is thermodynamically unstable in anoxic sediments and AVS is formed only in anoxic sediments. This finding was termed the "chromium hypothesis." In sediments where AVS exceeded analytical detection limits, the authors found that chromium concentrations in pore water were very low (<100 μg/L), and no significant toxicity was observed. Field experiments were conducted with sediments collected from Shipyard Creek in South Carolina. Findings from Shipyard Creek sediments supported the chromium hypothesis in that AVS concentrations were well above detection limits in all cases, and that total chromium concentrations of 1,780, 2,980, and 3,070 mg/kg were not toxic to *Ampelisca abdita.*

The specific objectives of the Becker sediment toxicity testing study of Hackensack River sediments affected with COPR were to 1) determine whether sediment toxicity exhibited a concentration-response relationship with total chromium, 2) evaluate whether a maximum no-effect concentration could be determined based on the observed relationships between sediment toxicity and total chromium, and 3) determine the bioavailability of total chromium based on evaluations of chemical speciation [i.e., Cr(III) and Cr(VI)] and phase associations.

The study was designed to evaluate a wide range of total chromium concentrations in sediments that could be tested with minimal interference from the potentially toxic effects of co-occurring chemicals. Seventeen potential sediment sampling and collection stations were sampled initially, of which 10 stations were selected for sediment toxicity testing to represent a wide range of total chromium concentrations affected as little as possible by elevated concentrations of co-occurring chemicals. Total Cr levels ranged from 199 to 3,970 mg/kg, and in 8 of the 10 stations, total chromium levels exceeded the National Oceanic and Atmospheric Administration (NOAA) Effects Range Medium (ERM) for chromium of 370 mg/kg (Long *et al.* 1995). Cr(VI) was detected at eight stations, but only at relatively low concentrations ranging from <0.3 to 19 mg/kg. There was no correlation between Cr(VI) and total chromium concentrations in the sediments. Other metals and contaminants that could potentially cause sediment toxicity were identified. Of note, polycyclic aromatic hydrocarbons (PAHs), certain metals, and chlorinated benzenes were measured at elevated concentrations, some of which exceeded ERMs for these chemicals. Thus, sediment toxicity observed in some samples could be due to chemicals other than chromium, or to other conditions such as elevated ammonia levels or a lack of fine-grained sediments, as noted by the sediment sampling team.

Concentrations of acid-volatile sulfide (AVS) ranged from 2.2 to 22 μmol/g at eight of the ten stations, indicating the existence of reducing conditions that would limit potential toxicity that might be related to chromium. Although concentrations of AVS were below detection limits at Stations 2 and 5, the detection limits were relatively high (i.e., 7.2 and 1.6 μmol/g, respectively). Therefore, it is possible that AVS was present at concentrations less than detection limits at those two stations.

Standard whole-sediment toxicity tests were conducted using the 10-day test based on the marine amphipod *Ampelisca abdita*, and the 28-day chronic test based on the estuarine amphipod *Leptocheirus plumulosu.* Percent survival was used as a test endpoint in both sediment toxicity tests, and biomass (i.e., dry weight of pooled survivors) was used as an additional endpoint for the *L. plumulosus* test to evaluate reproductive effects. Each toxicity endpoint was normalized to its corresponding negative control value, and the control-adjusted results

were then compared with the classification criteria developed by U.S. EPA (2004)—control-adjusted survival values less than 75% or control-adjusted biomass values less than 70%, indicative of probable adverse effects. To provide a measure of potential toxicity associated with chemicals other than chromium, the concentration of each co-occurring chemical was divided by its ERM value to provide an ERM quotient (ERMQ). All ERMQs for co-occurring chemicals at each station were summed and divided by the total number of quotients, to provide an overall mean ERMQ (i.e., without chromium included) for the station.

Mean control-adjusted survival in the 10-day *A. abdita* test ranged from 0 at Station 10 to 103% at Station 3, and did not correlate significantly with concentrations of total chromium. Mean survival was below the critical value of 75% at only two stations (9 and 10), indicating the probable presence of adverse effects at those stations. While these two stations had the highest concentrations of total chromium, they also had the two highest mean ERMQs and multiple chemical-specific ERM values that were exceeded, indicating that one or more co-occurring chemicals may have influenced the toxicity results. Station 10 also had the highest concentration of dichlorobenzene, which does not have an ERM. In addition, because the porewater concentration of total ammonia at termination of the toxicity test for this species was quantified as >20 mg/L for Station 10, it is possible that the actual ammonia concentration exceeded the species-specific no-effect concentration of 30 mg/L, thereby potentially contributing to reduced survival.

Similarly, mean control-adjusted survival in the 28-day *L. plumulosus* test ranged from 49% at Station 8 to 118% at Station 7, and did not correlate significantly with concentrations of total chromium. Mean survival was below the critical value of 75% only at Station 8, indicating the probable presence of adverse effects at that station. However, survival at Stations 9 and 10, which had higher concentrations of total chromium, were 87%–90%, suggesting that total chromium was unlikely the cause of reduced survival of *L. plumulosus* at Station 8. Mean control-adjusted biomass in the 28-day *L. plumulosus* test ranged from 57% at Station 10 to 247% at Station 3, and did not correlate significantly ($r_s = -0.47$; $P > 0.05$) with concentrations of total chromium. Mean biomass was below the critical value of 70% only at Station 10, indicating the probable presence of adverse effects at that station. As discussed previously for *A. abdita* survival, co-occurring chemicals and porewater ammonia may have contributed to any toxicity observed at Station 10, thereby adding uncertainty to the potential role of chromium in causing the reduced biomass of *L. plumulosus* at that station.

Based on these results, it is clear that the three toxicity endpoints did not exhibit a concentration-response relationship with total chromium across the range of concentrations evaluated in this study, which far exceed the chromium ERM of 370 mg/kg. Although toxic responses were found in all three tests at one or more of the three stations that had the highest total chromium concentrations (i.e., Stations 8–10), it was uncertain whether the test organisms were responding to total chromium or to other factors, such as co-occurring chemicals, elevated porewater ammonia concentrations, or sediment grain-size distribution. Further, concentrations of AVS were highest at the three stations with the highest total chromium concentrations (i.e., Stations 8–10), indicating that conditions in the sediments were strongly reducing, and that chromium should be present in only the insoluble and nontoxic trivalent form. The pooled results of the three toxicity endpoints indicate that potential toxic effects related to total chromium did not occur at concentrations at least as high as those observed at Station 7 (i.e., 1,310 mg/kg). Above this concentration, however, it was not clear whether the observed toxic effects were related to total chromium or to other factors. The concentration of 1,310 mg/kg was therefore considered a conservative estimate of the maximum no-effect concentration for total chromium.

Although the concentration of Cr(VI) was somewhat elevated at Station 3 (19 mg/kg), none of the sediment toxicity results indicated that Cr(VI) was toxic at that station, because all three toxicity endpoints were greater than 100% of their corresponding negative control values.

Electron microprobe analyses were conducted to determine the relative masses of the chromium-bearing phases found in sediments from the study site. The results showed that chromium in sediment samples from the study site was found in two primary chromium-bearing phases: chromite and iron oxide. The bioavailability of chromium in both of those phases is limited.

In conclusion, the results of the sediment toxicity testing study showed that chromium in sediments had limited bioavailability and demonstrated no strong relationship with sediment toxicity, indicating that chromium can be present in sediments at highly elevated concentrations without resulting in sediment toxicity. The maximum no-effect concentration estimated in this study (i.e., 1,310 mg/kg) was considerably greater than existing sediment quality guidelines (e.g., the ERM of 370 mg/kg).

2.6.2.3 Porewater Evaluation for Hexavalent and Total Chromium

In 2007, interstitial porewater samples were collected from five locations off the shore of Site 113 at the request of the NJDEP, to evaluate whether Cr(VI) exists in porewater at levels that exceed NJSWQC. Co-located samples for Cr(VI) and total chromium in surface water and were also collected and analyzed, as well as one sediment sample.

Porewater samples were collected passively in peepers placed in subsurface sediments. The peepers remained in the sediments for 4 weeks to allow passive diffusion of porewater, and following retrieval, the peepers were analyzed for dissolved total Cr, Cr(VI), DO, pH, and oxidation-reduction potential (ORP). Cr(VI) was not detected in any of the porewater samples (Limit of detection = 10 μg/L). Dissolved total Cr was detected in two of the five porewater samples at 3.9 μg/L and 5.3 μg/L, slightly greater than the reported method detection limit of 2.0 μg/L. Based on these results, there were no Cr(VI) exceedances of either the acute or chronic NJSWQC for Cr(VI), which supports the findings of the sediment toxicity testing study (Becker *et al.* 2006) that chromium in sediments and sediment porewater in the Hackensack River adjacent to Site 113 does not pose a hazard to sediment-dwelling biota. Similarly, ORP measures collected in this study indicate that reducing conditions existed in the porewater at all five stations, and levels of DO were low. Cr(VI) was also not detected in the co-located surface water or sediment sample. Total chromium was measured in sediments at a concentration of 2,780 mg/kg, demonstrating that elevated levels of total chromium in sediments is not associated with Cr(VI) in surface water or porewater at levels exceeding NJSWQC in the Hackensack River in association with COPR from Site 113. Porewater analytical results are presented in Tables 113-02-31 and 113-02-32. The full porewater report is presented in Appendix Q.

2.6.3 Comparison to Hexavalent Chromium Concentrations in Surface Water to NJSWQC

Thirty-eight surface-water samples collected from the Hackensack River off the shore of Site 113 in 1992 as part of the RI, and an additional seven samples were collected in 2007. Also, 27 surface-water samples were analyzed for Cr(VI) as part of the bioaccumulation study (Hall and Pulliam 1995). None of the samples collected in 2007, nor any of the samples collected during the bioaccumulation study, contained measurable levels of Cr(VI), with a limit of detection of 10 μg/L. Similarly, 31 of the 38 samples collected in 1992 did not contain measurable levels of Cr(VI). Of the seven samples with detectable concentrations, in all but one, Cr(VI) was measured below the chronic marine NJSWQC for Cr(VI) of 50 μg/L. One sample reportedly contained Cr(VI) at 104 μg/L; however, that same sample reportedly did not contain detectable total chromium at a detection limit of 80 μg/L, drawing into question the reliability of the reported Cr(VI) concentration. This one value was below the acute marine NJSWQC of 1,100 μg/L. Sampling and analysis of surface water during Phase II indicated that Cr(VI) and total Cr were not detected in any of the sample locations with the exception of the duplicate of 113-SW-06; which had an estimated detection of 3.4 μg/L.

This finding is questionable as the primary sample did not have a detectable level of total Cr. Clearly, the initial sample at that location, of the 72 collected in the Hackensack River near Site 113, is not representative of chronic exposure conditions and is questionable on the basis that it is clearly an outlier that is not reproducible.

2.6.4 ERA Summary

The studies discussed herein consistently demonstrate that chromium in COPR has not adversely affected the aquatic or benthic habitat of the Hackensack River. These studies found that Cr(VI) is rarely present in water and sediment, and when measurable, the levels are low. The sediments consistently exhibit reducing conditions, which favor the stability of Cr(III), and the forms of chromium in sediments have limited solubility, bioavailability, and toxicity. Together, these studies comprehensively address the potential for toxicity and demonstrate that chromium from COPR at Site 113 does not pose a hazard to the benthic or aquatic environment of the Hackensack River. No further study of the Hackensack River is warranted, given the comprehensive nature of the investigations and consistency of the findings.

3. SUMMARY AND CONCLUSIONS

A two-phased Remedial Investigation (RI) has been performed at Site 113 (Diamond Site) located in Kearny, New Jersey on behalf of Tierra Solutions, Inc. (TSI). The findings and data associated with the Phase I and Phase II activities are presented and summarized in this Revised Remedial Investigation (RRI) Report.

The initial phase (Phase I) of the RI was completed in 1999 and was reported in the document titled, "Remedial Investigation Report, Site 113 (Diamond) (Revised)", (Brown and Caldwell, 2001a).

The NJDEP provided comments on the Phase I RI report in late 2005 and, following a detailed discussion with the agency, a document titled "Supplemental Remedial Investigation Work Plan (SRIWP), Site 113 (Diamond Site), Revision 2" was submitted to NJDEP in July 2007 (Brown & Caldwell, 2007). Supplemental RI activities, referred to herein as Phase II, were performed in 2007 and 2008 by Brown and Caldwell.

3.1 Soil Investigation

3.1.1 Surface Soil Investigation

Surface soil samples were collected from 96 locations, 86 during the Phase I RI and 10 during Phase II. Surface samples were generally defined as being collected within 0.5 feet of the ground surface; however, when samples were collected through the IRM, surface samples were defined as 0 to 0.5 feet below the asphalt and DGA layer. Surface soil samples were analyzed for total Cr, Cr(VI), pH, ORP, pesticides/PCBs, semi-volatile organic compounds (SVOCs), six metals of interest to NJDEP, including antimony (Sb), arsenic (As), beryllium (Be), cadmium (Cd), nickel (Ni), and vanadium (V), plus the target analyte list (TAL) metals.

Total Cr data in surface soils, including the COPR fill, range from 5.5 to 27,200 mg/kg. There is no New Jersey NJ SRS for total Cr. Cr(VI) data range from not <0.41 to 5,200 mg/kg. There is no NJ SRS for Cr(VI). The majority of pesticide/PCBs results in surface soils were not detected. None of the sample results exceeded the current NJ SRS, with the exception of a small discrete area in the western part of the Site. Numerous polycyclic aromatic hydrocarbons (PAHs) were detected as SVOCs in the shallow soils. Many of these results exceed the NJ SRS. It is well recognized that PAHs are ubiquitous in anthropogenic fill. Other metals of interest and TAL metals in shallow soils do not generally exceed the NJ SRS with the minor exceptions of several samples for arsenic and lead, and vanadium.

3.1.2 Subsurface Soil Investigation

There have been 54 subsurface soil borings advanced, 37 of which were during Phase I and 17 were during Phase II. Subsurface soil samples were analyzed for total Cr, Cr(VI), pH, ORP, pesticides/PCBs, volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH), SVOCs, the six metals of interest, and other TAL metals.

Total Cr results in subsurface soils, including the COPR fill, range from 7.2 mg/kg to 66,400 mg/kg. The Cr(VI) results for subsurface soil samples range from <0.41 mg/kg to 19,100 mg/kg. Pesticides and PCBs were not detected above the NJ SRS in subsurface soil samples with the exception of a small discrete area in the western part of the Site. VOC results for subsurface soils resulted in no exceedances of the NJ SRS.

TPH was detected in various subsurface soil samples with no discernable pattern to the spatial distribution. PAHs were detected in a number of subsurface soil samples, most of which did not exceed the NJ SRS. TAL metals, including a group of six metals of interest, were detected in various subsurface soil samples.

3.1.3 Soil Conclusions

Elevated levels of total Cr and Cr(VI) above the tidal marsh deposits result from historical COPR filling that occurred on Site during its use as a Cr chemicals manufacturing facility. The relative concentrations of Cr(VI) in COPR are typically several orders of magnitude larger than the Cr(VI) concentrations found below the Tidal Marsh Deposits, demonstrating the role the Tidal Marsh Deposits have in reducing Cr(VI) to Cr(III). These results and field observations during RI activities corroborate historical accounts that COPR fill was not placed below the tidal marsh deposits.

3.2 Groundwater Investigation

There are 29 monitoring wells at Site 113, of which 15 are screened in the upper water-bearing zone (UWBZ) and 14 are screened in the lower water-bearing zone (LWBZ). Groundwater samples were collected twice from each monitoring well during each phase of the RI. Following the initial groundwater monitoring efforts in 1992-1996, groundwater samples were collected using the low flow sampling methodology as described in the NJDEP's April 2005 Field Sampling Procedures Manual (NJDEP, 2005). Groundwater samples were analyzed for filtered and unfiltered Cr(VI), filtered and unfiltered total Cr, and unfiltered pH, ORP, and VOCs during each event. Samples collected during Phase I were also analyzed for SVOCs, metals, and pesticides/PCBs. Samples collected during Phase II were also analyzed in the laboratory for chlorides, sodium, and TDS, and in the field for pH and DO.

3.2.1 Groundwater

Groundwater in Kearny, NJ is saline, and is not usable as a potable drinking water source. Groundwater data are described below on the basis of the comprehensive rounds of Phase II data.

Total Cr results exceeded the NJGWQC of 70 μg/L in most of the UWBZ samples, and ranged up to 279,000 μg/L. The lowest levels of total Cr in the UWBZ were generally observed along the Site 116 [southern] border and in the interior of the Site. Total Cr was detected in each of the LWBZ wells. In approximately half of the wells, the total Cr concentrations were substantially lower than the total Cr concentrations in the corresponding UWBZ wells.

Cr(VI) was detected in approximately half of the UWBZ wells at the Site, most of which are located along the northern boundary and west-central portions of the Site. Detected Cr(VI) concentrations ranged from 119 μg/L to 310,000 μg/L (113-W-303S). Most of the affected wells are screened directly within COPR-affected soils. Cr(VI) is absent from the LWBZ with the exception of four (4) locations where monitoring wells in this unit periodically exhibited relatively low levels. The concentrations of Cr(VI) in samples collected from these locations were typically less than 40 μg/L and are up to four orders of magnitude lower than the Cr(VI) concentrations in the corresponding UWBZ wells. The existence of such low concentrations of Cr(VI) in the four LWBZ wells, although seemingly divergent from the conceptual model discussed previously in this report, occurs in monitoring wells that are either below or downgradient of the alignment of the former channel of Dead Horse Creek. This suggests that small amounts of Cr(VI) may

have migrated vertically downward from the UWBZ through portions of the Tidal Marsh Deposits semi-confining layer that may have been disturbed and/or thinned by the channelization of Dead Horse Creek prior to existence of the former Cr chemicals manufacturing facility.

PCBs and pesticides were generally not detected in the UWBZ. A total of ten pesticide/PCB compounds exceeded their NJGWQC in the LWBZ.

VOCs in UWBZ groundwater cannot be attributed to on-site sources, as wells with VOC exceedances are located along the property boundary with and are characteristic of VOCs found on the Standard Chlorine site (Site 116). Several VOCs were detected in the LWBZ wells located downgradient and adjacent to Site 116.

With the exception of the PAHs, naphthalene and benzo(b)fluoranthene, SVOCs were not detected above NJGWQC in the UWBZ wells. Several SVOCs were detected in the LWBZ, including several PAHs and chlorobenzene compounds. These are likely related to the Standard Chlorine site.

Several metals exceeded the respective NJGWQC in both the UWBZ and LWBZ, most notably, arsenic, beryllium, sodium, and aluminum. These are not considered to be COPR-related-constituents and may be due to natural conditions or Site fill materials unrelated to COPR.

3.2.2 Groundwater Conclusions

The reduction of Cr(VI) to Cr(III) as groundwater moves from the UWBZ to the LWBZ was further investigated and groundwater samples were sent to SECOR Geochemistry in Sacramento, CA for analysis of total Cr, Cr(III), and Cr(VI). The results of the SECOR analysis are summarized as follows. The elevated total Cr concentrations in the LWBZ reflect predominantly Cr(III) that is believed to have precipitated as a metallic hydroxide and complexed with organic compounds in the tidal marsh deposits, resulting in low levels of soluble, slightly mobile Cr(III) in the groundwater immediately below the tidal marsh deposits. However, this mobility appears to be limited as the deeper samples generally contained lower concentrations of Cr(III). Furthermore, the soils beneath the tidal marsh deposits did not contain detectable levels of Cr(VI) and total Cr was at background levels. The chromium data in groundwater demonstrate that the Tidal Marsh Deposits semi-confining layer serves as a geochemical barrier to the migration of Cr(VI). The variable vertical attenuation of total Cr between UWBZ and the LWBZ likely reflects the variability in the physical characteristics of the Tidal Marsh Deposit semi-confining unit to reduce Cr(VI) and precipitate Cr(III), thereby limiting downward, vertical migration of Cr in groundwater from the overlying UWBZ.

Downward migration of groundwater is substantially retarded by the Clay Aquitard. This aquitard is comprised of a thick and laterally continuous glacial lake clay of very low permeability. This and the underlying glacial till provide robust hydraulic separation between the aforementioned water-bearing zones and the underlying bedrock aquifer.

The presence of VOCs and SVOCs are not attributable to Site sources. Detections and exceedances of these substances were all found downgradient and/or along the border of Site 116.

Prior to 1974, an anthropogenic tidal channel named Dead Horse Creek traversed the Site from southwest to northeast and discharged into the Hackensack River. The location of the Dead Horse Creek channel has been constant over time and does not appear to have been preceded by a natural stream channel. Dead Horse Creek predates The Cr chemicals manufacturing plant that was constructed in 1916; Dead Horse

Creek is shown on maps dating back to the 1887. It is concluded that the construction of the Dead Horse Creek channel likely removed the upper portion of the Tidal Marsh Deposits in some locations but was not so extensive to cause a complete breach of the unit.

Groundwater containing Cr at the Site is expected to be controlled as part of the implementation of the NJDEP-approved (NJDEP, 2008) Interim Response Action,(Key, 2007a, 2007b) which includes the installation of barrier walls keyed into the Glacial Lake Deposits and a hydraulic control system.

3.3 Surface Water, Sediment, and Porewater Investigation

Phase I surface water samples were collected from three locations each along 5 transects in the Hackensack River. Each of the Phase I surface water samples collected was analyzed for total Cr, Cr(VI), total petroleum hydrocarbons, SVOCs, pesticides/PCBs and TAL metals. During Phase II, six surface water samples that were collected were co-located for collection with the sediment porewater samples. Each surface water sample was analyzed for total Cr, Cr(VI), and pH, and field measurement of ORP.

Phase I sediment samples were generally collected at three locations per transect. A single sediment sample that was collected during Phase II was co-located with two vertically-spaced surface water samples. Sediment samples were analyzed for total Cr, Cr(VI), pH, ORP, and percent moisture. Samples collected during Phase I were also analyzed for SVOCs, VOCs, metals, pesticides and PCBs.

Porewater samples were collected during Phase II from five (5) locations at intervals approximately equally-spaced along the eastern boundary of Site 113 in the Hackensack River. Porewater samples were analyzed for dissolved Cr(VI), dissolved total Cr, chloride, pH, DO, and ORP.

3.3.1 Surface Water, Sediment, and Porewater Data

The analytical data for surface water, sediment, and sediment porewater samples collected from the Hackensack River adjacent to the Site are described below.

3.3.1.1 Surface Water

Total Cr was not detected in any of the filtered or unfiltered surface water samples collected during Phase II with the exception of a duplicate of a single sample at 3.4 μg/L, which is far below the human health NJSWQC for total Cr of 750 μg/L. Cr(VI) was not detected in any of the Phase II surface water samples. None of the surface water samples contained detectable pesticides, PCBs, TPH, and SVOCs.

3.3.1.2 Sediment and Sediment Porewater

Total Cr concentrations in sediment ranged from 29.3 to 3,660 mg/kg. The maximum Cr(VI) concentration detected in the sediment was 19 mg/kg. Other constituents, including pesticides, PCBs, TPH, and a number of VOCs and SVOCs related to the Standard Chlorine site, were detected in sediments. A sediment toxicity study revealed that chromium in sediments had limited bioavailability and no strong relationship with sediment toxicity, indicating that chromium can be present in sediments at elevated concentrations without resulting in sediment toxicity. These toxicity study results are generally consistent with the observation that measurable concentrations of acid volatile sulfides (AVS) are typically associated with low concentrations of Cr(VI).

Porewater samples revealed that Cr(VI) is not present at measurable concentrations in porewater of sediments of the Hackensack River adjacent to Site 113. The porewater data, along with the sediment toxicity data, indicate that total Cr in sediment has limited mobility, bioavailability, and toxicity. Moreover, Cr from Site 113 does not pose a hazard to the benthic environment of the Hackensack River adjacent to Site 113.

3.3.2 Surface Water, Sediment, and Porewater Conclusions

The ERA consistently demonstrates that chromium in COPR has not adversely affected the aquatic or benthic habitat of the Hackensack River. The ERA found that Cr(VI) is rarely present in water and sediment, and when measurable, the levels are quite low. The sediments consistently exhibit reducing conditions, which favor the stability of Cr(III), and the forms of chromium in sediments have limited solubility, bioavailability, and toxicity. Together, these studies comprehensively address the potential for toxicity and demonstrate that chromium from COPR at Site 113 does not pose a hazard to the benthic or aquatic environment of the Hackensack River. No further study of the Hackensack River is warranted, given the comprehensive nature of the investigations and consistency of the findings.

3.4 Wetlands Risk Assessment

An Ecological Risk Assessment (ERA) was performed for the wetland areas to examine whether chemicals of potential concern (CoPCs) in the collective 0.61 acre of Site wetlands pose a potentially unacceptable risk of adverse ecological effects to wildlife that forage in the wetlands.

3.4.1 Wetlands Conclusions

Modeling results indicate that Metals and PAHs are a potential a risk to invertivorous birds, invertivorous mammals, and herbivorous mammals, although this determination used very conservative and unlikely assumptions. For example, songbirds and small mammals were assumed to forage only in the small fragmented wetland habitats on the Site, and concentrations of CoPCs in soil were assumed to be 100% bioavailable. In addition, concentrations of CoPCs in plants and soil invertebrates were modeled using peer-reviewed, but conservative, uptake factors or bioaccumulations factors (BAFs). In contrast, Hall and Pulliam (1995) reported low bioavailabilty of chromium from COPR., The study reported that despite elevated concentrations of total Cr in sediment, no pattern of higher chromium concentrations was found in biota samples from the study site (Janatex Swamp). Lastly, exposure of ecological receptors to CoPCs in the wetlands are expected to be eliminated as part of the NJDEP-approved Interim Response Action

3.5 Air Sampling

Air sampling activities were performed prior to IRM installation on September 20-22 and October 4-5, 1989, and again on April 18-19, 1990 and in June, July, and August 1990. The air samples were analyzed for total Cr(VI), respirable Cr(VI), total Cr, and total suspended particles (TSP).

The highest concentration of Cr(VI) detected (3.4 ng/m^3 from Area 4) is at least 1,470 times below the Occupational Safety and Health Administration (OSHA) Permissible Exposure Level (PEL) of 5,000 ng/m^3 for Cr(VI), and is approximately 29 times below the EPA Reference Concentration (RfC) of 100 ng/m^3. The maximum outdoor total Cr concentration at 14 ng/m^3. While there currently is no OHSA PEL for total Cr, the maximum concentration of 14 ng/m^3 is substantially lower than both the Cr(VI) PEL of 5000 ng/m^3 and the Cr(III) PEL of 500,000 ng/m^3. Total suspended particulate levels ranged from 0.05 to 3 mg/m^3.

3.5.1 Air Conclusion

These results demonstrate that exposure to airborne Cr at Site 113 is not a concern.

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Figures

BROWN AND
CALDWELL

FIGURES

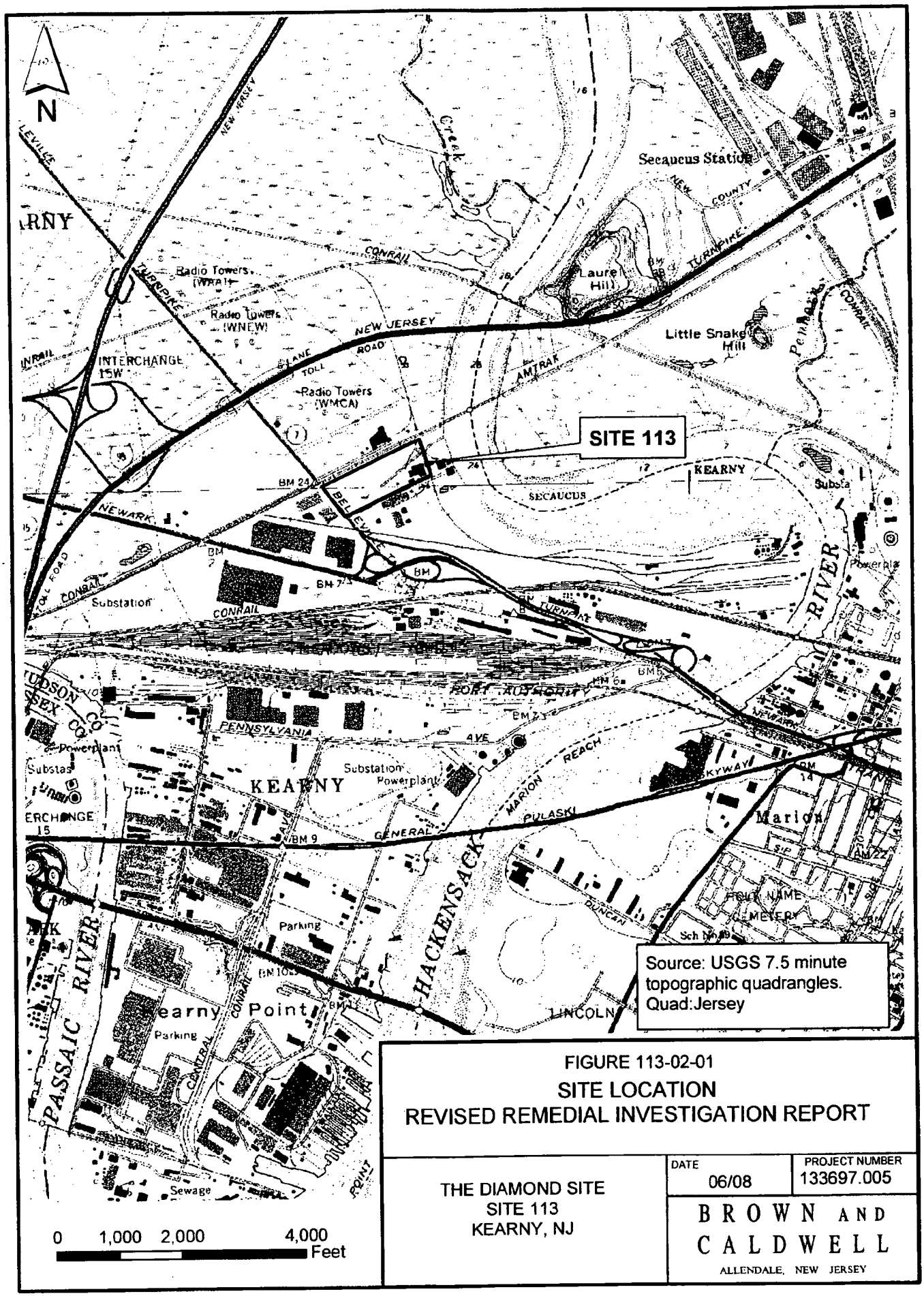


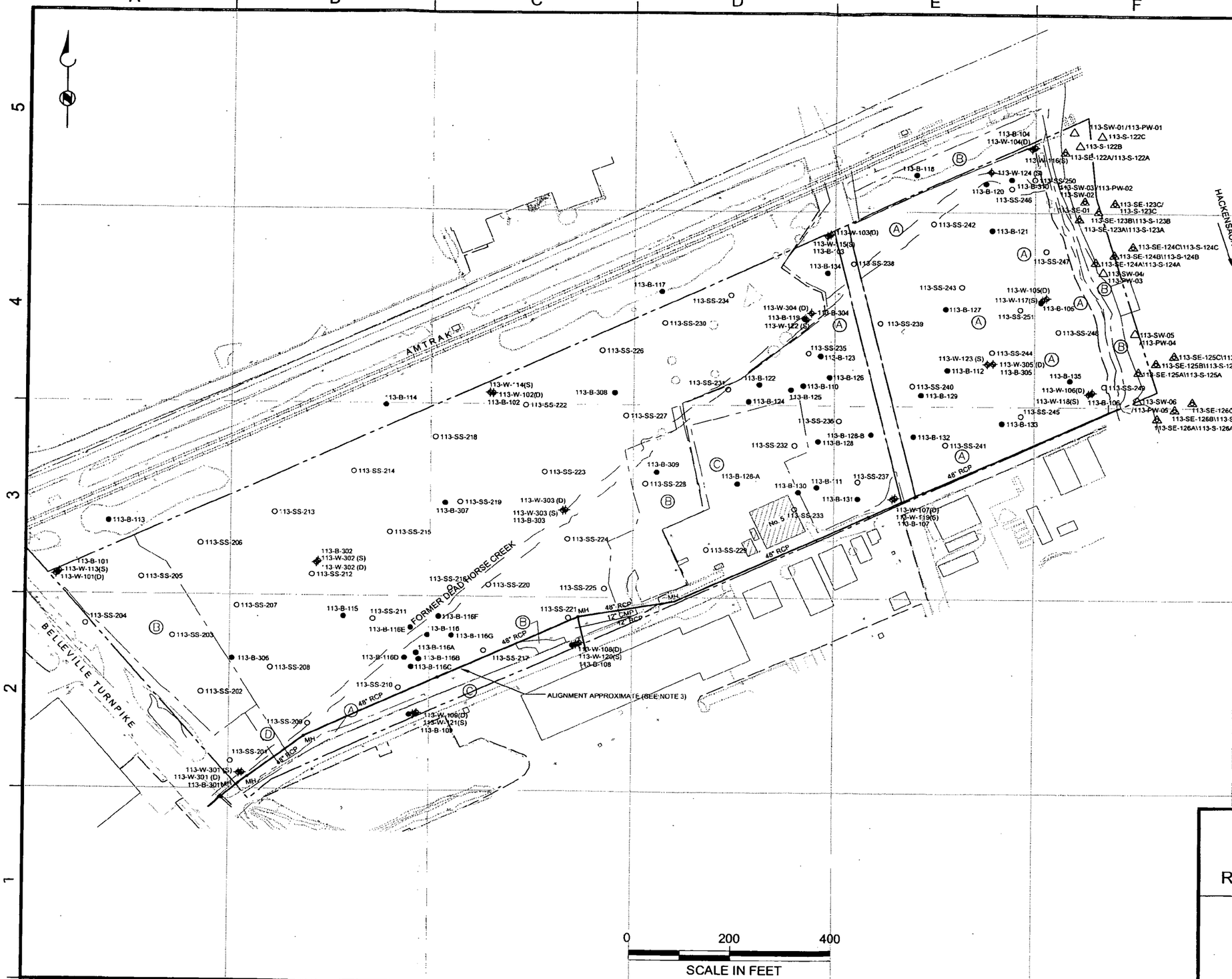
FIGURE 113-02-01
SITE LOCATION
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NJ

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:\GIS\TSI\Fig113_02_01(SiteLocation)



MAP SOURCE DATA:

1. MAP BASE INCLUDING CURRENT SITE FEATURES PROVIDED BY INTRASEARCH OF DENVER, CO. BASED ON AERIAL PHOTOGRAPHY PERFORMED BY ATLANTIS AERIAL SURVEY INC., ON JULY 11, 1998. MAP DATUM: HORIZONTAL NAD83, VERTICAL NAVD88.
2. HISTORICAL LOCATION OF FORMER DEAD HORSE CREEK CHANNEL BASED ON AERIAL PHOTOGRAPHS DATED APRIL 28, 1947.
3. LOCATION OF STORM SEWER LINE BASED ON DRAWINGS CONTAINED IN DOCUMENT TITLED, "ENGINEERING REPORT OF STORM DRAINAGE CULVERT DESIGN", PREPARED BY WHERAN ENGINEERING CORP., 1974.
4. SURFACE WATER SAMPLE 113-SW-02 AND 113-SW-03 WERE COLLECTED IN THE SAME LOCATION, BUT AT DIFFERENT VERTICAL DEPTHS. SW-02 WAS COLLECTED AT THE SURFACE OF THE HACKENSACK RIVER, SW-03 WAS COLLECTED DIRECTLY ABOVE THE RIVER BED.

LEGEND

113-W-301	MONITORING WELL
113-SS-207	SURFACE SOIL SAMPLE
113-B-115	SOIL BORING
113-SW-01 / 113-PW-01	SURFACE WATER/PORE WATER
113-SE-01	SEDIMENT SAMPLE
	EDGE OF ASPHALT
	FORMER DEAD HORSE CREEK
	EXISTING SHORE LINE
	APPROXIMATE PROPERTY LINE
	IRM BOUNDARY
	EXISTING STRUCTURE SITE 113
	EXISTING STRUCTURE OFF SITE
CB	EXISTING CATCH BASIN
(S)	SHALLOW MONITORING WELL
(D)	DEEP MONITORING WELL
IRM (A)	4" BITUMINOUS ASPHALT PAVEMENT OVER 4" DENSE GRADED AGGREGATE AND GEOTEXTILE FABRIC OVER EXISTING SOILS
IRM (B)	GEOTEXTILE FABRIC/GEOMEMBRANE LINER COMPOSITE AND 4" DENSE GRADED AGGREGATE OVER EXISTING SOILS
IRM (C)	2" ASPHALT OVER EXISTING PAVEMENT
IRM (D)	4" DENSE GRADED AGGREGATE OVER GEOTEXTILE FABRIC/GEOMEMBRANE LINER COMPOSITE OVER 6"-12" OF 1.5" STONE

BUILDINGS

No. 5 - MAINTENANCE BUILDING

FIGURE 133-02-02
SAMPLE LOCATION MAP
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

Jun 12, 2008 - 8:41am rjames
P:\DRAFTING\TSII\133697 (Site 113)\005\FIG 113_02_02 (SAMPLE LOCATION MAP).dwg

GEOLOGIC TIME SCALE		STRATIGRAPHIC DESIGNATIONS (Stanford, 2002)		APPROXIMATE AVERAGE THICKNESS (feet)	GENERALIZED DESCRIPTION	GRAPHIC	HYDRO - STRATIGRAPHIC UNITS
Period	Epoch			Site 113			
Quaternary	Holocene	Artificial Fill	(af)	9	cmf SAND, Clayey Silt, anthropogenic debris		Upper Water-Bearing Zone (UWBZ)
		Tidal Marsh Deposits	(Qm)	3	organic SILT and CLAY, some peat		Tidal Marsh Semi-Confining Unit
		Alluvial Deposits	(Qal)	5	cmf SAND, some Silt, trace Gravel		Lower Water-Bearing Zone (LWBZ)
	Pleistocene	Lower Passaic Terrace	(Qpt)	NP	cmf SAND, some Silt and f Gravel		
		Lake Hackensack Deposits	(Qhkl)	30	SILT and CLAY, some mf Sand		Clay Aquitard
		Lake Bayonne Deposits	(Qbnl)	22	SILT and CLAY, some mf Sand		
		Lake Bayonne Deltaic Deposits	(Qbn)	NP	cmf SAND and cmf GRAVEL, some silt		Lower Sand Aquifer (Discontinuous)
		Lake Bayonne Lacustrine-fan Deposits	(Qbnf)	NP	cmf SAND, trace Silt, cmf Gravel		
		Rahway Till	(Qr)	NP	Silty SAND to Sandy SILT some cmf gravel		
Jurassic		Passaic Formation	(JTp)	≈20,000	Siltstone, Sandstone and Mudstone		Brunswick Aquifer (bedrock)
		Jurassic Diabase	(Jd)	–	Diabase		
Triassic		Lockatong Formation	(Tl)	3,800	Siltstone and Sandstone		

Data Sources:

1. Surficial geologic data from NJGS Open File Map OFM 13, Weehawken quad, (Stanford, 1993), and NJGS Open File Map OFM 20, Jersey City quad, (Stanford, 1995).
2. Bedrock data from Olsen, 2000.

Notes
NP indicates not present.
The geology described herein is based on a area that includes, but is not limited to, Site 113. Not all of the hydrostratigraphic units described are present beneath Site 113.

FIGURE 113-02-03

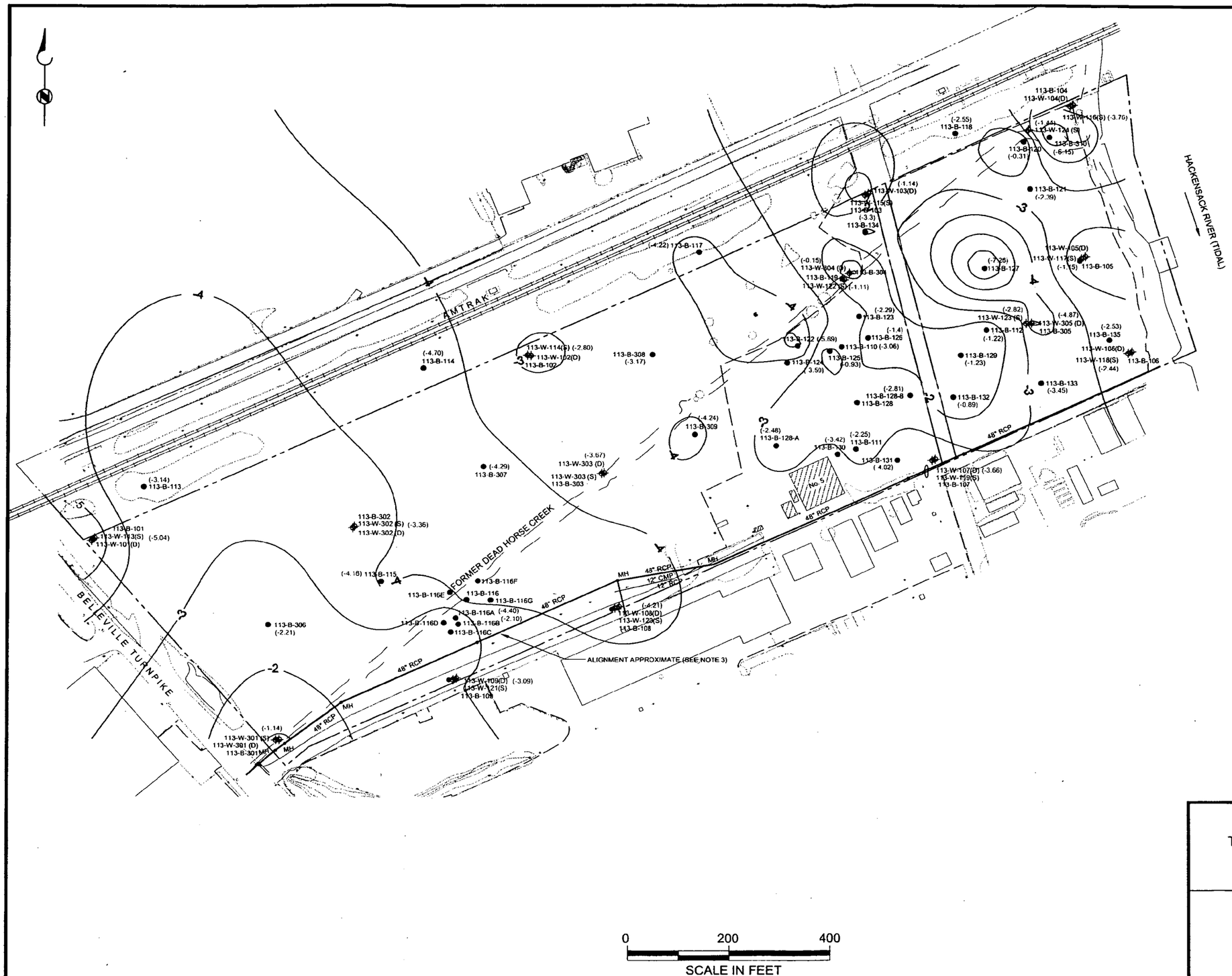
GENERALIZED HYDROSTRATIGRAPHIC COLUMN
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NJ

DATE	PROJECT NUMBER
05/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

\\BCall01\projects\TSI\Site 113\133697(SRI)\SRIR\figures\Fig113-02-03(Hydrostratigraphic_Column).ppt



MAP SOURCE DATA:

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3. LOCATION OF STORM SEWER LINE BASED ON DRAWINGS CONTAINED IN DOCUMENT TITLED, "ENGINEERING REPORT OF STORM DRAINAGE CULVERT DESIGN", PREPARED BY WHERAN ENGINEERING CORP., 1974.
4. ELEVATIONS CONTOURS PREPARED WITH GOLDEN SOFTWARE SURFER VERSION 7.0.

LEGEND

113-W-301	MONITORING WELL
113-B-115	SOIL BORING
	EDGE OF ASPHALT
	FORMER DEAD HORSE CREEK
	EXISTING SHORE LINE
	APPROXIMATE PROPERTY LINE
-4	Qm ELEVATION CONTOUR (1 FT INTERVAL)
	EXISTING STRUCTURE SITE 113
	EXISTING STRUCTURE OFF SITE
CB	EXISTING CATCH BASIN
(S)	SHALLOW MONITORING WELL
(D)	DEEP MONITORING WELL
(-4.02)	ELEVATION OF TOP OF Qm IN MEAN SEA LEVEL (MSL, FT)

BUILDINGS

No. 5 - MAINTENANCE BUILDING

FIGURE 113-02-04

TOP OF TIDAL MARSH DEPOSITS (Qm) STRUCTURAL CONTOUR MAP

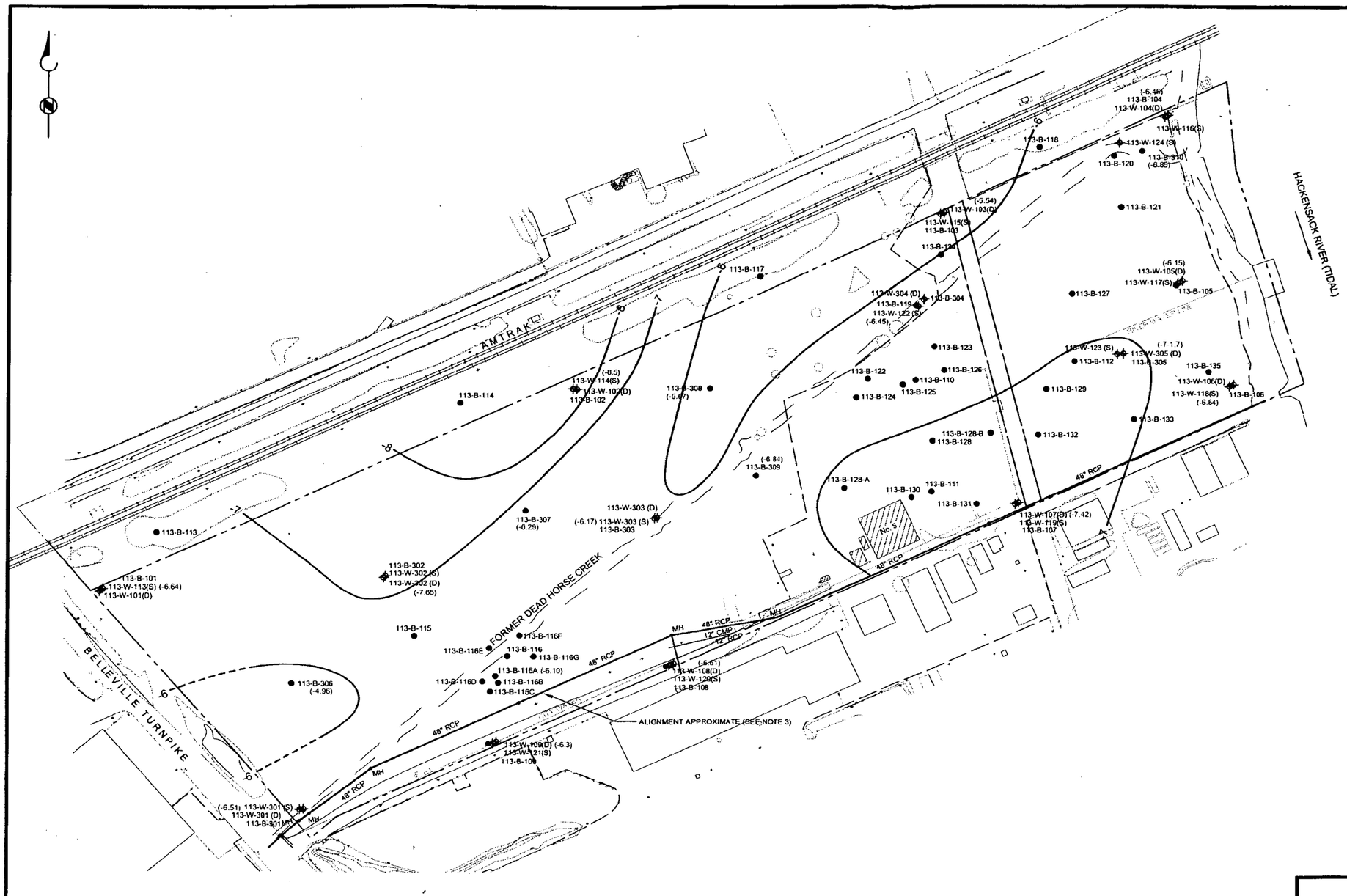
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

Jun 11, 2008 - 11:54am djames
P:\DRAFTING\TSR\133697 (Site 113)\005\CONTOUR MAPS\FIG 113_02_04 (TOP OF TIDAL MARSH DEPOSITS).dwg



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3. LOCATION OF STORM SEWER LINE BASED ON DRAWINGS CONTAINED IN DOCUMENT TITLED, "ENGINEERING REPORT OF STORM DRAINAGE CULVERT DESIGN", PREPARED BY WHERAN ENGINEERING CORP., 1974.
4. ELEVATIONS MANUALLY CONTOURED.

LEGEND

113-W-301	MONITORING WELL
113-B-115	SOIL BORING
	EDGE OF ASPHALT
	FORMER DEAD HORSE CREEK
	EXISTING SHORE LINE
	APPROXIMATE PROPERTY LINE
	TOP OF ALLUVIAL DEPOSIT STRUCTURAL CONTOUR (DASHED WHERE INFERRED, 1 FT INTERVAL)
	EXISTING STRUCTURE SITE 113
	EXISTING STRUCTURE OFF SITE
CB	EXISTING CATCH BASIN
(S)	SHALLOW MONITORING WELL
(D)	DEEP MONITORING WELL
(-6.15)	ELEVATION OF TOP OF Qal IN MEAN SEA LEVEL (MSL, FT)

BUILDINGS

No. 5 - MAINTENANCE BUILDING

0 200 400

SCALE IN FEET

FIGURE 113-02-05

TOP OF ALLUVIAL DEPOSIT (Qal) STRUCTURAL CONTOUR MAP
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

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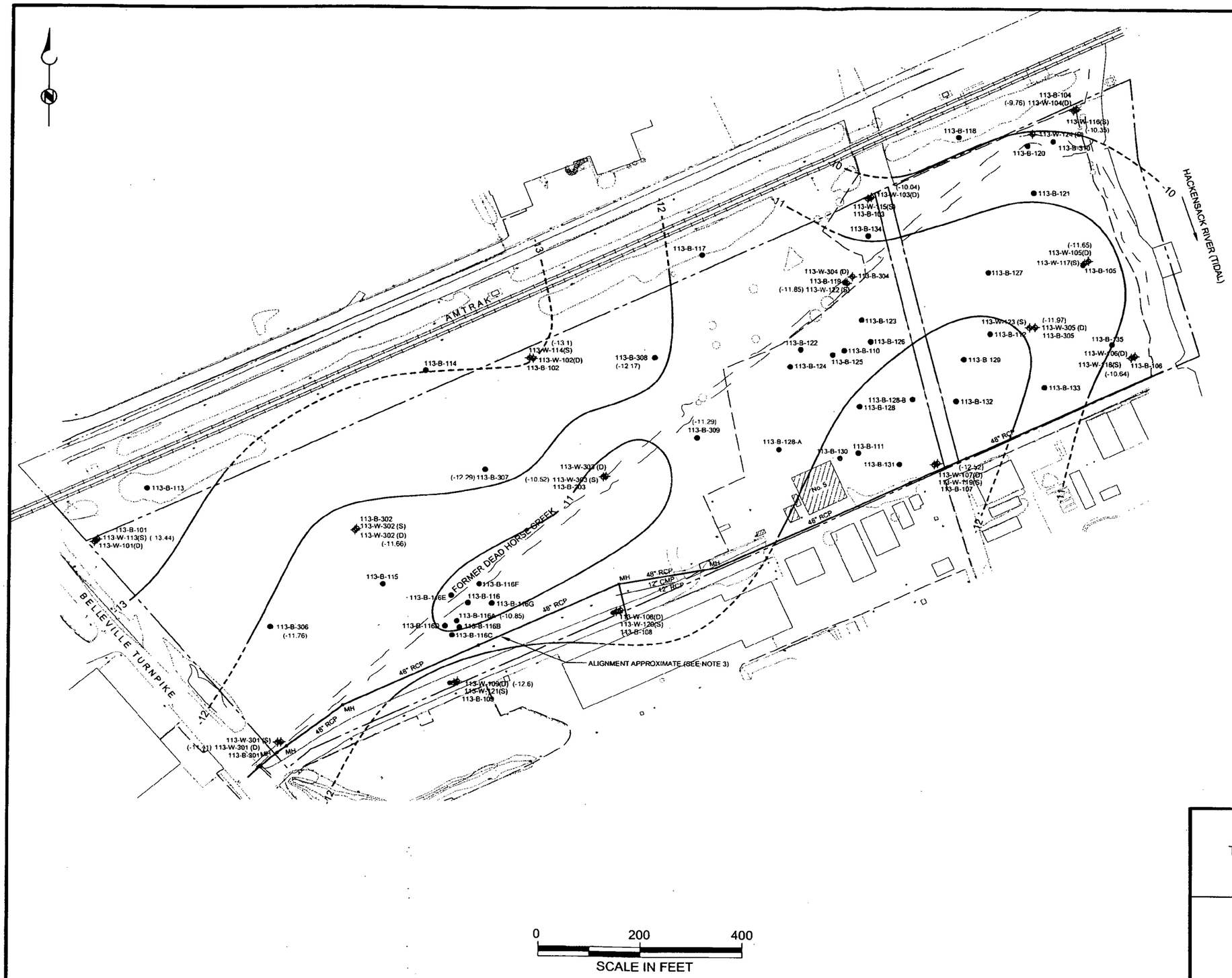

MAP SOURCE DATA:

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3. LOCATION OF STORM SEWER LINE BASED ON DRAWINGS CONTAINED IN DOCUMENT TITLED, "ENGINEERING REPORT OF STORM DRAINAGE CULVERT DESIGN", PREPARED BY WHERAN ENGINEERING CORP., 1974.
4. ELEVATIONS MANUALLY CONTOURED.

LEGEND

113-W-301	MONITORING WELL
113-B-115	SOIL BORING
	EDGE OF ASPHALT
	FORMER DEAD HORSE CREEK
	EXISTING SHORE LINE
	APPROXIMATE PROPERTY LINE
	TOP OF GLACIAL LAKE DEPOSIT STRUCTURAL CONTOUR (DASHED WHERE INFERRED, 1 FT INTERVAL)
	EXISTING STRUCTURE SITE 113
	EXISTING STRUCTURE OFF SITE
CB	EXISTING CATCH BASIN
(S)	SHALLOW MONITORING WELL
(D)	DEEP MONITORING WELL
(-11.66)	TOP OF GLACIAL LAKE DEPOSIT IN MEAN SEA LEVEL (MSL, FT)

BUILDINGS

No. 5 - MAINTENANCE BUILDING

FIGURE 113-02-06

TOP OF GLACIAL LAKE DEPOSIT (Qhkl) STRUCTURAL CONTOUR MAP
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

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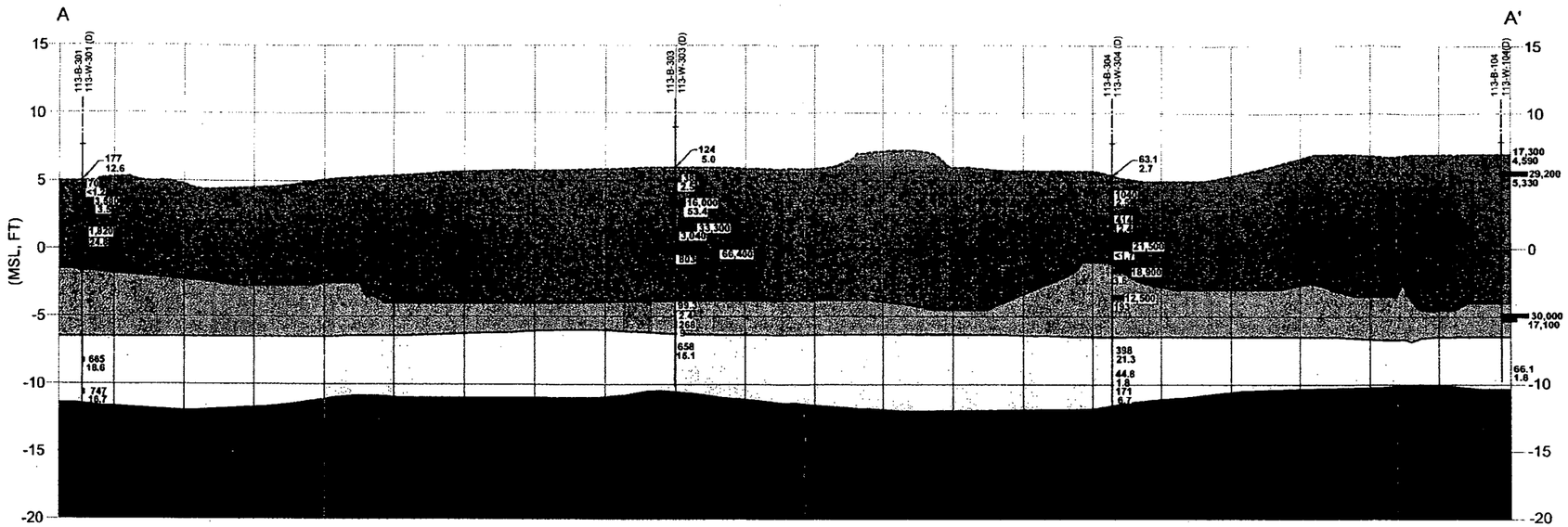
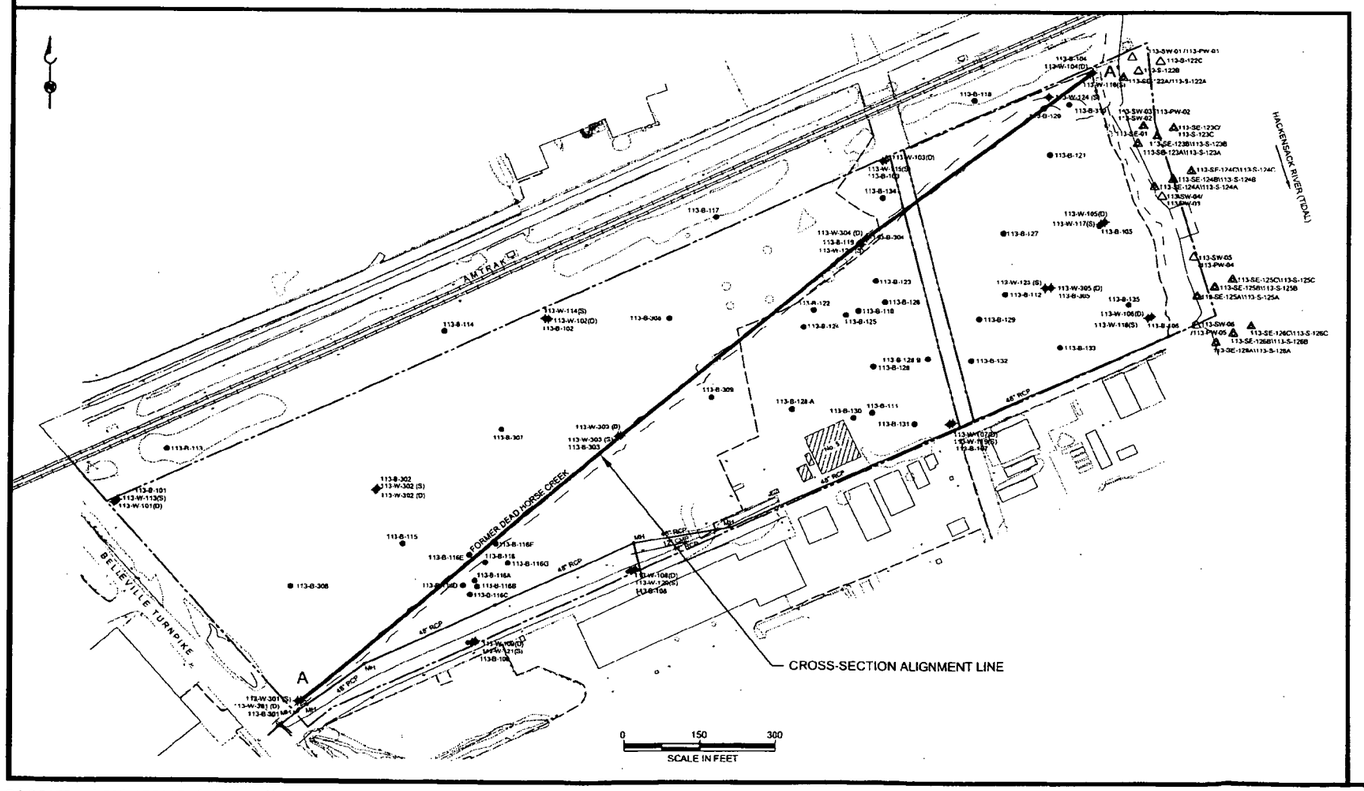


SECTION A-A'

HORIZONTAL SCALE: 1"=200'-0"
VERTICAL SCALE: 1"=10'-0"



LEGEND

- TOTAL Cr CONCENTRATION IN SOIL (mg/kg)
- Cr (VI) CONCENTRATION IN SOIL (mg/kg)
- ARTIFICIAL FILL
- TIDAL MARSH DEPOSITS
- ALLUVIAL DEPOSITS
- GLACIAL LAKE BOTTOM DEPOSITS
- 113-W-301(D) / 113-B-301 — SOIL BORING/MONITORING WELL LOCATION AND ID
- MSL — MEAN SEA LEVEL
- (D) — DEEP MONITORING WELL

FIGURE 113-02-07

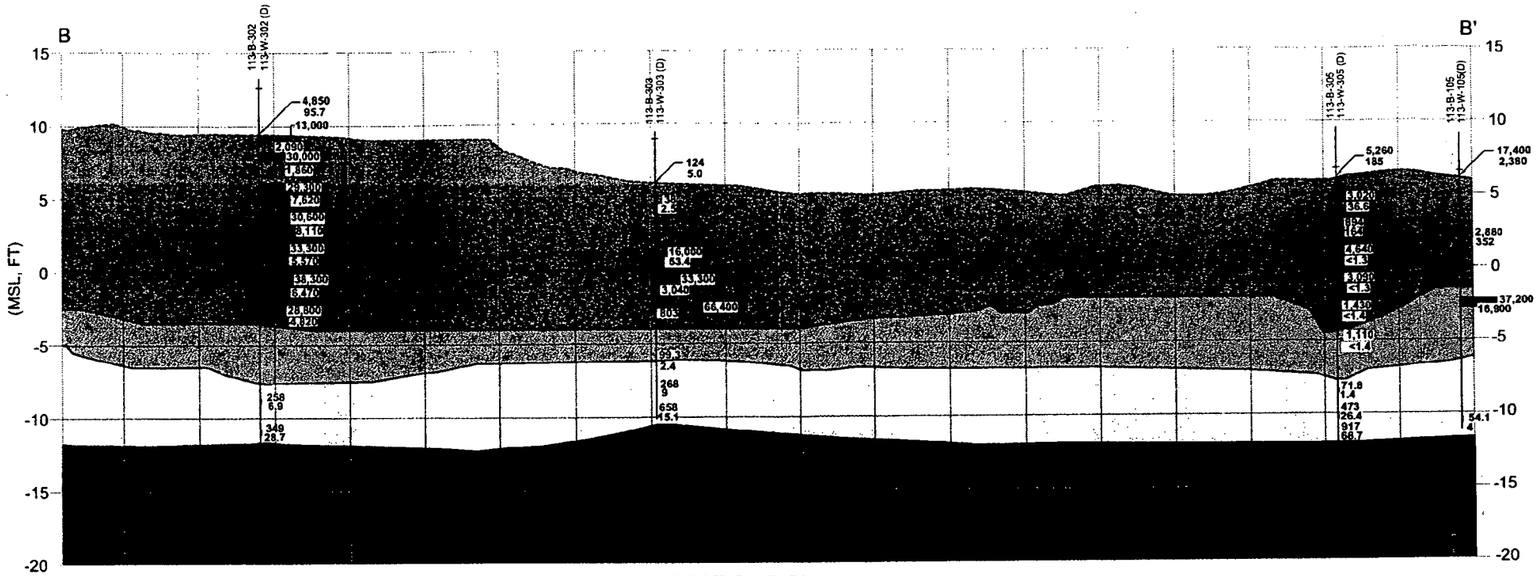
GEOLOGIC CROSS-SECTION A-A'
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

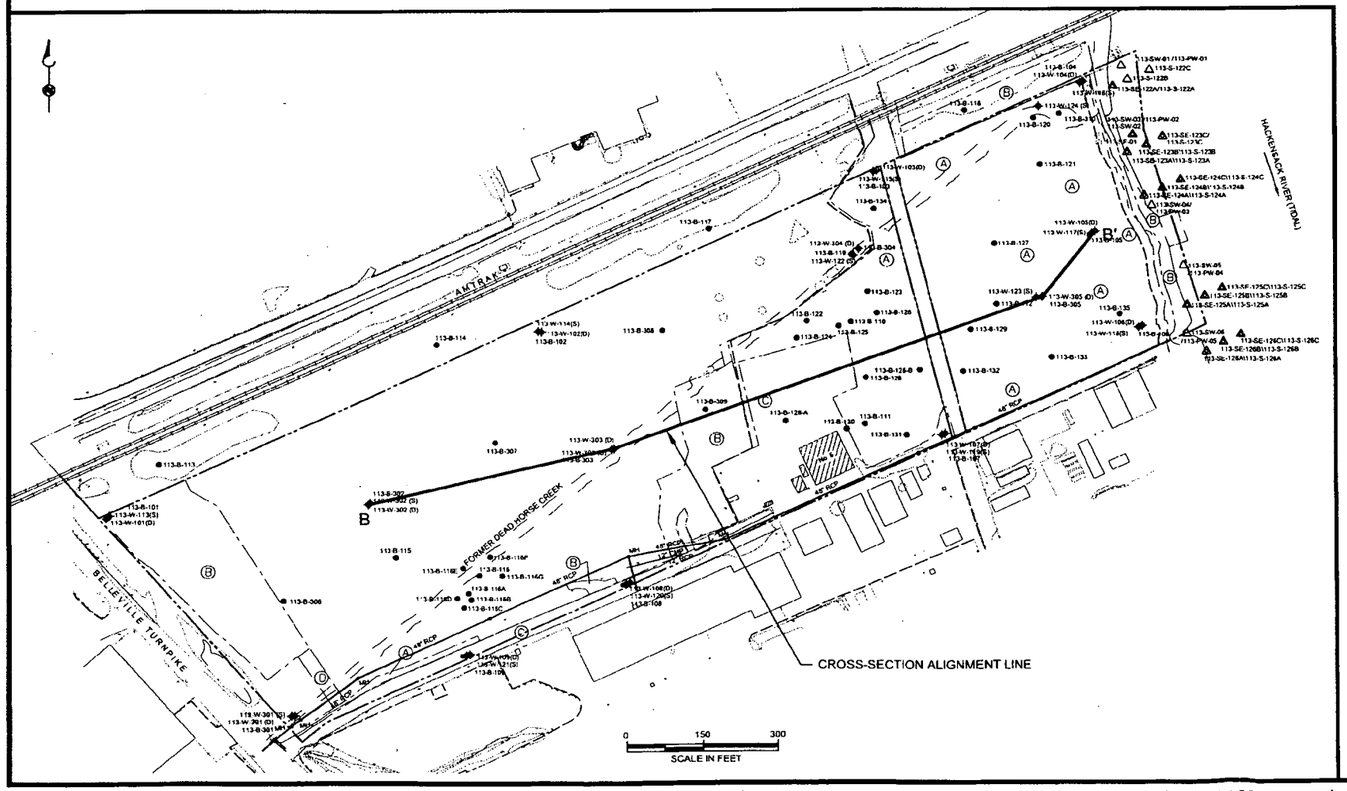
BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:\DRAFTING\TSI\133697 (SITE 113)\005\CONTOUR MAPS\FIG 113_02_07 (SECTION A-A).DWG 06/11/2008 11:58:42AM By:rjames XREFS: FIG 113_02_02 (SAMPLE LOCATION MAP) Layout: SECTIONS



SECTION B-B'

HORIZONTAL SCALE: 1"=200'-0"
VERTICAL SCALE: 1"=10'-0"



LEGEND

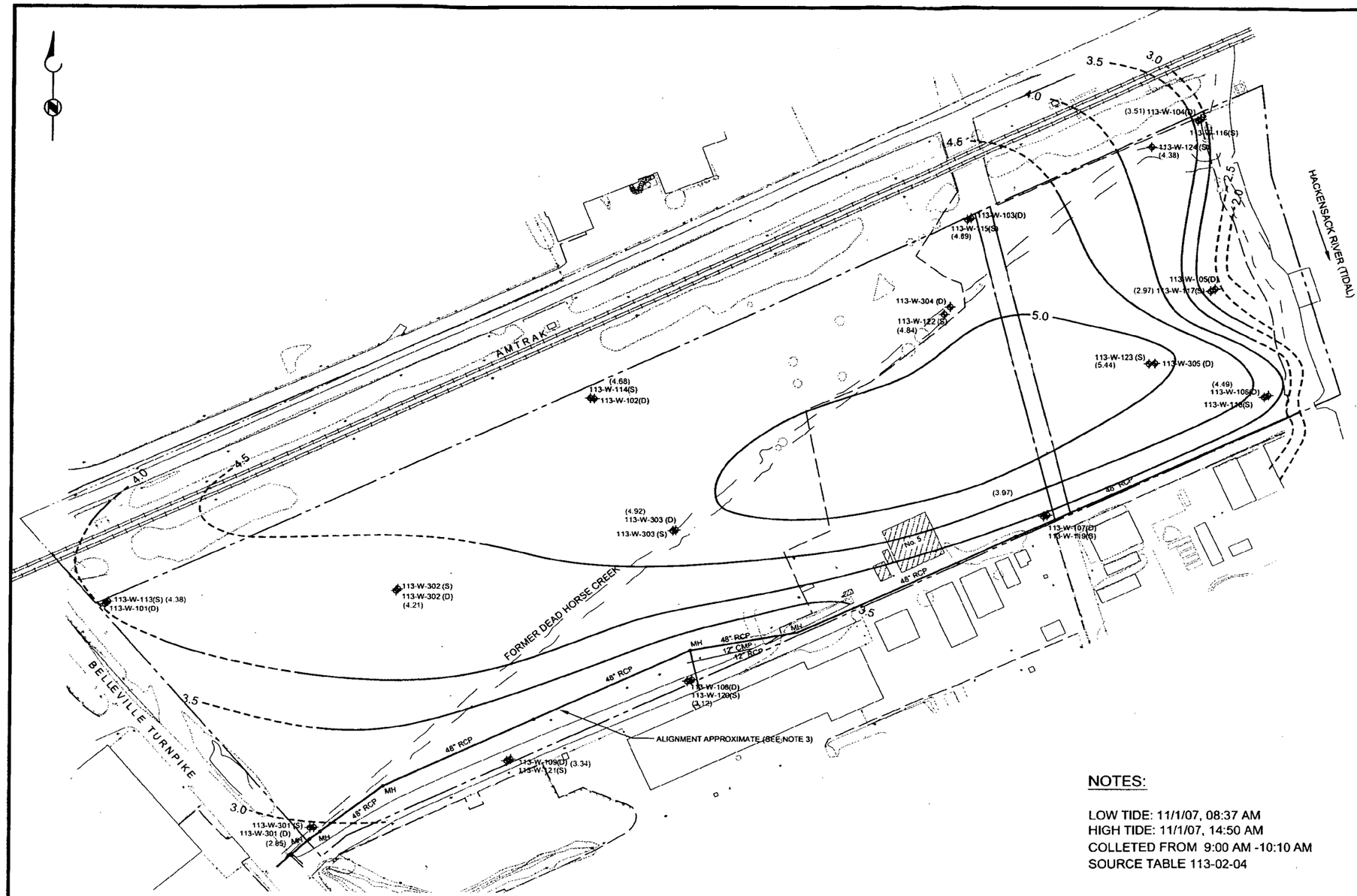
- TOTAL Cr CONCENTRATION IN SOIL (mg/kg)
- Cr (VI) CONCENTRATION IN SOIL (mg/kg)
- ARTIFICIAL FILL
- TIDAL MARSH DEPOSITS
- ALLUVIAL DEPOSITS
- GLACIAL LAKE BOTTOM DEPOSITS
- 113 B 104 / 113-W-104(D) — SOIL BORING/MONITORING WELL LOCATION AND ID
- MSL — MEAN SEA LEVEL
- (D) — DEEP MONITORING WELL

FIGURE 113-02-08

GEOLOGIC CROSS-SECTION B-B'
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE SITE 113 KEARNY, NEW JERSEY	DATE 06/08	PROJECT NUMBER 133697.005
	BROWN AND CALDWELL ALLENDALE, NEW JERSEY	

P:\DRAFTING\TSI\133697 (SITE 113)\005\CONTOUR MAPS\FIG 113_02_08 (SECTION B-B).DWG 06/11/2008 11:59:30AM By:rjames XREFS: FIG 113_02_02 (SAMPLE LOCATION MAP) Layout: SECTIONS



MAP SOURCE DATA:

1. MAP BASE INCLUDING CURRENT SITE FEATURES PROVIDED BY INTRASEARCH OF DENVER, CO. BASED ON AERIAL PHOTOGRAPHY PERFORMED BY ATLANTIS AERIAL SURVEY INC., ON JULY 11, 1998. MAP DATUM: HORIZONTAL NAD83, VERTICAL NAVD88.
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LEGEND

- 113-W-301 — MONITORING WELL
- EDGE OF ASPHALT
- FORMER DEAD HORSE CREEK
- EXISTING SHORE LINE
- APPROXIMATE PROPERTY LINE
- POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED, 0.5 FT INTERVAL)
- EXISTING STRUCTURE SITE 113
- EXISTING STRUCTURE OFF SITE
- CB — EXISTING CATCH BASIN
- (S) — SHALLOW MONITORING WELL
- (D) — DEEP MONITORING WELL
- (3.51) — GROUND WATER ELEVATION IN MEAN SEA LEVEL (MSL, FT)

NOTES:

LOW TIDE: 11/1/07, 08:37 AM
HIGH TIDE: 11/1/07, 14:50 AM
COLLETED FROM 9:00 AM -10:10 AM
SOURCE TABLE 113-02-04

BUILDINGS

No. 5 - MAINTENANCE BUILDING

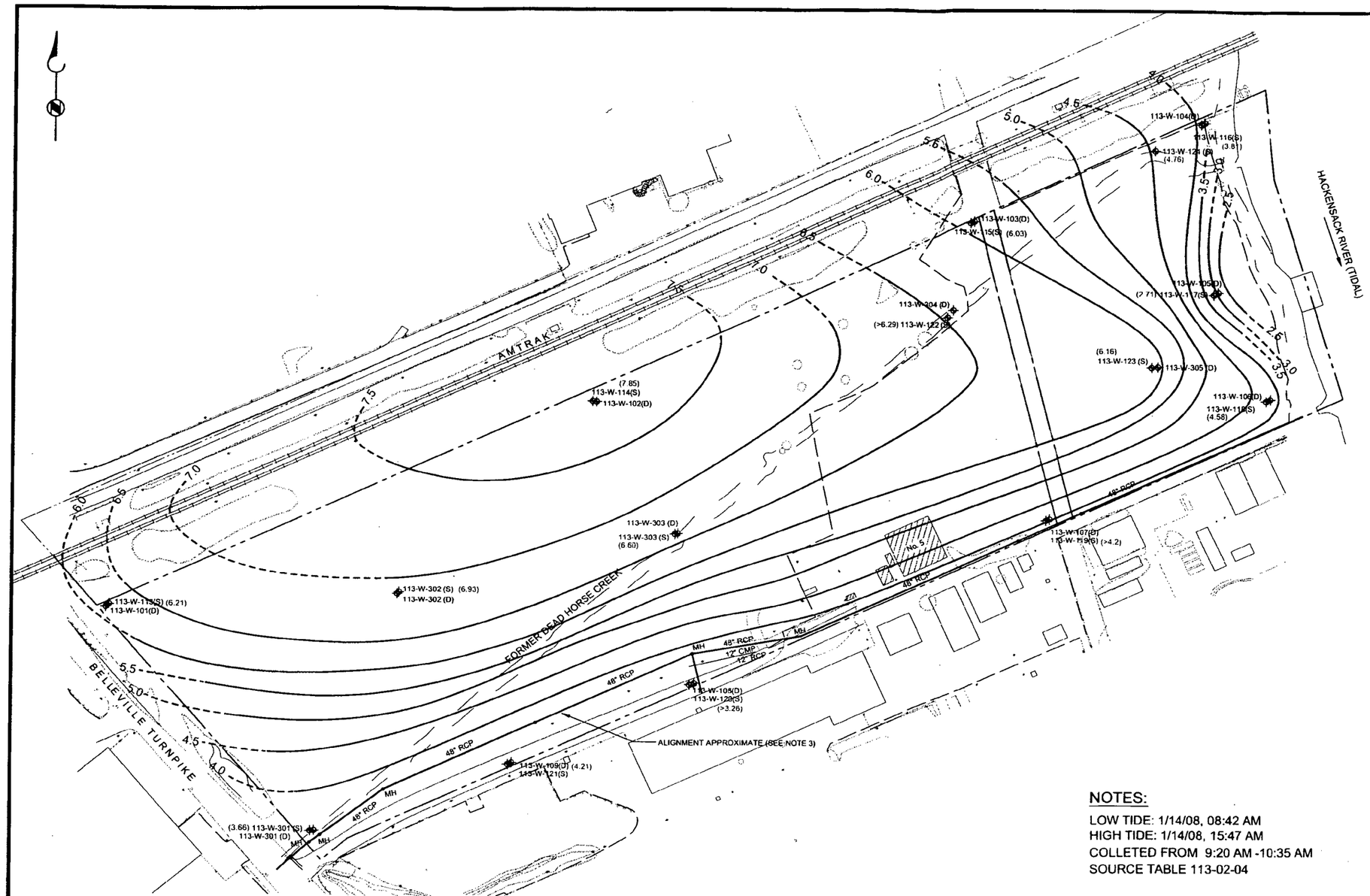
0 200 400
SCALE IN FEET

FIGURE 113-02-09
POTENTIOMETRIC SURFACE CONTOUR MAP UPPER WATER - BEARING ZONE
NOVEMBER 1, 2007
REVISED REMEDIAL INVESTIGATION REPORT

	DATE	PROJECT NUMBER
THE DIAMOND SITE SITE 113 KEARNY, NEW JERSEY	06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

Jun 11, 2008 - 12:00pm rjames
P:\DRAFTING\TSI\133697 (Site 113)\005\CONTOUR MAPS\FIG 113_02_09 (GW CONTOURS UPPER).dwg



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LEGEND

113-W-301	MONITORING WELL
	EDGE OF ASPHALT
	FORMER DEAD HORSE CREEK
	EXISTING SHORE LINE
	APPROXIMATE PROPERTY LINE
	POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED, 0.5 FT INTERVAL)
	EXISTING STRUCTURE SITE 113
	EXISTING STRUCTURE OFF SITE
CB	EXISTING CATCH BASIN
(S)	SHALLOW MONITORING WELL
(D)	DEEP MONITORING WELL
(4.76)	GROUND WATER ELEVATION IN MEAN SEA LEVEL (MSL, FT)

BUILDINGS

No. 5 - MAINTENANCE BUILDING

NOTES:

LOW TIDE: 1/14/08, 08:42 AM
HIGH TIDE: 1/14/08, 15:47 AM
COLLETED FROM 9:20 AM -10:35 AM
SOURCE TABLE 113-02-04

0 200 400
SCALE IN FEET

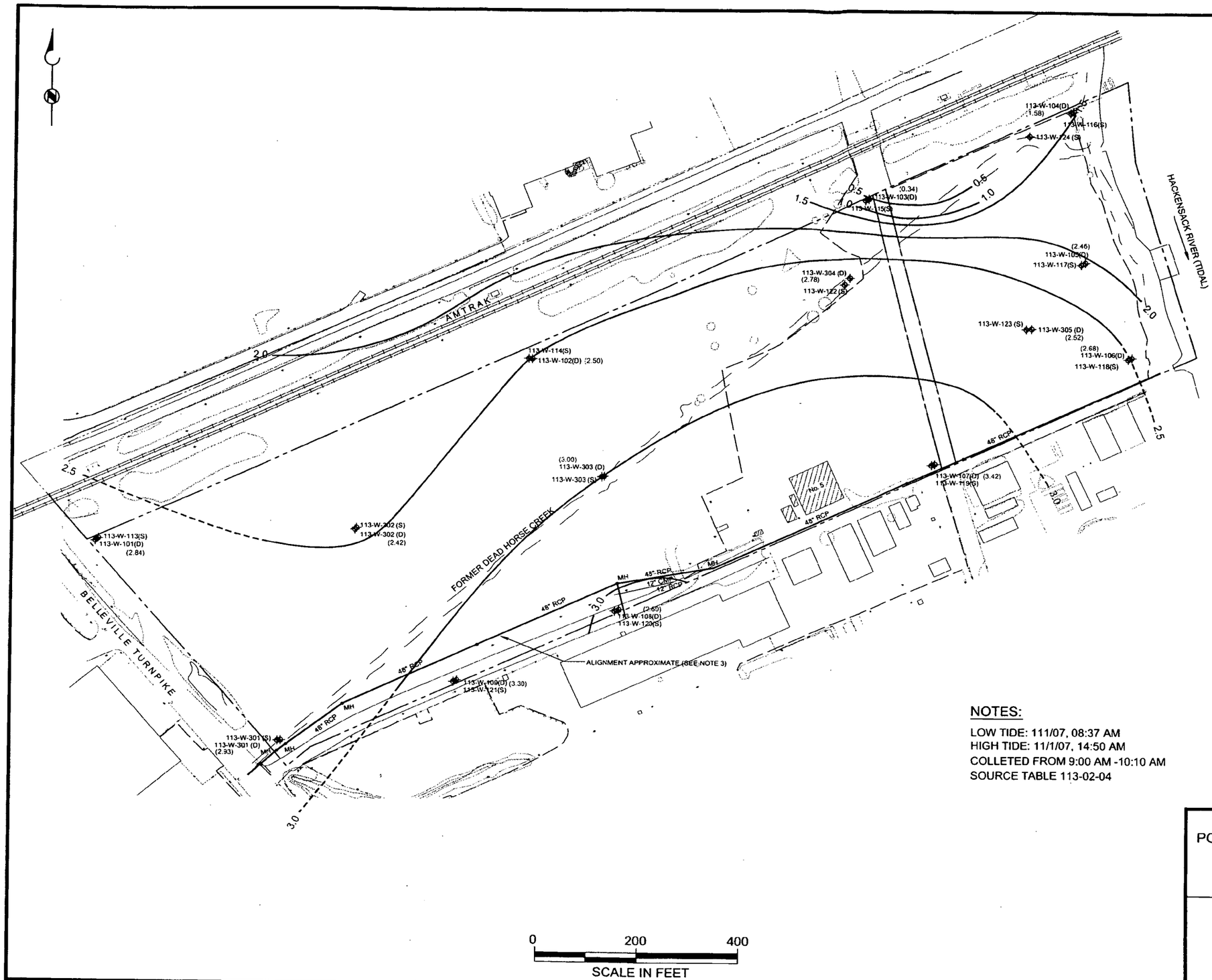
FIGURE 113-02-10
POTENTIOMETRIC SURFACE CONTOUR MAP UPPER WATER - BEARING ZONE
JANUARY 14, 2008
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

Jun 11, 2008 - 12:01pm rjames
P:\DRAFTING\TSI\133697 (Site 113)\005\CONTOUR MAPS\FIG 113_02_10 (GW CONTOURS UPPER).dwg



MAP SOURCE DATA:

1. MAP BASE INCLUDING CURRENT SITE FEATURES PROVIDED BY INTRASEARCH OF DENVER, CO. BASED ON AERIAL PHOTOGRAPHY PERFORMED BY ATLANTIS AERIAL SURVEY INC., ON JULY 11, 1998. MAP DATUM: HORIZONTAL NAD83, VERTICAL NAVD88.
2. HISTORICAL LOCATION OF FORMER DEAD HORSE CREEK CHANNEL BASED ON AERIAL PHOTOGRAPHS DATED APRIL 28, 1947.
3. LOCATION OF STORM SEWER LINE BASED ON DRAWINGS CONTAINED IN DOCUMENT TITLED, "ENGINEERING REPORT OF STORM DRAINAGE CULVERT DESIGN", PREPARED BY WHERAN ENGINEERING CORP., 1974.

LEGEND

113-W-301	MONITORING WELL
	EDGE OF ASPHALT
	FORMER DEAD HORSE CREEK
	EXISTING SHORE LINE
	APPROXIMATE PROPERTY LINE
	POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED, 0.5 FT INTERVAL)
	EXISTING STRUCTURE SITE 113
	EXISTING STRUCTURE OFF SITE
CB	EXISTING CATCH BASIN
(S)	SHALLOW MONITORING WELL
(D)	DEEP MONITORING WELL
(1.50)	GROUND WATER ELEVATION IN MEAN SEA LEVEL (MSL, FT)

NOTES:

LOW TIDE: 111/07, 08:37 AM
HIGH TIDE: 11/1/07, 14:50 AM
COLLETED FROM 9:00 AM -10:10 AM
SOURCE TABLE 113-02-04

BUILDINGS

No. 5 - MAINTENANCE BUILDING

0 200 400
SCALE IN FEET

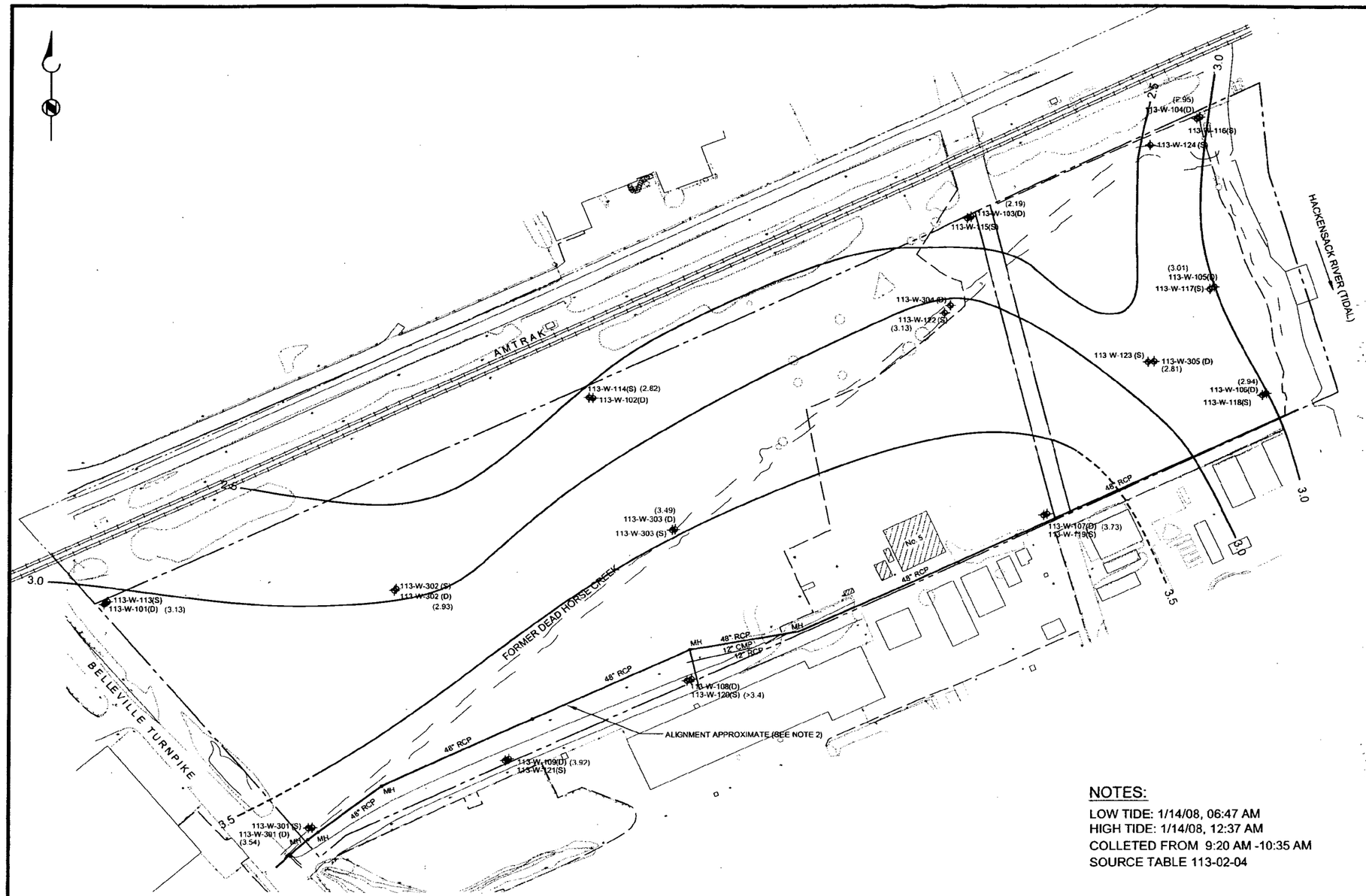
FIGURE 113-02-11
POTENTIOMETRIC SURFACE CONTOUR MAP LOWER WATER - BEARING ZONE
NOVEMBER 1, 2007
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

Jun 11, 2008 - 12:03pm rjames
P:\DRAFTING\TSI\133697 (Site 113)\005\CONTOUR MAPS\FIG 113_02_11 (GW CONTOURS LOWER).dwg



MAP SOURCE DATA:

1. MAP BASE INCLUDING CURRENT SITE FEATURES PROVIDED BY INTRASEARCH OF DENVER, CO. BASED ON AERIAL PHOTOGRAPHY PERFORMED BY ATLANTIS AERIAL SURVEY INC., ON JULY 11, 1998. MAP DATUM: HORIZONTAL NAD83, VERTICAL NAVD88.
2. HISTORICAL LOCATION OF FORMER DEAD HORSE CREEK CHANNEL BASED ON AERIAL PHOTOGRAPHS DATED APRIL 28, 1947.
3. LOCATION OF STORM SEWER LINE BASED ON DRAWINGS CONTAINED IN DOCUMENT TITLED, "ENGINEERING REPORT OF STORM DRAINAGE CULVERT DESIGN", PREPARED BY WHERAN ENGINEERING CORP., 1974.

LEGEND

113-W-301	MONITORING WELL
	EDGE OF ASPHALT
	FORMER DEAD HORSE CREEK
	EXISTING SHORE LINE
	APPROXIMATE PROPERTY LINE
	POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED, 0.5 FT INTERVAL)
	EXISTING STRUCTURE SITE 113
	EXISTING STRUCTURE OFF SITE
CB	EXISTING CATCH BASIN
(S)	SHALLOW MONITORING WELL
(D)	DEEP MONITORING WELL
(2.95)	GROUND WATER ELEVATION IN MEAN SEA LEVEL (MSL, FT)

BUILDINGS

No. 5 - MAINTENANCE BUILDING

NOTES:

LOW TIDE: 1/14/08, 06:47 AM
HIGH TIDE: 1/14/08, 12:37 AM
COLLETED FROM 9:20 AM -10:35 AM
SOURCE TABLE 113-02-04

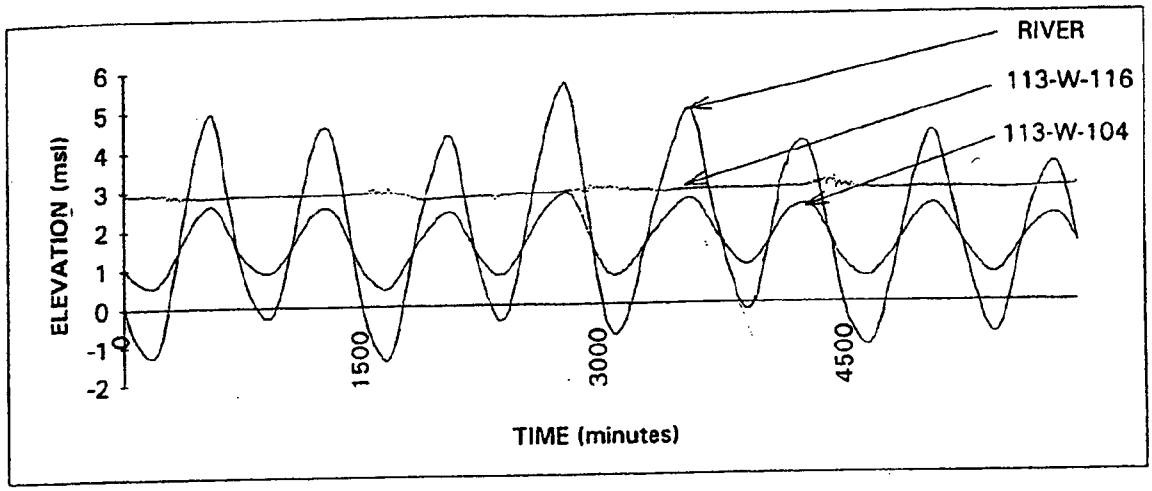
0 200 400
SCALE IN FEET

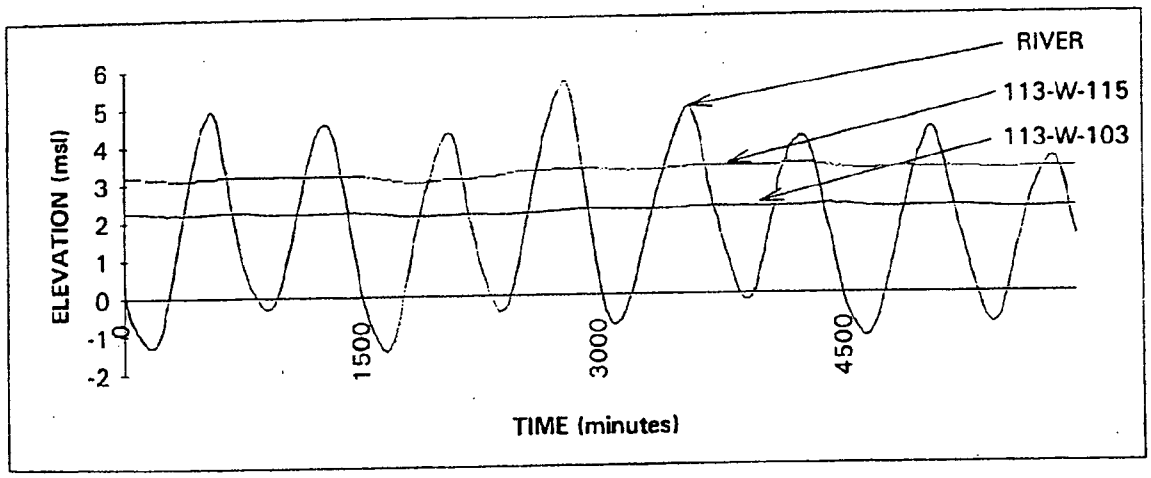
FIGURE 113-02-12
POTENTIOMETRIC SUFACE CONTOUR MAP LOWER WATER - BEARING ZONE
JANUARY 14, 2008
REVISED REMEDIAL INVESTIGATION REPORT

	DATE	PROJECT NUMBER
THE DIAMOND SITE SITE 113 KEARNY, NEW JERSEY	06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

Jun 11, 2008 - 12:02pm rjames
P:\DRAFTING\TSI\133697 (Site 113)\005\CONTOUR MAPS\FIG 113_12 (GW CONTOURS LOWER 1-14-08).dwg





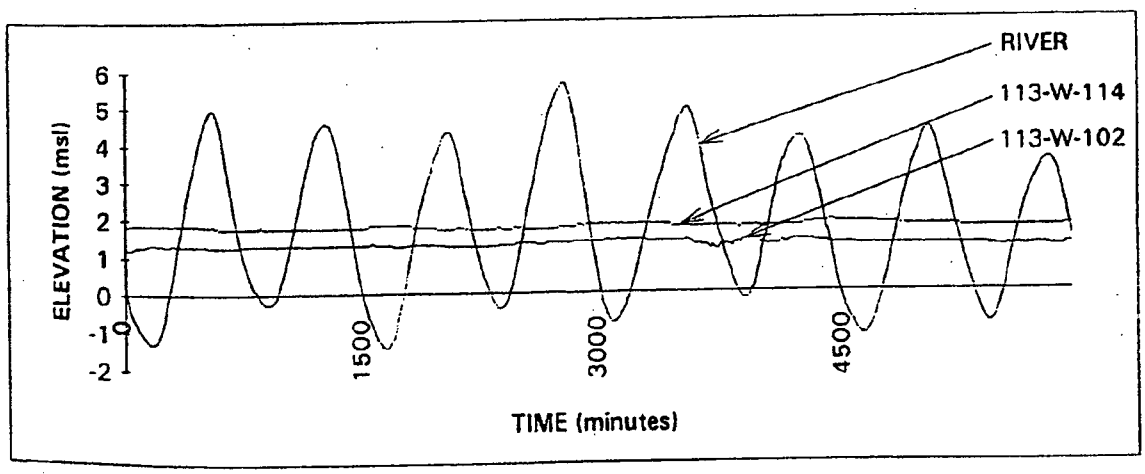


FIGURE 113-02-13

TIDAL STUDY HYDROGRAPH, OCTOBER 15, 1992
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE SITE 113 KEARNY, NJ	DATE 06/08	PROJECT NUMBER 133697.005
	BROWN AND CALDWELL ALLENDALE, NEW JERSEY	

P:\GIS\TSI\Fig113_02_13(TIDAL_HYDRO_101592)

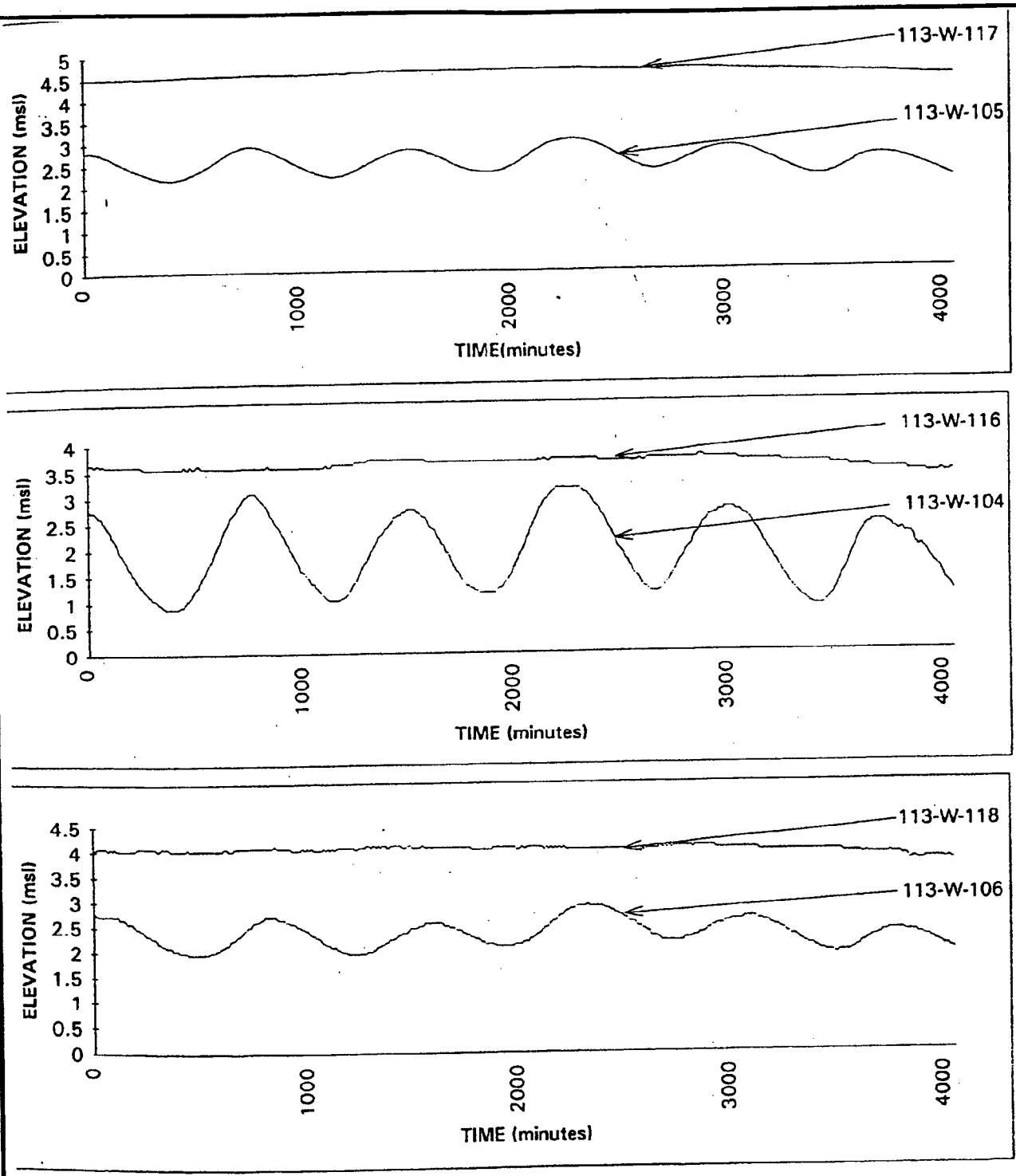
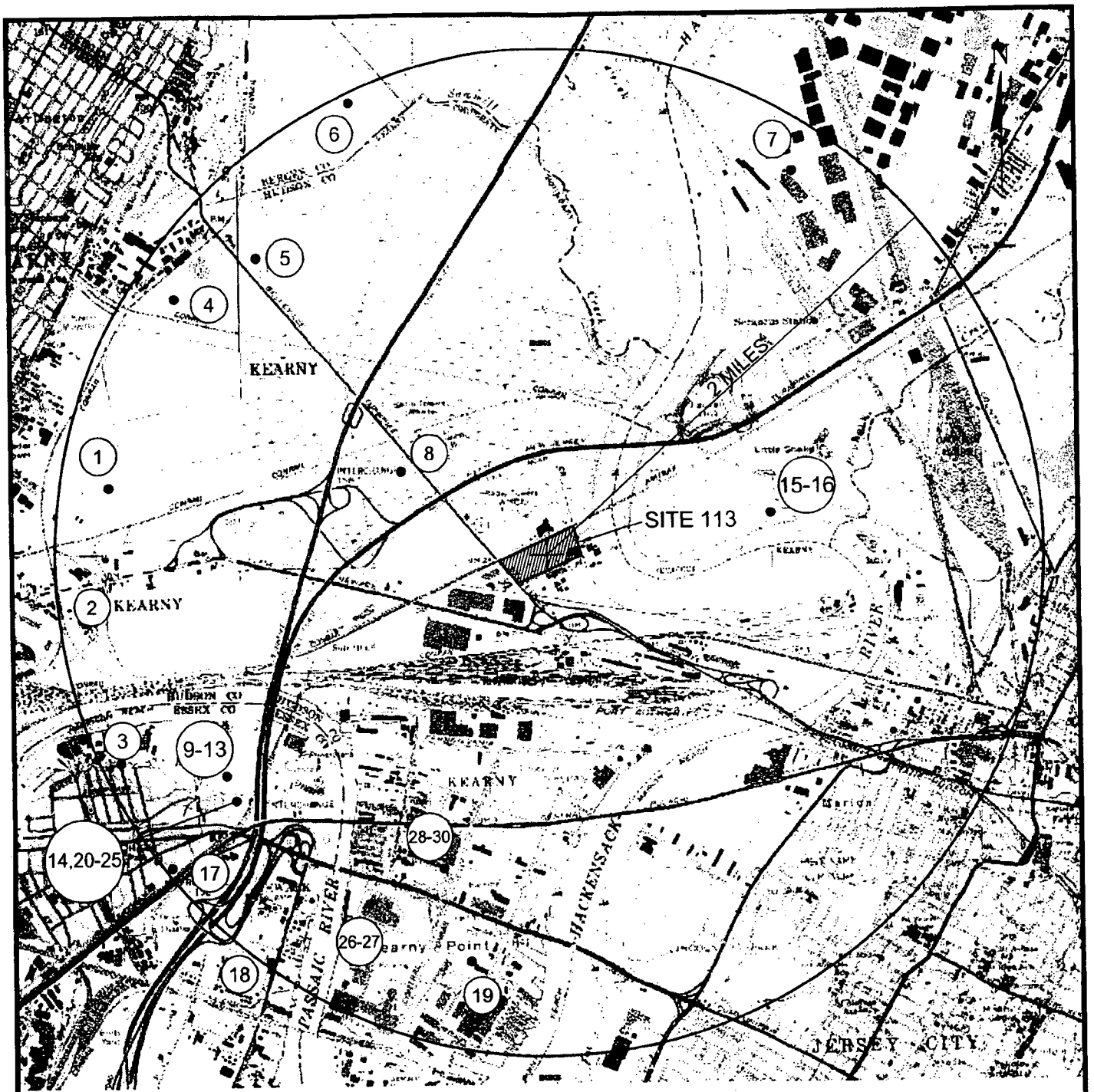


FIGURE 113-02-14

TIDAL STUDY HYDROGRAPH, JANUARY 15, 1993
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE SITE 113 KEARNY, NJ	DATE 06/08	PROJECT NUMBER 133697.005
	BROWN AND CALDWELL ALLENDALE, NEW JERSEY	

P:\GIS\TSI\Fig113_02_14(TIDAL_HYDRO_011593)



LEGEND:

●(6) LOCATION OF WELL AND INDEX NUMBER OTHER THAN MONITORING WELL (REFER TO TABLE 113-02-05 FOR WELL OWNER AND DISTANCE FROM SITE 113).

SOURCE:

USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLES
QUAD: JERSEY CITY, WEEHAWKEN

FIGURE 113-02-15
RESULTS OF WELL SEARCH
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:\DRAFTING\TSI\133697 (SITE 113)\005\FIGURE 113-02-15.DWG 06/12/2008 08:42:52AM By:rjames XREFS: Layout: SITE MAP

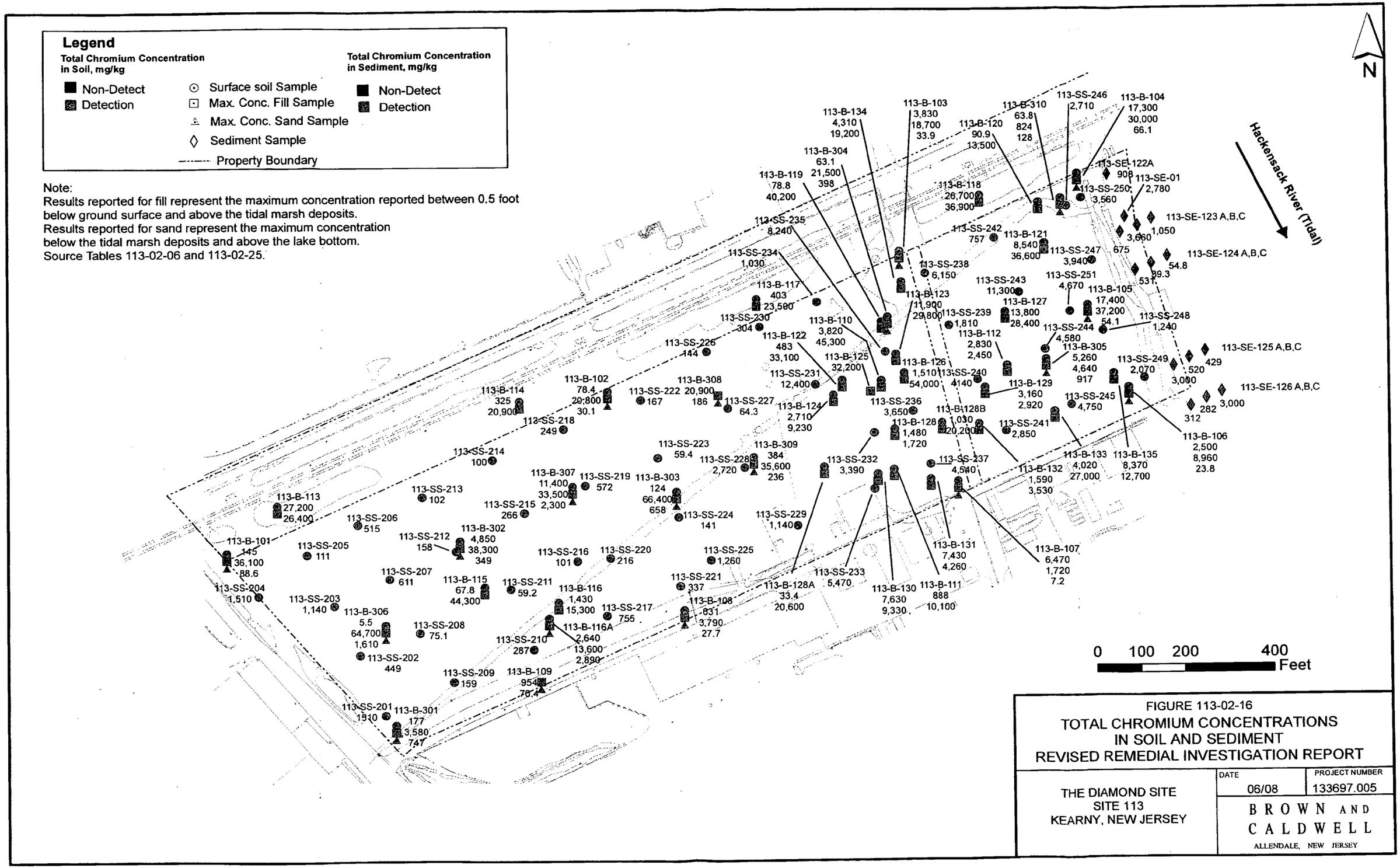
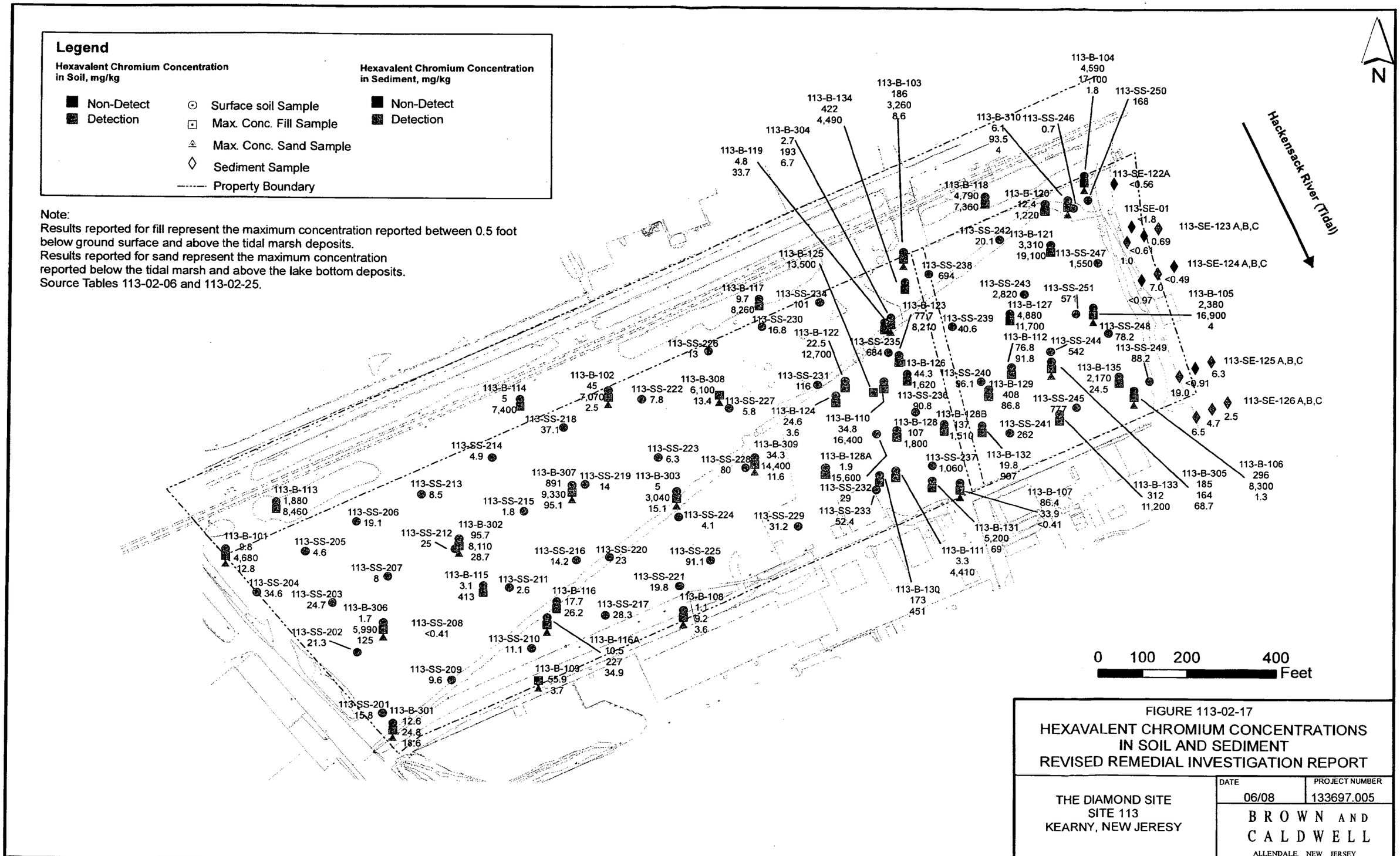


FIGURE 113-02-16
TOTAL CHROMIUM CONCENTRATIONS IN SOIL AND SEDIMENT
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE SITE 113 KEARNY, NEW JERSEY	DATE 06/08	PROJECT NUMBER 133697.005
	BROWN AND CALDWELL ALLENDALE, NEW JERSEY	

P:/GIS/TSI/Fig113_02_16(Total_Cr_Soil).mxd



Note:
Results reported for fill represent the maximum concentration reported between 0.5 foot below ground surface and above the tidal marsh deposits.
Results reported for sand represent the maximum concentration reported below the tidal marsh and above the lake bottom deposits.
Source Tables 113-02-06 and 113-02-25.

FIGURE 113-02-17
HEXAVALENT CHROMIUM CONCENTRATIONS IN SOIL AND SEDIMENT
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERESY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_17(Cr6_Soil)

Legend

Total PCB Concentration in Soil, mg/kg

- Non-Detect
- <1
- >1

- Surface soil Sample
- Max. Conc. Fill Sample
- Sediment Sample
- Property Boundary

Total PCB Concentration in Sediment, mg/kg

- Non-Detect
- Detection

Notes:
ND is used to denote that none of the PCBs analyzed for were detected. See Table 113-02-07 to see detection limits for individual PCBs.
2008 Current New Jersey Non-Residential Direct Contact Health Based Criteria and Soil Remediation Standard for Total PCBs is 1 mg/kg.
Results reported for the fill represent the maximum concentration reported between 0.5 foot below ground surface and above the tidal marsh deposits.
Source Tables 113-02-07 and 113-02-26.

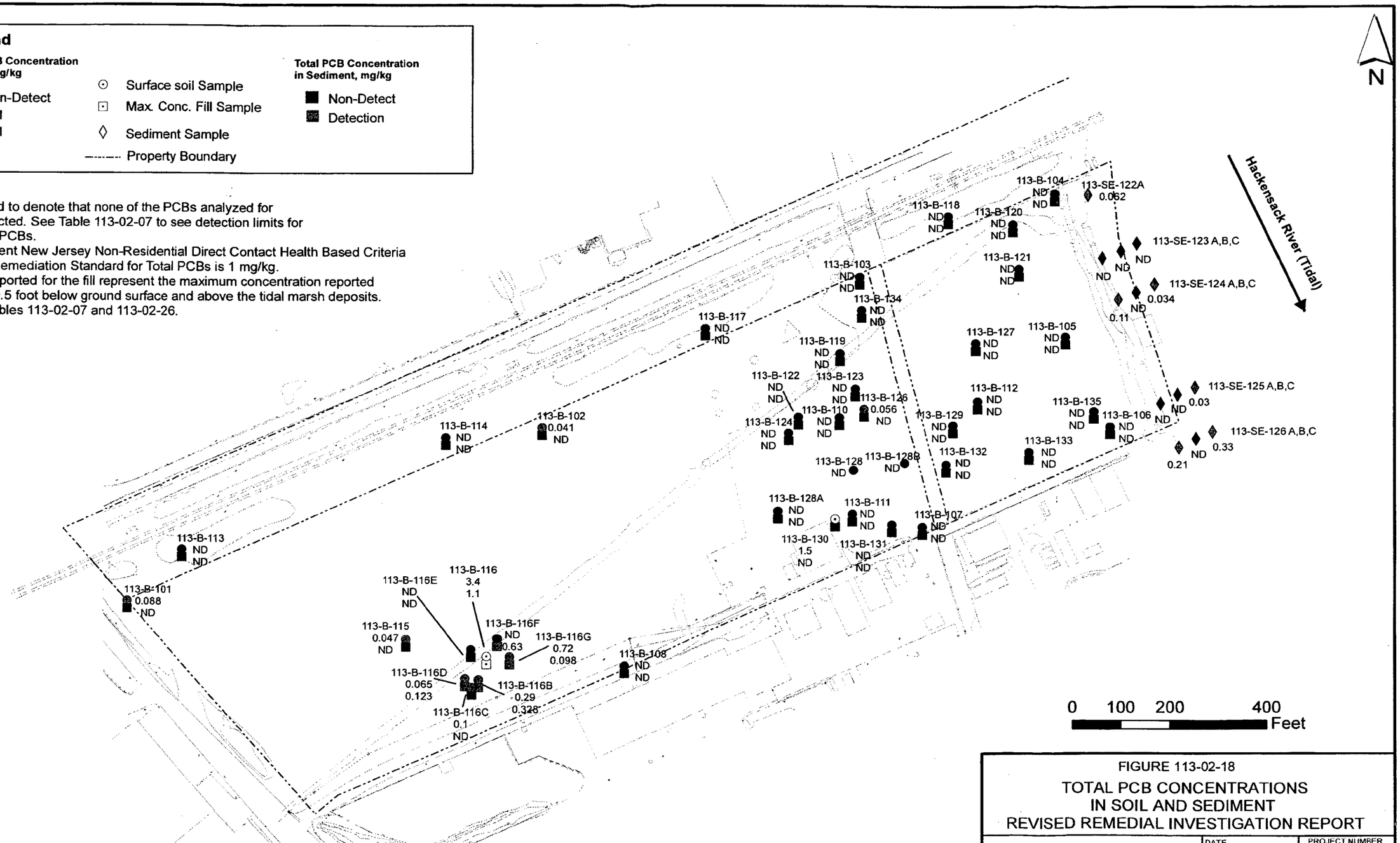


FIGURE 113-02-18

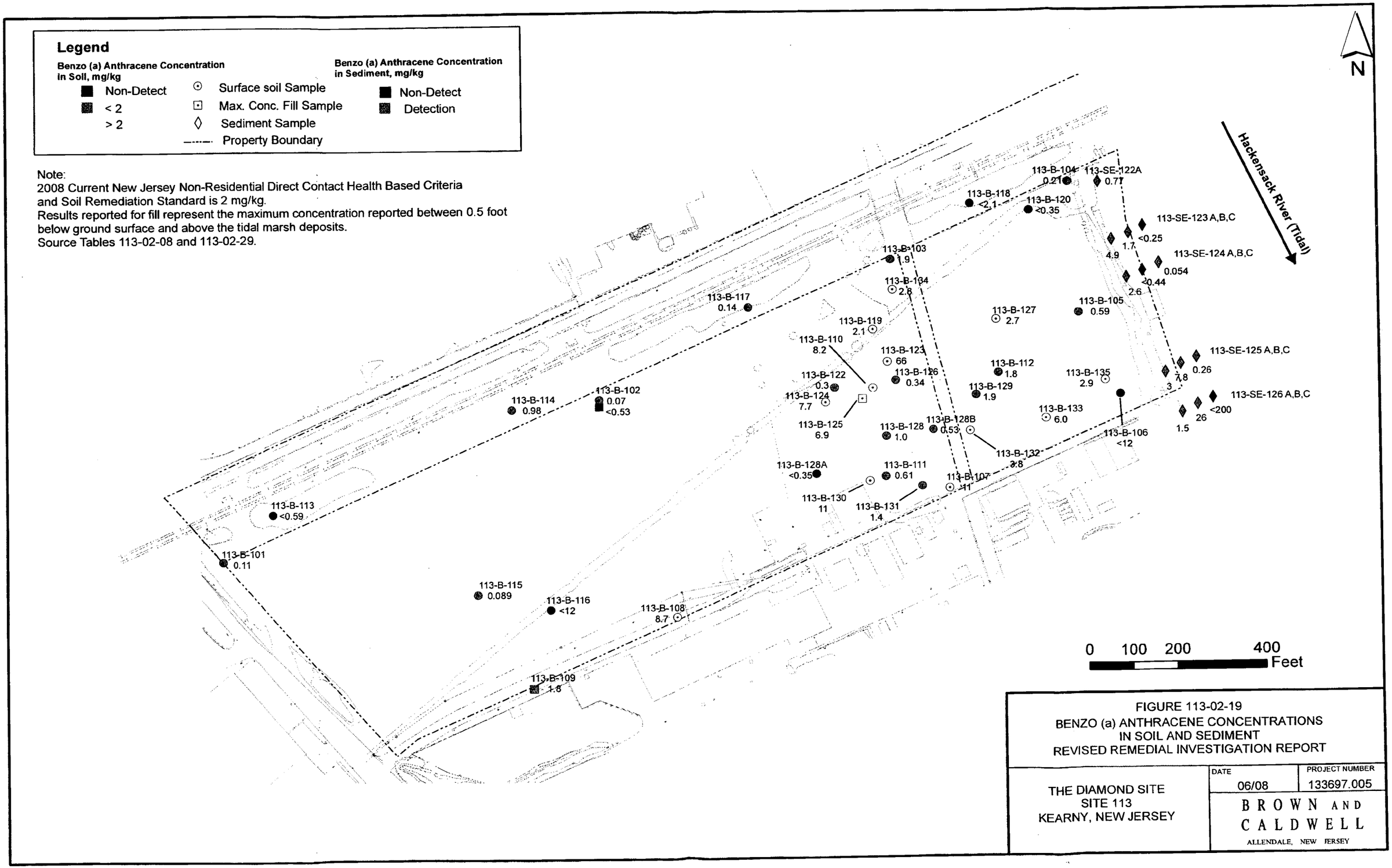
TOTAL PCB CONCENTRATIONS IN SOIL AND SEDIMENT
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_18(PCB_Soil)



Note:
2008 Current New Jersey Non-Residential Direct Contact Health Based Criteria and Soil Remediation Standard is 2 mg/kg.
Results reported for fill represent the maximum concentration reported between 0.5 foot below ground surface and above the tidal marsh deposits.
Source Tables 113-02-08 and 113-02-29.

FIGURE 113-02-19
BENZO (a) ANTHRACENE CONCENTRATIONS IN SOIL AND SEDIMENT
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_19(Benzo_a_Anthracene_Soil)

Legend

Chrysene Concentration in Soil, mg/kg

- Non-Detect
- < 230
- > 230
- Surface soil Sample
- Max. Conc. Fill Sample
- Sediment Sample
- Property Boundary

Chrysene Concentration in Sediment, mg/kg

- Non-Detect
- Detection

Note:
2008 Current New Jersey Non-Residential Direct Contact Health Based Criteria and Soil Remediation Standard is 230 mg/kg.
Results reported for fill represent the maximum concentration reported between 0.5 foot below ground surface and above the tidal marsh deposits.
Source Tables 113-02-08 and 113-02-29.

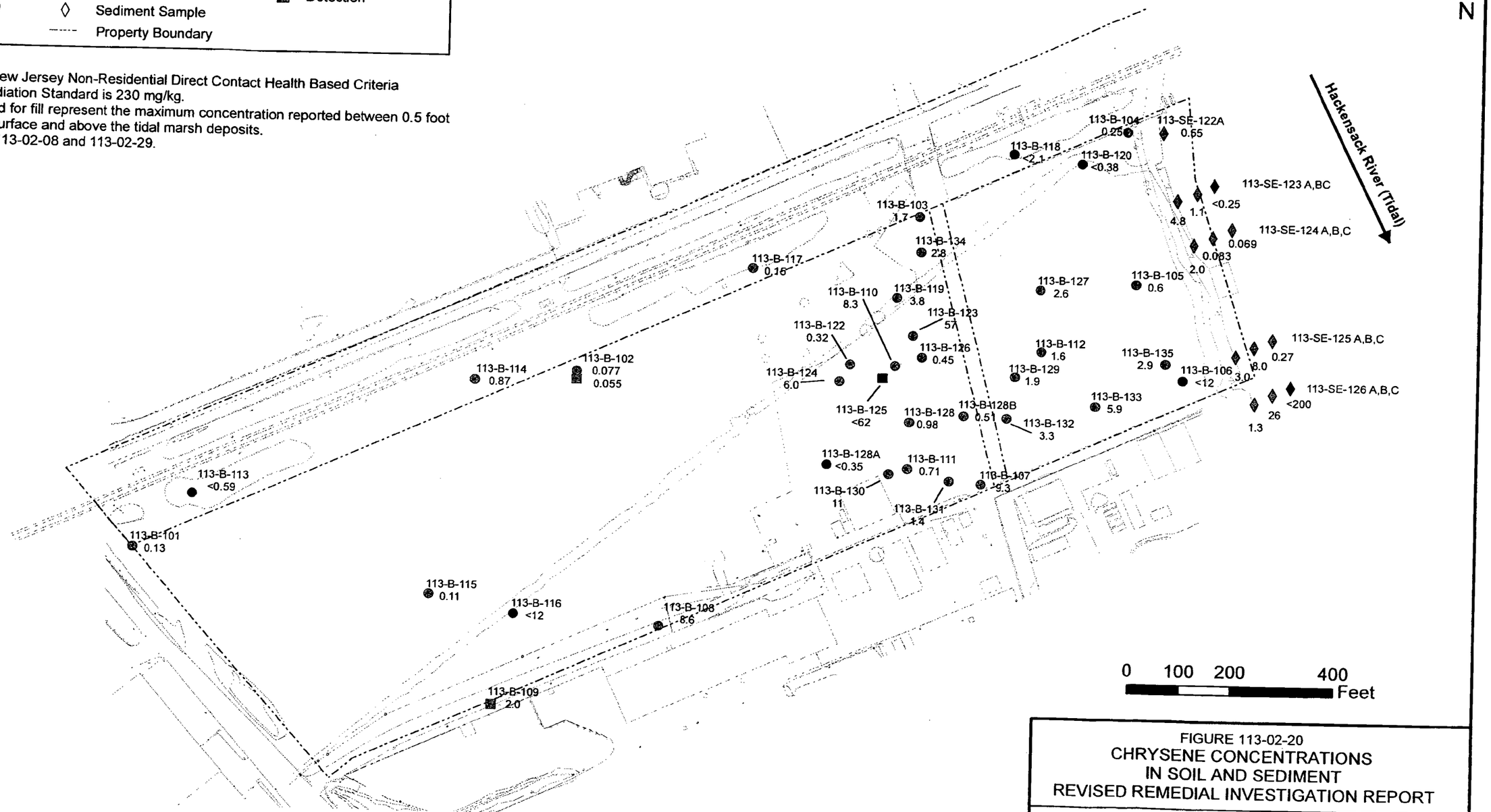


FIGURE 113-02-20
CHRYSENE CONCENTRATIONS
IN SOIL AND SEDIMENT
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE SITE 113 KEARNY, NEW JERSEY	DATE 06/08	PROJECT NUMBER 133697.005
	BROWN AND CALDWELL ALLENDALE, NEW JERSEY	

P:/GIS/TSI/Fig113_02_20(Chrysene_Soil).mxd

Legend

Benzo (b) Fluoranthene Concentration in Soil, mg/kg

- Non-Detect
- < 2
- > 2

- Surface soil Sample
- Max. Conc. Fill Sample
- Sediment Sample
- Property Boundary

Benzo (b) Fluoranthene Concentration in Sediment, mg/kg

- Non-Detect
- Detection

Note:
2008 Current New Jersey Non-Residential Direct Contact Health Based Criteria and Soil Remediation Standard is 2 mg/kg.
Results reported for fill represent the maximum concentration reported between 0.5 foot below ground surface and above the tidal marsh deposits.
Source Tables 113-02-08 and 113-02-29.

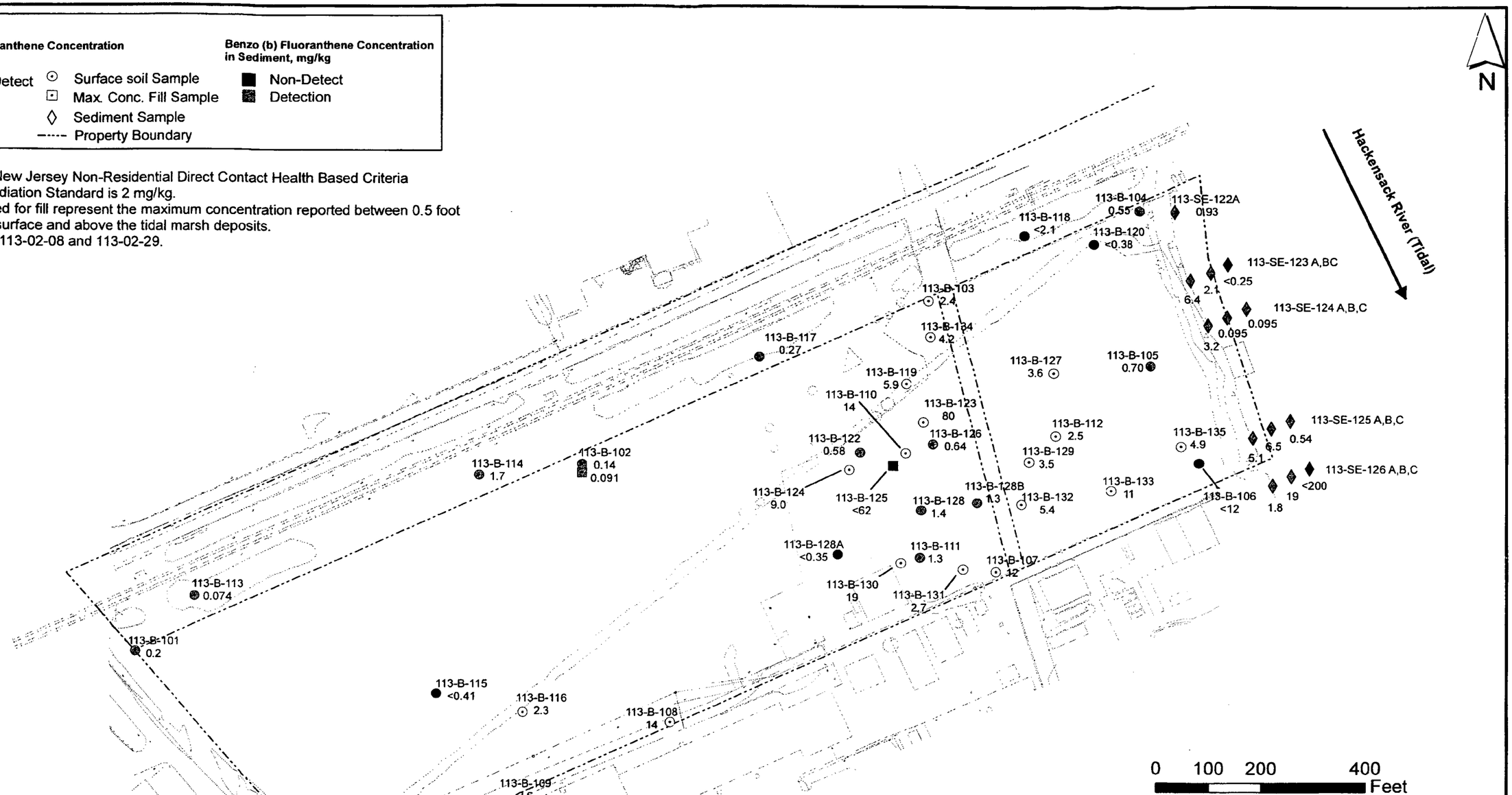


FIGURE 113-02-21
BENZO (b) FLUORANTHENE CONCENTRATIONS IN SOIL AND SEDIMENT
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE SITE 113 KEARNY, NEW JERSEY	DATE 06/08	PROJECT NUMBER 133697.005
	BROWN AND CALDWELL ALLENDALE, NEW JERSEY	

P:/GIS/TSI/Fig113_02_21(Benzo_b_Fluor_Soil)

Legend

Benzo (a) Pyrene Concentration in Soil, mg/kg

- Non-Detect
- <0.2
- >0.2

- Surface soil Sample
- Max. Conc. Fill Sample
- Sediment Sample
- Property Boundary

Benzo (a) Pyrene Concentration in Sediment, mg/kg

- Non-Detect
- Detection

Note:
2008 Current New Jersey Non-Residential Direct Contact Health Based Criteria and Soil Remediation Standard is 0.2 mg/kg.
Results reported for fill represent the maximum concentration reported between 0.5 foot below ground surface and above the tidal marsh deposits.
Source Tables 113-02-08 and 113-02-29.

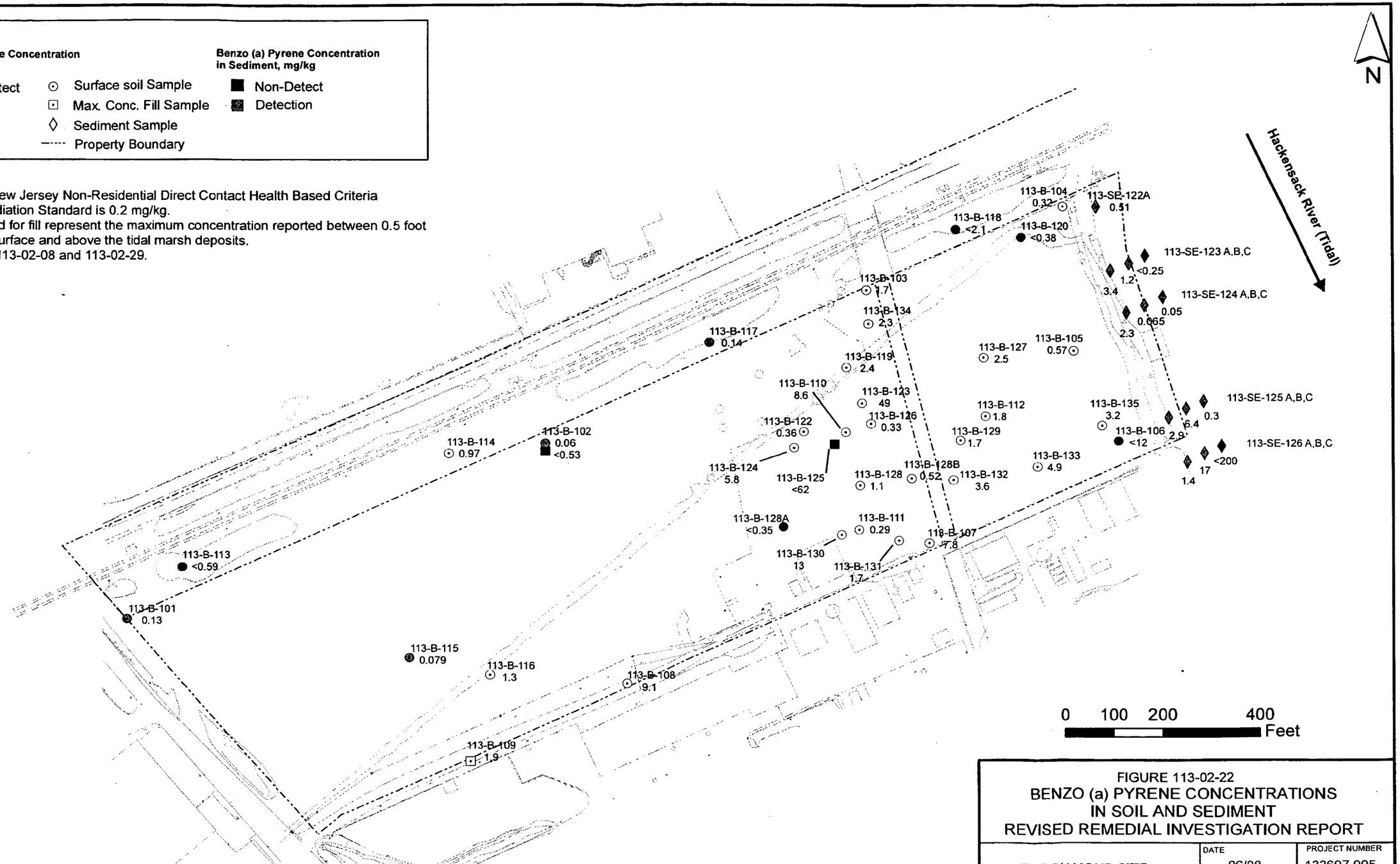


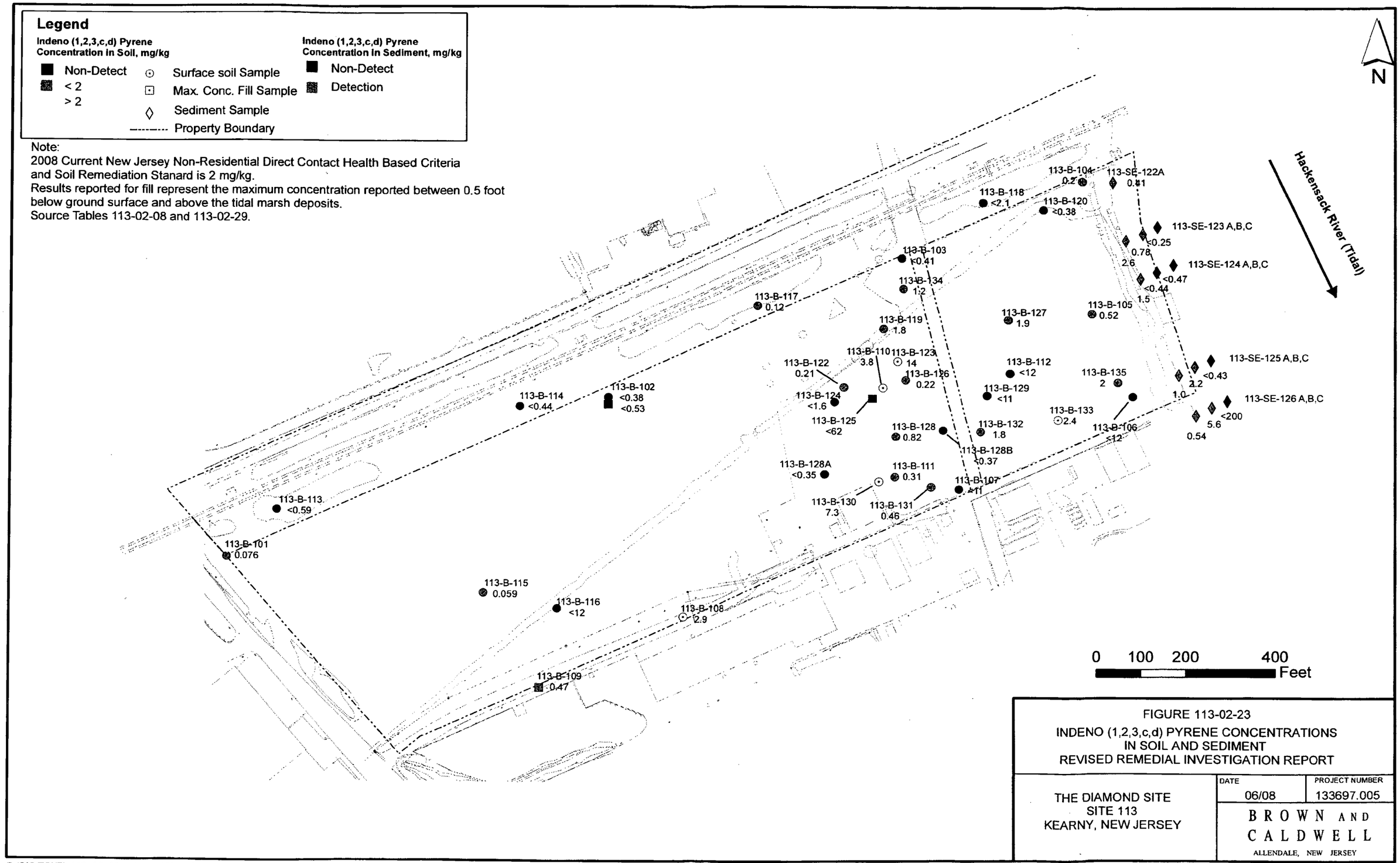
FIGURE 113-02-22
BENZO (a) PYRENE CONCENTRATIONS IN SOIL AND SEDIMENT
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_22(Benzo_a_Pyrene_Soil).mxd



Note:
2008 Current New Jersey Non-Residential Direct Contact Health Based Criteria and Soil Remediation Stanard is 2 mg/kg.
Results reported for fill represent the maximum concentration reported between 0.5 foot below ground surface and above the tidal marsh deposits.
Source Tables 113-02-08 and 113-02-29.

FIGURE 113-02-23
INDENO (1,2,3,c,d) PYRENE CONCENTRATIONS IN SOIL AND SEDIMENT
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_23(Indeno_123cd_Pyrene_Soil).mxd

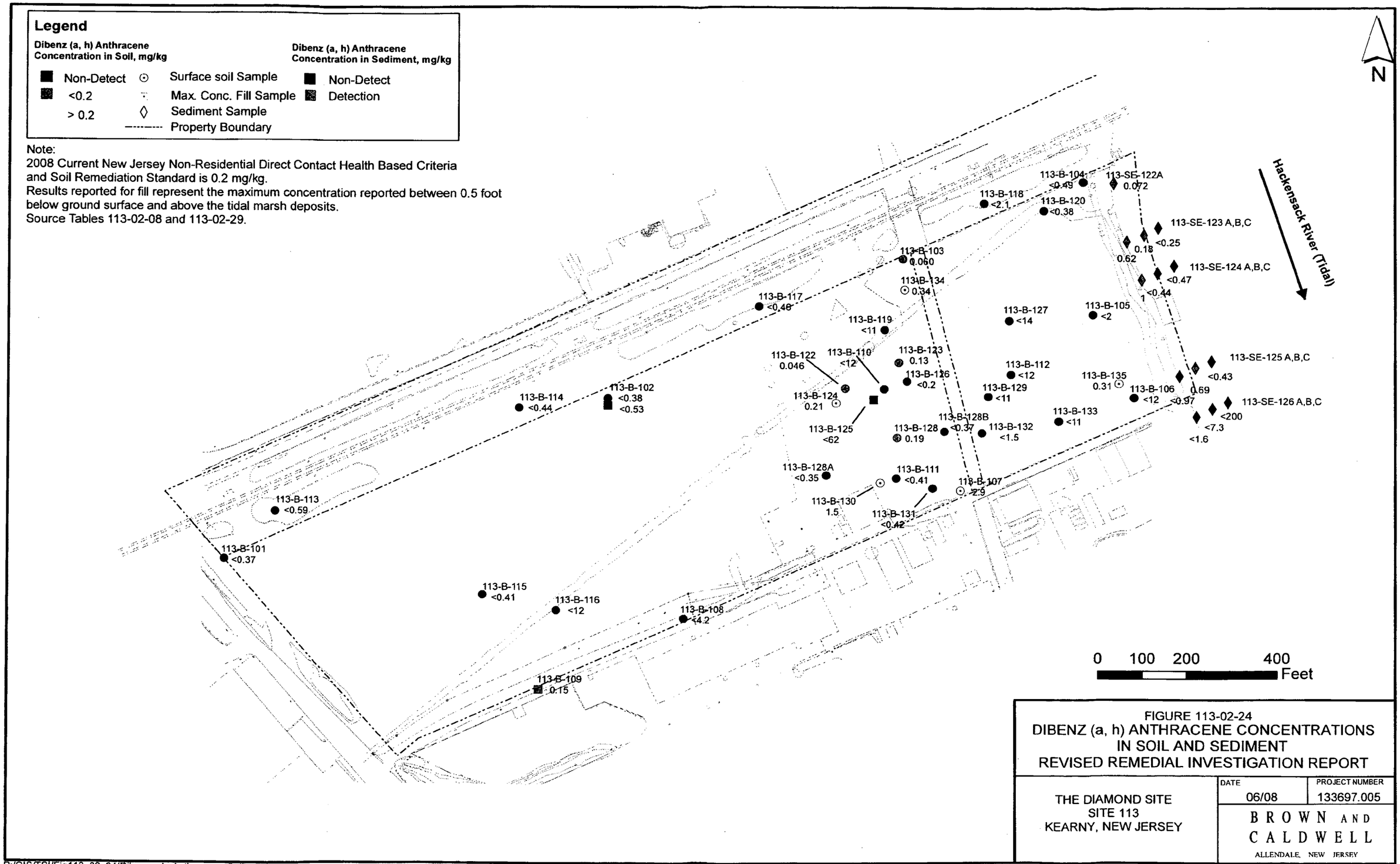


FIGURE 113-02-24
DIBENZ (a, h) ANTHRACENE CONCENTRATIONS IN SOIL AND SEDIMENT
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_24(Dibenz_ah_Anthracene_Soil).mxd

Legend

Arsenic Concentration, mg/kg

- Non-Detect
- < 19
- > 19
- Surface soil Sample
- Max. Conc. Fill Sample
- Max. Conc. Sand Sample
- Property Boundary

Note:
2008 Current New Jersey Non-Residential Direct Contact Health Based Criteria and Soil Remediation Standard is 19 mg/kg.
Results reported for fill represent the maximum concentration reported between 0.5 foot below ground surface and above the tidal marsh deposits.
Results reported for sand represent the maximum concentrations below the tidal marsh deposits and above the lake bottom deposits.
Source Table 113-02-09.

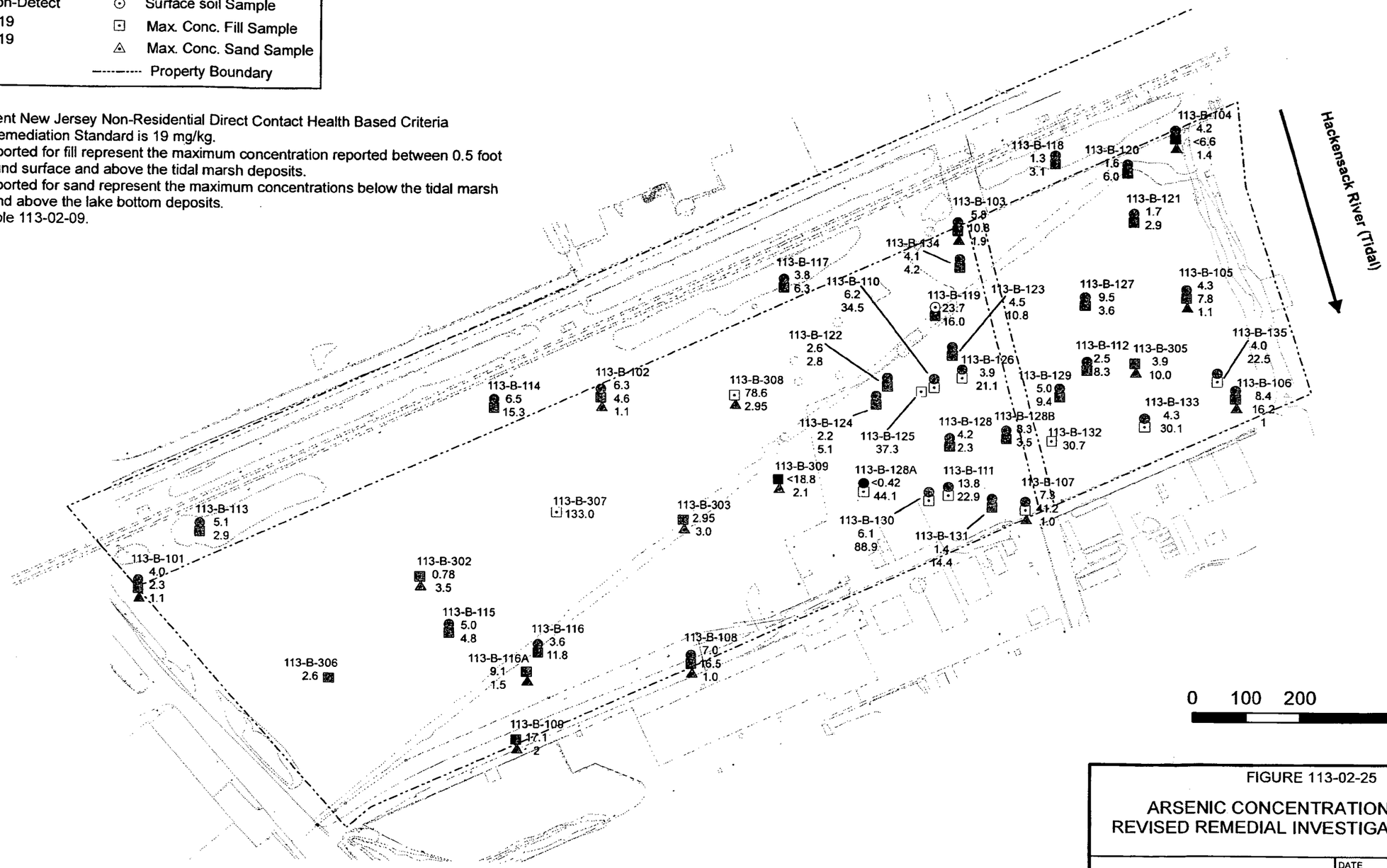


FIGURE 113-02-25

ARSENIC CONCENTRATIONS IN SOIL
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_25(As_in_Soil).mxd

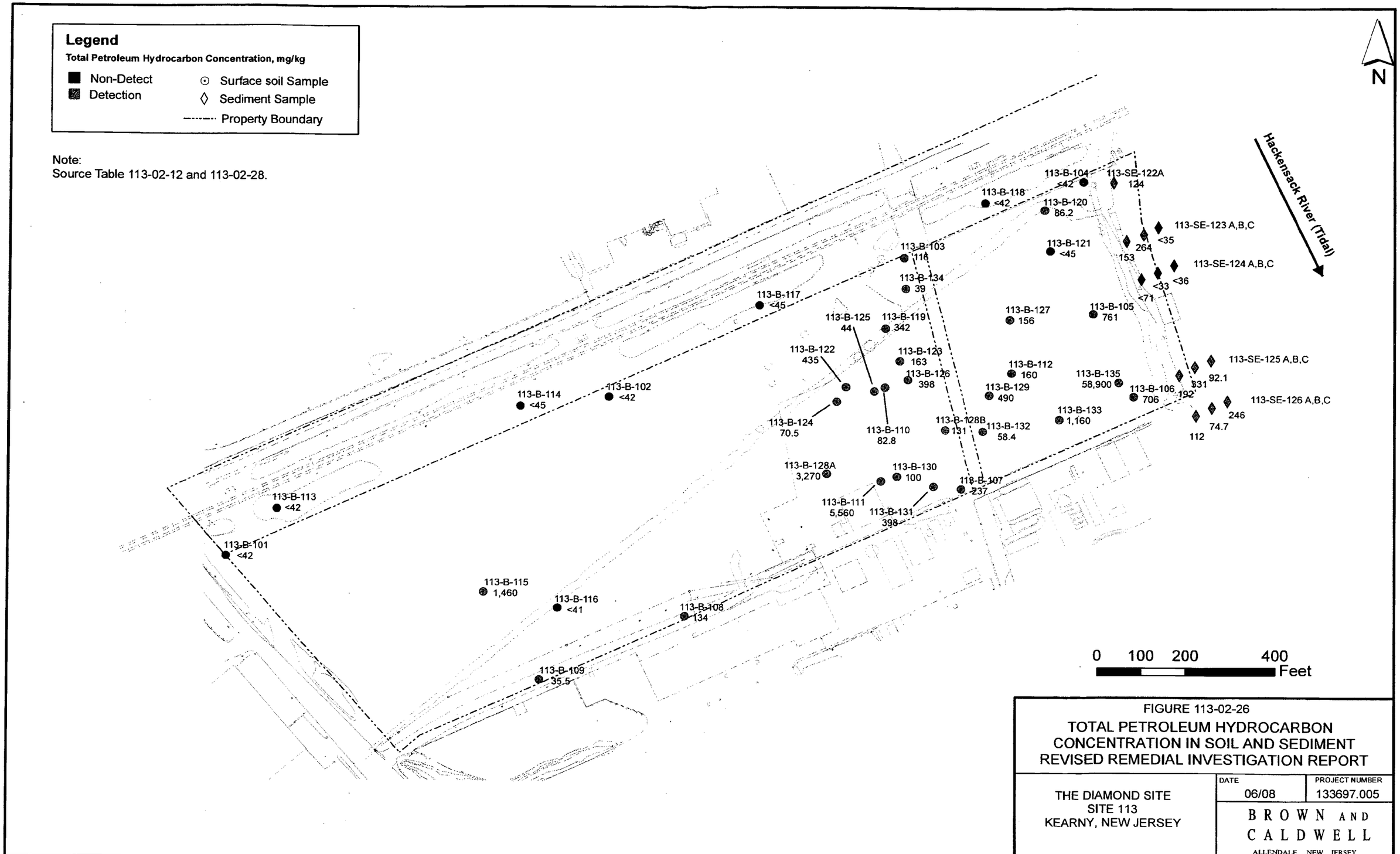


FIGURE 113-02-26

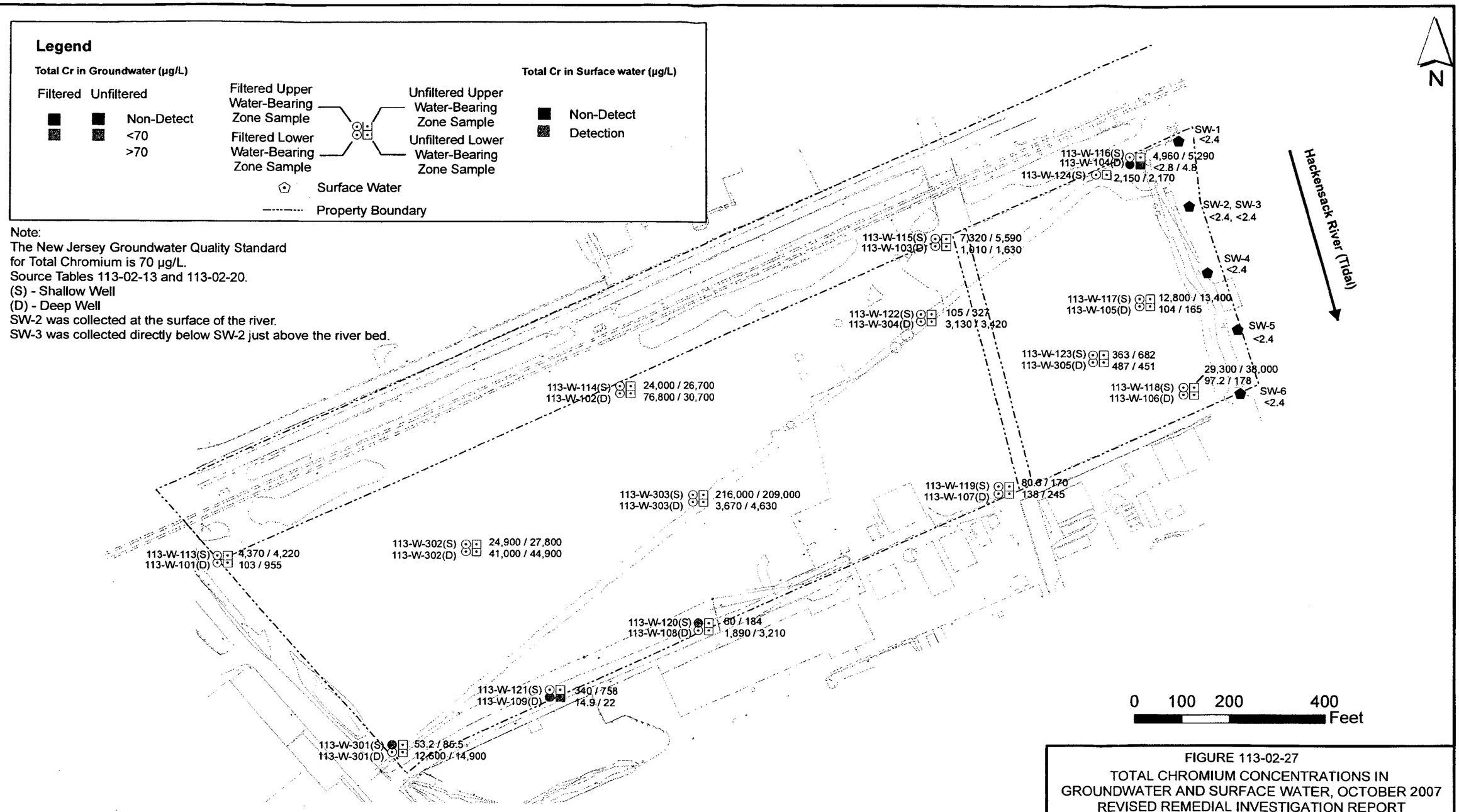
TOTAL PETROLEUM HYDROCARBON CONCENTRATION IN SOIL AND SEDIMENT REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_26(TPH_Soil).mxd



Note:
The New Jersey Groundwater Quality Standard for Total Chromium is 70 µg/L.
Source Tables 113-02-13 and 113-02-20.
(S) - Shallow Well
(D) - Deep Well
SW-2 was collected at the surface of the river.
SW-3 was collected directly below SW-2 just above the river bed.

FIGURE 113-02-27
TOTAL CHROMIUM CONCENTRATIONS IN GROUNDWATER AND SURFACE WATER, OCTOBER 2007
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_27(GW_Total_Cr_Max).mxd

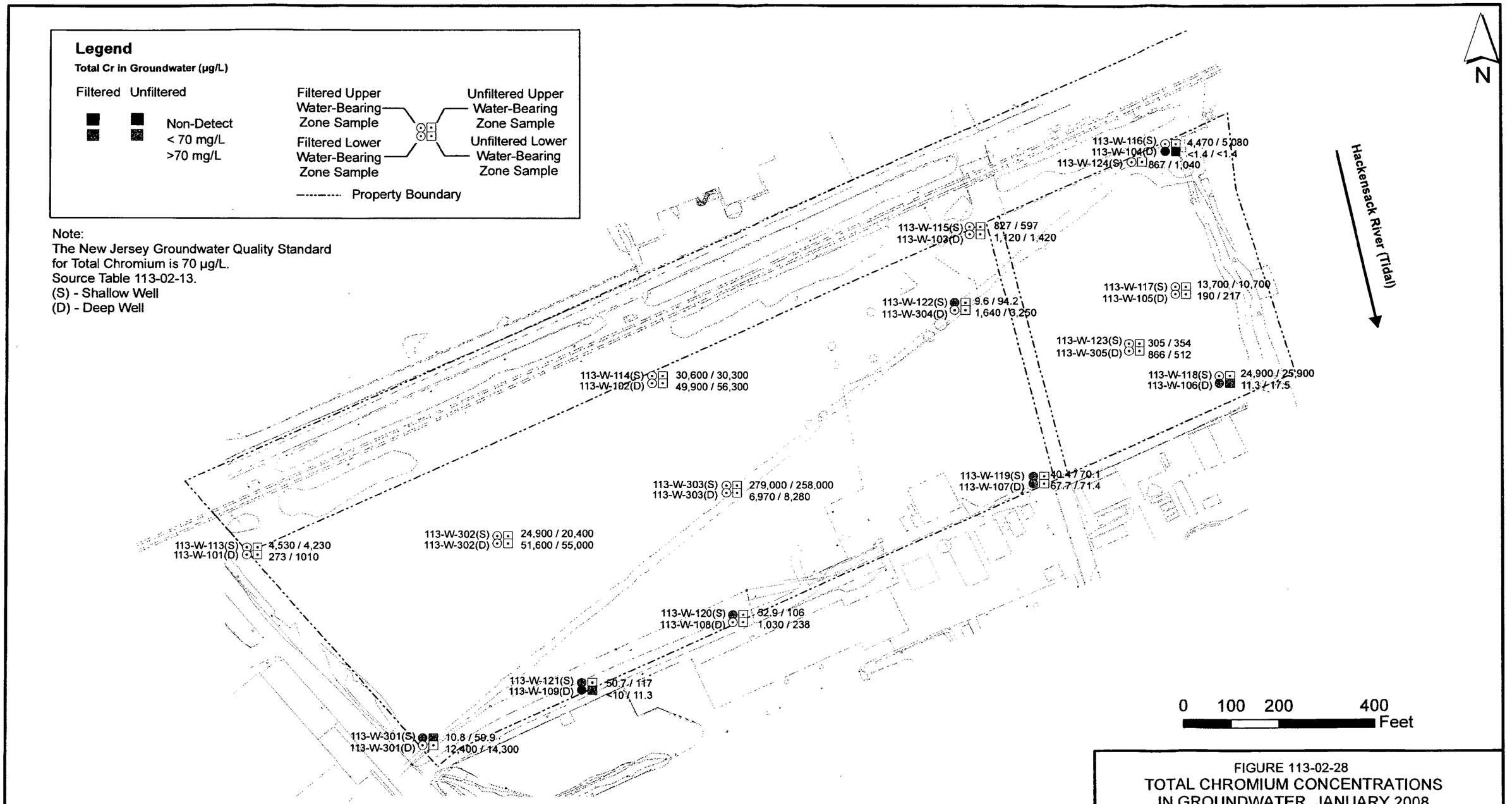


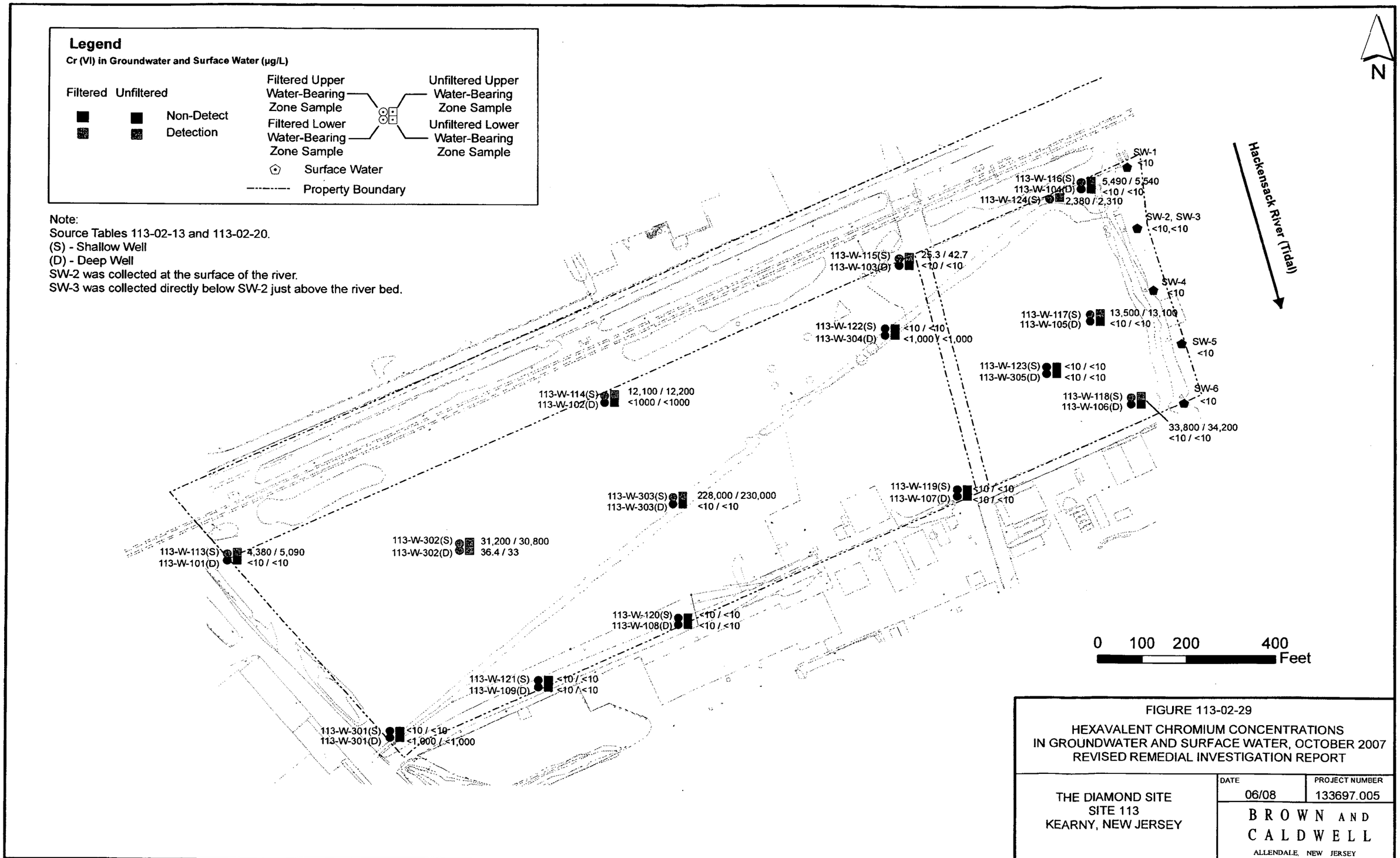
FIGURE 113-02-28
TOTAL CHROMIUM CONCENTRATIONS IN GROUNDWATER, JANUARY 2008
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_28(GW_Total_Cr_Max_2008).mxd



Note:
Source Tables 113-02-13 and 113-02-20.
(S) - Shallow Well
(D) - Deep Well
SW-2 was collected at the surface of the river.
SW-3 was collected directly below SW-2 just above the river bed.

FIGURE 113-02-29

HEXAVALENT CHROMIUM CONCENTRATIONS
IN GROUNDWATER AND SURFACE WATER, OCTOBER 2007
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_29(GW_Hex_Cr_Max).mxd

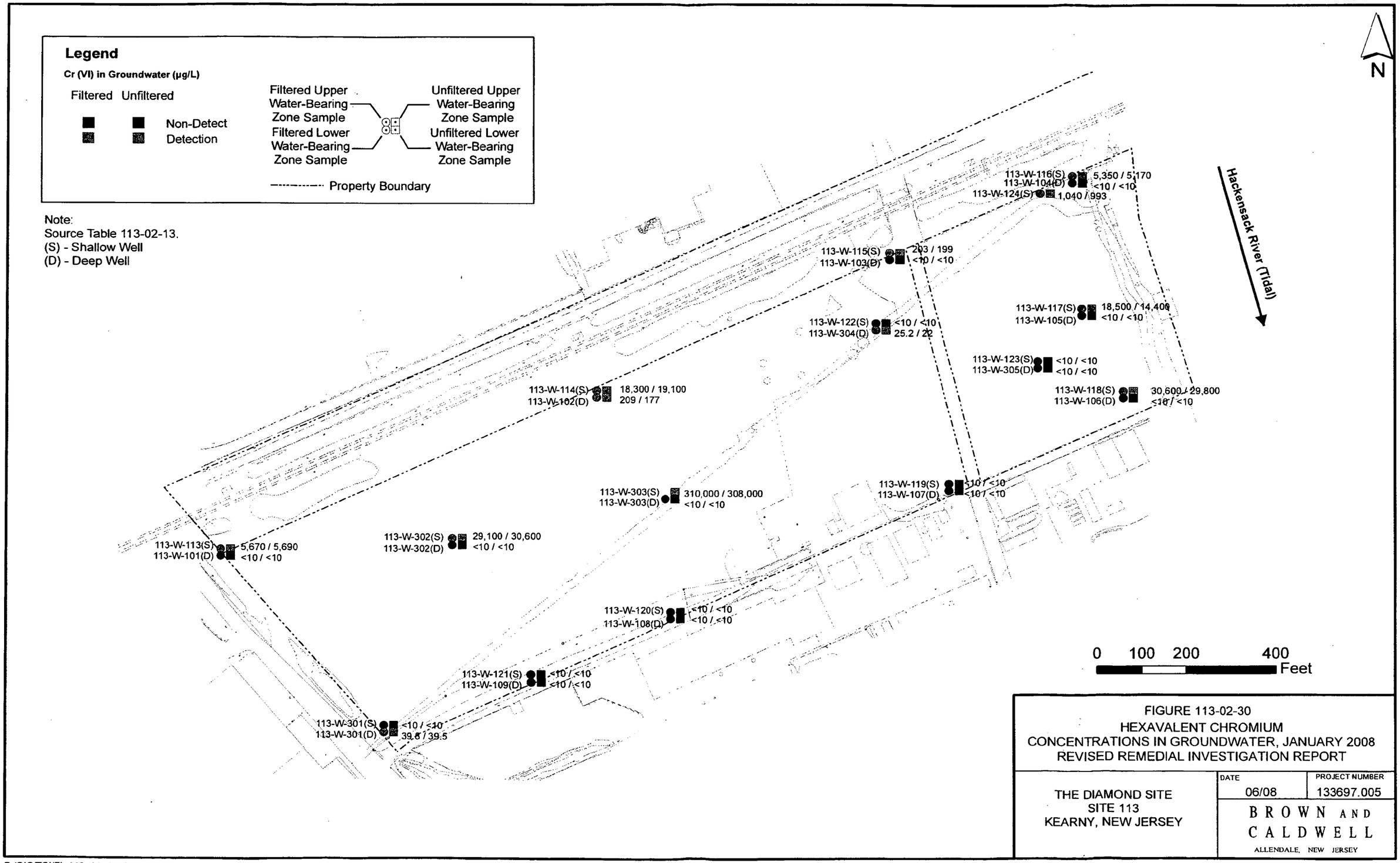


FIGURE 113-02-30
HEXAVALENT CHROMIUM
CONCENTRATIONS IN GROUNDWATER, JANUARY 2008
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_30(GW_Hex_Cr_Max_2008).mxd

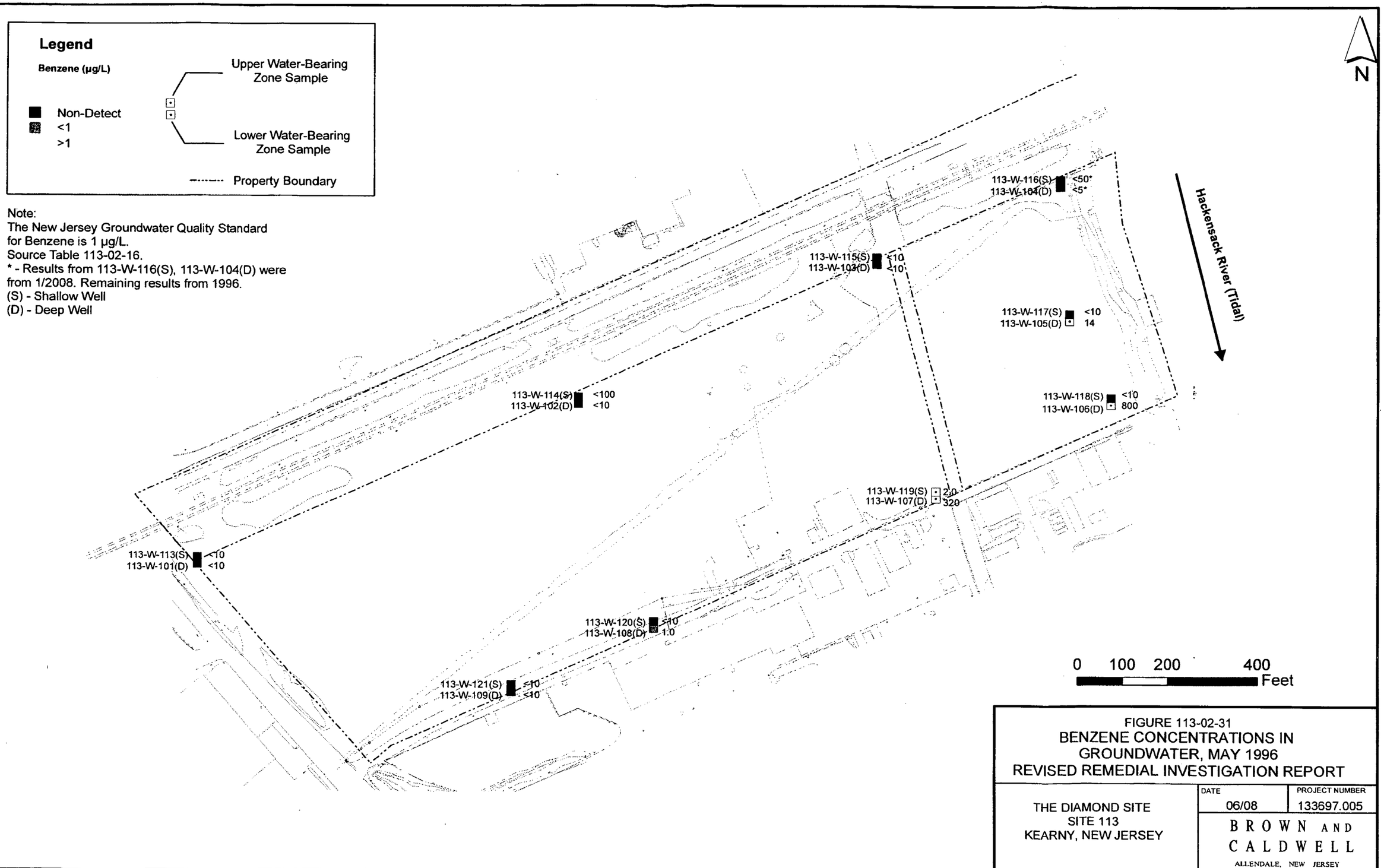
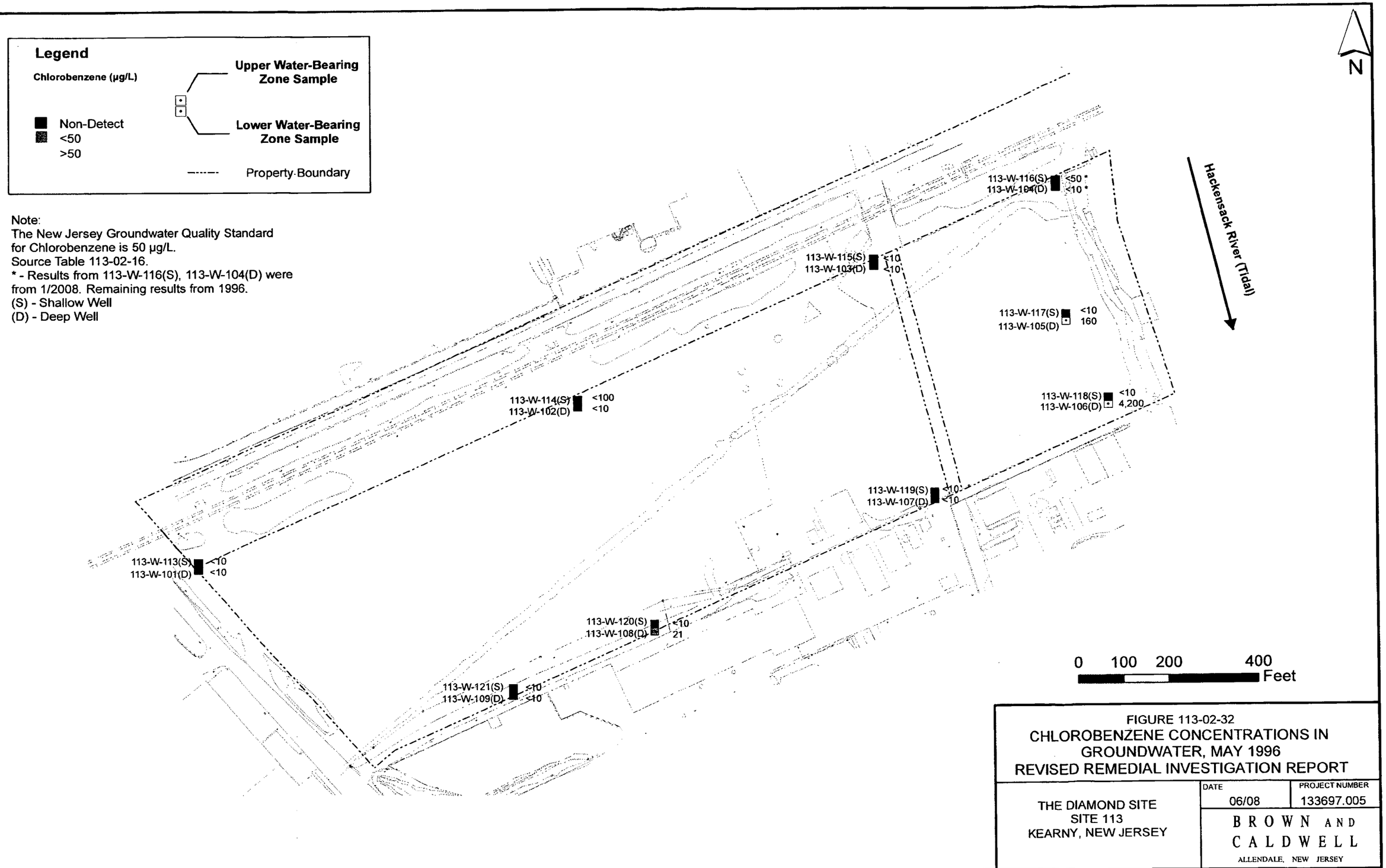


FIGURE 113-02-31
BENZENE CONCENTRATIONS IN GROUNDWATER, MAY 1996
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE SITE 113 KEARNY, NEW JERSEY	DATE 06/08	PROJECT NUMBER 133697.005
	BROWN AND CALDWELL ALLENDALE, NEW JERSEY	

P:/GIS/TSI/Fig113_02_31(GW_Benzene).mxd



Note:
The New Jersey Groundwater Quality Standard for Chlorobenzene is 50 µg/L.
Source Table 113-02-16.
* - Results from 113-W-116(S), 113-W-104(D) were from 1/2008. Remaining results from 1996.
(S) - Shallow Well
(D) - Deep Well

FIGURE 113-02-32
CHLOROBENZENE CONCENTRATIONS IN GROUNDWATER, MAY 1996
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

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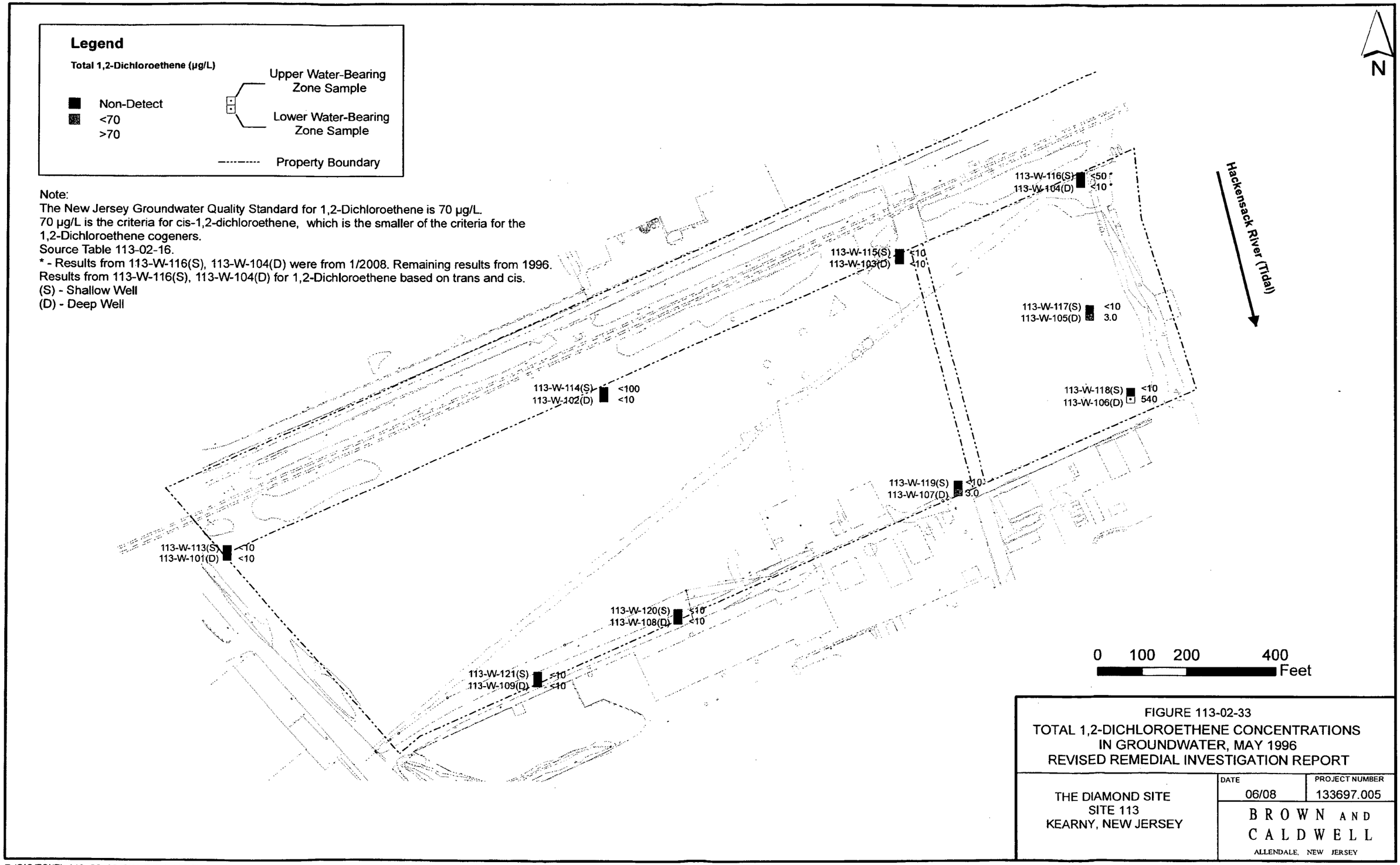

Note:
The New Jersey Groundwater Quality Standard for 1,2-Dichloroethene is 70 µg/L.
70 µg/L is the criteria for cis-1,2-dichloroethene, which is the smaller of the criteria for the 1,2-Dichloroethene cogeners.
Source Table 113-02-16.
* - Results from 113-W-116(S), 113-W-104(D) were from 1/2008. Remaining results from 1996.
Results from 113-W-116(S), 113-W-104(D) for 1,2-Dichloroethene based on trans and cis.
(S) - Shallow Well
(D) - Deep Well

FIGURE 113-02-33
TOTAL 1,2-DICHLOROETHENE CONCENTRATIONS IN GROUNDWATER, MAY 1996
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

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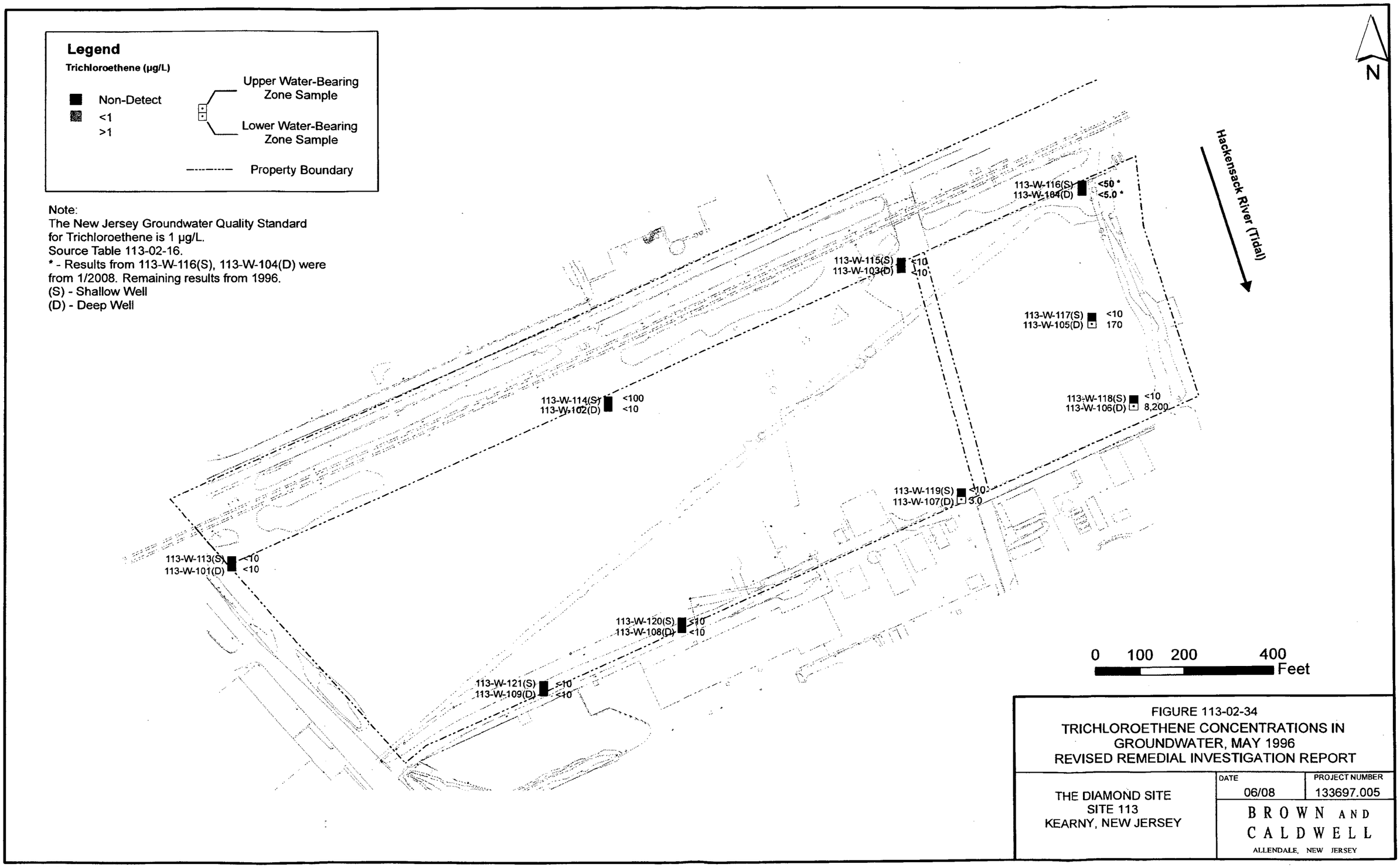

FIGURE 113-02-34
TRICHLOROETHENE CONCENTRATIONS IN GROUNDWATER, MAY 1996
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE SITE 113 KEARNY, NEW JERSEY	DATE 06/08	PROJECT NUMBER 133697.005
	BROWN AND CALDWELL ALLENDALE, NEW JERSEY	

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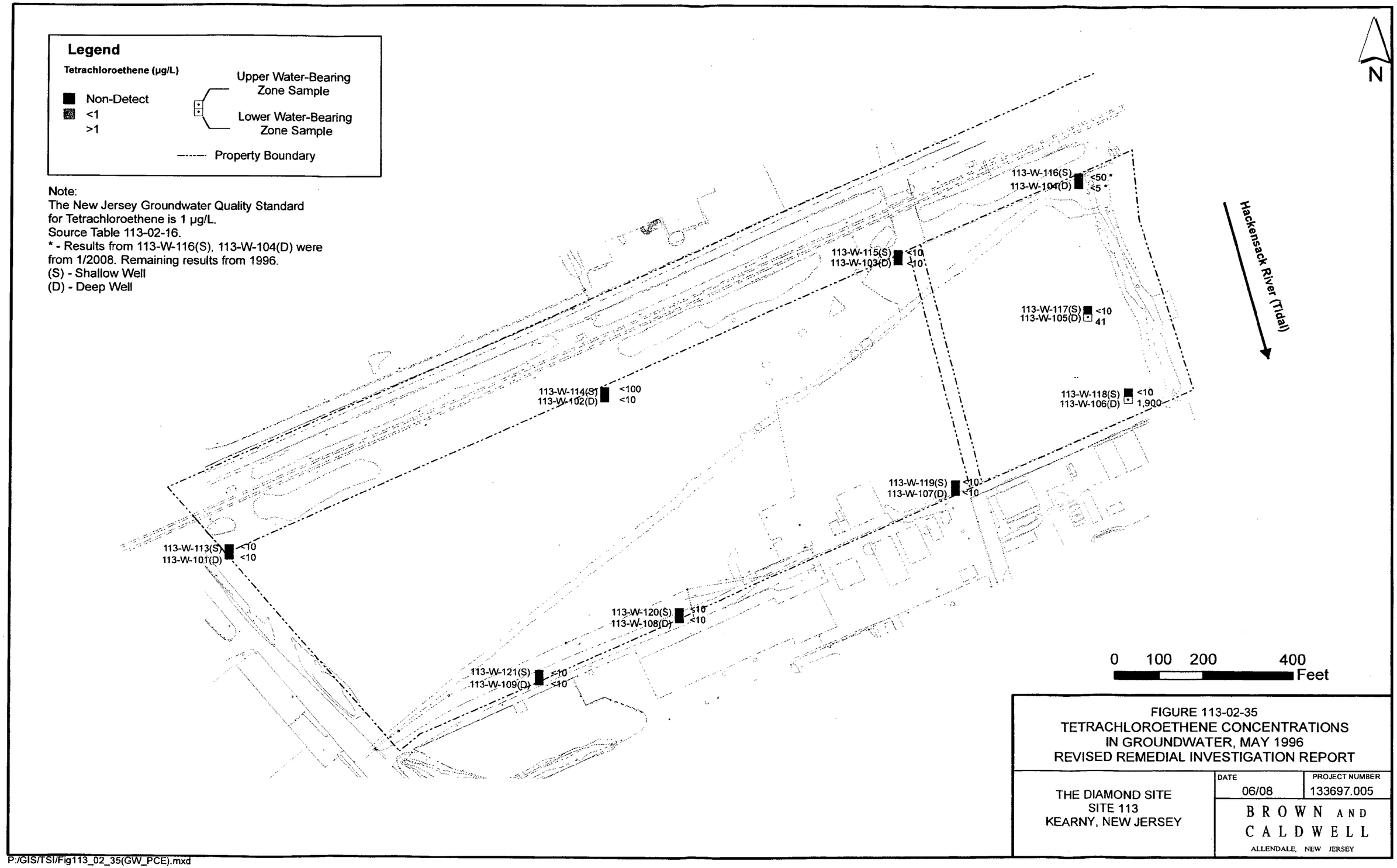

FIGURE 113-02-35
TETRACHLOROETHENE CONCENTRATIONS
IN GROUNDWATER, MAY 1996
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_35(GW_PCE).mxd

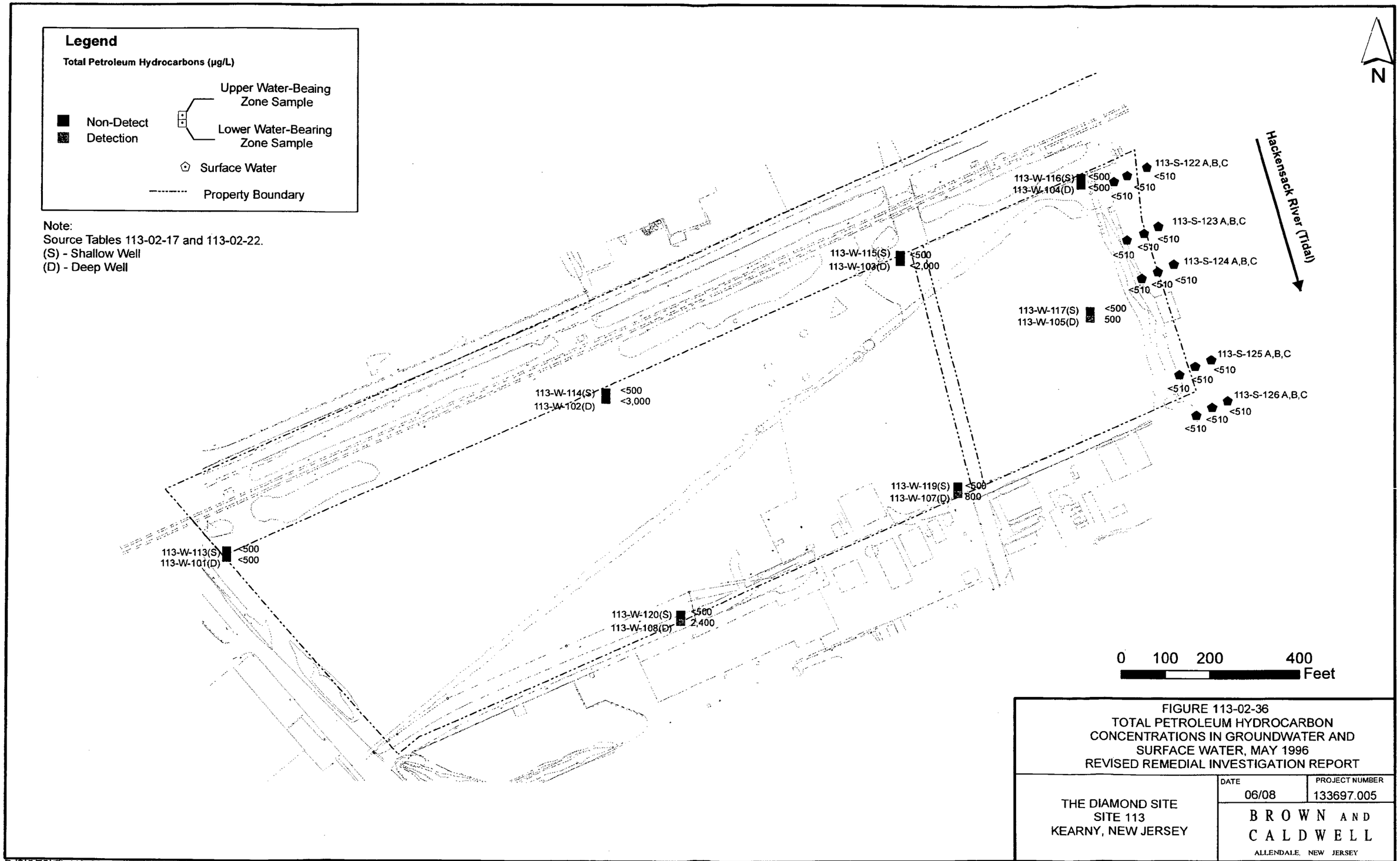

FIGURE 113-02-36
TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUNDWATER AND SURFACE WATER, MAY 1996
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_36(GW_TPH).mxd

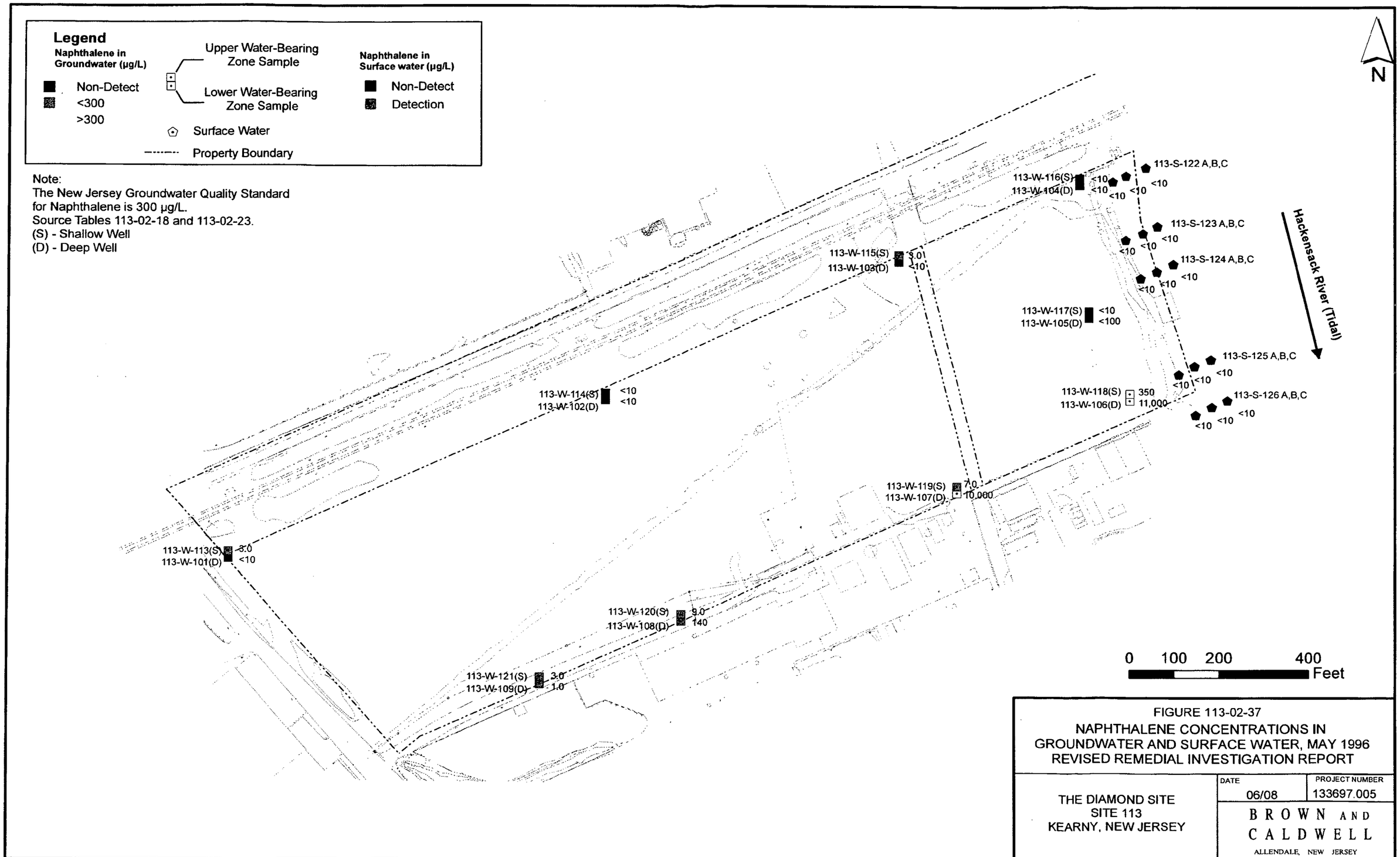

FIGURE 113-02-37
NAPHTHALENE CONCENTRATIONS IN GROUNDWATER AND SURFACE WATER, MAY 1996
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
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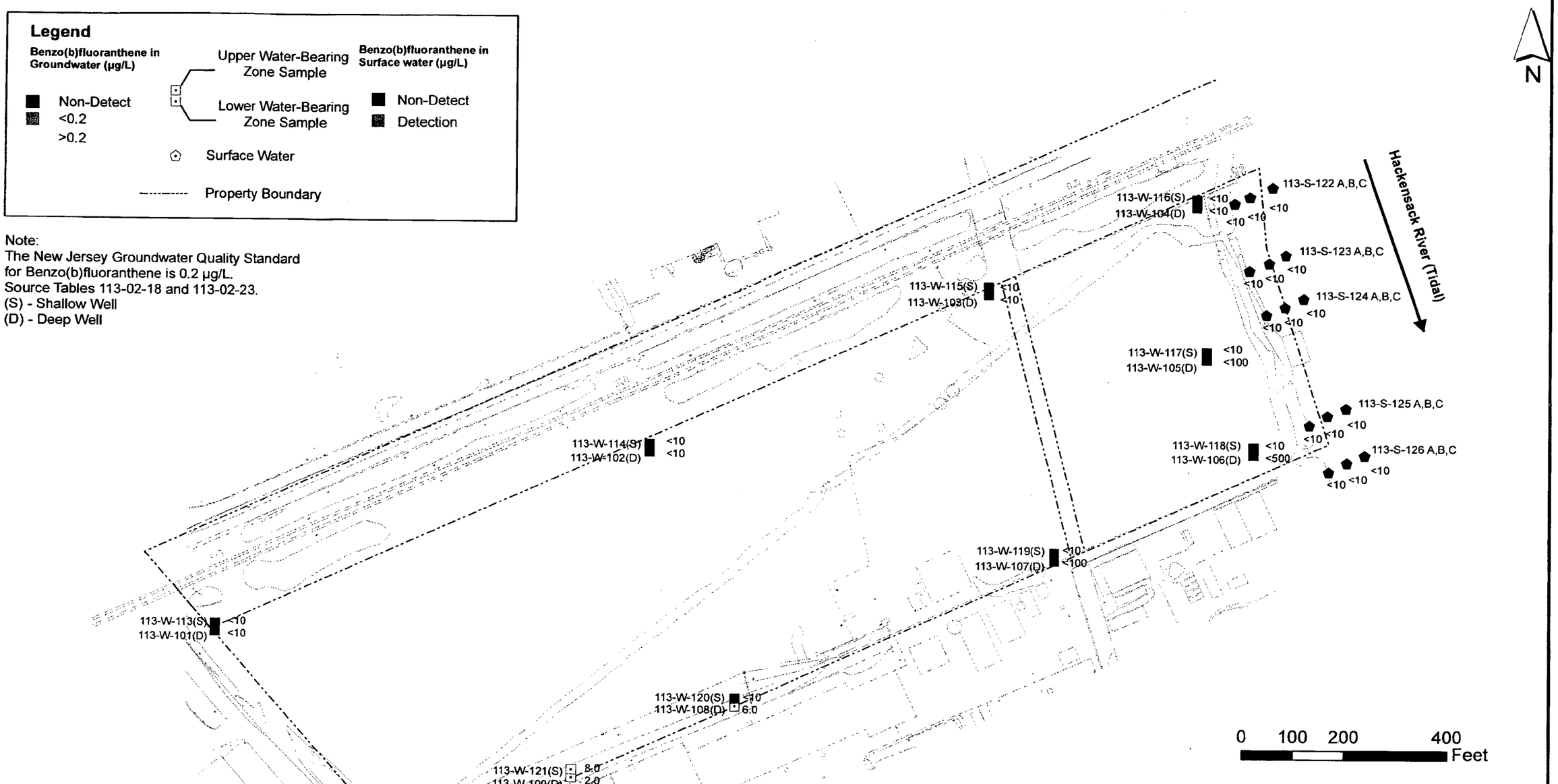
BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_37(GW_Naphthalene).mxd



Note:
The New Jersey Groundwater Quality Standard for Benzo(b)fluoranthene is 0.2 µg/L.
Source Tables 113-02-18 and 113-02-23.
(S) - Shallow Well
(D) - Deep Well

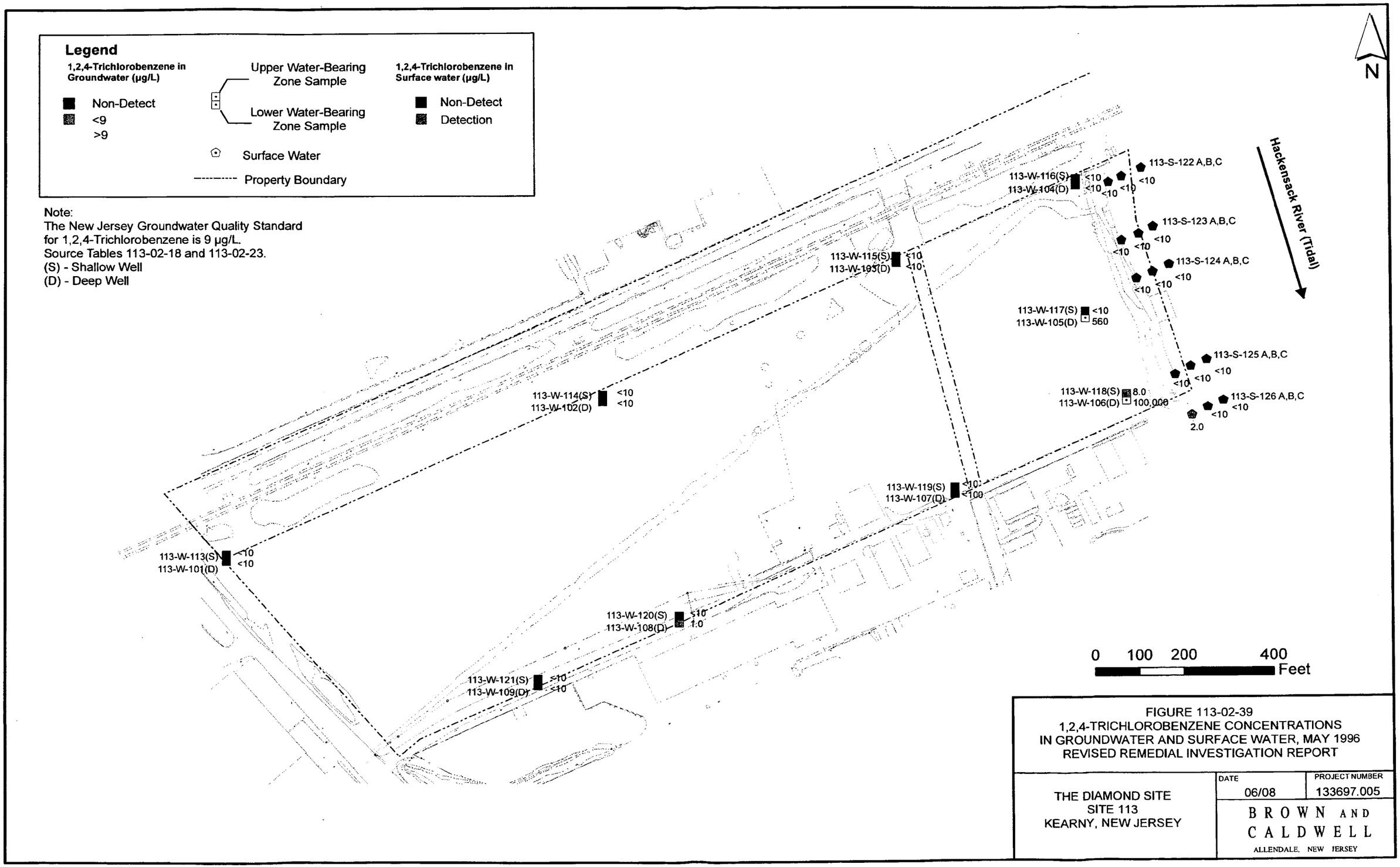
FIGURE 113-02-38
BENZO(b)FLUORANTHENE CONCENTRATIONS IN GROUNDWATER AND SURFACE WATER, MAY 1996
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/TSI/Fig113_02_38(GW_BenzoBFluoranthene).mxd



Note:
The New Jersey Groundwater Quality Standard for 1,2,4-Trichlorobenzene is 9 µg/L.
Source Tables 113-02-18 and 113-02-23.
(S) - Shallow Well
(D) - Deep Well

FIGURE 113-02-39
1,2,4-TRICHLOROBENZENE CONCENTRATIONS IN GROUNDWATER AND SURFACE WATER, MAY 1996
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

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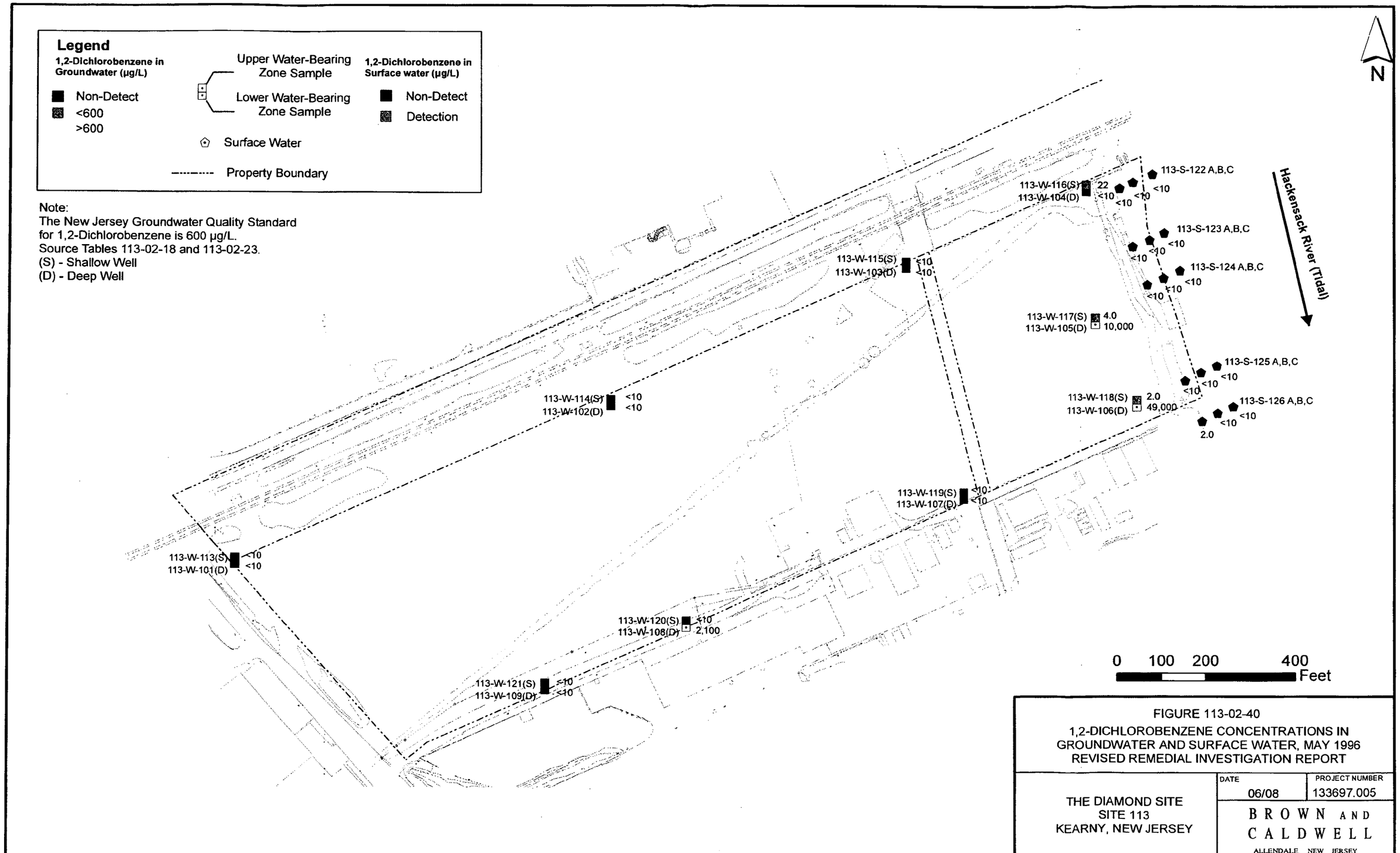

FIGURE 113-02-40

1,2-DICHLOROBENZENE CONCENTRATIONS IN GROUNDWATER AND SURFACE WATER, MAY 1996
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

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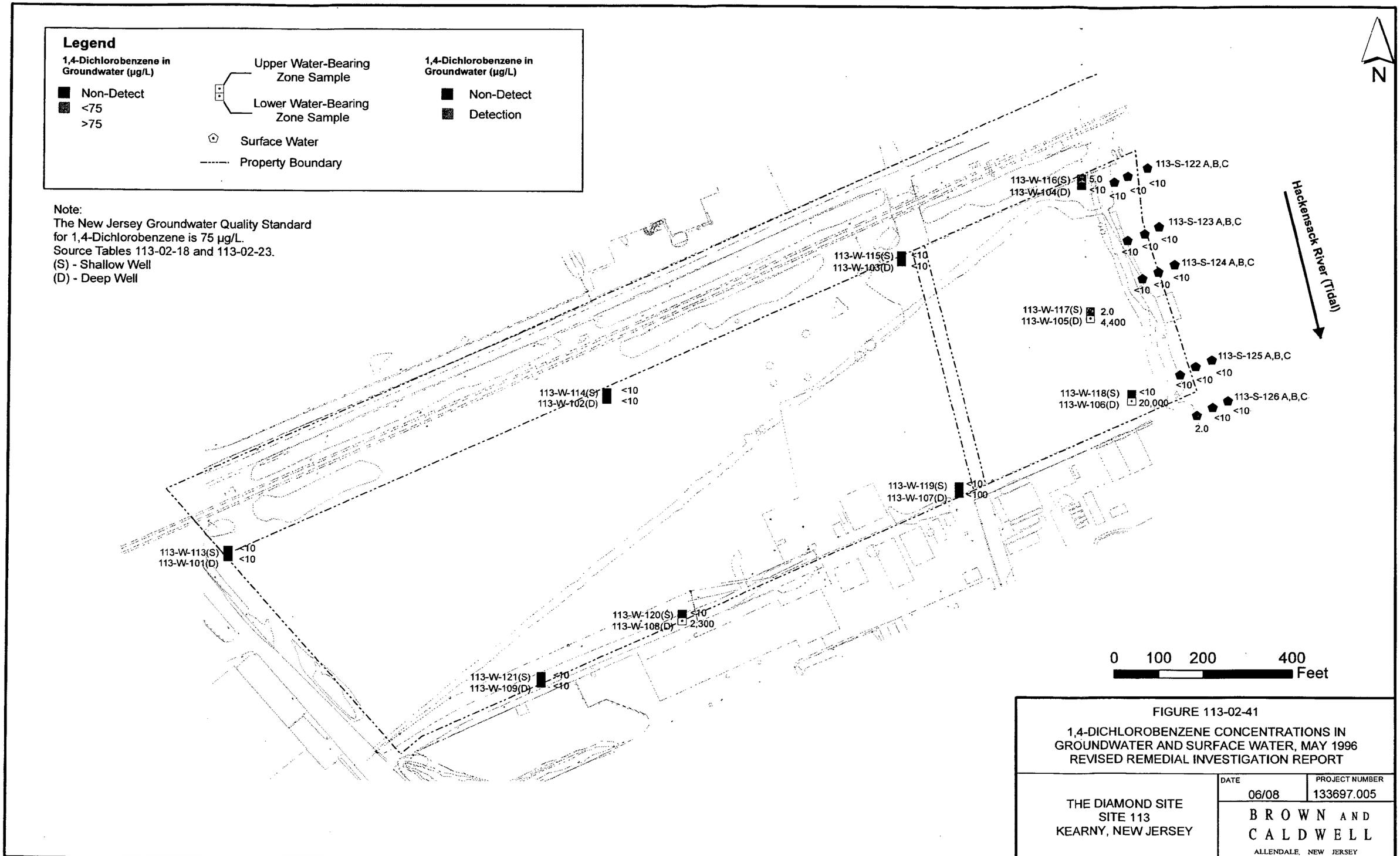

FIGURE 113-02-41

1,4-DICHLOROBENZENE CONCENTRATIONS IN GROUNDWATER AND SURFACE WATER, MAY 1996
REVISED REMEDIAL INVESTIGATION REPORT

THE DIAMOND SITE
SITE 113
KEARNY, NEW JERSEY

DATE	PROJECT NUMBER
06/08	133697.005

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

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REVISED REMEDIAL INVESTIGATION REPORT SITE 113 (DIAMOND SITE) KEARNY, NEW JERSEY

VOLUME II OF III
APPENDICES A - L

Prepared for

Tierra Solutions, Inc., East Brunswick, New Jersey

June 2008

Tables

BROWN AND
CALDWELL

TABLES

Table 113-02-01
Grid Coordinate Sample Locations
Site 113 Diamond Site
Kearny, New Jersey

Location Name	Grid Coordinate
113-B-101	A3
113-B-102	C4
113-B-103	E5
113-B-104	F5
113-B-105	F4
113-B-106	F4
113-B-107	E3
113-B-108	C2
113-B-109	C2
113-B-110	D4
113-B-111	E3
113-B-112	E4
113-B-113	A3
113-B-114	B4
113-B-115	B3
113-B-116	C2
113-B-116A	C2
113-B-116B	C2
113-B-116C	C2
113-B-116D	C2
113-B-116E	C3
113-B-116F	C3
113-B-116G	C2
113-B-117	D4
113-B-118	E5
113-B-119	D4
113-B-120	E5
113-B-121	E5
113-B-122	D4
113-B-123	E4
113-B-124	D4
113-B-125	D4
113-B-126	E4
113-B-127	E4
113-B-128	E3
113-B-128-A	D3
113-B-128-B	E4
113-B-129	E4
113-B-130	D3
113-B-131	E3
113-B-132	E4

Table 113-02-01
Grid Coordinate Sample Locations
Site 113 Diamond Site
Kearny, New Jersey

Location Name	Grid Coordinate
113-B-133	E4
113-B-134	E4
113-B-135	F4
113-B-301	B2
113-B-302	B3
113-B-303	C3
113-B-304	E4
113-B-305	E4
113-B-306	B2
113-B-307	C3
113-B-308	D4
113-B-309	D3
113-B-310	F5
113-PW-01	F5
113-PW-02	F5
113-PW-03	F4
113-PW-04	F4
113-PW-05	F4
113-S-122A	F5
113-S-122B	F5
113-S-122C	F5
113-S-123A	F5
113-S-123B	F5
113-S-123C	F5
113-S-124A	F4
113-S-124B	F4
113-S-124C	F4
113-S-125A	F4
113-S-125B	F4
113-S-125C	F4
113-S-126A	F4
113-S-126B	F4
113-S-126C	F4
113-SE-01	F5
113-SE-122A	F5
113-SE-123A	F5
113-SE-123B	F5
113-SE-123C	F5
113-SE-124A	F4
113-SE-124B	F4
113-SE-124C	F4

Table 113-02-01
Grid Coordinate Sample Locations
Site 113 Diamond Site
Kearny, New Jersey

Location Name	Grid Coordinate
113-SE-125A	F4
113-SE-125B	F4
113-SE-125C	F4
113-SE-126A	F4
113-SE-126B	F4
113-SE-126C	F4
113-SS-201	B2
113-SS-202	B2
113-SS-203	A2
113-SS-204	A3
113-SS-205	A3
113-SS-206	B3
113-SS-207	B3
113-SS-208	B2
113-SS-209	B2
113-SS-210	C2
113-SS-211	B3
113-SS-212	B3
113-SS-213	B3
113-SS-214	B3
113-SS-215	B3
113-SS-216	C3
113-SS-217	C2
113-SS-218	C3
113-SS-219	C3
113-SS-220	C3
113-SS-221	C3
113-SS-222	C4
113-SS-223	C3
113-SS-224	C3
113-SS-225	D3
113-SS-226	C4
113-SS-227	D4
113-SS-228	D3
113-SS-229	D3
113-SS-230	D4
113-SS-231	D4
113-SS-232	D3
113-SS-233	D3
113-SS-234	D4
113-SS-235	E4
113-SS-236	E4
113-SS-237	E3
113-SS-238	E4
113-SS-239	E4

Table 113-02-01
Grid Coordinate Sample Locations
Site 113 Diamond Site
Kearny, New Jersey

Location Name	Grid Coordinate
113-SS-240	E4
113-SS-241	E3
113-SS-242	E5
113-SS-243	E4
113-SS-244	E4
113-SS-245	F4
113-SS-246	F5
113-SS-247	F4
113-SS-248	F4
113-SS-249	F4
113-SS-250	F5
113-SS-251	F4
113-SW-01	F5
113-SW-02	F5
113-SW-03	F5
113-SW-04	F4
113-SW-05	F4
113-SW-06	F4
113-W-101(D)	A3
113-W-102(D)	C4
113-W-103(D)	E5
113-W-104(D)	F5
113-W-105(D)	F4
113-W-106(D)	F4
113-W-107(D)	E3
113-W-108(D)	C2
113-W-109(D)	C2
113-W-113(S)	A3
113-W-114(S)	C4
113-W-115(S)	E5
113-W-116(S)	F5
113-W-117(S)	F4
113-W-118(S)	F4
113-W-119(S)	E3
113-W-120(S)	C2
113-W-121(S)	C2
113-W-122(S)	E4
113-W-123(S)	E4
113-W-124(S)	E5
113-W-301(D)	B2
113-W-301(S)	B2

Table 113-02-01
Grid Coordinate Sample Locations
Site 113 Diamond Site
Kearny, New Jersey

Location Name	Grid Coordinate
113-W-302(D)	B3
113-W-302(S)	B3
113-W-303(D)	C3
113-W-303(S)	C3
113-W-304(D)	E4
113-W-305(D)	E4

Notes:
The grid coordinates presented on this table are as defined on Figure 113-02-02.
SS - Surface Soil
B - Soil Boring
W - Monitoring Well
(D) - Deep Monitoring Well
(S) - Shallow Monitoring Well
113-B-116(A) through 113-B-116(G) were placed in close proximity to 113-B-116, (A) through (G) denote this relationship.
S,SW - Surface Water
SW-02 and 03 were each collected from the same location, but at different vertical depths in the Hackensack River. SW-02 was collected from the surface of the river, and SW-03 was collected directly above the river bed.
A,B,C when associated with a suface water sample denote increasing distance from the shoreline, A being the closest and C being the furthest.
PW - Porewater
SE - Sediment

TABLE 113-02-02
Summary of Hydraulic Conductivity Tests
Site 113 Diamond Site
Kearny, New Jersey

Monitoring Wells	Hydraulic Conductivity (Bouwer-Rice) Feet/minute	Feet/day	Centimeters/second
Upper Water Bearing Zone (UWBZ)			
113-W-113 (Rising)	1.92E-03	2.76E+00	9.59E-04
113-W-113 (Falling)	5.82E-03	8.39E+00	2.91E-03
113-W-114 (Rising)	3.25E-03	4.68E+00	1.63E-03
113-W-114 (Falling)	3.11E-03	4.48E+00	1.56E-03
113-W-115 (Rising)	4.57E-03	6.59E+00	2.29E-03
113-W-115 (Falling)	5.75E-04	8.28E-01	2.87E-04
113-W-116 (Rising)	9.29E-03	1.34E+01	4.65E-03
113-W-116 (Falling)	1.29E-02	1.86E+01	6.46E-03
113-W-117 (Rising)	1.79E-03	2.58E+00	8.95E-04
113-W-117 (Falling)	1.28E-03	1.85E+00	6.42E-04
113-W-118 (Rising)	9.81E-04	1.41E+00	4.91E-04
113-W-118 (Falling)	7.62E-04	1.10E+00	3.81E-04
113-W-119 (Rising)	4.27E-03	6.16E+00	2.14E-03
113-W-119 (Falling)	7.80E-03	1.12E+01	3.90E-03
113-W-120 (Rising)	7.17E-03	1.03E+01	3.59E-03
113-W-121 (Rising)	3.68E-02	5.30E+01	1.84E-02
113-W-121 (Falling)	2.53E-02	3.64E+01	1.28E-02
113-W-301(S) (Rising)	9.59E-05	1.38E-01	4.87E-05
113-W-301(S) (Falling)	1.53E-04	2.21E-01	7.78E-05
113-W-302(S) (Rising)	7.24E-03	1.04E+01	3.68E-03
113-W-302(S) (Falling)	3.29E-03	4.73E+00	1.67E-03
113-W-303(S) (Rising)	2.07E-03	2.98E+00	1.05E-03
113-W-303(S) (Falling)	1.67E-03	2.40E+00	8.47E-04
Geometric Mean (UWBZ):	2.78E-03	4.00E+00	1.40E-03
Minimum Value (UWBZ):	9.59E-05	1.38E-01	4.87E-05
Maximum Value (UWBZ):	3.68E-02	5.30E+01	1.84E-02
Lower Water Bearing Zone (LWBZ)			
113-W-101 (Rising)	1.30E-04	1.87E-01	6.59E-05
113-W-101 (Falling)	2.38E-04	3.43E-01	1.21E-04
113-W-102 (Rising)	1.63E-03	2.35E+00	8.28E-04
113-W-102 (Falling)	1.92E-03	2.77E+00	9.78E-04
113-W-103 (Rising)	6.86E-04	9.88E-01	3.49E-04
113-W-103 (Falling)	7.96E-04	1.15E+00	4.05E-04
113-W-104 (Rising)	1.54E-03	2.22E+00	7.83E-04
113-W-104 (Falling)	1.07E-03	1.55E+00	5.45E-04
113-W-105 (Rising)	3.68E-03	5.30E+00	1.87E-03
113-W-105 (Falling)	3.54E-03	5.09E+00	1.80E-03
113-W-106 (Rising)	6.53E-04	9.40E-01	3.32E-04
113-W-106 (Falling)	5.67E-04	8.17E-01	2.88E-04
113-W-107 (Rising)	1.07E-03	1.54E+00	5.44E-04
113-W-107 (Falling)	1.13E-03	1.63E+00	5.77E-04
113-W-108 (Rising)	1.90E-03	2.74E+00	9.68E-04

TABLE 113-02-02
Summary of Hydraulic Conductivity Tests
Site 113 Diamond Site
Kearny, New Jersey

	Hydraulic Conductivity (Bouwer-Rice)		
Monitoring Wells	**Feet/minute**	**Feet/day**	**Centimeters/second**
113-W-108 (Falling)	2.14E-03	3.08E+00	1.09E-03
113-W-109 (Rising)	3.08E-03	4.43E+00	1.56E-03
113-W-109 (Falling)	2.64E-03	3.81E+00	1.34E-03
113-W-301(D) (Rising)	4.78E-03	6.89E+00	2.43E-03
113-W-301(D) (Falling)	2.78E-03	4.00E+00	1.41E-03
113-W-302(D) (Rising)	1.13E-04	1.62E-01	5.72E-05
113-W-302(D) (Falling)	1.05E-03	1.51E+00	5.31E-04
113-W-303(D) (Rising)	3.23E-04	4.65E-01	1.64E-04
113-W-303(D) (Falling)	2.81E-04	4.05E-01	1.43E-04
113-W-304(D) (Rising)	2.80E-03	4.03E+00	1.42E-03
113-W-304(D) (Falling)	2.66E-03	3.83E+00	1.35E-03
113-W-305(D) (Rising)	7.56E-04	1.09E+00	3.84E-04
113-W-305(D) (Falling)	6.97E-04	1.00E+00	3.54E-04
Geometric Mean (LWBZ):	1.08E-03	1.56E+00	5.51E-04
Minimum Value (LWBZ):	1.13E-04	1.62E-01	5.72E-05
Maximum Value (LWBZ):	4.78E-03	6.89E+00	2.43E-03

Notes:
W - Monitoring well
(S) - Well located in Upper Water Bearing Zone
(D) - Well located in Lower Water Bearnig Zone
(Rising) - Rising head test, e.g. water levels are recorded as groundwater elevation rises
(Falling) - Falling head test, e.g. water levels are recorded as gruondwater elevation falls

TABLE 113-02-03
Summary of Geotechnical Results
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Sample Date	% Moisture	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Hydraulic Conductivity (cm/sec)	Cu	Cc	Plastic Index	USCS Soil Class
Artificial Fill (Qf)									
113-B-106-2-4	09/29/92	16.3%	--	--	--	32.9	0.7	--	SP-SM
113-B-106-6-8	09/29/92	32.1%	--	--	--	25	1.4	--	SP-SM
113-B-127-4-6	05/10/92	30.0%	--	--	--	58	0.04	--	SM
Post Glacial Fluvial Deposits (Qal)									
113-B-102-8-10	08/28/92	30.2%	--	--	--	20	0.93	--	SM-ML
113-B-104-16-18	09/24/92	16.9%	--	--	--	1.69	1.13	--	SP
113-B-105-15-21	09/29/92	17.3%	--	--	--	2.67	1.7	--	SP
113-B-106-15-17	09/30/92	14.1%	--	--	--	3.63	1.25	--	SP
Glacial Lake Clay									
113-B-101-23-25	09/04/92	17.4%	28.5%	10.8%	5.37E-04	35.7	0.8	17.7%	CL
113-B-103-18-20	09/04/92	14.6%	22.2%	13.4%	1.14E-05	3.22	17.14	8.8%	CL
113-B-104-20-22	09/24/92	16.0%	27.3%	22.1%	2.29E-05	18.6	3.1	5.2%	CL-ML
113-B-301-16-18.5	10/02/07	21.7%	26.4%	19.4%	1.84E-06	--	--	7.6%	CL
113-B-303-18-20.5	10/02/07	29.5%	26.2%	19.4%	9.56E-07	--	--	6.8%	CL-ML
113-B-310-18-20.5	10/02/07	23.2%	27.3%	19.4%	6.94E-06	--	--	7.9%	CL
				Geometric Mean:	1.09E-05				

Notes:
B - Boring
- - - "Not Analyzed" or "Not Applicable" or "Not Requested"
Cu - Coefficient of Uniformity
Cc - Coefficient of Curvature
USCS - Uniform Soil Classification System
SP - Poorly Graded Sand
SM - Sandy Silt
ML - Low Plasticity Silt
CL - Low Plasticity Clay

TABLE 113-02-04
Groundwater Elevations
Site 113 Diamond Site
Kearny, New Jersey

Measurement Date			11/1/2007		1/14/2008	
Well Identification	Reference Elevation (MSL, ft)	Total Depth (ft)	Depth to Water (ft)	Water Elevation (MSL, ft)	Depth to Water (ft)	Water Elevation (MSL, ft)
Upper Water Bearing Zone						
113-W-113 (S)	11.00	14.2	6.62	4.38	4.79	6.21
113-W-114 (S)	12.39	16.0	7.71	4.68	4.54	7.85
113-W-115 (S)	6.74	10.8	1.85	4.89	0.71	6.03
113-W-116 (S)	7.78	11.7	4.27	3.51	3.97	3.81
113-W-117 (S)	6.54	8.45	3.57	2.97	3.83	2.71
113-W-118 (S)	5.75	8.15	1.26	4.49	1.17	4.58
113-W-119 (S)	4.20	7.75	0.23	3.97	OF	>4.2
113-W-120 (S)	3.26	8.00	0.14	3.12	OF	>3.26
113-W-121 (S)	4.77	7.95	1.43	3.34	0.56	4.21
113-W-122 (S)	6.29	8.70	1.45	4.84	OF	>6.29
113-W-123 (S)	7.18	11.8	1.74	5.44	1.02	6.16
113-W-124 (S)	7.59	12.2	3.21	4.38	2.83	4.76
113-W-301 (S)	7.53	9.00	4.68	2.85	3.87	3.66
113-W-302 (S)	12.40	15.2	8.19	4.21	5.47	6.93
113-W-303 (S)	8.95	12.1	4.03	4.92	2.35	6.60
Lower Water Bearing Zone						
113-W-101 (D)	10.25	23.83	7.41	2.84	7.12	3.13
113-W-102 (D)	12.20	26.55	9.70	2.50	9.38	2.82
113-W-103 (D)	6.57	17.80	6.23	0.34	4.38	2.19
113-W-104 (D)	7.90	18.21	6.32	1.58	4.95	2.95
113-W-105 (D)	6.72	18.30	4.26	2.46	3.71	3.01
113-W-106 (D)	5.65	17.80	2.97	2.68	2.71	2.94
113-W-107 (D)	4.24	17.80	0.82	3.42	0.51	3.73
113-W-108 (D)	3.40	13.35	0.71	2.69	OF	>3.40
113-W-109 (D)	4.86	17.74	1.56	3.30	0.94	3.92
113-W-301 (D)	7.62	18.63	4.69	2.93	4.08	3.54
113-W-302 (D)	12.62	24.70	10.2	2.42	9.69	2.93
113-W-303 (D)	8.52	18.00	5.52	3.00	5.03	3.49
113-W-304 (D)	7.79	19.72	5.01	2.78	4.66	3.13
113-W-305 (D)	6.80	19.20	4.28	2.52	3.99	2.81

Notes:
W - Monitoring well
(S) - Well located in Upper Water Bearing Zone
(D) - Well located in Lower Water Bearnig Zone
MSL - Mean Sea Level
OF - Overflowing

Table 113-02-05
Results of Well Search
Site 113 Diamond Site
Kearny, New Jersey

	Permit Number	Date Installed	Map Location	Distance from Site 113 (miles)	Use	Owner	Location
1	26-2083	9/29/1959	26-12-966	1.81	Industrial	Nick Veraleno	26 Fairway Ave, Belleville, NJ
2	26-4523	6/6/1973	26-12-968	1.9	Industrial	The Theobald Industries	Town of Kearny, NJ
3	26-94	4/26/1949	26-12-996	1.93	Industrial	Kohler Chemical Works, Inc.	80 Lister Ave, Kearny, NJ
4	26-20920	7/17/1990	26-13-477	1.83	Public	Tom Ostroman	38 O'Brian Rd, Kearny, NJ
5	26-4264	8/14/1968	26-13-479	1.67	Industrial	Penncap Reality Co.	Belleville Turnpike, Kearny, NJ
6	26-179	4/30/1952	26-13-482	1.97	Air Conditioner	Leonard Del Grosso	262 Ridge Road, Lyndhurst, NJ
7	26-5018	4/12/1981	26-13-594	1.84	Industrial	Wardley Products Co.	1 Aquarium Drive, Secaucus, NJ
8	26-4099	5/19/1967	26-13-753	0.69	Toilet & Washing	Schiavone Construction Co.	Belleville Pike, Kearny, NJ
9	26-1783	4/15/1958	26-13-775	1.6	Industrial	Newark Paraffane Co	70 Blanchard Street, Newark, NJ
10	26-1940	1/23/1959	26-13-775	1.6	Cooling	Eureka Construction Co	171 Blanchard Street, Newark, NJ
11	26-3293	8/5/1965	26-13-775	1.6	Industrial	Fairmount Chemical Co. Inc.	117 Blanchard Street, Newark, NJ
12	26-4136	9/18/1967	26-13-775	1.6	Cooling	Fairmount Chemical Co. Inc.	117 Blanchard Street, Newark, NJ
13	26-4947	11/3/1981	26-13-775	1.6	Industrial	Newark Box Board Co.	17 Blanchard Street, Newark, NJ
14	26-429	3/19/1952	26-13-778	1.63	Industrial	Arden Chemical Co.	60 Blanchard Street, Newark, NJ
15	26-26647	9/20/1991	26-13-855	0.93	Recovery	Koppers Co.	Kearny Township (Block 287, Lot 62)
16	26-26648	9/20/1991	26-13-855	0.93	Recovery	Koppers Co.	Kearny Township (Block 287, Lot 62)
17	26-3139	6/8/1965	26-23-111	1.99	Industrial	Pfaff & Kendall	84 Foundry Street, Newark, NJ
18	26-12120	12/28/1987	26-23-116	1.99	Recovery	Texaco Terminal	910 Delancey Street, Kearny, NJ
19	26-5034	5/1/1981	26-23-135	1.66	Domestic	Coca Cola Co.	Lincoln Highway & Hackensack Ave, Kearny, NJ
20	26-34363	8/24/1993	26-13-778	1.57	Recovery	Deleet Merchandising	26 Blanchard Street, Newark, NJ
21	26-34364	8/24/1993	26-13-778	1.57	Recovery	Deleet Merchandising	26 Blanchard Street, Newark, NJ
22	26-36181	4/22/1994	26-13-778	1.57	Recovery	Deleet Merchandising	26 Blanchard Street, Newark, NJ
23	26-36182	4/22/1994	26-13-778	1.57	Recovery	Deleet Merchandising	26 Blanchard Street, Newark, NJ
24	26-36183	4/22/1994	26-13-778	1.57	Recovery	Deleet Merchandising	26 Blanchard Street, Newark, NJ
25	26-36184	4/22/1994	26-13-778	1.57	Recovery	Deleet Merchandising	26 Blanchard Street, Newark, NJ
26	26-30999	3/17/1993	26-23-123	1.57	Recovery	Acme Markets, Inc.	Kearny Town, NJ

Table 113-02-05
Results of Well Search
Site 113 Diamond Site
Kearny, New Jersey

	Permit Number	Date Installed	Map Location	Distance from Site 113 (miles)	Use	Owner	Location
27	26-31000	3/17/1993	26-23-123	1.57	Recovery	Acme Markets, Inc.	Kearny Town, NJ
28	26-46931	3/19/1997	26-23-131	1.29	Recovery	200 Central Avenue	Kearny, NJ
29	26-46932	3/20/1997	26-23-131	1.29	Recovery	200 Central Avenue	Kearny, NJ
30	26-46933	3/20/1997	26-23-131	1.29	Recovery	200 Central Avenue	Kearny, NJ

TABLE 113-02-06
Summary of Soil Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dilution Factor for Cr(VI)	Total Cr (mg/Kg)	Total Cr (mg/Kg) (Enesco-RMA)	Cr(VI) (mg/Kg)	pH (s.u.)	Field pH (s.u.)	ORP Eh (mV)	Field ORP Eh (mV)	Percent Solids (%)	Percent Solids (%) (Enesco-RMA)
113-B-101-00-0.5-030992-053	09/03/92	Accutest	00-0.5	1	145	--	9.8	7.4	--	--	--	82	--
113-B-101-02-04-030992-053	09/03/92	Accutest	02-04	50	36,100	--	4,680	13.0	--	165	--	61	--
113-B-101-12-13-030992-053	09/03/92	Accutest	12-13	50	32,500	--	3,610	13.0	--	--	--	60	--
113-B-101-14-16-090992-056	09/09/92	Accutest	14-16	1	88.6	--	12.8	11.0	--	58	--	84	--
113-B-101-14-16-D-090992-056	09/09/92	Accutest	14-16	1	115	--	3.9	11.0	--	--	--	84	--
113-B-102-00-0.5-270892-050	08/27/92	Accutest	00-0.5	10	78.4	--	45	7.7	--	--	--	85	--
113-B-102-02-04-270892-050	08/27/92	Accutest	02-04	200	20,800	--	7,067	10.0	--	155	--	60	--
113-B-102-12-14-270892-050	08/27/92	Accutest	12-14	200	5,390	--	4,560	8.6	--	177	--	59	--
113-B-102-12-14-D-270892-050	08/27/92	Accutest	12-14	200	16,200	--	4,130	9.6	--	--	--	57	--
113-B-102-18-20-040992-054	09/04/92	Accutest	18-20	1	30.1	--	2.5	8.4	--	147	--	75	--
113-B-102-18-20-D-040992-054	09/04/92	Accutest	18-20	1	47.7	--	2.1	8.5	--	--	--	79	--
113-B-103-00-0.5-030992-053	09/03/92	Accutest	00-0.5	20	3,830	--	186	8.6	--	--	--	81	--
113-B-103-02-04-030992-053	09/03/92	Accutest	02-04	20	5,390	--	369	10.0	--	269	--	79	--
113-B-103-02-04-D-030992-053	09/03/92	Accutest	02-04	20	5,200	--	189	9.8	--	--	--	81	--
113-B-103-08-10-030992-053	09/03/92	Accutest	08-10	50	18,700	--	3,260	12.0	--	--	--	53	--
113-B-103-12-14-110992-056	09/11/92	Accutest	12-14	1	33.9	--	8.6	9.2	--	128	--	82	--
113-B-104-00-0.5-230992-065	09/23/92	Accutest	00-0.5	200	17,300	--	4,590	12.0	--	--	--	69	--
113-B-104-02-04-230992-065	09/23/92	Accutest	02-04	200	29,200	--	5,330	12.0	--	124	--	62	--
113-B-104-02-04-D-230992-065	09/23/92	Accutest	02-04	1	27,300	--	23.7	12.0	--	--	--	64	--
113-B-104-10-12-230992-065	09/23/92	Accutest	10-12	500	30,000	--	17,100	12.0	--	110	--	60	--
113-B-104-14-16-240992-069	09/24/92	Accutest	14-16	1	66.1	--	1.8	10.0	--	46	--	80	--
113-B-104-14-16-D-240992-069	09/24/92	Accutest	14-16	1	182	--	1.4	10.0	--	--	--	82	--
113-B-105-00-0.5-290992-072	09/29/92	Accutest	00-0.5	100	--	17,400	2,380	12.0	--	--	--	69	72
113-B-105-02-04-290992-072	09/29/92	Accutest	02-04	20	--	2,880	352	12.0	--	205	--	72	70
113-B-105-06-08-290992-072	09/29/92	Accutest	06-08	500	--	37,200	16,900	13.0	--	139	--	58	61
113-B-105-14-15-300992-073	09/30/92	Accutest	14-15	1	54.1	--	4.0	7.9	--	--	--	80	--
113-B-105-14-15-D-300992-073	09/30/92	Accutest	14-15	1	53	--	3.1	8.0	--	--	--	82	--
113-B-106-00-0.5-121092-082	10/12/92	Accutest	00-0.5	10	2,500	--	296	12.0	--	--	--	80	--

TABLE 113-02-06
Summary of Soil Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dilution Factor for Cr(VI)	Total Cr (mg/Kg)	Total Cr (mg/Kg) (Enesco-RMA)	Cr(VI) (mg/Kg)	pH (s.u.)	Field pH (s.u.)	ORP Eh (mV)	Field ORP Eh (mV)	Percent Solids (%)	Percent Solids (%) (Enesco-RMA)
113-B-106-02-04-121092-082	10/12/92	Accutest	02-04	100	8,960	--	2,340	12.0	--	25	--	62	--
113-B-106-08-09-121092-082	10/12/92	Accutest	08-09	200	5,840	--	8,300	13.0	--	--	--	52	--
113-B-106-11-13-141092-083	10/14/92	Accutest	11-13	1	--	23.8	1.3	8.5	--	--	--	85	86
113-B-107-00-0.5-121092-082	10/12/92	Accutest	00-0.5	2	6,470	--	86.4	8.9	--	--	--	88	--
113-B-107-02-04-121092-082	10/12/92	Accutest	02-04	1	1,720	--	33.9	9.4	--	100	--	77	--
113-B-107-02-04-D-121092-082	10/12/92	Accutest	02-04	1	1,390	--	24.8	9.4	--	--	--	79	--
113-B-107-04-06-121092-082	10/12/92	Accutest	04-06	1	590	--	0.81	9.3	--	--	--	73	--
113-B-107-12-14-141092-083	10/14/92	Accutest	12-14	1	--	7.2	0.41 U	7.4	--	--	--	83	87
113-B-107-12-14-D-141092-083	10/14/92	Accutest	12-14	1	--	7.9	0.86	7.5	--	--	--	81	88
113-B-108-00-0.5-160992-060	09/16/92	Accutest	00-0.5	1	631	--	1.1	8.5	--	--	--	81	--
113-B-108-02-04-160992-060	09/16/92	Accutest	02-04	1	3,790	--	6.7	9.7	--	216	--	67	--
113-B-108-02-04-D-160992-060	09/16/92	Accutest	02-04	1	2,050	--	2.3	9.5	--	--	--	63	--
113-B-108-04-06-160992-060	09/16/92	Accutest	04-06	1	1,970	--	9.2	9.8	--	--	--	75	--
113-B-108-10-12-170992-061	09/17/92	Accutest	10-12	1	27.7	--	3.6	9.1	--	115	--	81	--
113-B-108-10-12-D-170992-061	09/17/92	Accutest	10-12	1	23.9	--	1.7	9.6	--	--	--	82	--
113-B-109-01-1.5-160992-060	09/16/92	Accutest	01-1.5	1	954	--	41.2	9.2	--	--	--	85	--
113-B-109-02-04-160992-060	09/16/92	Accutest	02-04	1	365	--	55.9	11.0	--	241	--	72	--
113-B-109-06-08-160992-060	09/16/92	Accutest	06-08	1	613	--	42.7	11.0	--	156	--	78	--
113-B-109-11-13-180992-061	09/18/92	Accutest	11-13	1	70.4	--	3.7	11.0	--	-100	--	80	--
113-B-110-00-0.5-140992-058	09/14/92	Accutest	00-0.5	1	3,820	--	34.8	8.8	--	--	--	85	--
113-B-110-04-06-140992-058	09/14/92	Accutest	04-06	500	45,300	--	16,400	13.0	--	178	--	51	--
113-B-110-08-10-140992-058	09/14/92	Accutest	08-10	200	31,900	--	14,900	13.0	--	16	--	43	--
113-B-111-00-0.5-150992-059	09/15/92	Accutest	00-0.5	1	888	--	3.3	7.7	--	--	--	80	--
113-B-111-02-04-150992-059	09/15/92	Accutest	02-04	50	10,100	--	312	9.2	--	91	--	78	--
113-B-111-06-08-150992-059	09/15/92	Accutest	06-08	200	7,860	--	4,400	13.0	--	-352	--	65	--
113-B-112-00-0.5-220992-064	09/22/92	Accutest	00-0.5	5	2,830	--	76.8	9.1	--	--	--	88	--
113-B-112-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	--	2,400	--	--	--	--	--	--	88	--
113-B-112-04-06-220992-064	09/22/92	Accutest	04-06	5	2,300	--	91.8	12.0	--	--	--	88	--

TABLE 113-02-06
Summary of Soil Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dilution Factor for Cr(VI)	Total Cr (mg/Kg)	Total Cr (mg/Kg) (Enesco-RMA)	Cr(VI) (mg/Kg)	pH (s.u.)	Field pH (s.u.)	ORP Eh (mV)	Field ORP Eh (mV)	Percent Solids (%)	Percent Solids (%) (Enesco-RMA)
113-B-112-08-10-220992-064	09/22/92	Accutest	08-10	1	2,450	--	0.55 U	11.0	--	--	--	62	--
113-B-113-0.0-0.5-231192-096	11/23/92	Accutest	00-0.5	100	--	27,200	1,880	10.0	--	--	--	55	57
113-B-113-2.0-4.0-231192-096	11/23/92	Accutest	02-04	200	--	26,400	7,690	12.0	--	--	--	58	61
113-B-113-14.0-16.0-231192-096	11/23/92	Accutest	14-16	200	--	26,300	8,460	12.0	--	--	--	61	61
113-B-114-00-0.5-100293-114	02/10/93	Lancaster	00-0.5	1	325	--	5.0	7.1	--	--	--	76	--
113-B-114-00-0.5-D-100293-114	02/10/93	Lancaster	00-0.5	1	417	--	5.0	7.2	--	--	--	76	--
113-B-114-02-04-100293-114	02/10/93	Lancaster	02-04	100	20,000	--	7,400	12.2	--	--	--	62	--
113-B-114-12-14-100293-114	02/10/93	Lancaster	12-14	100	20,900	--	6,090	12.2	--	--	--	62	--
113-B-115-00-0.5-250892-050	08/25/92	Accutest	00-0.5	1	67.8	--	3.1	6.3	--	--	--	82	--
113-B-115-02-04-250892-050	08/25/92	Accutest	02-04	1	8,970	--	6.8	13.0	--	252	--	75	--
113-B-115-12-14-250892-050	08/25/92	Accutest	12-14	10	44,300	--	413	11.0	--	--	--	39	--
113-B-116(A)-0-.5-240907-1336	09/24/07	Lancaster	00-0.5	2	2,640	--	10.5	8.4	--	465	--	84.3	--
113-B-116(A)-2-4-240907-1336	09/24/07	Lancaster	02-04	20	7,970	--	227	9.9	7.89	453	488	71.2	--
113-B-116(A)-2-4-D-240907-1336	09/24/07	Lancaster	02-04	50	7,140	--	501	9.9	7.89	460	467	72.6	--
113-B-116(A)-4-6-240907-1336	09/24/07	Lancaster	04-06	2	5,730	--	8.7	9.5	7.92	465	433	64.3	--
113-B-116(A)-6-8-240907-1336	09/24/07	Lancaster	06-08	2	13,600	--	21	9.7	7.58	135	164	61.8	--
113-B-116(A)-12-14-280907-1340	09/28/07	Lancaster	12-14	1	36.1	--	4.9	8.8	6.12	439	503	78.9	--
113-B-116(A)-14-16-280907-1340	09/28/07	Lancaster	14-16	5	2,890	--	34.9	9.3	6.31	499	417	81.5	--
113-B-116(A)-16-18-280907-1340	09/28/07	Lancaster	16-18	5	413	--	29.5	9.3	6.88	502	427	82.1	--
113-B-116-00-0.5-010992-051	09/01/92	Accutest	00-0.5	1	1,430	--	17.7	7.7	--	--	--	83	--
113-B-116-02-04-010992-051	09/01/92	Accutest	02-04	1	36.6	--	1.9	10.0	--	375	--	90	--
113-B-116-02-04-D-010992-051	09/01/92	Accutest	02-04	1	40	--	2.7	10.0	--	--	--	90	--
113-B-116-08-10-010992-052	09/01/92	Accutest	08-10	1	15,300	--	26.2	9.8	--	-211	--	59	--
113-B-116-08-10-D-010992-052	09/01/92	Accutest	08-10	1	18,200	--	16.7	9.8	--	--	--	56	--
113-B-117-00-0.5-241192-096	11/24/92	Accutest	00-0.5	1	--	403	9.7	7.4	--	--	--	79	79
113-B-117-02-04-241192-096	11/24/92	Accutest	02-04	5	--	8,450	170	9.8	--	--	--	64	62
113-B-117-12-13-241192-096	11/24/92	Accutest	12-13	200	--	23,500	8,260	12.0	--	--	--	55	60
113-B-118-0.0-0.5-231192-096	11/23/92	Accutest	00-0.5	200	--	26,700	4,790	12.0	--	--	--	62	62

TABLE 113-02-06
Summary of Soil Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dilution Factor for Cr(VI)	Total Cr (mg/Kg)	Total Cr (mg/Kg) (Enesco-RMA)	Cr(VI) (mg/Kg)	pH (s.u.)	Field pH (s.u.)	ORP Eh (mV)	Field ORP Eh (mV)	Percent Solids (%)	Percent Solids (%) (Enesco-RMA)
113-B-118D-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	--	--	30,200	--	--	--	--	--	61	--
113-B-118-2.0-4.0-231192-096	11/23/92	Accutest	02-04	200	--	36,900	7,360	12.0	--	--	--	60	63
113-B-118D-2.0-4.0-231192-096	11/23/92	Accutest	02-04	200	--	--	6,270	12.0	--	--	--	60	--
113-B-118-8.0-10.0-231192-096	11/23/92	Accutest	08-10	200	--	21,500	6,580	12.0	--	--	--	62	65
113-B-119-00-0.5-010992-051	09/01/92	Accutest	00-0.5	1	78.8	--	4.8	6.9	--	--	--	83	--
113-B-119-02-04-010992-051	09/01/92	Accutest	02-04	1	40,200	--	1.5	8.2	--	91	--	56	--
113-B-119-12-14-010992-052	09/01/92	Accutest	12-14	1	6,560	--	33.7	11.0	--	-141	--	72	--
113-B-120-00-0.5-100592-077	05/10/92	Accutest	00-0.5	2	--	90.9	12.4	5.4	--	--	--	79	87
113-B-120-02-04-100592-077	05/10/92	Accutest	02-04	2	--	3,870	2.0	6.6	--	241	--	82	--
113-B-120-06-08-100592-077	05/10/92	Accutest	06-08	100	--	13,500	1,220	12.0	--	178	--	50	--
113-B-121-00-0.5-290992-072	09/29/92	Accutest	00-0.5	100	--	8,540	3,310	12.0	--	--	--	71	74
113-B-121-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	--	--	10,100	--	--	--	--	--	--	--
113-B-121-02-04-290992-072	09/29/92	Accutest	02-04	500	--	36,600	19,100	13.0	--	107	--	56	60
113-B-121-02-04-D-290992-072	09/29/92	Accutest	02-04	500	--	--	23,800	13.0	--	--	--	57	--
113-B-121-08-10-290992-072	09/29/92	Accutest	08-10	200	--	24,900	12,400	12.6	--	95	--	59	68
113-B-122-00-0.5-140992-058	09/14/92	Accutest	00-0.5	1	483	--	22.5	8.7	--	--	--	93	--
113-B-122-02-04-140992-058	09/14/92	Accutest	02-04	200	33,100	--	12,700	13.0	--	129	--	62	--
113-B-122-02-04-D-140992-058	09/14/92	Accutest	02-04	200	35,800	--	13,000	13.0	--	--	--	64	--
113-B-122-11-13-140992-058	09/14/92	Accutest	11-13	200	25,400	--	4,960	13.0	--	95	--	57	--
113-B-123-00-0.5-100992-057	09/10/92	Accutest	00-0.5	10	11,900	--	77.7	8.1	--	--	--	86	--
113-B-123-00-0.5-150992-059	09/15/92	Accutest	00-0.5	1	3,970	--	30.6	8.7	--	--	--	88	--
113-B-123-02-04-150992-059	09/15/92	Accutest	02-04	200	9,950	--	1,190	11.0	--	208	--	60	--
113-B-123-02-04-D-150992-059	09/15/92	Accutest	02-04	200	11,300	--	1,630	11.0	--	--	--	67	--
113-B-123-08-10-150992-059	09/15/92	Accutest	08-10	200	29,800	--	8,210	13.0	--	-2	--	57	--
113-B-124-00-0.5-100992-057	09/10/92	Accutest	00-0.5	1	2,710	--	24.6	9.6	--	--	--	78	--
113-B-124-02-04-150992-058	09/15/92	Accutest	02-04	1	9,230	--	1.3	8.9	--	140	--	71	--
113-B-124-08-10-150992-059	09/15/92	Accutest	08-10	1	1,800	--	3.6	9.5	--	-68	--	60	--
113-B-125-02-2.5-100992-057	09/10/92	Accutest	02-2.5	200	32,200	--	4,970	13.0	--	--	--	68	--

TABLE 113-02-06
Summary of Soil Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dilution Factor for Cr(VI)	Total Cr (mg/Kg)	Total Cr (mg/Kg) (Enesco-RMA)	Cr(VI) (mg/Kg)	pH (s.u.)	Field pH (s.u.)	ORP Eh (mV)	Field ORP Eh (mV)	Percent Solids (%)	Percent Solids (%) (Enesco-RMA)
113-B-125-04-06-100992-057	09/10/92	Accutest	04-06	200	24,800	--	7,980	13.0	--	--	--	63	--
113-B-125-06-08-100992-057	09/10/92	Accutest	06-08	200	23,000	--	13,500	13.0	--	149	--	53	--
113-B-126-00-0.5-150992-058	09/15/92	Accutest	00-0.5	1	1,510	--	44.3	9.0	--	--	--	79	--
113-B-126-02-04-150992-059	09/15/92	Accutest	02-04	200	54,000	--	1,620	7.3	--	313	--	70	--
113-B-126-06-08-150992-059	09/15/92	Accutest	06-08	50	6,150	--	262	9.3	--	188	--	62	--
113-B-127-00-0.5-100592-077	05/10/92	Accutest	00-0.5	100	--	13,800	4,880	12.0	--	--	--	74	76
113-B-127-00-0.5-D-100592-077	05/10/92	Accutest	00-0.5	--	--	16,800	--	--	--	--	--	73	73
113-B-127-02-04-100592-077	05/10/92	Accutest	02-04	100	--	3,810	1,340	12.1	--	132	--	76	--
113-B-127-02-04-D-100592-077	05/10/92	Accutest	02-04	100	--	--	773	12.0	--	--	--	75	--
113-B-127-12-14-100592-077	05/10/92	Accutest	12-14	200	--	28,400	11,700	13.0	--	--	--	58	--
113-B-128-00-0.5-150992-059	09/15/92	Accutest	00-0.5	5	1,480	--	107	9.4	--	--	--	88	--
113-B-128-05-5.5-221092-086	10/22/92	Accutest	05-5.5	100	--	1,720	1,800	12.0	--	240	--	79	81
113-B-128-05-5.5-D-221092-086	10/22/92	Accutest	05-5.5	100	--	1,090	1,890	12.0	--	--	--	80	87
113-B-128A-00-0.5-191192-095	11/19/92	Accutest	00-0.5	1	--	33.4	1.9	7.9	--	--	--	95	95
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	--	--	35.8	--	--	--	--	--	94	--
113-B-128A-02-04-191192-095	11/19/92	Accutest	02-04	200	--	14,700	11,400	11.2	--	195	--	43	43
113-B-128A-02-04-D-191192-095	11/19/92	Accutest	02-04	200	--	--	15,600	12.0	--	--	--	42	--
113-B-128A-06-08-191192-095	11/19/92	Accutest	06-08	200	--	20,600	15,600	12.0	--	56	--	48	56
113-B-128B-00-0.5-191192-095	11/19/92	Accutest	00-0.5	50	--	1,030	137	8.9	--	--	--	84	86
113-B-128B-02-04-191192-095	11/19/92	Accutest	02-04	100	--	1,520	314	10.0	--	--	--	84	84
113-B-128B-08-10-191192-095	11/19/92	Accutest	08-10	100	--	20,200	1,510	8.8	--	--	--	52	62
113-B-129-00-0.5-220992-064	09/22/92	Accutest	00-0.5	20	3,160	--	408	9.3	--	--	--	85	--
113-B-129-02-04-220992-064	09/22/92	Accutest	02-04	5	2,430	--	86.8	10.0	--	--	--	70	--
113-B-129-06-06-220992-064	09/22/92	Enseco-RMA	04-06	--	--	1,080	--	--	--	--	--	--	70
113-B-129-06-08-220992-064	09/22/92	Accutest	06-08	1	2,920	--	44.1	10.0	--	--	--	66	78
113-B-130-00-0.5-230992-065	09/23/92	Accutest	00-0.5	25	7,630	--	173	9.2	--	--	--	85	--
113-B-130-02-04-230992-065	09/23/92	Accutest	02-04	25	821	--	283	11.0	--	294	--	73	--
113-B-130-04-06-230992-065	09/23/92	Accutest	04-06	25	2,750	--	276	11.0	--	251	--	71	--

TABLE 113-02-06
Summary of Soil Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dilution Factor for Cr(VI)	Total Cr (mg/Kg)	Total Cr (mg/Kg) (Enesco-RMA)	Cr(VI) (mg/Kg)	pH (s.u.)	Field pH (s.u.)	ORP Eh (mV)	Field ORP Eh (mV)	Percent Solids (%)	Percent Solids (%) (Enesco-RMA)
113-B-130-08-10-230992-065	09/23/92	Accutest	08-10	25	9,330	--	451	8.1	--	--	--	12	--
113-B-131-00-0.5-280992-070	09/28/92	Accutest	00-0.5	200	7,430	--	5,200	12.0	--	--	--	78	--
113-B-131-02-04-280992-070	09/28/92	Accutest	02-04	5	3,700	--	69	9.2	--	243	--	75	--
113-B-131-02-04-D-280992-070	09/28/92	Accutest	02-04	1	--	--	46.5	10.0	--	--	--	77	--
113-B-131-06-08-280992-070	09/28/92	Accutest	06-08	1	4,260	--	31.4	9.2	--	262	--	73	--
113-B-132-00-0.5-280992-070	09/28/92	Accutest	00-0.5	5	1,590	--	19.8	9.9	--	--	--	86	--
113-B-132-02-04-280992-070	09/28/92	Accutest	02-04	10	2,270	--	82.1	11.0	--	130	--	70	--
113-B-132-06-08-280992-070	09/28/92	Accutest	06-08	20	3,530	--	907	12.0	--	--	--	60	--
113-B-133-00-0.5-220992-064	09/22/92	Accutest	00-0.5	20	4,020	--	312	11.0	--	--	--	83	--
113-B-133-04-06-220992-064	09/22/92	Accutest	04-06	50	11,500	--	1,780	12.0	--	85	--	61	--
113-B-133-04-06-D-220992-064	09/22/92	Accutest	04-06	50	11,100	--	1,310	12.0	--	--	--	63	--
113-B-133-08-10-220992-064	09/22/92	Accutest	08-10	200	27,000	--	11,200	12.0	--	62	--	60	--
113-B-134-00-0.5-100992-057	09/10/92	Accutest	00-0.5	100	4,310	--	422	9.8	--	--	--	83	--
113-B-134-02-04-100992-057	09/10/92	Accutest	02-04	200	11,500	--	2,960	13.0	--	123	--	62	--
113-B-134-08-10-100992-057	09/10/92	Accutest	08-10	200	19,200	--	4,490	13.0	--	132	--	60	--
113-B-134-08-10-D-100992-057	09/10/92	Accutest	08-10	200	22,000	--	3,580	13.0	--	--	--	59	--
113-B-135-00-0.5-280992-070	09/28/92	Accutest	00-0.5	50	8,370	--	2,170	12.0	--	--	--	78	--
113-B-135-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	--	--	7,700	--	--	--	--	--	78	--
113-B-135-02-04-280992-070	09/28/92	Accutest	02-04	1	4,230	--	9.5	10.0	--	--	--	72	--
113-B-135-06-08-280992-070	09/28/92	Accutest	06-08	1	12,700	--	24.5	11.0	--	--	--	76	--
113-B-301-0-0.5-071107-1352	11/07/07	Lancaster	00-0.5	5	177	--	12.6	7.1	6.00	593	301	74.1	--
113-B-301-0.5-2-071107-1352	11/07/07	Lancaster	0.5-02	1	70	--	1.2 U	7.0	7.53	595	301	83.6	--
113-B-301-2-4-071107-1352	11/07/07	Lancaster	02-04	1	3,580	--	3.5	8.1	8.00	600	219	81.1	--
113-B-301-2-4-D-071107-1352	11/07/07	Lancaster	02-04	5	2,090	--	17.1	8.1	8.00	606	138	83.1	--
113-B-301-4-6-071107-1352	11/07/07	Lancaster	04-06	5	1,820	--	24.8	7.9	8.05	553	102	77.4	--
113-B-301-12-14-031007-1343	10/03/07	Lancaster	12-14	2	665	--	18.6	8.2	7.55	313	400	80.8	--
113-B-301-12-14-D-031007-1343	10/03/07	Lancaster	12-14	1	560	--	11.9	8.0	7.55	276	400	81.3	--
113-B-301-14-16-031007-1343	10/03/07	Lancaster	14-16	2	747	--	16.7	9.3	9.05	454	210	82.2	--

TABLE 113-02-06
Summary of Soil Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dilution Factor for Cr(VI)	Total Cr (mg/Kg)	Total Cr (mg/Kg) (Enesco-RMA)	Cr(VI) (mg/Kg)	pH (s.u.)	Field pH (s.u.)	ORP Eh (mV)	Field ORP Eh (mV)	Percent Solids (%)	Percent Solids (%) (Enesco-RMA)
113-B-302-0-.5-210907-1335	09/21/07	Lancaster	00-0.5	20	4,850	--	95.7	8.6	8.47	627	205	80.8	--
113-B-302-.5-2-210907-1335	09/21/07	Lancaster	0.5-02	500	13,000	--	2,090	10.8	8.8	584	205	74.9	--
113-B-302-.5-2-D-210907-1335	09/21/07	Lancaster	0.5-02	500	15,700	--	2,520	11.1	8.8	578	205	75.7	--
113-B-302-2-4-210907-1335	09/21/07	Lancaster	02-04	500	30,000	--	1,860	10.8	10.7	572	308	75.2	--
113-B-302-4-6-210907-1335	09/21/07	Lancaster	04-06	500	29,300	--	7,620	12.5	12.3	492	240	70.6	--
113-B-302-6-8-210907-1335	09/21/07	Lancaster	06-08	500	30,600	--	8,110	12.5	12.4	479	199	58.1	--
113-B-302-8-10-210907-1335	09/21/07	Lancaster	08-10	500	33,300	--	5,570	12.6	11.2	471	228	58.2	--
113-B-302-10-12-210907-1335	09/21/07	Lancaster	10-12	500	38,300	--	6,470	12.6	12.3	458	386	63	--
113-B-302-12-14-210907-1335	09/21/07	Lancaster	12-14	500	28,800	--	4,820	12.6	12.2	350	281	64.4	--
113-B-302-18-20-250907-1337	09/25/07	Lancaster	18-20	1	258	--	6.9	10.7	9.58	598	260	75.6	--
113-B-302-20-22-250907-1337	09/25/07	Lancaster	20-22	5	349	--	28.7	10.8	9.42	578	315	79.1	--
113-B-302-20-22-D-250907-1337	09/25/07	Lancaster	20-22	2	240	--	24.6	10.5	9.42	589	315	78.8	--
113-B-303-0-.5-270907-1339	09/27/07	Lancaster	00-0.5	1	124	--	5.0	7.9	8.62	540	392	83.3	--
113-B-303-.5-2-270907-1339	09/27/07	Lancaster	0.5-02	1	38	--	2.5	9.2	9.55	541	306	89.6	--
113-B-303-4-6-270907-1339	09/27/07	Lancaster	04-06	5	16,000	--	53.4	11.5	10.3	442	306	63.4	--
113-B-303-6-8-270907-1339	09/27/07	Lancaster	06-08	200	33,300	--	3,040	12.1	--	344	--	44.2	--
113-B-303-8-10-270907-1339	09/27/07	Lancaster	08-10	50	66,400	--	803	12.0	9.52	419	372	39.8	--
113-B-303-12-14-021007-1342	10/02/07	Lancaster	12-14	1	99.3	--	2.4	10.1	9.17	521	-82	79.8	--
113-B-303-14-16-021007-1342	10/02/07	Lancaster	14-16	1	268	--	9.0	10.8	9.53	283	60	79.7	--
113-B-303-14-16-D-021007-1342	10/02/07	Lancaster	14-16	5	2,790	--	54.4	11.4	9.53	304	60	77.4	--
113-B-303-16-18-021007-1342	10/02/07	Lancaster	16-18	2	658	--	15.1	11.1	9.29	356	272	78.4	--
113-B-304-0-.5-190907-1333	09/19/07	Lancaster	00-0.5	1	63.1	--	2.7	7.8	4.37	412	254	79.0	--
113-B-304-.5-2-190907-1333	09/19/07	Lancaster	0.5-02	1	1,040	--	2.5	8.9	--	417	--	84.0	--
113-B-304-2-4-190907-1333	09/19/07	Lancaster	02-04	1	414	--	2.4	8.7	4.03	408	416	86.3	--
113-B-304-4-6-190907-1333	09/19/07	Lancaster	04-06	1	21,500	--	1.7 U	10.3	3.96	364	239	59.1	--
113-B-304-6-8-190907-1333	09/19/07	Lancaster	06-08	1	18,900	--	3.6	11.2	3.85	204	167	57.4	--
113-B-304-8-10-190907-1333	09/19/07	Lancaster	08-10	20	36,100	--	193	11.5	--	260	--	64.8	--
113-B-304-12-14-190907-1333	09/19/07	Lancaster	12-14	10	398	--	21.3	9.6	3.27	315	197	81.4	--

TABLE 113-02-06
Summary of Soil Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dilution Factor for Cr(VI)	Total Cr (mg/Kg)	Total Cr (mg/Kg) (Enesco-RMA)	Cr(VI) (mg/Kg)	pH (s.u.)	Field pH (s.u.)	ORP Eh (mV)	Field ORP Eh (mV)	Percent Solids (%)	Percent Solids (%) (Enesco-RMA)
113-B-304-14-16-031007-1343	10/03/07	Lancaster	14-16	1	44.8	--	1.8	11.6	10.4	322	261	81.4	--
113-B-304-16-18-031007-1343	10/03/07	Lancaster	16-18	1	171	--	6.7	12.4	11.1	265	157	80.7	--
113-B-305-0-5-180907-1332	09/18/07	Lancaster	00-0.5	20	5,260	--	185	9.8	8.45	588	284	84.9	--
113-B-305-0.5-2.0-180907-1332	09/18/07	Lancaster	0.5-02	5	3,020	--	36.6	8.6	9.59	595	272	88.6	--
113-B-305-2.0-4.0-180907-1332	09/18/07	Lancaster	02-04	20	894	--	164	10.9	5.4	546	361	77.7	--
113-B-305-4-6-190907-1333	09/19/07	Lancaster	04-06	1	4,640	--	1.3 U	11.1	4.8	321	166	74.1	--
113-B-305-6-8-190907-1333	09/19/07	Lancaster	06-08	1	3,090	--	1.3 U	11.8	4.79	353	156	79.4	--
113-B-305-6-8-D-190907-1333	09/19/07	Lancaster	06-08	5	1,620	--	18.3	11.0	4.79	335	156	78.1	--
113-B-305-8-10-190907-1333	09/19/07	Lancaster	08-10	1	1,430	--	1.4 U	10.3	4.63	245	89	69.7	--
113-B-305-10-12-190907-1333	09/19/07	Lancaster	10-12	1	1,110	--	1.4 U	10.0	4.76	215	138	69.9	--
113-B-305-14-16-041007-1344	10/04/07	Lancaster	14-16	1	71.8	--	1.4	8.7	9.02	556	208	82.8	--
113-B-305-16-18-041007-1344	10/04/07	Lancaster	16-18	2	473	--	26.4	7.8	9.66	579	297	83.3	--
113-B-305-16-18-D-041007-1344	10/04/07	Lancaster	16-18	1	574	--	13.1	7.4	9.66	567	297	81.7	--
113-B-305-18-20-041007-1344	10/04/07	Lancaster	18-20	5	917	--	68.7	6.3	6.23	564	127	79.7	--
113-B-306-0-0.5-081007-1345	10/08/07	Lancaster	00-0.5	1	5.5	--	1.7	6.3	4.85	403	250	92.1	--
113-B-306-0-2-200907-1334	09/20/07	Lancaster	00-02	5	264	--	24.8	7.7	4.85	371	250	93.3	--
113-B-306-2-4-200907-1334	09/20/07	Lancaster	02-04	500	15,900	--	5,990	11.6	11.3	294	339	63.6	--
113-B-306-4-6-200907-1334	09/20/07	Lancaster	04-06	500	17,400	--	4,000	11.7	11.2	289	278	68.2	--
113-B-306-D-4-6-200907-1334	09/20/07	Lancaster	04-06	500	18,100	--	6,920	11.7	11.2	286	278	67.0	--
113-B-306-6-8-200907-1334	09/20/07	Lancaster	06-08	500	7,260	--	1,920	12.5	12.0	487	286	58.5	--
113-B-306-8-10-200907-1334	09/20/07	Lancaster	08-10	20	24,000	--	190	11.1	11.0	562	199	62.2	--
113-B-306-10-12-200907-1334	09/20/07	Lancaster	10-12	20	20600	--	111	9.1	10.3	565	209	57.7	--
113-B-306-12-14-210907-1335	09/21/07	Lancaster	12-14	50	64,700	--	107	10.4	8.48	580	210	58.3	--
113-B-306-16-18-011007-1341	10/01/07	Lancaster	16-18	10	1,610	--	125	8.9	8.30	584	233	82.5	--
113-B-306-20-22-011007-1341	10/01/07	Lancaster	20-22	2	1,240	--	28.7	10.1	8.99	585	99	81.2	--
113-B-306-20-22-D-011007-1341	10/01/07	Lancaster	20-22	10	1,050	--	71	9.9	8.99	590	99	81.4	--
113-B-306-22-24-011007-1341	10/01/07	Lancaster	22-24	5	767	--	31.6	9.6	8.81	615	165	82.6	--
113-B-307-0-.5-260907-1338	09/26/07	Lancaster	00-0.5	200	11,400	--	891	10.1	8.74	612	458	68.8	--

TABLE 113-02-06
Summary of Soil Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dilution Factor for Cr(VI)	Total Cr (mg/Kg)	Total Cr (mg/Kg) (Enesco-RMA)	Cr(VI) (mg/Kg)	pH (s.u.)	Field pH (s.u.)	ORP Eh (mV)	Field ORP Eh (mV)	Percent Solids (%)	Percent Solids (%) (Enesco-RMA)
113-B-307-.5-2-260907-1338	09/26/07	Lancaster	0.5-02	10	979	--	42.7	8.1	7.67	642	439	84.4	--
113-B-307-2-4-260907-1338	09/26/07	Lancaster	02-04	500	20,800	--	9,330	11.7	10.2	560	387	59.7	--
113-B-307-2-4-D-260907-1338	09/26/07	Lancaster	02-04	500	24,900	--	9,320	11.7	10.2	551	387	57.4	--
113-B-307-4-6-260907-1338	09/26/07	Lancaster	04-06	500	28,600	--	6,480	12.4	10.4	502	369	56.3	--
113-B-307-6-8-260907-1338	09/26/07	Lancaster	06-08	500	28,400	--	6,330	12.6	10.3	467	378	64.0	--
113-B-307-8-10-260907-1338	09/26/07	Lancaster	08-10	500	32,500	--	8,390	12.5	10.4	437	394	59.6	--
113-B-307-10-12-260907-1338	09/26/07	Lancaster	10-12	500	28,400	--	7,180	12.5	10.2	399	393	61.5	--
113-B-307-12-14-260907-1338	09/26/07	Lancaster	12-14	500	33,500	--	6,740	--	10.9	384	330	63.5	--
113-B-307-16-18-280907-1340	09/28/07	Lancaster	16-18	1	709	--	1.2 U	11.5	11.1	120	104	80.8	--
113-B-307-18-20-280907-1340	09/28/07	Lancaster	18-20	5	287	--	33.8	11.3	10.9	157	185	84.2	--
113-B-307-20-22-280907-1340	09/28/07	Lancaster	20-22	10	2,300	--	95.1	8.3	8.34	369	178	81.7	--
113-B-308-.5-2-270907-1339	09/27/07	Lancaster	0.5-02	2	243	--	18.5	8.1	6.7	595	389	89.2	--
113-B-308-2-4-270907-1339	09/27/07	Lancaster	02-04	20	6,680	--	222	9.4	9.26	579	341	69.3	--
113-B-308-4-6-270907-1339	09/27/07	Lancaster	04-06	500	20,900	--	6,100	12.5	12.4	518	204	56.4	--
113-B-308-4-6-D-270907-1339	09/27/07	Lancaster	04-06	500	19,400	--	6,280	12.5	12.4	510	204	57.9	--
113-B-308-6-8-270907-1339	09/27/07	Lancaster	06-08	500	19,200	--	5,690	12.5	12.5	500	232	54.4	--
113-B-308-8-10-270907-1339	09/27/07	Lancaster	08-10	250	18,300	--	4,210	12.5	12.6	491	248	57.1	--
113-B-308-10-12-270907-1339	09/27/07	Lancaster	10-12	500	19,500	--	4,850	--	--	483	--	60.5	--
113-B-308-14-16-280907-1340	09/28/07	Lancaster	14-16	2	186	--	13.4	9.5	8.43	390	256	78.7	--
113-B-308-14-16-D-280907-1340	09/28/07	Lancaster	14-16	2	175	--	22	9.6	8.43	386	256	80.2	--
113-B-308-18-20-280907-1340	09/28/07	Lancaster	18-20	1	81.4	--	3.5	8.8	7.57	503	371	83.1	--
113-B-308-20-22-280907-1340	09/28/07	Lancaster	20-22	2	88.4	--	10.7	8.7	7.25	560	-26	79.5	--
113-B-309-0-0.5-190907-1333	09/19/07	Lancaster	00-0.5	20	384	--	34.3	6.4	4.41	445	212	89.0	--
113-B-309-.5-2-190907-1333	09/19/07	Lancaster	0.5-02	20	1,060	--	54.2	6.8	4.23	440	163	85.2	--
113-B-309-2-4-190907-1333	09/19/07	Lancaster	02-04	5	390	--	12.4	6.5	4.31	424	274	90.0	--
113-B-309-4-6-190907-1333	09/19/07	Lancaster	04-06	500	9,680	--	2,480	12.4	4.56	236	160	79.2	--
113-B-309-6-8-190907-1333	09/19/07	Lancaster	06-08	1000	35,600	--	14,400	12.5	4.83	190	100	62.8	--
113-B-309-12-14-011007-1341	10/01/07	Lancaster	12-14	1	104	--	11.6	9.6	9.37	581	228	82.1	--

TABLE 113-02-06
Summary of Soil Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dilution Factor for Cr(VI)	Total Cr (mg/Kg)	Total Cr (mg/Kg) (Enesco-RMA)	Cr(VI) (mg/Kg)	pH (s.u.)	Field pH (s.u.)	ORP Eh (mV)	Field ORP Eh (mV)	Percent Solids (%)	Percent Solids (%) (Enesco-RMA)
113-B-309-14-16-011007-1341	10/01/07	Lancaster	14-16	1	218	--	10.3	11.0	8.81	543	295	79.9	--
113-B-309-16-18-011007-1341	10/01/07	Lancaster	16-18	1	236	--	11	10.6	9.23	539	282	78.0	--
113-B-310-0-.5-041007-1344	10/04/07	Lancaster	00-0.5	1	63.8	--	6.1	6.2	7.09	581	202	80.9	--
113-B-310-0.5-2.0-180907-1332	09/18/07	Lancaster	0.5-02	1	209	--	7.8	4.3	5.85	588	273	83.7	--
113-B-310-2.0-4.0-180907-1332	09/18/07	Lancaster	02-04	1	51	--	4.3	5.7	5.6	558	301	89.1	--
113-B-310-4.0-6.0-180907-1332	09/18/07	Lancaster	04-06	1	28.1	--	3.5	3.9	4.4	551	355	82.7	--
113-B-310-6-8-180907-1332	09/18/07	Lancaster	06-08	5	97.1	--	8.3	--	4.81	537	355	83.7	--
113-B-310-8-10-180907-1332	09/18/07	Lancaster	08-10	1	54.5	--	3.1	4.3	5.14	545	335	83.3	--
113-B-310-8-10-D-180907-1332	09/18/07	Lancaster	08-10	1	23.2	--	3.0	3.8	5.14	528	335	83.3	--
113-B-310-10-12-180907-1332	09/18/07	Lancaster	10-12	1	672	--	5.7	7.2	6.17	569	282	80.4	--
113-B-310-12-14-180907-1332	09/18/07	Lancaster	12-14	10	824	--	93.5	8.2	7.44	589	284	80.5	--
113-B-310-14-16-021007-1342	10/02/07	Lancaster	14-16	1	101	--	3.5	9.0	8.56	554	338	81.2	--
113-B-310-16-18-021007-1342	10/02/07	Lancaster	16-18	1	128	--	4.0	9.4	8.19	574	394	80.4	--
113-SS-201-170992-062	09/17/92	Accutest	00-0.5	1	1,510	--	15.8	7.7	--	--	--	73	--
113-SS-201-D-170992-062	09/17/92	Accutest	00-0.5	1	991	--	30	7.7	--	--	--	74	--
113-SS-202-150992-059	09/15/92	Accutest	00-0.5	1	449	--	21.3	7.6	--	--	--	80	--
113-SS-203-150992-059	09/15/92	Accutest	00-0.5	1	1,140	--	24.7	7.4	--	--	--	81	--
113-SS-204-150992-059	09/15/92	Accutest	00-0.5	1	1,510	--	34.6	10.0	--	--	--	79	--
113-SS-205-150992-059	09/15/92	Accutest	00-0.5	1	111	--	4.6	7.3	--	--	--	82	--
113-SS-206-030992-053	09/03/92	Accutest	00-0.5	1	515	--	19.1	8.2	--	--	--	84	--
113-SS-207-080992-055	09/08/92	Accutest	00-0.5	1	611	--	8.0	7.9	--	368	--	81	--
113-SS-208-080992-055	09/08/92	Accutest	00-0.5	1	75.1	--	0.41 U	7.7	--	397	--	82	--
113-SS-209-080992-055	09/08/92	Accutest	00-0.5	1	159	--	9.6	5.0	--	485	--	88	--
113-SS-210-010992-051	09/01/92	Accutest	00-0.5	1	287	--	11.1	8.3	--	--	--	90	--
113-SS-211-010992-051	09/01/92	Accutest	00-0.5	1	59.2	--	2.6	6.2	--	--	--	89	--
113-SS-212-030992-053	09/03/92	Accutest	00-0.5	1	158	--	25	7.2	--	--	--	83	--
113-SS-213-030992-053	09/03/92	Accutest	00-0.5	1	102	--	8.5	7.5	--	--	--	86	--
113-SS-214-080992-055	09/08/92	Accutest	00-0.5	1	100	--	4.9	7.1	--	466	--	86	--

TABLE 113-02-06
Summary of Soil Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dilution Factor for Cr(VI)	Total Cr (mg/Kg)	Total Cr (mg/Kg) (Enesco-RMA)	Cr(VI) (mg/Kg)	pH (s.u.)	Field pH (s.u.)	ORP Eh (mV)	Field ORP Eh (mV)	Percent Solids (%)	Percent Solids (%) (Enesco-RMA)
113-SS-215-080992-055	09/08/92	Accutest	00-0.5	1	266	--	1.8	7.2	--	511	--	83	--
113-SS-215-D-080992-055	09/08/92	Accutest	00-0.5	1	201	--	1.6	7.2	--	--	--	83	--
113-SS-216-090992-055	09/09/92	Accutest	00-0.5	1	101	--	14.2	7.0	--	--	--	89	--
113-SS-217-090992-055	09/09/92	Accutest	00-0.5	1	755	--	28.3	8.4	--	--	--	89	--
113-SS-218-100992-055	09/10/92	Accutest	00-0.5	10	249	--	37.1	7.2	--	--	--	76	--
113-SS-219-100992-055	09/10/92	Accutest	00-0.5	1	572	--	14	8.3	--	--	--	79	--
113-SS-220-170992-062	09/17/92	Accutest	00-0.5	1	216	--	23	3.6	--	--	--	86	--
113-SS-221-090992-055	09/09/92	Accutest	00-0.5	1	337	--	19.8	8.4	--	--	--	86	--
113-SS-222-100992-055	09/10/92	Accutest	00-0.5	1	167	--	7.8	6.9	--	--	--	79	--
113-SS-223-170992-062	09/17/92	Accutest	00-0.5	1	59.4	--	6.3	6.3	--	--	--	88	--
113-SS-224-170992-062	09/17/92	Accutest	00-0.5	1	141	--	4.1	7.3	--	--	--	85	--
113-SS-225-300992-071	09/30/92	Accutest	00-0.5	5	--	1,260	91.1	8.4	--	--	--	73	--
113-SS-226-300992-071	09/30/92	Accutest	00-0.5	1	--	144	13	6.2	--	--	--	77	--
113-SS-227-300992-071	09/30/92	Accutest	00-0.5	1	--	64.3	5.8	6.1	--	--	--	83	--
113-SS-228-210992-063	09/21/92	Accutest	00-0.5	5	2,720	--	80	7.3	--	--	--	80	--
113-SS-228-D-210992-063	09/21/92	Accutest	00-0.5	1	1,280	--	30	7.4	--	--	--	78	--
113-SS-229-300992-071	09/30/92	Accutest	00-0.5	1	--	1,140	31.2	10.0	--	--	--	90	--
113-SS-230-300992-071	09/30/92	Accutest	00-0.5	1	--	304	16.8	7.0	--	--	--	79	--
113-SS-231-210992-063	09/21/92	Accutest	00-0.5	5	12,400	--	116	8.4	--	--	--	80	--
113-SS-232-210992-063	09/21/92	Accutest	00-0.5	1	3,390	--	29	7.7	--	--	--	85	--
113-SS-233-210992-063	09/21/92	Accutest	00-0.5	5	5,470	--	52.4	7.7	--	--	--	83	--
113-SS-234-300992-071	09/30/92	Accutest	00-0.5	5	--	1,030	101	8.2	--	--	--	73	--
113-SS-235-220992-063	09/22/92	Accutest	00-0.5	50	8,240	--	684	11.0	--	--	--	79	--
113-SS-236-220992-063	09/22/92	Accutest	00-0.5	5	3,650	--	90.8	8.7	--	--	--	85	--
113-SS-237-210992-063	09/21/92	Accutest	00-0.5	20	4,540	--	1,060	11.0	--	--	--	80	--
113-SS-238-220992-063	09/22/92	Accutest	00-0.5	20	6,150	--	694	10.0	--	--	--	80	--
113-SS-239-220992-063	09/22/92	Accutest	00-0.5	1	1,810	--	40.6	8.7	--	--	--	86	--
113-SS-240-280992-071	09/28/92	Accutest	00-0.5	20	--	4,140	96.1	8.7	--	--	--	76	--

TABLE 113-02-06
Summary of Soil Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dilution Factor for Cr(VI)	Total Cr (mg/Kg)	Total Cr (mg/Kg) (Enesco-RMA)	Cr(VI) (mg/Kg)	pH (s.u.)	Field pH (s.u.)	ORP Eh (mV)	Field ORP Eh (mV)	Percent Solids (%)	Percent Solids (%) (Enesco-RMA)
113-SS-241-280992-071	09/28/92	Accutest	00-0.5	20	--	2,850	262	10.0	--	--	--	78	--
113-SS-242-230992-063	09/23/92	Accutest	00-0.5	1	757	--	20.1	8.1	--	--	--	84	--
113-SS-243-230992-063	09/23/92	Accutest	00-0.5	100	11,300	--	2,820	12.0	--	--	--	69	--
113-SS-244-280992-071	09/28/92	Accutest	00-0.5	20	--	4,580	542	11.0	--	--	--	66	--
113-SS-244-D-280992-071	09/28/92	Accutest	00-0.5	20	--	4,140	1,000	10.0	--	--	--	78	--
113-SS-245-300992-071	09/30/92	Accutest	00-0.5	20	--	4,750	777	10.0	--	--	--	75	--
113-SS-246-290992-071	09/29/92	Accutest	00-0.5	1	--	2,710	0.7	8.5	--	--	--	79	--
113-SS-247-290992-071	09/29/92	Accutest	00-0.5	50	--	3,940	1,550	12.0	--	--	--	73	--
113-SS-248-280992-071	09/28/92	Accutest	00-0.5	20	--	1,240	78.2	8.7	--	--	--	87	--
113-SS-249-290992-071	09/29/92	Accutest	00-0.5	10	--	2,070	88.2	9.1	--	--	--	82	--
113-SS-250-290992-071	09/29/92	Accutest	00-0.5	5	--	3,560	168	11.0	--	--	--	80	--
113-SS-251-280992-071	09/28/92	Accutest	00-0.5	20	--	4,670	571	10.0	--	--	--	82	--

Notes:
B - Boring
SS - Surface Sample
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
Field ORP Eh - Field ORP measurement has been converted to Eh based on the reference electrode used.
D - Field Duplicate
mV - Millivolts
mg/Kg - Milligrams per kilogram
- - "Not Analyzed" or "Not Applicable" or "Not Requested"
(s.u.) - Standard Units
bgs - Below ground surface
B-116(A) - Phase II soil boring B-116(A) was collected in proximity to Phase I soil boring B-116 for delineation, this close relationship between the two soil borings is denoted with "(A)".

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	alpha-BHC (mg/Kg)	beta-BHC (mg/Kg)	delta-BHC (mg/Kg)	gamma-BHC (Lindane) (mg/Kg)	Heptachlor (mg/Kg)	Aldrin (mg/Kg)	Heptachlor Epoxide (mg/Kg)
SRS				0.5	2.0	--	2.0	0.7	0.2	0.3
113-B-101-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U
113-B-101-02-04-030992-053	09/03/92	Enseco-RMA	02-04	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U
113-B-102-00-0.5-270892-050	08/27/92	Enseco-RMA	00-0.5	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
113-B-102-02-04-270892-050	08/27/92	Enseco-RMA	02-04	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U
113-B-102-02-04-D-270892-050	08/27/92	Enseco-RMA	02-04	0.0028 U	0.0028 U	0.0028 U	0.0028 U	0.0028 U	0.0028 U	0.0028 U
113-B-103-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
113-B-103-00-0.5-D-030992-053	09/03/92	Enseco-RMA	00-0.5	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
113-B-103-02-04-030992-053	09/03/92	Enseco-RMA	02-04	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U
113-B-104-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
113-B-104-02-04-230992-065	09/23/92	Enseco-RMA	02-04	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U
113-B-105-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
113-B-105-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U
113-B-105-02-04-290992-072	09/29/92	Enseco-RMA	02-04	0.0046 U	0.0046 U	0.0046 U	0.0046 U	0.0046 U	0.0046 U	0.0046 U
113-B-106-00-0.5-121092-082	10/12/93	Enseco-RMA	00-0.5	0.0042 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U
113-B-106-00-0.5-D-121092-082	10/12/93	Enseco-RMA	00-0.5	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U
113-B-106-02-04-121092-082	10/12/93	Enseco-RMA	02-04	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
113-B-107-00-0.5-121092-082	10/12/93	Enseco-RMA	00-0.5	0.0037 U	0.0037 U	0.0037 U	0.0037 U	0.0037 U	0.0037 U	0.0037 U
113-B-107-02-04-121092-082	10/12/93	Enseco-RMA	02-04	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U
113-B-108-00-0.5-160992-060	09/16/92	Enseco-RMA	00-0.5	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U
113-B-108-00-0.5-D-160992-060	09/16/92	Enseco-RMA	00-0.5	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U
113-B-108-02-04-160992-060	09/16/92	Enseco-RMA	02-04	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
113-B-109-01-1.5-160992-060	09/16/92	Enseco-RMA	01-1.5	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U
113-B-109-02-04-160992-060	09/16/92	Enseco-RMA	02-04	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-110-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
113-B-110-02-04-140992-058	09/14/92	Enseco-RMA	02-04	0.0022 U	0.0022 U	0.0022 U	0.0022 U	0.0022 U	0.0022 U	0.0022 U
113-B-111-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.0042 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U
113-B-111-02-04-150992-059	09/15/92	Enseco-RMA	02-04	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	alpha-BHC (mg/Kg)	beta-BHC (mg/Kg)	delta-BHC (mg/Kg)	gamma-BHC (Lindane) (mg/Kg)	Heptachlor (mg/Kg)	Aldrin (mg/Kg)	Heptachlor Epoxide (mg/Kg)
SRS				0.5	2.0	--	2.0	0.7	0.2	0.3
113-B-112-04-06-220992-064	09/22/92	Enseco-RMA	04-06	0.0089	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
113-B-113-2.0-4.0-231192-096	11/23/92	Enseco-RMA	02-04	0.0028 U	0.0028 U	0.0028 U	0.0028 U	0.0028 U	0.0028 U	0.0028 U
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	0.0023 U	0.0023 U	0.0023 U	0.0023 U	0.0023 U	0.0023 U	0.0023 U
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U
113-B-114-02-04-100293-114	02/10/93	Enseco-RMA	02-04	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U
113-B-115-00-0.5-250892-050	08/25/92	Enseco-RMA	00-0.5	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U
113-B-115-02-04-250892-050	08/25/92	Enseco-RMA	02-04	0.0022 U	0.0022 U	0.0022 U	0.0022 U	0.0022 U	0.0022 U	0.0022 U
113-B-116-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
113-B-116-00-0.5-D-010992-051	09/01/92	Enseco-RMA	00-0.5	0.085 U	0.085 U	0.085 U	0.085 U	0.085 U	0.085 U	0.085 U
113-B-116-02-04-010992-051	09/01/92	Enseco-RMA	02-04	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U
113-B-116(B)-0-.5-240907-1336	09/24/07	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(B)-2-4-240907-1336	09/24/07	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(C)-0-.5-240907-1336	09/24/07	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(C)-2-4-240907-1336	09/24/07	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(D)-0-.5-240907-1336	09/24/07	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(D)-2-4-240907-1336	09/24/07	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(E)-0-0.5-240308-1367	03/24/08	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(E)-2-4-240308-1367	03/28/08	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(F)-0-0.5-240308-1367	03/24/08	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(F)-2-4-240308-1367	03/30/08	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(G)-0-0.5-240308-1367	03/24/08	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(G)-2-4-240308-1367	03/25/08	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(G)-2-4-D-240308-1367	03/26/08	Lancaster	02-04	--	--	--	--	--	--	--
113-B-117-00-0.5-241192-096	11/24/92	Enseco-RMA	00-0.5	0.0047 U	0.0027	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U
113-B-117-02-04-241192-096	11/24/92	Enseco-RMA	02-04	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U
113-B-118-0.0-0.5-D-231192-096	11/23/92	Enseco-RMA	00-0.5	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	alpha-BHC (mg/Kg)	beta-BHC (mg/Kg)	delta-BHC (mg/Kg)	gamma-BHC (Lindane) (mg/Kg)	Heptachlor (mg/Kg)	Aldrin (mg/Kg)	Heptachlor Epoxide (mg/Kg)
SRS				0.5	2.0	--	2.0	0.7	0.2	0.3
113-B-118-2-4-231192-096	11/23/92	Enseco-RMA	02-04	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U	0.0027 U
113-B-119-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	0.034
113-B-119-02-04-010992-051	09/01/92	Enseco-RMA	02-04	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U
113-B-120-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
113-B-120-00-0.5-D-100592-077	05/10/92	Enseco-RMA	00-0.5	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
113-B-120-02-04-100592-077	05/10/92	Enseco-RMA	02-04	0.0022 U	0.0022 U	0.0022 U	0.0022 U	0.0022 U	0.0022 U	0.0022 U
113-B-121-00-0.5-290992-072	02/29/92	Enseco-RMA	00-0.5	0.0091 U	0.0091 U	0.0091 U	0.0091 U	0.0091 U	0.0091 U	0.0091 U
113-B-121-02-04-290992-072	02/29/92	Enseco-RMA	02-04	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
113-B-122-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.0037 U	0.0037 U	0.0037 U	0.0037 U	0.0037 U	0.0037 U	0.0037 U
113-B-122-00-0.5-D-140992-058	09/14/92	Enseco-RMA	00-0.5	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U
113-B-122-2-4-140992-058	09/14/92	Enseco-RMA	02-04	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U
113-B-123-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U
113-B-123-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.0039 U	0.0039 U	0.0039 U	0.0039 U	0.0039 U	0.0039 U	0.0039 U
113-B-123-00-0.5-D-150992-059	09/15/92	Enseco-RMA	00-0.5	0.0039 U	0.0039 U	0.0039 U	0.0039 U	0.0039 U	0.0039 U	0.0039 U
113-B-123-02-04-150992-059	09/15/92	Enseco-RMA	02-04	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U
113-B-124-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.0041 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U
113-B-124-02-04-150992-058	09/15/92	Enseco-RMA	02-04	0.0024 U	0.0024 U	0.0024 U	0.0024 U	0.0024 U	0.0024 U	0.0024 U
113-B-125-02-2.5-100992-057	09/10/92	Enseco-RMA	02-2.5	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-125-04-06-100992-057	09/10/92	Enseco-RMA	04-06	0.0029 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U
113-B-126-00-0.5-150992-058	09/15/92	Enseco-RMA	00-0.5	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
113-B-126-02-04-150992-059	09/15/92	Enseco-RMA	02-04	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-127-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-127-02-04-100592-077	05/10/92	Enseco-RMA	02-04	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.049
113-B-128-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U
113-B-128A-02-04-191192-095	11/19/92	Enseco-RMA	02-04	0.0037 U	0.0037 U	0.0037 U	0.0037 U	0.0037 U	0.0027	0.0037 U
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.0039 U	0.0039 U	0.0039 U	0.0039 U	0.0039 U	0.0039 U	0.0039 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	alpha-BHC (mg/Kg)	beta-BHC (mg/Kg)	delta-BHC (mg/Kg)	gamma-BHC (Lindane) (mg/Kg)	Heptachlor (mg/Kg)	Aldrin (mg/Kg)	Heptachlor Epoxide (mg/Kg)
SRS				0.5	2.0	--	2.0	0.7	0.2	0.3
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.0097 U	0.0097 U	0.0097 U	0.0097 U	0.0097 U	0.0097 U	0.0097 U
113-B-129-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	0.0099 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U
113-B-129-04-06-220992-064	09/22/92	Enseco-RMA	04-06	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	0.041 U	0.041 U	0.041 U	0.041 U	0.041 U	0.041 U	0.041 U
113-B-130-00-0.5-D-230992-065	09/23/92	Enseco-RMA	00-0.5	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U
113-B-130-02-04-230992-065	09/23/92	Enseco-RMA	02-04	0.0023 U	0.0023 U	0.0023 U	0.0023 U	0.0023 U	0.0023 U	0.0023 U
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.0043 U	0.0043 U	0.0043 U	0.0043 U	0.0043 U	0.0043 U	0.0043 U
113-B-131-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U
113-B-131-02-04-280992-070	09/28/92	Enseco-RMA	02-04	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U
113-B-132-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.0099 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U
113-B-132-02-04-280992-070	09/28/92	Enseco-RMA	02-04	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U
113-B-133-04-06-220992-064	09/22/92	Enseco-RMA	04-06	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U	0.0031 U
113-B-134-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
113-B-134-00-0.5-D-100992-057	09/10/92	Enseco-RMA	00-0.5	0.0083 U	0.0083 U	0.0083 U	0.0083 U	0.0083 U	0.0083 U	0.0083 U
113-B-134-02-04-100992-057	09/10/92	Enseco-RMA	02-04	0.0093 U	0.0093 U	0.0093 U	0.0093 U	0.0093 U	0.0093 U	0.0093 U
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U
113-B-135-02-04-280992-070	09/28/92	Enseco-RMA	02-04	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Endosulfan I (mg/Kg)	Dieldrin (mg/Kg)	4,4-DDE (mg/Kg)	Endrin (mg/Kg)	Endosulfan II (mg/Kg)	4,4'-DDD (mg/Kg)	Endosulfan Sulfate (mg/Kg)
SRS				6,800	0.2	9.0	340	6,800	13	6,800
113-B-101-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.0038 U	0.0074 U	0.01	0.0074 U	0.0074 U	0.0074 U	0.0074 U
113-B-101-02-04-030992-053	09/03/92	Enseco-RMA	02-04	0.0027 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U
113-B-102-00-0.5-270892-050	08/27/92	Enseco-RMA	00-0.5	0.002 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U
113-B-102-02-04-270892-050	08/27/92	Enseco-RMA	02-04	0.0027 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U
113-B-102-02-04-D-270892-050	08/27/92	Enseco-RMA	02-04	0.0028 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
113-B-103-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.01 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
113-B-103-00-0.5-D-030992-053	09/03/92	Enseco-RMA	00-0.5	0.01 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
113-B-103-02-04-030992-053	09/03/92	Enseco-RMA	02-04	0.022 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
113-B-104-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	0.0025 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U
113-B-104-02-04-230992-065	09/23/92	Enseco-RMA	02-04	0.0027 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U
113-B-105-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	0.0052 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
113-B-105-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	0.0051 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U
113-B-105-02-04-290992-072	09/29/92	Enseco-RMA	02-04	0.0046 U	0.0089 U	0.0066	0.0089 U	0.0089 U	0.0089 U	0.0089 U
113-B-106-00-0.5-121092-082	10/12/93	Enseco-RMA	00-0.5	0.0042 U	0.0081 U	0.0089	0.0081 U	0.0081 U	0.0081 U	0.0081 U
113-B-106-00-0.5-D-121092-082	10/12/93	Enseco-RMA	00-0.5	0.0082 U	0.016 U	0.014	0.016 U	0.016 U	0.016 U	0.016 U
113-B-106-02-04-121092-082	10/12/93	Enseco-RMA	02-04	0.01 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
113-B-107-00-0.5-121092-082	10/12/93	Enseco-RMA	00-0.5	0.0037 U	0.0073 U	0.0062	0.0073 U	0.0073 U	0.0073 U	0.0073 U
113-B-107-02-04-121092-082	10/12/93	Enseco-RMA	02-04	0.0084 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-108-00-0.5-160992-060	09/16/92	Enseco-RMA	00-0.5	0.0086 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U
113-B-108-00-0.5-D-160992-060	09/16/92	Enseco-RMA	00-0.5	0.022 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
113-B-108-02-04-160992-060	09/16/92	Enseco-RMA	02-04	0.048 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U
113-B-109-01-1.5-160992-060	09/16/92	Enseco-RMA	01-1.5	0.021 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
113-B-109-02-04-160992-060	09/16/92	Enseco-RMA	02-04	0.011 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U
113-B-110-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.04 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
113-B-110-02-04-140992-058	09/14/92	Enseco-RMA	02-04	0.0022 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U
113-B-111-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.0042 U	0.0081 U	0.0045	0.0081 U	0.0081 U	0.0081 U	0.0081 U
113-B-111-02-04-150992-059	09/15/92	Enseco-RMA	02-04	0.022 U	0.043 U	0.15	0.043 U	0.043 U	0.043 U	0.043 U
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.02 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Endosulfan I (mg/Kg)	Dieldrin (mg/Kg)	4,4-DDE (mg/Kg)	Endrin (mg/Kg)	Endosulfan II (mg/Kg)	4,4'-DDD (mg/Kg)	Endosulfan Sulfate (mg/Kg)
SRS				6,800	0.2	9.0	340	6,800	13	6,800
113-B-112-04-06-220992-064	09/22/92	Enseco-RMA	04-06	0.0086	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.003 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
113-B-113-2.0-4.0-231192-096	11/23/92	Enseco-RMA	02-04	0.0028 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	0.0023 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	0.0047 U	0.009 U	0.0063	0.009 U	0.009 U	0.009 U	0.009 U
113-B-114-02-04-100293-114	02/10/93	Enseco-RMA	02-04	0.0027 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
113-B-115-00-0.5-250892-050	08/25/92	Enseco-RMA	00-0.5	0.0021 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U
113-B-115-02-04-250892-050	08/25/92	Enseco-RMA	02-04	0.0022 U	0.0043 U	0.0026	0.0043 U	0.0043 U	0.0043 U	0.0043 U
113-B-116-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	0.083 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
113-B-116-00-0.5-D-010992-051	09/01/92	Enseco-RMA	00-0.5	0.085 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
113-B-116-02-04-010992-051	09/01/92	Enseco-RMA	02-04	0.038 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U
113-B-116(B)-0-.5-240907-1336	09/24/07	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(B)-2-4-240907-1336	09/24/07	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(C)-0-.5-240907-1336	09/24/07	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(C)-2-4-240907-1336	09/24/07	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(D)-0-.5-240907-1336	09/24/07	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(D)-2-4-240907-1336	09/24/07	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(E)-0-0.5-240308-1367	03/24/08	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(E)-2-4-240308-1367	03/28/08	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(F)-0-0.5-240308-1367	03/24/08	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(F)-2-4-240308-1367	03/30/08	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(G)-0-0.5-240308-1367	03/24/08	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(G)-2-4-240308-1367	03/25/08	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(G)-2-4-D-240308-1367	03/26/08	Lancaster	02-04	--	--	--	--	--	--	--
113-B-117-00-0.5-241192-096	11/24/92	Enseco-RMA	00-0.5	0.0047 U	0.0092 U	0.0092 U	0.0092 U	0.0057	0.0092 U	0.0057 U
113-B-117-02-04-241192-096	11/24/92	Enseco-RMA	02-04	0.01 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.0027 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
113-B-118-0.0-0.5-D-231192-096	11/23/92	Enseco-RMA	00-0.5	0.0027 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Endosulfan I (mg/Kg)	Dieldrin (mg/Kg)	4,4-DDE (mg/Kg)	Endrin (mg/Kg)	Endosulfan II (mg/Kg)	4,4'-DDD (mg/Kg)	Endosulfan Sulfate (mg/Kg)
SRS				6,800	0.2	9.0	340	6,800	13	6,800
113-B-118-2-4-231192-096	11/23/92	Enseco-RMA	02-04	0.0027 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
113-B-119-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	0.036 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U
113-B-119-02-04-010992-051	09/01/92	Enseco-RMA	02-04	0.026 U	0.05 U	0.031	0.05 U	0.05 U	0.051	0.05 U
113-B-120-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.002 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U
113-B-120-00-0.5-D-100592-077	05/10/92	Enseco-RMA	00-0.5	0.002 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U
113-B-120-02-04-100592-077	05/10/92	Enseco-RMA	02-04	0.0022 U	0.0042 U	0.0036	0.0042 U	0.0042 U	0.0042	0.0042 U
113-B-121-00-0.5-290992-072	02/29/92	Enseco-RMA	00-0.5	0.0091 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
113-B-121-02-04-290992-072	02/29/92	Enseco-RMA	02-04	0.003 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U
113-B-122-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.0037 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U
113-B-122-00-0.5-D-140992-058	09/14/92	Enseco-RMA	00-0.5	0.0018 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U
113-B-122-2-4-140992-058	09/14/92	Enseco-RMA	02-04	0.0051 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U
113-B-123-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.0096 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U
113-B-123-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.0039 U	0.0076 U	0.0055	0.0076 U	0.0076 U	0.0076 U	0.0076 U
113-B-123-00-0.5-D-150992-059	09/15/92	Enseco-RMA	00-0.5	0.0039 U	0.0077 U	0.0085	0.0077 U	0.0077 U	0.0077 U	0.0077 U
113-B-123-02-04-150992-059	09/15/92	Enseco-RMA	02-04	0.0051 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U
113-B-124-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.0041 U	0.008 U	0.008 U	0.008 U	0.008 U	0.0054	0.008 U
113-B-124-02-04-150992-058	09/15/92	Enseco-RMA	02-04	0.0024 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U
113-B-125-02-2.5-100992-057	09/10/92	Enseco-RMA	02-2.5	0.013 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
113-B-125-04-06-100992-057	09/10/92	Enseco-RMA	04-06	0.0029 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
113-B-126-00-0.5-150992-058	09/15/92	Enseco-RMA	00-0.5	0.002 U	0.004 U	0.0032	0.004 U	0.004 U	0.004 U	0.004 U
113-B-126-02-04-150992-059	09/15/92	Enseco-RMA	02-04	0.011 U	0.022 U	0.019	0.022 U	0.022 U	0.022 U	0.022 U
113-B-127-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.012 U	0.023 U	0.016	0.023 U	0.023 U	0.023 U	0.023 U
113-B-127-02-04-100592-077	05/10/92	Enseco-RMA	02-04	0.011 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U
113-B-128-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.0038 U	0.0073 U	0.0064	0.0073 U	0.0073 U	0.0073 U	0.0073 U
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.0018 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	0.0018 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U
113-B-128A-02-04-191192-095	11/19/92	Enseco-RMA	02-04	0.0037 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.0039 U	0.0075 U	0.0047	0.0075 U	0.0075 U	0.0075 U	0.0075 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Endosulfan I (mg/Kg)	Dieldrin (mg/Kg)	4,4-DDE (mg/Kg)	Endrin (mg/Kg)	Endosulfan II (mg/Kg)	4,4'-DDD (mg/Kg)	Endosulfan Sulfate (mg/Kg)
SRS				6,800	0.2	9.0	340	6,800	13	6,800
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.0097 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U
113-B-129-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	0.0099 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U
113-B-129-04-06-220992-064	09/22/92	Enseco-RMA	04-06	0.011 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	0.041 U	0.08 U	0.13	0.08 U	0.08 U	0.11	0.08 U
113-B-130-00-0.5-D-230992-065	09/23/92	Enseco-RMA	00-0.5	0.021 U	0.04 U	0.045	0.04 U	0.04 U	0.061	0.04 U
113-B-130-02-04-230992-065	09/23/92	Enseco-RMA	02-04	0.0023 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U	0.0045 U
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.0043 U	0.0084 U	0.011	0.0084 U	0.0084 U	0.0084 U	0.0084 U
113-B-131-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	0.0044 U	0.0085 U	0.0071	0.0085 U	0.0085 U	0.0085 U	0.0085 U
113-B-131-02-04-280992-070	09/28/92	Enseco-RMA	02-04	0.0044 U	0.0086 U	0.017	0.0086 U	0.0086 U	0.0066	0.0086 U
113-B-132-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.0099 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U
113-B-132-02-04-280992-070	09/28/92	Enseco-RMA	02-04	0.0054 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.021 U	0.041 U	0.041 U	0.041 U	0.041 U	0.041 U	0.041 U
113-B-133-04-06-220992-064	09/22/92	Enseco-RMA	04-06	0.0031 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U
113-B-134-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.004 U	0.0078 U	0.0078 U	0.0078 U	0.0078 U	0.0078 U	0.0078 U
113-B-134-00-0.5-D-100992-057	09/10/92	Enseco-RMA	00-0.5	0.0083 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-134-02-04-100992-057	09/10/92	Enseco-RMA	02-04	0.0093 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.022 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U
113-B-135-02-04-280992-070	09/28/92	Enseco-RMA	02-04	0.011 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	4,4'-DDT (mg/Kg)	Methoxychlor (mg/Kg)	Endrin Ketone (mg/Kg)	Endrin Aldehyde (mg/Kg)	alpha Chlordane (mg/Kg)	gamma Chlordane (mg/Kg)	Toxaphene (mg/Kg)
SRS				8.0	5,700	--	--	1.0	1.0	3.0
113-B-101-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.0074 U	0.038 U	0.0074 U	0.0074 U	0.0038 U	0.0038 U	0.38 U
113-B-101-02-04-030992-053	09/03/92	Enseco-RMA	02-04	0.0053 U	0.027 U	0.0053 U	0.0053 U	0.0027 U	0.0027 U	0.27 U
113-B-102-00-0.5-270892-050	08/27/92	Enseco-RMA	00-0.5	0.0038 U	0.02 U	0.0038 U	0.0038 U	0.002 U	0.002 U	0.2 U
113-B-102-02-04-270892-050	08/27/92	Enseco-RMA	02-04	0.0053 U	0.027 U	0.0053 U	0.0053 U	0.0027 U	0.0027 U	0.27 U
113-B-102-02-04-D-270892-050	08/27/92	Enseco-RMA	02-04	0.0054 U	0.028 U	0.0054 U	0.0054 U	0.0028 U	0.0028 U	0.28 U
113-B-103-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.02 U	0.10 U	0.02 U	0.02 U	0.01 U	0.01 U	1.0 U
113-B-103-00-0.5-D-030992-053	09/03/92	Enseco-RMA	00-0.5	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.01 U	1.0 U
113-B-103-02-04-030992-053	09/03/92	Enseco-RMA	02-04	0.042 U	0.22 U	0.042 U	0.042 U	0.022 U	0.022 U	2.2 U
113-B-104-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	0.0049 U	0.025 U	0.0049 U	0.0049 U	0.0025 U	0.0025 U	0.25 U
113-B-104-02-04-230992-065	09/23/92	Enseco-RMA	02-04	0.0053 U	0.027 U	0.0053 U	0.0053 U	0.0027 U	0.0027 U	0.27 U
113-B-105-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	0.01 U	0.052 U	0.01 U	0.01 U	0.0052 U	0.0052 U	0.52 U
113-B-105-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	0.0065	0.051 U	0.0099 U	0.0099 U	0.0051 U	0.0051 U	0.51 U
113-B-105-02-04-290992-072	09/29/92	Enseco-RMA	02-04	0.0089 U	0.029	0.0089 U	0.0089 U	0.0046 U	0.0046 U	0.46 U
113-B-106-00-0.5-121092-082	10/12/93	Enseco-RMA	00-0.5	0.0081 U	0.061	0.0081 U	0.0081 U	0.0042 U	0.0042 U	0.42 U
113-B-106-00-0.5-D-121092-082	10/12/93	Enseco-RMA	00-0.5	0.016 U	0.066	0.016 U	0.016 U	0.0082 U	0.0082 U	0.82 U
113-B-106-02-04-121092-082	10/12/93	Enseco-RMA	02-04	0.02 U	0.1	0.02 U	0.02 U	0.01 U	0.01 U	1.0 U
113-B-107-00-0.5-121092-082	10/12/93	Enseco-RMA	00-0.5	0.0073 U	0.028	0.0073 U	0.0073 U	0.0037 U	0.0037 U	0.37 U
113-B-107-02-04-121092-082	10/12/93	Enseco-RMA	02-04	0.016 U	0.084 U	0.016 U	0.016 U	0.0084 U	0.0084 U	0.84 U
113-B-108-00-0.5-160992-060	09/16/92	Enseco-RMA	00-0.5	0.017 U	0.086 U	0.017 U	0.017 U	0.0086 U	0.0086 U	0.86 U
113-B-108-00-0.5-D-160992-060	09/16/92	Enseco-RMA	00-0.5	0.042 U	0.22 U	0.042 U	0.042 U	0.022 U	0.022 U	2.2 U
113-B-108-02-04-160992-060	09/16/92	Enseco-RMA	02-04	0.093 U	0.48 U	0.093 U	0.093 U	0.048 U	0.048 U	4.8 U
113-B-109-01-1.5-160992-060	09/16/92	Enseco-RMA	01-1.5	0.04 U	0.21 U	0.04 U	0.04 U	0.021 U	0.021 U	2.1 U
113-B-109-02-04-160992-060	09/16/92	Enseco-RMA	02-04	0.022 U	0.11 U	0.022 U	0.022 U	0.011 U	0.011 U	1.1 U
113-B-110-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.077 U	0.4 U	0.077 U	0.077 U	0.04 U	0.04 U	4.0 U
113-B-110-02-04-140992-058	09/14/92	Enseco-RMA	02-04	0.0042 U	0.022	0.0042 U	0.0042 U	0.0022 U	0.0022 U	0.22 U
113-B-111-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.0081 U	0.029	0.0081 U	0.0081 U	0.0042 U	0.0042 U	0.42 U
113-B-111-02-04-150992-059	09/15/92	Enseco-RMA	02-04	0.054	0.72	0.043 U	0.043 U	0.022 U	0.022 U	2.2 U
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.038 U	0.2 U	0.038 U	0.038 U	0.032	0.02 U	2.0 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	4,4'-DDT (mg/Kg)	Methoxychlor (mg/Kg)	Endrin Ketone (mg/Kg)	Endrin Aldehyde (mg/Kg)	alpha Chlordane (mg/Kg)	gamma Chlordane (mg/Kg)	Toxaphene (mg/Kg)
SRS				8.0	5,700	--	--	1.0	1.0	3.0
113-B-112-04-06-220992-064	09/22/92	Enseco-RMA	04-06	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.01 U	1.0 U
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.0059 U	0.03 U	0.0059 U	0.0059 U	0.003 U	0.003 U	0.3 U
113-B-113-2.0-4.0-231192-096	11/23/92	Enseco-RMA	02-04	0.0054 U	0.028 U	0.0054 U	0.0054 U	0.0028 U	0.0028 U	0.28 U
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	0.0044 U	0.023 U	0.0023 U	0.0023 U	0.0023 U	0.0023 U	0.23 U
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	0.009 U	0.047 U	0.009 U	0.009 U	0.0047 U	0.0047 U	0.47 U
113-B-114-02-04-100293-114	02/10/93	Enseco-RMA	02-04	0.0052 U	0.027 U	0.0052 U	0.0052 U	0.0027 U	0.0027 U	0.27 U
113-B-115-00-0.5-250892-050	08/25/92	Enseco-RMA	00-0.5	0.0041 U	0.021 U	0.0041 U	0.0041 U	0.0021 U	0.0021 U	0.21 U
113-B-115-02-04-250892-050	08/25/92	Enseco-RMA	02-04	0.0043 U	0.018	0.0043 U	0.0043 U	0.0022 U	0.0022 U	0.22 U
113-B-116-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	0.16 U	0.83 U	0.16 U	0.16 U	0.083 U	0.083 U	8.3 U
113-B-116-00-0.5-D-010992-051	09/01/92	Enseco-RMA	00-0.5	0.16 U	0.85 U	0.16 U	0.16 U	0.085 U	0.085 U	8.5 U
113-B-116-02-04-010992-051	09/01/92	Enseco-RMA	02-04	0.073 U	0.38 U	0.073 U	0.073 U	0.038 U	0.038 U	3.8 U
113-B-116(B)-0-.5-240907-1336	09/24/07	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(B)-2-4-240907-1336	09/24/07	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(C)-0-.5-240907-1336	09/24/07	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(C)-2-4-240907-1336	09/24/07	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(D)-0-.5-240907-1336	09/24/07	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(D)-2-4-240907-1336	09/24/07	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(E)-0-0.5-240308-1367	03/24/08	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(E)-2-4-240308-1367	03/28/08	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(F)-0-0.5-240308-1367	03/24/08	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(F)-2-4-240308-1367	03/30/08	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(G)-0-0.5-240308-1367	03/24/08	Lancaster	00-0.5	--	--	--	--	--	--	--
113-B-116(G)-2-4-240308-1367	03/25/08	Lancaster	02-04	--	--	--	--	--	--	--
113-B-116(G)-2-4-D-240308-1367	03/26/08	Lancaster	02-04	--	--	--	--	--	--	--
113-B-117-00-0.5-241192-096	11/24/92	Enseco-RMA	00-0.5	0.0092 U	0.047 U	0.0092 U	0.0092 U	0.0047 U	0.0047 U	0.47 U
113-B-117-02-04-241192-096	11/24/92	Enseco-RMA	02-04	0.02 U	0.1 U	0.02 U	0.02 U	0.01 U	0.01 U	1.0 U
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.0052 U	0.027 U	0.0052 U	0.0052 U	0.0027 U	0.0027 U	0.27 U
113-B-118-0.0-0.5-D-231192-096	11/23/92	Enseco-RMA	00-0.5	0.0052 U	0.027 U	0.0052 U	0.0052 U	0.0027 U	0.0027 U	0.27 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	4,4'-DDT (mg/Kg)	Methoxychlor (mg/Kg)	Endrin Ketone (mg/Kg)	Endrin Aldehyde (mg/Kg)	alpha Chlordane (mg/Kg)	gamma Chlordane (mg/Kg)	Toxaphene (mg/Kg)
SRS				8.0	5,700	--	--	1.0	1.0	3.0
113-B-118-2-4-231192-096	11/23/92	Enseco-RMA	02-04	0.0052 U	0.027 U	0.0052 U	0.0052 U	0.0027 U	0.0027 U	0.27 U
113-B-119-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	0.07 U	0.23	0.07 U	0.07 U	0.036 U	0.069	3.6 U
113-B-119-02-04-010992-051	09/01/92	Enseco-RMA	02-04	0.029	0.26 U	0.05 U	0.05 U	0.026 U	0.026 U	2.6 U
113-B-120-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.0038 U	0.02 U	0.0038 U	0.0038 U	0.002 U	0.002 U	0.2 U
113-B-120-00-0.5-D-100592-077	05/10/92	Enseco-RMA	00-0.5	0.0038 U	0.02 U	0.002 U	0.002 U	0.002 U	0.002 U	0.2 U
113-B-120-02-04-100592-077	05/10/92	Enseco-RMA	02-04	0.0042 U	0.013	0.0042 U	0.0042 U	0.0022 U	0.0022 U	0.22 U
113-B-121-00-0.5-290992-072	02/29/92	Enseco-RMA	00-0.5	0.018 U	0.091 U	0.018 U	0.018 U	0.0091 U	0.0091 U	0.91 U
113-B-121-02-04-290992-072	02/29/92	Enseco-RMA	02-04	0.0058 U	0.03 U	0.0058 U	0.0058 U	0.003 U	0.003 U	0.3 U
113-B-122-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.0072 U	0.037 U	0.0072 U	0.0072 U	0.0037 U	0.0037 U	0.37 U
113-B-122-00-0.5-D-140992-058	09/14/92	Enseco-RMA	00-0.5	0.0035 U	0.018 U	0.0035 U	0.0035 U	0.0018 U	0.0018 U	0.18 U
113-B-122-2-4-140992-058	09/14/92	Enseco-RMA	02-04	0.0099 U	0.029	0.0099 U	0.0099 U	0.0051 U	0.0051 U	0.51 U
113-B-123-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.019 U	0.096 U	0.019 U	0.019 U	0.0096 U	0.0096 U	0.96 U
113-B-123-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.0076 U	0.033	0.0076 U	0.0076 U	0.0039 U	0.0039 U	0.39 U
113-B-123-00-0.5-D-150992-059	09/15/92	Enseco-RMA	00-0.5	0.0077 U	0.06	0.0077 U	0.0077 U	0.0039 U	0.0039 U	0.39 U
113-B-123-02-04-150992-059	09/15/92	Enseco-RMA	02-04	0.0099 U	0.04	0.0099 U	0.0099 U	0.0051 U	0.0051 U	0.51 U
113-B-124-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.008 U	0.041 U	0.008 U	0.008 U	0.0035	0.0023	0.41 U
113-B-124-02-04-150992-058	09/15/92	Enseco-RMA	02-04	0.0047 U	0.016	0.0047 U	0.0047 U	0.0024 U	0.0024 U	0.24 U
113-B-125-02-2.5-100992-057	09/10/92	Enseco-RMA	02-2.5	0.025 U	0.13 U	0.025 U	0.025 U	0.013 U	0.013 U	1.3 U
113-B-125-04-06-100992-057	09/10/92	Enseco-RMA	04-06	0.0056 U	0.029 U	0.0056 U	0.0056 U	0.0029 U	0.0029 U	0.29 U
113-B-126-00-0.5-150992-058	09/15/92	Enseco-RMA	00-0.5	0.003	0.013	0.004 U	0.004 U	0.002 U	0.002 U	0.2 U
113-B-126-02-04-150992-059	09/15/92	Enseco-RMA	02-04	0.022 U	0.1	0.022 U	0.022 U	0.011 U	0.011 U	1.1 U
113-B-127-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.026	0.11	0.023 U	0.023 U	0.012 U	0.012 U	1.2 U
113-B-127-02-04-100592-077	05/10/92	Enseco-RMA	02-04	0.021 U	0.055	0.021 U	0.021 U	0.011 U	0.011 U	1.1 U
113-B-128-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.0063	0.029	0.0073 U	0.0073 U	0.0038 U	0.0033	0.38 U
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.0035 U	0.018 U	0.0035 U	0.0035 U	0.0018 U	0.0018 U	0.18 U
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	0.0034 U	0.018 U	0.0034 U	0.0034 U	0.0018 U	0.0018 U	0.18 U
113-B-128A-02-04-191192-095	11/19/92	Enseco-RMA	02-04	0.0072 U	0.037 U	0.0072 U	0.0072 U	0.0037 U	0.0037 U	0.37 U
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.0069	0.039 U	0.0075 U	0.0075 U	0.0039 U	0.0039 U	0.39 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	4,4'-DDT (mg/Kg)	Methoxychlor (mg/Kg)	Endrin Ketone (mg/Kg)	Endrin Aldehyde (mg/Kg)	alpha Chlordane (mg/Kg)	gamma Chlordane (mg/Kg)	Toxaphene (mg/Kg)
SRS				8.0	5,700	--	--	1.0	1.0	3.0
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.019 U	0.097 U	0.019 U	0.019 U	0.0097 U	0.0097 U	0.97 U
113-B-129-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	0.019 U	0.099 U	0.019 U	0.019 U	0.0082	0.0099 U	0.99 U
113-B-129-04-06-220992-064	09/22/92	Enseco-RMA	04-06	0.022 U	0.11 U	0.022 U	0.022 U	0.0084	0.011 U	1.1 U
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	0.31	0.41 U	0.08 U	0.08 U	0.041 U	0.041 U	4.1 U
113-B-130-00-0.5-D-230992-065	09/23/92	Enseco-RMA	00-0.5	0.15	0.21 U	0.04 U	0.04 U	0.021 U	0.021 U	2.1 U
113-B-130-02-04-230992-065	09/23/92	Enseco-RMA	02-04	0.0045 U	0.023 U	0.0045 U	0.0045 U	0.0023 U	0.0023 U	0.23 U
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.0084 U	0.044	0.0084 U	0.0084 U	0.0043 U	0.0043 U	0.43 U
113-B-131-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	0.0085 U	0.022	0.0085 U	0.0085 U	0.0044 U	0.0044 U	0.44 U
113-B-131-02-04-280992-070	09/28/92	Enseco-RMA	02-04	0.0086 U	0.033	0.0086 U	0.0086 U	0.0044 U	0.0044 U	0.44 U
113-B-132-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.019 U	0.099 U	0.019 U	0.019 U	0.0099 U	0.0099 U	0.99 U
113-B-132-02-04-280992-070	09/28/92	Enseco-RMA	02-04	0.01 U	0.054 U	0.01 U	0.01 U	0.0054 U	0.0054 U	0.54 U
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.041 U	0.21 U	0.041 U	0.041 U	0.021 U	0.021 U	2.1 U
113-B-133-04-06-220992-064	09/22/92	Enseco-RMA	04-06	0.0061 U	0.031 U	0.0061 U	0.0061 U	0.0031 U	0.0031 U	0.31 U
113-B-134-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.0091	0.004 U	0.0078 U	0.0078 U	0.004 U	0.0041	0.4 U
113-B-134-00-0.5-D-100992-057	09/10/92	Enseco-RMA	00-0.5	0.016 U	0.083 U	0.016 U	0.016 U	0.013	0.0077	0.83 U
113-B-134-02-04-100992-057	09/10/92	Enseco-RMA	02-04	0.018 U	0.093 U	0.018 U	0.018 U	0.0093 U	0.0093 U	0.93 U
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.043 U	0.22 U	0.043 U	0.043 U	0.022 U	0.022 U	2.2 U
113-B-135-02-04-280992-070	09/28/92	Enseco-RMA	02-04	0.021 U	0.11 U	0.021 U	0.021 U	0.011 U	0.011 U	1.1 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	PCB-1016 (mg/Kg)	PCB-1221 (mg/Kg)	PCB-1232 (mg/Kg)	PCB-1242 (mg/Kg)	PCB-1248 (mg/Kg)	PCB-1254 (mg/Kg)	PCB-1260 (mg/Kg)
SRS				1.0	1.0	1.0	1.0	1.0	1.0	1.0
113-B-101-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.074 U	0.15 U	0.074 U	0.074 U	0.074 U	0.074 U	0.088
113-B-101-02-04-030992-053	09/03/92	Enseco-RMA	02-04	0.053 U	0.11 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U
113-B-102-00-0.5-270892-050	08/27/92	Enseco-RMA	00-0.5	0.038 U	0.078 U	0.038 U	0.038 U	0.038 U	0.038 U	0.041
113-B-102-02-04-270892-050	08/27/92	Enseco-RMA	02-04	0.053 U	0.11 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U
113-B-102-02-04-D-270892-050	08/27/92	Enseco-RMA	02-04	0.054 U	0.11 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U
113-B-103-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.20 U	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
113-B-103-00-0.5-D-030992-053	09/03/92	Enseco-RMA	00-0.5	0.20 U	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
113-B-103-02-04-030992-053	09/03/92	Enseco-RMA	02-04	0.42 U	0.86 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
113-B-104-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	0.049 U	0.099 U	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U
113-B-104-02-04-230992-065	09/23/92	Enseco-RMA	02-04	0.053 U	0.11 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U
113-B-105-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	0.10 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
113-B-105-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	0.099 U	0.20 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U
113-B-105-02-04-290992-072	09/29/92	Enseco-RMA	02-04	0.089 U	0.18 U	0.089 U	0.089 U	0.089 U	0.089 U	0.089 U
113-B-106-00-0.5-121092-082	10/12/93	Enseco-RMA	00-0.5	0.081 U	0.17 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U
113-B-106-00-0.5-D-121092-082	10/12/93	Enseco-RMA	00-0.5	0.16 U	0.32 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
113-B-106-02-04-121092-082	10/12/93	Enseco-RMA	02-04	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
113-B-107-00-0.5-121092-082	10/12/93	Enseco-RMA	00-0.5	0.073 U	0.15 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U
113-B-107-02-04-121092-082	10/12/93	Enseco-RMA	02-04	0.16 U	0.33 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
113-B-108-00-0.5-160992-060	09/16/92	Enseco-RMA	00-0.5	0.17 U	0.34 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
113-B-108-00-0.5-D-160992-060	09/16/92	Enseco-RMA	00-0.5	0.42 U	0.86 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
113-B-108-02-04-160992-060	09/16/92	Enseco-RMA	02-04	0.93 U	1.9 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U
113-B-109-01-1.5-160992-060	09/16/92	Enseco-RMA	01-1.5	0.40 U	0.82 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
113-B-109-02-04-160992-060	09/16/92	Enseco-RMA	02-04	0.22 U	0.45 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
113-B-110-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U
113-B-110-02-04-140992-058	09/14/92	Enseco-RMA	02-04	0.042 U	0.086 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
113-B-111-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.081 U	0.17 U	0.081 U	0.081 U	0.081 U	0.081 U	0.081 U
113-B-111-02-04-150992-059	09/15/92	Enseco-RMA	02-04	0.43 U	0.88 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.38 U	0.78 U	0.38 U	0.38 U	0.38 U	0.38 U	0.39 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	PCB-1016 (mg/Kg)	PCB-1221 (mg/Kg)	PCB-1232 (mg/Kg)	PCB-1242 (mg/Kg)	PCB-1248 (mg/Kg)	PCB-1254 (mg/Kg)	PCB-1260 (mg/Kg)
SRS				1.0	1.0	1.0	1.0	1.0	1.0	1.0
113-B-112-04-06-220992-064	09/22/92	Enseco-RMA	04-06	0.20 U	0.40 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.059 U	0.12 U	0.059 U	0.059 U	0.059 U	0.059 U	0.059 U
113-B-113-2.0-4.0-231192-096	11/23/92	Enseco-RMA	02-04	0.054 U	0.11 U	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	0.044 U	0.089 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	0.09 U	0.18 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
113-B-114-02-04-100293-114	02/10/93	Enseco-RMA	02-04	0.052 U	0.1 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
113-B-115-00-0.5-250892-050	08/25/92	Enseco-RMA	00-0.5	0.041 U	0.084 U	0.041 U	0.041 U	0.041 U	0.041 U	0.047
113-B-115-02-04-250892-050	08/25/92	Enseco-RMA	02-04	0.043 U	0.088 U	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U
113-B-116-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	1.6 U	3.3 U	1.6 U	1.6 U	1.6 U	1.6 U	**3.4**
113-B-116-00-0.5-D-010992-051	09/01/92	Enseco-RMA	00-0.5	1.6 U	3.3 U	1.6 U	1.6 U	1.6 U	1.6 U	**3.7**
113-B-116-02-04-010992-051	09/01/92	Enseco-RMA	02-04	0.73 U	1.5 U	0.73 U	0.73 U	0.73 U	0.73 U	**1.1**
113-B-116(B)-0-.5-240907-1336	09/24/07	Lancaster	00-0.5	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.29
113-B-116(B)-2-4-240907-1336	09/24/07	Lancaster	02-04	0.024 U	0.024 U	0.024 U	0.024 U	0.22	0.083	0.025
113-B-116(C)-0-.5-240907-1336	09/24/07	Lancaster	00-0.5	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.10
113-B-116(C)-2-4-240907-1336	09/24/07	Lancaster	02-04	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
113-B-116(D)-0-.5-240907-1336	09/24/07	Lancaster	00-0.5	0.019 U	0.019 U	0.019 U	0.019 U	0.023	0.019 U	0.042
113-B-116(D)-2-4-240907-1336	09/24/07	Lancaster	02-04	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.023	0.10
113-B-116(E)-0-0.5-240308-1367	03/24/08	Lancaster	00-0.5	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
113-B-116(E)-2-4-240308-1367	03/28/08	Lancaster	02-04	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
113-B-116(F)-0-0.5-240308-1367	03/24/08	Lancaster	00-0.5	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U
113-B-116(F)-2-4-240308-1367	03/30/08	Lancaster	02-04	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.032	0.031
113-B-116(G)-0-0.5-240308-1367	03/24/08	Lancaster	00-0.5	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.72
113-B-116(G)-2-4-240308-1367	03/25/08	Lancaster	02-04	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.098
113-B-116(G)-2-4-D-240308-1367	03/26/08	Lancaster	02-04	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.046
113-B-117-00-0.5-241192-096	11/24/92	Enseco-RMA	00-0.5	0.092 U	0.19 U	0.092 U	0.092 U	0.092 U	0.092 U	0.092 U
113-B-117-02-04-241192-096	11/24/92	Enseco-RMA	02-04	0.20 U	0.41 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.052 U	0.1 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
113-B-118-0.0-0.5-D-231192-096	11/23/92	Enseco-RMA	00-0.5	0.052 U	0.1 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	PCB-1016 (mg/Kg)	PCB-1221 (mg/Kg)	PCB-1232 (mg/Kg)	PCB-1242 (mg/Kg)	PCB-1248 (mg/Kg)	PCB-1254 (mg/Kg)	PCB-1260 (mg/Kg)
SRS				1.0	1.0	1.0	1.0	1.0	1.0	1.0
113-B-118-2-4-231192-096	11/23/92	Enseco-RMA	02-04	0.052 U	0.1 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
113-B-119-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	0.70 U	1.4 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
113-B-119-02-04-010992-051	09/01/92	Enseco-RMA	02-04	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
113-B-120-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.038 U	0.077 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U
113-B-120-00-0.5-D-100592-077	05/10/92	Enseco-RMA	00-0.5	0.038 U	0.077 U	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U
113-B-120-02-04-100592-077	05/10/92	Enseco-RMA	02-04	0.042 U	0.085 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
113-B-121-00-0.5-290992-072	02/29/92	Enseco-RMA	00-0.5	0.18 U	0.36 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
113-B-121-02-04-290992-072	02/29/92	Enseco-RMA	02-04	0.058 U	0.12 U	0.058 U	0.058 U	0.058 U	0.058 U	0.058 U
113-B-122-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.072 U	0.15 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
113-B-122-00-0.5-D-140992-058	09/14/92	Enseco-RMA	00-0.5	0.035 U	0.072 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U
113-B-122-2-4-140992-058	09/14/92	Enseco-RMA	02-04	0.099 U	0.2 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U
113-B-123-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
113-B-123-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.076 U	0.15 U	0.076 U	0.076 U	0.076 U	0.076 U	0.076 U
113-B-123-00-0.5-D-150992-059	09/15/92	Enseco-RMA	00-0.5	0.077 U	0.16 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
113-B-123-02-04-150992-059	09/15/92	Enseco-RMA	02-04	0.099 U	0.2 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U
113-B-124-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.08 U	0.16 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
113-B-124-02-04-150992-058	09/15/92	Enseco-RMA	02-04	0.047 U	0.095 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
113-B-125-02-2.5-100992-057	09/10/92	Enseco-RMA	02-2.5	0.25 U	0.52 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
113-B-125-04-06-100992-057	09/10/92	Enseco-RMA	04-06	0.056 U	0.11 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U
113-B-126-00-0.5-150992-058	09/15/92	Enseco-RMA	00-0.5	0.04 U	0.08 U	0.04 U	0.04 U	0.04 U	0.04 U	0.056
113-B-126-02-04-150992-059	09/15/92	Enseco-RMA	02-04	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
113-B-127-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.23 U	0.47 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
113-B-127-02-04-100592-077	05/10/92	Enseco-RMA	02-04	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
113-B-128-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.073 U	0.15 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.035 U	0.071 U	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	0.034 U	0.07 U	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U
113-B-128A-02-04-191192-095	11/19/92	Enseco-RMA	02-04	0.072 U	0.15 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.075 U	0.15 U	0.075 U	0.075 U	0.075 U	0.075 U	0.075 U

TABLE 113-02-07
Summary of Soil Characterization - Pesticide/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	PCB-1016 (mg/Kg)	PCB-1221 (mg/Kg)	PCB-1232 (mg/Kg)	PCB-1242 (mg/Kg)	PCB-1248 (mg/Kg)	PCB-1254 (mg/Kg)	PCB-1260 (mg/Kg)
SRS				1.0	1.0	1.0	1.0	1.0	1.0	1.0
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.19 U	0.38 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
113-B-129-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	0.19 U	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
113-B-129-04-06-220992-064	09/22/92	Enseco-RMA	04-06	0.22 U	0.45 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	0.8 U	1.6 U	0.8 U	0.8 U	0.8 U	1.5	0.8 U
113-B-130-00-0.5-D-230992-065	09/23/92	Enseco-RMA	00-0.5	0.4 U	0.82 U	0.4 U	0.4 U	0.4 U	0.57	0.4 U
113-B-130-02-04-230992-065	09/23/92	Enseco-RMA	02-04	0.045 U	0.092 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.084 U	0.17 U	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
113-B-131-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	0.085 U	0.17 U	0.085 U	0.085 U	0.085 U	0.085 U	0.085 U
113-B-131-02-04-280992-070	09/28/92	Enseco-RMA	02-04	0.086 U	0.17 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
113-B-132-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.19 U	0.39 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
113-B-132-02-04-280992-070	09/28/92	Enseco-RMA	02-04	0.1 U	0.21 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.41 U	0.82 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-133-04-06-220992-064	09/22/92	Enseco-RMA	04-06	0.061 U	0.12 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U
113-B-134-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.078 U	0.16 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
113-B-134-00-0.5-D-100992-057	09/10/92	Enseco-RMA	00-0.5	0.16 U	0.33 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
113-B-134-02-04-100992-057	09/10/92	Enseco-RMA	02-04	0.18 U	0.37 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.43 U	0.88 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
113-B-135-02-04-280992-070	09/28/92	Enseco-RMA	02-04	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U

Notes:
B - Boring
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
D - Field Duplicate
mg/Kg - Milligrams per kilogram
- - "Not Analyzed" or "Not Applicable" or "Not Requested"
bgs - Below ground surface
B-116(A)-(F) - Phase II soil borings B-116(A)-(F) were collected in proximity to Phase I soil boring B-116 for delineation, this close relationship between the soil borings is denoted with "(A)" - "(F)".
[ ]-Exceeds the Residential Direct Contact Health Based Criteria and Soil Remediation Standards (SRS)

BROWN AND CALDWELL

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Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Phenol (mg/Kg)	bis(2-Chloroethyl) ether (mg/Kg)	2-Chlorophenol (mg/Kg)	1,3-Dichlorobenzene (mg/Kg)	1,4-Dichlorobenzene (mg/Kg)	1,2-Dichlorobenzene (mg/Kg)	2-Methylphenol (mg/Kg)
SRS				**210,000**	**1.0**	**2,000**	**59,000**	**12**	**59,000**	**3,400**
113-B-101-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
113-B-102-00-0.5-270892-050	08/27/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
113-B-102-02-04-270892-050	08/27/92	Enseco-RMA	02-04	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
113-B-102-02-04-D-270892-050	08/27/92	Enseco-RMA	02-04	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
113-B-103-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-103-00-0.5-D-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-104-00-0.5-230992-065	09/03/92	Enseco-RMA	00-0.5	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
113-B-105-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
113-B-105-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
113-B-106-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-106-00-0.5-D-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-107-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-108-00-0.5-160992-060	09/16/92	Enseco-RMA	00-0.5	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
113-B-108-00-0.5-D-160992-060	09/16/92	Enseco-RMA	00-0.5	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U
113-B-109-01-1.5-160992-060	09/16/92	Enseco-RMA	01-1.5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
113-B-110-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-111-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-111-00-0.5-150992-059RE	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Phenol (mg/Kg)	bis(2-Chloroethyl) ether (mg/Kg)	2-Chlorophenol (mg/Kg)	1,3-Dichlorobenzene (mg/Kg)	1,4-Dichlorobenzene (mg/Kg)	1,2-Dichlorobenzene (mg/Kg)	2-Methylphenol (mg/Kg)
SRS				210,000	1.0	2,000	59,000	12	59,000	3,400
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
113-B-115-00-0.5-250892-050	08/25/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-116-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-116-00-0.5-D-010992-051	09/01/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-117-00-0.5-241192-096	11/24/92	Enseco-RMA	00-0.5	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.33	2.1 U	0.34	2.1 U	2.1 U	2.1 U	2.1 U
113-B-118-0.0-0.5-D-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
113-B-119-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-120-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
113-B-120-00-0.5-D-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
113-B-122-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
113-B-122-00-0.5-D-140992-058	09/14/92	Enseco-RMA	00-0.5	0.02	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
113-B-123-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
113-B-123-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-123-00-0.5-D-150992-059	09/15/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-124-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
113-B-125-02-2.5-100992-057	09/10/92	Enseco-RMA	02-2.5	62 U	62 U	62 U	62 U	62 U	62 U	62 U
113-B-126-00-0.5-150992-058	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
113-B-126-00-0.5-150992-058RE	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
113-B-127-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	14 U	14 U	14 U	14 U	14 U	14 U	14 U
113-B-128-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Phenol (mg/Kg)	bis(2-Chloroethyl) ether (mg/Kg)	2-Chlorophenol (mg/Kg)	1,3-Dichlorobenzene (mg/Kg)	1,4-Dichlorobenzene (mg/Kg)	1,2-Dichlorobenzene (mg/Kg)	2-Methylphenol (mg/Kg)
SRS				**210,000**	**1.0**	**2,000**	**59,000**	**12**	**59,000**	**3,400**
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-129-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-130-00-0.5-D-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
113-B-131-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	0.39	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
113-B-132-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-134-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.044	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
113-B-134-00-0.5-D-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	2,2'-oxybis-(1-Chloropropane) (mg/Kg)	4-Methylphenol (mg/Kg)	N-Nitroso-di-n-Propylamine (mg/Kg)	Hexachloroethane (mg/Kg)	Nitrobenzene (mg/Kg)	Isophorone (mg/Kg)	2-Nitrophenol (mg/Kg)
SRS				**60**	**340**	**0.3**	**140**	**340**	**2,000**	--
113-B-101-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
113-B-102-00-0.5-270892-050	08/27/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
113-B-102-02-04-270892-050	08/27/92	Enseco-RMA	02-04	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
113-B-102-02-04-D-270892-050	08/27/92	Enseco-RMA	02-04	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
113-B-103-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-103-00-0.5-D-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-104-00-0.5-230992-065	09/03/92	Enseco-RMA	00-0.5	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
113-B-105-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
113-B-105-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
113-B-106-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-106-00-0.5-D-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-107-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-108-00-0.5-160992-060	09/16/92	Enseco-RMA	00-0.5	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
113-B-108-00-0.5-D-160992-060	09/16/92	Enseco-RMA	00-0.5	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U
113-B-109-01-1.5-160992-060	09/16/92	Enseco-RMA	01-1.5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
113-B-110-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-111-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.23	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-111-00-0.5-150992-059RE	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.21	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	2,2'-oxybis-(1-Chloropropane) (mg/Kg)	4-Methylphenol (mg/Kg)	N-Nitroso-di-n-Propylamine (mg/Kg)	Hexachloroethane (mg/Kg)	Nitrobenzene (mg/Kg)	Isophorone (mg/Kg)	2-Nitrophenol (mg/Kg)
SRS				**60**	**340**	**0.3**	**140**	**340**	**2,000**	**--**
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
113-B-115-00-0.5-250892-050	08/25/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-116-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-116-00-0.5-D-010992-051	09/01/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-117-00-0.5-241192-096	11/24/92	Enseco-RMA	00-0.5	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
113-B-118-0.0-0.5-D-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
113-B-119-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-120-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
113-B-120-00-0.5-D-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
113-B-122-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
113-B-122-00-0.5-D-140992-058	09/14/92	Enseco-RMA	00-0.5	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
113-B-123-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.37 U	0.44	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
113-B-123-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-123-00-0.5-D-150992-059	09/15/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-124-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
113-B-125-02-2.5-100992-057	09/10/92	Enseco-RMA	02-2.5	62 U	62 U	62 U	62 U	62 U	62 U	62 U
113-B-126-00-0.5-150992-058	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
113-B-126-00-0.5-150992-058RE	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
113-B-127-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	14 U	14 U	14 U	14 U	14 U	14 U	14 U
113-B-128-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.36 U	0.21	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	2,2'-oxybis-(1-Chloropropane) (mg/Kg)	4-Methylphenol (mg/Kg)	N-Nitroso-di-n-Propylamine (mg/Kg)	Hexachloroethane (mg/Kg)	Nitrobenzene (mg/Kg)	Isophorone (mg/Kg)	2-Nitrophenol (mg/Kg)
SRS				**60**	**340**	**0.3**	**140**	**340**	**2,000**	**--**
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-129-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-130-00-0.5-D-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
113-B-131-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
113-B-132-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-134-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
113-B-134-00-0.5-D-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	2,4-Dimethylphenol (mg/Kg)	bis(2-Chloroethoxy) Methane (mg/Kg)	2,4-Dichlorophenol (mg/Kg)	1,2,4-Trichlorobenzene (mg/Kg)	Naphthalene (mg/Kg)	4-Chloroaniline (mg/Kg)	Hexachlorobutadiene (mg/Kg)
SRS				14,000	--	2,100	820	16	66	25
113-B-101-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
113-B-102-00-0.5-270892-050	08/27/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
113-B-102-02-04-270892-050	08/27/92	Enseco-RMA	02-04	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
113-B-102-02-04-D-270892-050	08/27/92	Enseco-RMA	02-04	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
113-B-103-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.1	0.41 U	0.41 U
113-B-103-00-0.5-D-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.1	0.41 U	0.41 U
113-B-104-00-0.5-230992-065	09/03/92	Enseco-RMA	00-0.5	0.49 U	0.49 U	0.49 U	0.49 U	0.22	0.49 U	0.49 U
113-B-105-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
113-B-105-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
113-B-106-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	2	12 U	12 U
113-B-106-00-0.5-D-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	2.6	11 U	11 U
113-B-107-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	19	11 U	11 U
113-B-108-00-0.5-160992-060	09/16/92	Enseco-RMA	00-0.5	4.2 U	4.2 U	4.2 U	4.2 U	4	4.2 U	4.2 U
113-B-108-00-0.5-D-160992-060	09/16/92	Enseco-RMA	00-0.5	8.5 U	8.5 U	8.5 U	8.5 U	3.7	8.5 U	8.5 U
113-B-109-01-1.5-160992-060	09/16/92	Enseco-RMA	01-1.5	0.8 U	0.8 U	0.8 U	0.8 U	0.26	0.8 U	0.8 U
113-B-110-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-111-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-111-00-0.5-150992-059RE	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	0.44 U	0.44 U	0.44 U	0.44 U	0.37	0.44 U	0.44 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	2,4-Dimethylphenol (mg/Kg)	bis(2-Chloroethoxy) Methane (mg/Kg)	2,4-Dichlorophenol (mg/Kg)	1,2,4-Trichlorobenzene (mg/Kg)	Naphthalene (mg/Kg)	4-Chloroaniline (mg/Kg)	Hexachlorobutadiene (mg/Kg)
SRS				**14,000**	**--**	**2,100**	**820**	**16**	**66**	**25**
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	0.9 U	0.9 U	0.9 U	0.9 U	0.42	0.9 U	0.9 U
113-B-115-00-0.5-250892-050	08/25/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-116-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-116-00-0.5-D-010992-051	09/01/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
113-B-117-00-0.5-241192-096	11/24/92	Enseco-RMA	00-0.5	0.46 U	0.46 U	0.46 U	0.46 U	0.095	0.46 U	0.46 U
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
113-B-118-0.0-0.5-D-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
113-B-119-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-120-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
113-B-120-00-0.5-D-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
113-B-122-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
113-B-122-00-0.5-D-140992-058	09/14/92	Enseco-RMA	00-0.5	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
113-B-123-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.37 U	0.37 U	0.096	0.37 U	0.37 U
113-B-123-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-123-00-0.5-D-150992-059	09/15/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-124-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	1.6 U	1.6 U	1.6 U	0.3	1.6 U	1.6 U
113-B-125-02-2.5-100992-057	09/10/92	Enseco-RMA	02-2.5	62 U	62 U	62 U	62 U	**100**	62 U	62 U
113-B-126-00-0.5-150992-058	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
113-B-126-00-0.5-150992-058RE	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.2 U	0.2 U	0.021	0.2 U	0.2 U	0.2 U
113-B-127-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	14 U	14 U	14 U	14 U	14 U	14 U	14 U
113-B-128-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.36 U	0.36 U	0.36 U	0.36 U	0.067	0.36 U	0.36 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	2,4-Dimethylphenol (mg/Kg)	bis(2-Chloroethoxy) Methane (mg/Kg)	2,4-Dichlorophenol (mg/Kg)	1,2,4-Trichlorobenzene (mg/Kg)	Naphthalene (mg/Kg)	4-Chloroaniline (mg/Kg)	Hexachlorobutadiene (mg/Kg)
SRS				**14,000**	**--**	**2,100**	**820**	**16**	**66**	**25**
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.37 U	0.039	0.16	0.37 U	0.37 U
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-129-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	2.4	12 U	12 U
113-B-130-00-0.5-D-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	0.42 U	0.42 U	0.42 U	0.15	0.42 U	0.42 U
113-B-131-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	0.42 U	0.42 U	0.064	0.5	0.42 U	0.42 U
113-B-132-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.5 U	1.5 U	1.5 U	0.24	0.6	1.5 U	1.5 U
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	1.4	11 U	11 U	11 U
113-B-134-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.39 U	0.39 U	0.39 U	0.13	0.32	0.39 U	0.39 U
113-B-134-00-0.5-D-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	1.6 U	1.6 U	1.6 U	0.29	1.6 U	1.6 U
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.4 U	1.4 U	1.4 U	0.52	1.7	1.4 U	1.4 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	4-Chloro-3-Methylphenol (mg/Kg)	2-Methylnaphthalene (mg/Kg)	Hexachlorocyclopentadiene (mg/Kg)	2,4,6-Trichlorophenol (mg/Kg)	2,4,5-Trichlorophenol (mg/Kg)	2-Chloronaphthalene (mg/Kg)	2-Nitroaniline (mg/Kg)
RS				--	2,400	97	74	68,000	--	83
3-B-101-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.37 U	0.37 U	0.9 U	0.37 U	0.9 U
3-B-102-00-0.5-270892-050	08/27/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.93 U	0.38 U	0.93 U
3-B-102-02-04-270892-050	08/27/92	Enseco-RMA	02-04	0.53 U	0.53 U	0.53 U	0.53 U	1.3 U	0.53 U	1.3 U
3-B-102-02-04-D-270892-050	08/27/92	Enseco-RMA	02-04	0.54 U	0.54 U	0.54 U	0.54 U	1.3 U	0.54 U	1.3 U
3-B-103-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	0.046	0.41 U	0.41 U	0.99 U	0.41 U	0.99 U
3-B-103-00-0.5-D-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	0.049	0.41 U	0.41 U	0.98 U	0.41 U	0.98 U
3-B-104-00-0.5-230992-065	09/03/92	Enseco-RMA	00-0.5	0.49 U	0.49 U	0.49 U	0.49 U	1.2 U	0.49 U	1.2 U
3-B-105-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	2.0 U	2.0 U	2.0 U	4.8 U	2.0 U	4.8 U
3-B-105-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	2.0 U	2.0 U	2.0 U	4.8 U	2.0 U	4.8 U
3-B-106-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	31 U	12 U	31 U
3-B-106-00-0.5-D-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	29 U	11 U	29 U
3-B-107-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	2.2	11 U	11 U	27 U	11 U	27 U
3-B-108-00-0.5-160992-060	09/16/92	Enseco-RMA	00-0.5	4.2 U	2.5	4.2 U	4.2 U	10 U	4.2 U	10 U
3-B-108-00-0.5-D-160992-060	09/16/92	Enseco-RMA	00-0.5	8.5 U	2.4	8.5 U	8.5 U	21 U	8.5 U	21 U
3-B-109-01-1.5-160992-060	09/16/92	Enseco-RMA	01-1.5	0.8 U	0.2	0.8 U	0.8 U	2 U	0.8 U	2 U
3-B-110-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	29 U	12 U	29 U
3-B-111-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.98 U	0.41 U	0.98 U
3-B-111-00-0.5-150992-059RE	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.98 U	0.41 U	0.98 U
3-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	1.3	12 U	12 U	29 U	12 U	29 U
3-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.59 U	0.59 U	0.59 U	0.59 U	1.4 U	0.59 U	1.4 U
3-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	0.44 U	0.13	0.44 U	0.44 U	1.1 U	0.44 U	1.1 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	4-Chloro-3-Methylphenol (mg/Kg)	2-Methylnaphthalene (mg/Kg)	Hexachlorocyclopentadiene (mg/Kg)	2,4,6-Trichlorophenol (mg/Kg)	2,4,5-Trichlorophenol (mg/Kg)	2-Chloronaphthalene (mg/Kg)	2-Nitroaniline (mg/Kg)
RS				--	2,400	97	74	68,000	--	83
13-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	0.9 U	0.9 U	0.9 U	0.9 U	2.2 U	0.9 U	2.2 U
13-B-115-00-0.5-250892-050	08/25/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	1.0 U	0.41 U	1.0 U
13-B-116-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	31 U	12 U	31 U
13-B-116-00-0.5-D-010992-051	09/01/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	1.0 U	0.41 U	1.0 U
13-B-117-00-0.5-241192-096	11/24/92	Enseco-RMA	00-0.5	0.46 U	0.46 U	0.46 U	0.46 U	1.1 U	0.46 U	1.1 U
13-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	2.1 U	2.1 U	5.0 U	2.1 U	5.0 U
13-B-118-0.0-0.5-D-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	2.1 U	2.1 U	5.0 U	2.1 U	5.0 U
13-B-119-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	27 U	11 U	27 U
13-B-120-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.92 U	0.38 U	0.92 U
13-B-120-00-0.5-D-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.92 U	0.38 U	0.92 U
13-B-122-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.36 U	0.36 U	0.36 U	0.36 U	0.87 U	0.36 U	0.87 U
13-B-122-00-0.5-D-140992-058	09/14/92	Enseco-RMA	00-0.5	0.18 U	0.18 U	0.18 U	0.18 U	0.43 U	0.18 U	0.43 U
13-B-123-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.37 U	0.096	0.37 U	0.37 U	0.91 U	0.37 U	0.91 U
13-B-123-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	29 U	11 U	29 U
13-B-123-00-0.5-D-150992-059	09/15/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	29 U	12 U	29 U
13-B-124-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	1.6 U	1.6 U	1.6 U	3.9 U	1.6 U	3.9 U
13-B-125-02-2.5-100992-057	09/10/92	Enseco-RMA	02-2.5	62 U	34	62 U	62 U	150 U	62 U	150 U
13-B-126-00-0.5-150992-058	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.2 U	0.2 U	0.2 U	0.48 U	0.2 U	0.48 U
13-B-126-00-0.5-150992-058RE	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.2 U	0.2 U	0.2 U	0.48 U	0.2 U	0.48 U
13-B-127-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	14 U	14 U	14 U	14 U	34 U	14 U	34 U
13-B-128-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.36 U	0.36 U	0.36 U	0.36 U	0.88 U	0.36 U	0.88 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	4-Chloro-3-Methylphenol (mg/Kg)	2-Methylnaphthalene (mg/Kg)	Hexachlorocyclopentadiene (mg/Kg)	2,4,6-Trichlorophenol (mg/Kg)	2,4,5-Trichlorophenol (mg/Kg)	2-Chloronaphthalene (mg/Kg)	2-Nitroaniline (mg/Kg)
RS				--	2,400	97	74	68,000	--	83
13-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.35 U	0.35 U	0.35 U	0.35 U	0.85 U	0.35 U	0.85 U
13-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	0.34 U	0.34 U	0.34 U	0.34 U	0.83 U	0.34 U	0.83 U
13-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.37 U	0.076	0.37 U	0.37 U	0.91 U	0.37 U	0.91 U
13-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	27 U	11 U	27 U
13-B-129-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	29 U	12 U	29 U
13-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	30 U	12 U	30 U
13-B-130-00-0.5-D-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	30 U	12 U	30 U
13-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	0.06	0.42 U	0.42 U	1.0 U	0.42 U	1.0 U
13-B-131-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	0.22	0.42 U	0.42 U	1.0 U	0.42 U	1.0 U
13-B-132-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.5 U	0.23	1.5 U	3.7 U	1.5 U	1.5 U	3.7 U
13-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	28 U	11 U	28 U
13-B-134-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.39 U	0.12	0.39 U	0.39 U	0.94 U	0.39 U	0.94 U
13-B-134-00-0.5-D-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	1.6 U	1.6 U	1.6 U	3.9 U	1.6 U	3.9 U
13-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.4 U	0.29	1.4 U	1.4 U	3.5 U	1.4 U	3.5 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dimethylphthalate (mg/Kg)	2,6-Dinitrotoluene (mg/Kg)	Acenaphthylene (mg/Kg)	Acenaphthene (mg/Kg)	2,4-Dinitrophenol (mg/Kg)	4-Nitrophenol (mg/Kg)	Dibenzofuran (mg/Kg)
SRS				--	3.0	300,000	37,000	1,400	--	--
113-B-101-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.37 U	0.37 U	0.9 U	0.9 U	0.37 U
113-B-102-00-0.5-270892-050	08/27/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.93 U	0.93 U	0.38 U
113-B-102-02-04-270892-050	08/27/92	Enseco-RMA	02-04	0.53 U	0.53 U	0.53 U	0.53 U	1.3 U	1.3 U	0.53 U
113-B-102-02-04-D-270892-050	08/27/92	Enseco-RMA	02-04	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
113-B-103-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.12	0.99 U	0.99 U	0.07
113-B-103-00-0.5-D-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.093	0.98 U	0.98 U	0.057
113-B-104-00-0.5-230992-065	09/03/92	Enseco-RMA	00-0.5	0.49 U	0.49 U	0.49 U	0.49 U	1.2 U	1.2 U	0.49 U
113-B-105-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	2.0 U	2.0 U	2.0 U	4.8 U	4.8 U	2.0 U
113-B-105-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	2.0 U	2.0 U	2.0 U	4.8 U	4.8 U	2.0 U
113-B-106-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	31 U	31 U	12 U
113-B-106-00-0.5-D-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	29 U	29 U	11 U
113-B-107-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	2.4	27 U	27 U	1.2
113-B-108-00-0.5-160992-060	09/16/92	Enseco-RMA	00-0.5	4.2 U	4.2 U	4.2 U	3.8	10 U	10 U	3.4
113-B-108-00-0.5-D-160992-060	09/16/92	Enseco-RMA	00-0.5	8.5 U	8.5 U	8.5 U	4.2	21 U	21 U	3.6
113-B-109-01-1.5-160992-060	09/16/92	Enseco-RMA	01-1.5	0.8 U	0.8 U	0.11	0.11	2 U	2 U	0.13
113-B-110-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	29 U	12 U
113-B-111-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	0.98 U	0.98 U	0.043
113-B-111-00-0.5-150992-059RE	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.041	0.98 U	0.98 U	0.41 U
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	29 U	29 U	12 U
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.59 U	0.59 U	0.59 U	0.59 U	1.4 U	1.4 U	0.59 U
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	0.44 U	0.44 U	0.23	0.045	1.1 U	1.1 U	0.067

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dimethylphthalate (mg/Kg)	2,6-Dinitrotoluene (mg/Kg)	Acenaphthylene (mg/Kg)	Acenaphthene (mg/Kg)	2,4-Dinitrophenol (mg/Kg)	4-Nitrophenol (mg/Kg)	Dibenzofuran (mg/Kg)
SRS				--	3.0	300,000	37,000	1,400	--	--
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	0.9 U	0.9 U	0.52	0.9 U	2.2 U	2.2 U	0.9 U
113-B-115-00-0.5-250892-050	08/25/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	1.0 U	1.0 U	0.41 U
113-B-116-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	31 U	31 U	12 U
113-B-116-00-0.5-D-010992-051	09/01/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.057	0.086	1.0 U	1.0 U	0.049
113-B-117-00-0.5-241192-096	11/24/92	Enseco-RMA	00-0.5	0.46 U	0.46 U	0.46 U	0.46 U	1.1 U	1.1 U	0.46 U
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	2.1 U	2.1 U	5.0 U	5.0 U	2.1 U
113-B-118-0.0-0.5-D-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	2.1 U	2.1 U	5.0 U	5.0 U	2.1 U
113-B-119-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	27 U	27 U	11 U
113-B-120-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.92 U	0.92 U	0.38 U
113-B-120-00-0.5-D-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.92 U	0.92 U	0.38 U
113-B-122-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.36 U	0.36 U	0.36 U	0.36 U	0.87 U	0.87 U	0.36 U
113-B-122-00-0.5-D-140992-058	09/14/92	Enseco-RMA	00-0.5	0.18 U	0.18 U	0.18 U	0.18 U	0.43 U	0.43 U	0.18 U
113-B-123-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.078	0.37 U	0.059	0.14	0.91 U	0.91 U	0.088
113-B-123-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	2.2	29 U	29 U	11 U
113-B-123-00-0.5-D-150992-059	09/15/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	29 U	29 U	12 U
113-B-124-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	1.6 U	1.6 U	0.7	3.9 U	3.9 U	0.42
113-B-125-02-2.5-100992-057	09/10/92	Enseco-RMA	02-2.5	62 U	62 U	62 U	24	150 U	150 U	25
113-B-126-00-0.5-150992-058	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.2 U	0.2 U	0.02	0.48 U	0.48 U	0.2 U
113-B-126-00-0.5-150992-058RE	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.2 U	0.2 U	0.025	0.48 U	0.48 U	0.2 U
113-B-127-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	14 U	14 U	14 U	14 U	34 U	34 U	14 U
113-B-128-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.36 U	0.36 U	0.046	0.061	0.88 U	0.88 U	0.039

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Dimethylphthalate (mg/Kg)	2,6-Dinitrotoluene (mg/Kg)	Acenaphthylene (mg/Kg)	Acenaphthene (mg/Kg)	2,4-Dinitrophenol (mg/Kg)	4-Nitrophenol (mg/Kg)	Dibenzofuran (mg/Kg)
SRS				--	**3.0**	**300,000**	**37,000**	**1,400**	--	--
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.35 U	0.35 U	0.35 U	0.35 U	0.85 U	0.85 U	0.35 U
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	0.34 U	0.34 U	0.34 U	0.34 U	0.83 U	0.83 U	0.34 U
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.11	0.042	0.91 U	0.91 U	0.05
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	27 U	27 U	11 U
113-B-129-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	29 U	29 U	12 U
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	30 U	30 U	12 U
113-B-130-00-0.5-D-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	30 U	30 U	12 U
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	0.42 U	0.052	0.061	1.0 U	1.0 U	0.056
113-B-131-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	0.42 U	0.14	0.35	1.0 U	1.0 U	0.47
113-B-132-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.5 U	1.5 U	1.5 U	0.43	3.7 U	3.7 U	0.31
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	28 U	28 U	11 U
113-B-134-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.39 U	0.39 U	0.087	0.2	0.94 U	0.94 U	0.18
113-B-134-00-0.5-D-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	1.6 U	1.6 U	0.17	3.9 U	3.9 U	1.6 U
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.4 U	1.4 U	1.4 U	0.19	3.5 U	3.5 U	0.2

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	2,4-Dinitrotoluene (mg/Kg)	Diethylphthalate (mg/Kg)	4-Chlorophenyl-phenylether (mg/Kg)	Fluorene (mg/Kg)	4-Nitroaniline (mg/Kg)	4,6-Dinitro-2-Methylphenol (mg/Kg)	N-Nitroso-diphenylamine (mg/Kg)
SRS				**3.0**	**550,000**	**--**	**24,000**	**--**	**68**	**390**
113-B-101-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.37 U	0.37 U	0.9 U	0.9 U	0.37 U
113-B-102-00-0.5-270892-050	08/27/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.93 U	0.93 U	0.38 U
113-B-102-02-04-270892-050	08/27/92	Enseco-RMA	02-04	0.53 U	0.53 U	0.53 U	0.53 U	1.3 U	1.3 U	0.53 U
113-B-102-02-04-D-270892-050	08/27/92	Enseco-RMA	02-04	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
113-B-103-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.12	0.99 U	0.99 U	0.41 U
113-B-103-00-0.5-D-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.091	0.98 U	0.98 U	0.41 U
113-B-104-00-0.5-230992-065	09/03/92	Enseco-RMA	00-0.5	0.49 U	0.49 U	0.49 U	0.49 U	1.2 U	1.2 U	0.49 U
113-B-105-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	2.0 U	2.0 U	2.0 U	4.8 U	4.8 U	2.0 U
113-B-105-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	2.0 U	2.0 U	2.0 U	4.8 U	4.8 U	2.0 U
113-B-106-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	31 U	31 U	12 U
113-B-106-00-0.5-D-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	29 U	29 U	11 U
113-B-107-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	2.6	27 U	27 U	11 U
113-B-108-00-0.5-160992-060	09/16/92	Enseco-RMA	00-0.5	4.2 U	4.2 U	4.2 U	4.9	10 U	10 U	4.2 U
113-B-108-00-0.5-D-160992-060	09/16/92	Enseco-RMA	00-0.5	8.5 U	8.5 U	8.5 U	5.1	21 U	21 U	8.5 U
113-B-109-01-1.5-160992-060	09/16/92	Enseco-RMA	01-1.5	0.8 U	0.8 U	0.8 U	0.14	2 U	2 U	0.8 U
113-B-110-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	29 U	29 U	12 U
113-B-111-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.07	0.98 U	0.98 U	0.41 U
113-B-111-00-0.5-150992-059RE	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.061	0.98 U	0.98 U	0.41 U
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	29 U	29 U	12 U
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.59 U	0.59 U	0.59 U	0.59 U	1.4 U	1.4 U	0.59 U
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	0.44 U	0.44 U	0.44 U	0.092	1.1 U	1.1 U	0.44 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	2,4-Dinitrotoluene (mg/Kg)	Diethylphthalate (mg/Kg)	4-Chlorophenyl-phenylether (mg/Kg)	Fluorene (mg/Kg)	4-Nitroaniline (mg/Kg)	4,6-Dinitro-2-Methylphenol (mg/Kg)	N-Nitroso-diphenylamine (mg/Kg)
SRS				**3.0**	**550,000**	**--**	**24,000**	**--**	**68**	**390**
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	0.9 U	0.9 U	0.9 U	0.24	0.9 U	0.9 U	0.9 U
113-B-115-00-0.5-250892-050	08/25/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.41 U	1.0 U	1.0 U	0.41 U
113-B-116-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	31 U	31 U	12 U
113-B-116-00-0.5-D-010992-051	09/01/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.41 U	0.092	1.0 U	1.0 U	0.41 U
113-B-117-00-0.5-241192-096	11/24/92	Enseco-RMA	00-0.5	0.46 U	0.46 U	0.46 U	0.46 U	1.1 U	1.1 U	0.46 U
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	2.1 U	2.1 U	5.0 U	5.0 U	2.1 U
113-B-118-0.0-0.5-D-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	2.1 U	2.1 U	5.0 U	5.0 U	2.1 U
113-B-119-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	27 U	27 U	11 U
113-B-120-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.92 U	0.92 U	0.38 U
113-B-120-00-0.5-D-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.92 U	0.92 U	0.38 U
113-B-122-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.36 U	0.36 U	0.36 U	0.36 U	0.87 U	0.87 U	0.36 U
113-B-122-00-0.5-D-140992-058	09/14/92	Enseco-RMA	00-0.5	0.18 U	0.18 U	0.18 U	0.18 U	0.43 U	0.43 U	0.18 U
113-B-123-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.37 U	0.13	0.91 U	0.91 U	0.042
113-B-123-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	2.4	29 U	29 U	11 U
113-B-123-00-0.5-D-150992-059	09/15/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	29 U	29 U	12 U
113-B-124-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	1.6 U	1.6 U	0.75	3.9 U	3.9 U	1.6 U
113-B-125-02-2.5-100992-057	09/10/92	Enseco-RMA	02-2.5	62 U	62 U	62 U	62 U	150 U	150 U	62 U
113-B-126-00-0.5-150992-058	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.2 U	0.2 U	0.2 U	0.48 U	0.48 U	0.2 U
113-B-126-00-0.5-150992-058RE	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.2 U	0.2 U	0.2 U	0.48 U	0.48 U	0.2 U
113-B-127-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	14 U	14 U	14 U	14 U	34 U	34 U	14 U
113-B-128-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.36 U	0.36 U	0.36 U	0.059	0.88 U	0.88 U	0.36 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	2,4-Dinitrotoluene (mg/Kg)	Diethylphthalate (mg/Kg)	4-Chlorophenyl-phenylether (mg/Kg)	Fluorene (mg/Kg)	4-Nitroaniline (mg/Kg)	4,6-Dinitro-2-Methylphenol (mg/Kg)	N-Nitroso-diphenylamine (mg/Kg)
SRS				**3.0**	**550,000**	**--**	**24,000**	**--**	**68**	**390**
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.35 U	0.35 U	0.35 U	0.35 U	0.85 U	0.85 U	0.35 U
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	0.34 U	0.34 U	0.34 U	0.34 U	0.83 U	0.83 U	0.34 U
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.37 U	0.047	0.91 U	0.91 U	0.37 U
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	27 U	27 U	11 U
113-B-129-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	29 U	29 U	12 U
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	30 U	30 U	12 U
113-B-130-00-0.5-D-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	30 U	30 U	12 U
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	0.42 U	0.42 U	0.061	1.0 U	1.0 U	0.42 U
113-B-131-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	0.42 U	0.42 U	0.58	1.0 U	1.0 U	0.09
113-B-132-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.5 U	1.5 U	1.5 U	0.44	3.7 U	3.7 U	1.5 U
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	28 U	28 U	11 U
113-B-134-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.39 U	0.39 U	0.39 U	0.25	0.94 U	0.94 U	0.047
113-B-134-00-0.5-D-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	1.6 U	1.6 U	0.18	3.9 U	3.9 U	1.6 U
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.4 U	1.4 U	1.4 U	0.18	3.5 U	3.5 U	1.4 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	4-Bromophenyl-phenylether (mg/Kg)	Hexachlorobenzene (mg/Kg)	Pentachlorophenol (mg/Kg)	Phenanthrene (mg/Kg)	Anthracene (mg/Kg)	Carbazole (mg/Kg)	Di-n-Butylphthalate (mg/Kg)
SRS				--	1.0	10	300,000	30,000	96	68,000
113-B-101-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.9 U	0.077	0.37 U	0.37 U	0.37 U
113-B-102-00-0.5-270892-050	08/27/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.93 U	0.051	0.38 U	0.38 U	0.38 U
113-B-102-02-04-270892-050	08/27/92	Enseco-RMA	02-04	0.53 U	0.53 U	1.3 U	0.53 U	0.53 U	0.53 U	0.53 U
113-B-102-02-04-D-270892-050	08/27/92	Enseco-RMA	02-04	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
113-B-103-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.99 U	1.5	0.52	0.17	0.41 U
113-B-103-00-0.5-D-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.98 U	1.1	0.26	0.1	0.41 U
113-B-104-00-0.5-230992-065	09/03/92	Enseco-RMA	00-0.5	0.49 U	0.49 U	1.2 U	0.24	0.49 U	0.49 U	0.49 U
113-B-105-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	2.0 U	4.8 U	0.54	2.0 U	2.0 U	2.0 U
113-B-105-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	2.0 U	4.8 U	1.0	2.0 U	2.0 U	2.0 U
113-B-106-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	12 U	12 U	31 U	12 U	12 U	12.0 U	12 U
113-B-106-00-0.5-D-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	11 U	29 U	11 U	11 U	11 U	11 U
113-B-107-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	11 U	27 U	14	3.3	11 U	11 U
113-B-108-00-0.5-160992-060	09/16/92	Enseco-RMA	00-0.5	4.2 U	4.2 U	10 U	29	6.5	1.9	4.2 U
113-B-108-00-0.5-D-160992-060	09/16/92	Enseco-RMA	00-0.5	8.5 U	8.5 U	21 U	31	7.3	2.1	8.5 U
113-B-109-01-1.5-160992-060	09/16/92	Enseco-RMA	01-1.5	0.8 U	0.8 U	0.14	1.4	0.3	0.15	0.8 U
113-B-110-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	12 U	12 U	1.7	3.8	12 U	12 U	12 U
113-B-111-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.98 U	0.58	0.13	0.043	0.41 U
113-B-111-00-0.5-150992-059RE	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.98 U	0.57	0.13	0.046	0.41 U
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	12 U	29 U	1.8	12 U	12 U	12 U
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.59 U	0.59 U	1.4 U	0.59 U	0.59 U	0.59 U	0.59 U
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	0.44 U	0.18	0.045	0.79	0.36	0.085	0.44 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	4-Bromophenyl-phenylether (mg/Kg)	Hexachlorobenzene (mg/Kg)	Pentachlorophenol (mg/Kg)	Phenanthrene (mg/Kg)	Anthracene (mg/Kg)	Carbazole (mg/Kg)	Di-n-Butylphthalate (mg/Kg)
SRS				--	**1.0**	**10**	**300,000**	**30,000**	**96**	**68,000**
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	0.9 U	0.19	2.2 U	2.6	0.99	0.23	0.9 U
113-B-115-00-0.5-250892-050	08/25/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	1.0 U	0.07	0.41 U	0.41 U	0.41 U
113-B-116-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	12 U	12 U	31 U	12 U	12 U	12 U	12 U
113-B-116-00-0.5-D-010992-051	09/01/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	1.0 U	1.3	0.21	0.074	0.41 U
113-B-117-00-0.5-241192-096	11/24/92	Enseco-RMA	00-0.5	0.46 U	0.5	1.1 U	0.096	0.067	0.46 U	0.46 U
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	5.0 U	2.1 U	2.1 U	2.1 U	2.1 U
113-B-118-0.0-0.5-D-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	5.0 U	2.1 U	2.1 U	2.1 U	2.1 U
113-B-119-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	11 U	11 U	27 U	11 U	11 U	11 U	1.7
113-B-120-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.39	0.38 U	0.38 U	0.38 U	0.38 U
113-B-120-00-0.5-D-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.92 U	0.38 U	0.38 U	0.38 U	0.38 U
113-B-122-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.36 U	0.36 U	0.87 U	0.17	0.037	0.36 U	0.36 U
113-B-122-00-0.5-D-140992-058	09/14/92	Enseco-RMA	00-0.5	0.18 U	0.18 U	0.43 U	0.08	0.18 U	0.18 U	0.18 U
113-B-123-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.91 U	1.9	0.45	0.2	0.37 U
113-B-123-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	11 U	11 U	29 U	45	11	1.6	11 U
113-B-123-00-0.5-D-150992-059	09/15/92	Enseco-RMA	00-0.5	12 U	12 U	1.4	8.8	2.4	12 U	12 U
113-B-124-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	1.6 U	3.9 U	7	1.7	0.82	1.6 U
113-B-125-02-2.5-100992-057	09/10/92	Enseco-RMA	02-2.5	62 U	62 U	150 U	95	11	7.3	62 U
113-B-126-00-0.5-150992-058	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.2 U	0.48 U	0.23	0.046	0.027	0.2 U
113-B-126-00-0.5-150992-058RE	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.2 U	0.48 U	0.31	0.067	0.046	0.2 U
113-B-127-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	14 U	14 U	34 U	3.7	14 U	14 U	14 U
113-B-128-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.36 U	0.36 U	0.88 U	0.86	0.17	0.11	0.36 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	4-Bromophenyl-phenylether (mg/Kg)	Hexachlorobenzene (mg/Kg)	Pentachlorophenol (mg/Kg)	Phenanthrene (mg/Kg)	Anthracene (mg/Kg)	Carbazole (mg/Kg)	Di-n-Butylphthalate (mg/Kg)
SRS				--	**1.0**	**10**	**300,000**	**30,000**	**96**	**68,000**
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.35 U	0.35 U	0.85 U	0.35 U	0.35 U	0.35 U	0.35 U
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	0.34 U	0.34 U	0.83 U	0.34 U	0.34 U	0.34 U	0.34 U
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.37 U	0.37 U	0.91 U	0.39	0.16	0.048	0.37 U
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11 U	2.2	1.4	11 U	11 U	11 U
113-B-129-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	12 U	29 U	4.2	1.2	12 U	12 U
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12 U	30 U	9.9	2.0	12 U	12 U
113-B-130-00-0.5-D-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12 U	30 U	3.8	12 U	12 U	12 U
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	0.42 U	1.0 U	0.93	0.22	0.098	0.42 U
113-B-131-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	0.42	1.0 U	8.5	2.0	0.54	0.42 U
113-B-132-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.5 U	1.5 U	3.7 U	4.5	1.2	0.47	1.5 U
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11 U	28 U	4.0	11 U	11 U	11 U
113-B-134-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.39 U	0.053	0.94 U	2.4	0.76	0.22	0.39 U
113-B-134-00-0.5-D-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	1.6 U	3.9 U	1.9	0.7	0.23	1.6 U
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.4 U	0.24	3.5 U	2.5	0.81	0.28	1.4 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Fluoranthene (mg/Kg)	Pyrene (mg/Kg)	Butylbenzylphthalate (mg/Kg)	3,3'-Dichlorobenzidine (mg/Kg)	Benzo(a)anthracene (mg/Kg)	bis(2-Ethylhexyl) phthalate (mg/Kg)	Chrysene (mg/Kg)
SRS				24,000	18,000	14,000	4.0	2.0	140	230
113-B-101-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.23	0.19	0.37 U	0.37 U	0.11	0.24	0.13
113-B-102-00-0.5-270892-050	08/27/92	Enseco-RMA	00-0.5	0.12	0.11	0.38 U	0.38 U	0.07	0.055	0.077
113-B-102-02-04-270892-050	08/27/92	Enseco-RMA	02-04	0.078	0.089	0.53 U	0.53 U	0.53 U	0.064	0.055
113-B-102-02-04-D-270892-050	08/27/92	Enseco-RMA	02-04	0.087	0.09	0.54 U	0.54 U	0.061	0.06	0.068
113-B-103-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	2.8	3.2	0.41 U	0.41 U	1.9	0.079	1.7
113-B-103-00-0.5-D-030992-053	09/03/92	Enseco-RMA	00-0.5	2.3	2.7	0.41 U	0.41 U	1.2	0.062	1.2
113-B-104-00-0.5-230992-065	09/03/92	Enseco-RMA	00-0.5	0.35	0.31	0.49 U	0.49 U	0.21	2.9	0.25
113-B-105-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	1.2	0.9	2.0 U	2.0 U	0.59	2.0 U	0.6
113-B-105-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	2.3	2.8	2.0 U	2.0 U	1.6	2.0 U	1.5
113-B-106-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	1.3	12 U	12 U	12 U	12 U	12 U	12 U
113-B-106-00-0.5-D-121092-082	10/12/92	Enseco-RMA	00-0.5	1.5	1.3	11 U	11 U	11 U	11 U	11 U
113-B-107-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	17	17	11 U	11 U	11	11 U	9.3
113-B-108-00-0.5-160992-060	09/16/92	Enseco-RMA	00-0.5	30	26	4.2 U	4.2 U	8.7	4.2 U	8.6
113-B-108-00-0.5-D-160992-060	09/16/92	Enseco-RMA	00-0.5	37	28	8.5 U	8.5 U	11	8.5 U	10
113-B-109-01-1.5-160992-060	09/16/92	Enseco-RMA	01-1.5	3.7	3.8	0.8 U	0.8 U	1.8	0.8 U	2.0
113-B-110-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	10	16	12 U	12 U	8.2	12 U	8.3
113-B-111-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	1.1	0.76	0.41 U	0.41 U	0.61	0.13	0.71
113-B-111-00-0.5-150992-059RE	09/15/92	Enseco-RMA	00-0.5	1	0.66	0.41 U	0.41 U	0.72	0.093	0.62
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	3.1	2.6	12 U	12 U	1.8	12 U	1.6
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.093	0.067	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	2	1.3	0.44 U	0.44 U	0.98	0.086	0.87

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Fluoranthene (mg/Kg)	Pyrene (mg/Kg)	Butylbenzylphthalate (mg/Kg)	3,3'-Dichlorobenzidine (mg/Kg)	Benzo(a)anthracene (mg/Kg)	bis(2-Ethylhexyl) phthalate (mg/Kg)	Chrysene (mg/Kg)
SRS				24,000	18,000	14,000	4.0	2.0	140	230
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	6.3	3.8	0.9 U	0.9 U	3.2	0.9 U	3.1
113-B-115-00-0.5-250892-050	08/25/92	Enseco-RMA	00-0.5	0.16	0.17	0.41 U	0.41 U	0.089	0.1	0.11
113-B-116-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	1.4	1.6	12 U	12 U	12 U	12 U	12 U
113-B-116-00-0.5-D-010992-051	09/01/92	Enseco-RMA	00-0.5	2.4	3.2	0.41 U	0.41 U	1.5	0.12	1.4
113-B-117-00-0.5-241192-096	11/24/92	Enseco-RMA	00-0.5	0.23	0.17	0.46 U	0.46 U	0.14	0.056	0.15
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1	2.1 U
113-B-118-0.0-0.5-D-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
113-B-119-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	2.3	2.6	11 U	11 U	2.1	11 U	3.8
113-B-120-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
113-B-120-00-0.5-D-100592-077	05/10/92	Enseco-RMA	00-0.5	0.042	0.047	0.38 U	0.38 U	0.38 U	0.041	0.38 U
113-B-122-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.52	0.53	0.36 U	0.36 U	0.3	0.36 U	0.32
113-B-122-00-0.5-D-140992-058	09/14/92	Enseco-RMA	00-0.5	0.25	0.42	0.18 U	0.18 U	0.18	0.022	0.23
113-B-123-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	4	5.4	0.37 U	0.37 U	3.3	0.26	2.9
113-B-123-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	130	90	11 U	11 U	66	11 U	57
113-B-123-00-0.5-D-150992-059	09/15/92	Enseco-RMA	00-0.5	22	17	12 U	12 U	13	12 U	11
113-B-124-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	13	13	1.6 U	1.6 U	7.7	0.73	6.0
113-B-125-02-2.5-100992-057	09/10/92	Enseco-RMA	02-2.5	48	32	62 U	62 U	6.9	62 U	62 U
113-B-126-00-0.5-150992-058	09/15/92	Enseco-RMA	00-0.5	0.5	1.1	0.2 U	0.2 U	0.34	0.076	0.45
113-B-126-00-0.5-150992-058RE	09/15/92	Enseco-RMA	00-0.5	0.65	0.8	0.027	0.2 U	0.39	0.071	0.36
113-B-127-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	6.0	4.1	14 U	14 U	2.7	14 U	2.6
113-B-128-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	1.7	2.5	0.36 U	0.36 U	1.0	0.19	0.98

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Fluoranthene (mg/Kg)	Pyrene (mg/Kg)	Butylbenzylphthalate (mg/Kg)	3,3'-Dichlorobenzidine (mg/Kg)	Benzo(a)anthracene (mg/Kg)	bis(2-Ethylhexyl) phthalate (mg/Kg)	Chrysene (mg/Kg)
SRS				24,000	18,000	14,000	4.0	2.0	140	230
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.87	0.76	0.064	0.37 U	0.53	0.051	0.51
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	3.2	3.0	11 U	11 U	1.9	11 U	1.9
113-B-129-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	10	8.9	12 U	12 U	**6.0**	12 U	5.5
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	23	25	12 U	12 U	**11**	7.6	11
113-B-130-00-0.5-D-230992-065	09/23/92	Enseco-RMA	00-0.5	14	12	12 U	12 U	**5.8**	12 U	5.8
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	3.4	3.2	0.42 U	0.42 U	1.4	0.11	1.4
113-B-131-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	9.5	6.4	0.42 U	0.42 U	**2.9**	0.16	2.9
113-B-132-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	8.9	8.0	1.5 U	1.5 U	**3.8**	1.4	3.3
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	9.4	9.8	11 U	11 U	**6.0**	11 U	5.9
113-B-134-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	4.3	4.8	0.39 U	0.39 U	**2.8**	0.14	2.8
113-B-134-00-0.5-D-100992-057	09/10/92	Enseco-RMA	00-0.5	6.7	6.2	1.6 U	1.6 U	**2.8**	1.6 U	2.8
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	5.6	5.7	1.4 U	1.4 U	**2.9**	0.16	2.9

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Di-n-Octylphthalate (mg/Kg)	Benzo(b) fluoranthene (mg/Kg)	Benzo(k) fluoranthene (mg/Kg)	Benzo(a) pyrene (mg/Kg)	Indeno(1,2,3-cd) pyrene (mg/Kg)	Dibenz(a,h) anthracene (mg/Kg)	Benzo(g,h,i) perylene (mg/Kg)
SRS				**27,000**	**2.0**	**23**	**0.2**	**2.0**	**0.2**	**30,000**
113-B-101-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.37 U	0.2	0.072	0.13	0.076	0.37 U	0.068
113-B-102-00-0.5-270892-050	08/27/92	Enseco-RMA	00-0.5	0.38 U	0.14	0.38 U	0.06	0.38 U	0.38 U	0.38 U
113-B-102-02-04-270892-050	08/27/92	Enseco-RMA	02-04	0.53 U	0.091	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
113-B-102-02-04-D-270892-050	08/27/92	Enseco-RMA	02-04	0.54 U	0.092	0.54 U	0.06	0.54 U	0.54 U	0.54 U
113-B-103-00-0.5-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	**2.4**	0.99	**1.7**	0.41 U	0.06	0.41 U
113-B-103-00-0.5-D-030992-053	09/03/92	Enseco-RMA	00-0.5	0.41 U	1.8	0.9	**1.4**	0.79	**0.22**	0.68
113-B-104-00-0.5-230992-065	09/03/92	Enseco-RMA	00-0.5	0.25	0.55	0.49 U	**0.32**	0.2	0.49 U	0.18
113-B-105-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	0.7	0.3	**0.57**	0.52	2.0 U	2.0 U
113-B-105-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	2.0 U	**3.1**	1.0	**2.0**	1.1	2.0 U	1.2
113-B-106-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	12 U	12 U	12 U	12 U	12 U	12 U	12 U
113-B-106-00-0.5-D-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	11 U	11 U	11 U	11 U	11 U	11 U
113-B-107-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	11 U	**12**	4.2 U	**7.8**	11 U	**2.9**	2.2
113-B-108-00-0.5-160992-060	09/16/92	Enseco-RMA	00-0.5	4.2 U	**14**	4.2 U	**9.1**	**2.9**	4.2 U	1.9
113-B-108-00-0.5-D-160992-060	09/16/92	Enseco-RMA	00-0.5	8.5 U	**16**	8.5 U	**10**	**3.6**	8.5 U	1.8
113-B-109-01-1.5-160992-060	09/16/92	Enseco-RMA	01-1.5	0.8 U	**3.6**	0.8 U	**1.9**	0.47	0.15	0.8 U
113-B-110-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	12 U	**14**	4.8	**8.6**	**3.8**	12 U	5.0
113-B-111-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.41 U	1.3	0.56	**0.29**	0.31	0.41 U	0.41 U
113-B-111-00-0.5-150992-059RE	09/15/92	Enseco-RMA	00-0.5	0.41 U	0.93	0.49	**0.21**	0.19	0.11	0.41 U
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	**2.5**	1.3	**1.8**	12 U	12 U	12 U
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	0.59 U	0.074	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	0.44 U	1.7	0.7	**1.0**	0.44 U	0.44 U	0.44 U

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Di-n-Octylphthalate (mg/Kg)	Benzo(b) fluoranthene (mg/Kg)	Benzo(k) fluoranthene (mg/Kg)	Benzo(a) pyrene (mg/Kg)	Indeno(1,2,3-cd) pyrene (mg/Kg)	Dibenz(a,h) anthracene (mg/Kg)	Benzo(g,h,i) perylene (mg/Kg)
SRS				**27,000**	**2.0**	**23**	**0.2**	**2.0**	**0.2**	**30,000**
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	0.9 U	**5.3**	2.4	**3.4**	2	**0.61**	0.93
113-B-115-00-0.5-250892-050	08/25/92	Enseco-RMA	00-0.5	0.41 U	0.41 U	0.19	0.1	0.059	0.41 U	0.41 U
113-B-116-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	12 U	**2.3**	12 U	**1.3**	12 U	12 U	12 U
113-B-116-00-0.5-D-010992-051	09/01/92	Enseco-RMA	00-0.5	0.41 U	1.9	0.89	**1.4**	0.41 U	0.41 U	0.41 U
113-B-117-00-0.5-241192-096	11/24/92	Enseco-RMA	00-0.5	0.46 U	0.27	0.46 U	0.1	0.12	0.46 U	0.11
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	1.5	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
113-B-118-0.0-0.5-D-231192-096	11/23/92	Enseco-RMA	00-0.5	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
113-B-119-00-0.5-010992-051	09/01/92	Enseco-RMA	00-0.5	11 U	**5.9**	2.3	**2.4**	1.8	11 U	1.6
113-B-120-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.38 U	0.38 U	0.4 U	0.38 U	0.38 U	0.38 U
113-B-120-00-0.5-D-100592-077	05/10/92	Enseco-RMA	00-0.5	0.38 U	0.062	0.38 U	0.4 U	0.38 U	0.38 U	0.38 U
113-B-122-00-0.5-140992-058	09/14/92	Enseco-RMA	00-0.5	0.36 U	0.58	0.2	**0.4**	0.21	0.046	0.13
113-B-122-00-0.5-D-140992-058	09/14/92	Enseco-RMA	00-0.5	0.18 U	0.39	0.14	**0.2**	0.14	0.18 U	0.12
113-B-123-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.08	**6.1**	0.37 U	**3.3**	0.37 U	0.13	0.37 U
113-B-123-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	11 U	**80**	11 U	**49**	**14**	11 U	6.8
113-B-123-00-0.5-D-150992-059	09/15/92	Enseco-RMA	00-0.5	12 U	**17**	**25**	**12**	**3.4**	12 U	2.1
113-B-124-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	**9.0**	3.6	**5.8**	1.6 U	**0.21**	1.6 U
113-B-125-02-2.5-100992-057	09/10/92	Enseco-RMA	02-2.5	62 U	62 U	62 U	62.0 U	62 U	62 U	62 U
113-B-126-00-0.5-150992-058	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.64	0.21	**0.3**	0.22	0.2 U	0.19
113-B-126-00-0.5-150992-058RE	09/15/92	Enseco-RMA	00-0.5	0.2 U	0.75	0.2 U	**0.4**	0.28	0.2 U	0.26
113-B-127-00-0.5-100592-077	05/10/92	Enseco-RMA	00-0.5	14 U	**3.6**	14 U	**2.5**	1.9	14 U	14 U
113-B-128-00-0.5-150992-059	09/15/92	Enseco-RMA	00-0.5	0.36 U	1.4	0.75	**1.1**	0.82	0.19	0.8

Table 113-02-08
Summary of Soil Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Di-n-Octylphthalate (mg/Kg)	Benzo(b) fluoranthene (mg/Kg)	Benzo(k) fluoranthene (mg/Kg)	Benzo(a) pyrene (mg/Kg)	Indeno(1,2,3-cd) pyrene (mg/Kg)	Dibenz(a,h) anthracene (mg/Kg)	Benzo(g,h,i) perylene (mg/Kg)
SRS				27,000	2.0	23	0.2	2.0	0.2	30,000
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.35 U	0.35 U	0.35 U	0.4 U	0.35 U	0.35 U	0.35 U
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	0.34 U	0.34 U	0.34 U	0.3 U	0.34 U	0.34 U	0.34 U
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.37 U	1.3	0.37 U	0.5	0.37 U	0.37 U	0.37 U
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	3.5	11 U	1.7	11 U	11 U	11 U
113-B-129-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	12 U	9.7	12 U	5.1	12 U	12 U	12 U
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	19	6.6	13	7.3	1.5	7.9
113-B-130-00-0.5-D-230992-065	09/23/92	Enseco-RMA	00-0.5	12 U	12	12 U	6.3	3.1	12 U	3.0
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	2.7	0.42 U	1.7	0.46	0.42 U	0.52
113-B-131-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	0.42 U	4.9	0.42 U	2.9	0.78	0.42 U	0.72
113-B-132-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.5 U	5.4	1.9	3.6	1.8	1.5 U	2.0
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	11 U	11	11 U	4.9	2.4	11 U	1.5
113-B-134-00-0.5-100992-057	09/10/92	Enseco-RMA	00-0.5	0.39 U	4.2	1.2	2.3	1.2	0.34	0.89
113-B-134-00-0.5-D-100992-057	09/10/92	Enseco-RMA	00-0.5	1.6 U	5.0	1.6 U	2.7	1.6 U	1.6 U	1.6 U
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1.4 U	4.9	1.5	3.2	2.0	0.31	1.4 U

Notes:
B - Boring
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
D - Field Duplicate
RE - Reanalysis of separate portion of the same sample
mg/Kg - Milligrams per kilogram
-- "Not Analyzed" or "Not Applicable" or "Not Requested"
bgs - Below ground surface
[ ] -Exceeds the Residential Direct Contact Health Based Criteria and Soil Remediation Standards (SRS)

TABLE 113-02-09
Summary of Soil Characterization - Metals of Interest
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft, bgs)	Antimony (mg/Kg)	Arsenic (mg/Kg)	Beryllium (mg/Kg)	Cadmium (mg/Kg)	Nickel (mg/Kg)	Vanadium (mg/Kg)
SRS				450	19	140	78	23,000	1,100
113-B-101-00-0.5-030992-053	09/03/92	Accutest	00-0.5	0.15	4.0	0.85	0.49 U	20.7	78.3
113-B-101-02-04-030992-053	09/03/92	Accutest	02-04	0.19	2.0	0.16 U	0.66 U	523	241
113-B-101-12-13-030992-053	09/03/92	Accutest	12-13	0.17 U	2.3	0.17 U	0.67 U	480	240
113-B-101-14-16-090992-056	09/09/92	Accutest	14-16	0.34	1.1	0.6	0.48 U	12.3	42
113-B-101-14-16-D-090992-056	09/09/92	Accutest	14-16	0.29	0.94	0.6	0.48 U	15	33.9
113-B-102-00-0.5-270892-050	08/27/92	Accutest	00-0.5	0.27	6.3	0.71	0.47 U	16.6	43.5
113-B-102-02-04-270892-050	08/27/92	Accutest	02-04	1.6	4.6	0.17	0.67 U	362	518
113-B-102-12-14-270892-050	08/27/92	Accutest	12-14	0.17 U	3.7	0.68 U	0.68 U	153	161
113-B-102-12-14-D-270892-050	08/27/92	Accutest	12-14	0.2	2.0	0.15 U	0.58 U	444	363
113-B-102-18-20-040992-054	09/04/92	Accutest	18-20	0.13 U	1.1	0.13	0.53 U	5.6	18
113-B-102-18-20-D-040992-054	09/04/92	Accutest	18-20	0.3	1.3	0.25	0.51 U	7.1	19.9
113-B-103-00-0.5-030992-053	09/03/92	Accutest	00-0.5	0.93	5.8	0.62	0.49 U	235	699
113-B-103-02-04-030992-053	09/03/92	Accutest	02-04	0.94	3.6	0.63	0.51 U	229	576
113-B-103-02-04-D-030992-053	09/03/92	Accutest	02-04	1.3	5.7	0.62	0.49 U	288	740
113-B-103-08-10-030992-053	09/03/92	Accutest	08-10	1.6	10.8	0.19 U	0.75 U	338	353
113-B-103-12-14-110992-056	09/11/92	Accutest	12-14	0.12 U	1.9	0.61	0.49 U	12	29.6
113-B-104-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	5.0 U	4.2	0.28 U	1.4 U	449	465
113-B-104-02-04-230992-065	09/23/92	Enseco-RMA	02-04	16.4	1.2 U	0.3 U	1.5 U	575	283
113-B-104-02-04-D-230992-065	09/23/92	Enseco-RMA	02-04	5.6 U	2.4	0.31 U	1.6 U	566	311
113-B-104-10-12-230992-065	09/23/92	Enseco-RMA	10-12	10	6.6 U	0.33 U	1.6 U	601	264
113-B-104-14-16-240992-069	09/24/92	Enseco-RMA	14-16	4.5 U	1.4	0.59	1.2 U	6.9	27.8
113-B-104-14-16-D-240992-069	09/24/92	Enseco-RMA	14-16	4.4 U	1.6	0.56	1.2 U	6.0	27.1
113-B-105-00-0.5-290992-072	02/29/92	Enseco-RMA	00-0.5	44.3	4.3	0.28 U	2.7	466	537
113-B-105-02-04-290992-072	02/29/92	Enseco-RMA	02-04	5.6	3.4	0.44	1.4 U	96.2	196
113-B-105-06-08-290992-072	02/29/92	Enseco-RMA	06-08	92.2	7.8	0.65 U	3.3 U	731	266
113-B-105-14-15-300992-073	09/30/92	Enseco-RMA	14-15	4.5 U	1.1	0.35	1.3 U	10.3	19.4
113-B-105-14-15-D-300992-073	09/30/92	Enseco-RMA	14-15	4.6 U	1.1	0.68	1.3 U	8.7	16.8

TABLE 113-02-09
Summary of Soil Characterization - Metals of Interest
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft, bgs)	Antimony (mg/Kg)	Arsenic (mg/Kg)	Beryllium (mg/Kg)	Cadmium (mg/Kg)	Nickel (mg/Kg)	Vanadium (mg/Kg)
SRS				**450**	**19**	**140**	**78**	**23,000**	**1,100**
113-B-106-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	4.3 U	8.4	0.24 U	1.2 U	307	717
113-B-106-02-04-121092-082	10/12/92	Enseco-RMA	02-04	5.8 U	7.2	0.32 U	1.6 U	464	354
113-B-106-08-09-121092-082	10/12/92	Enseco-RMA	08-09	6.9 U	16.2	0.38 U	1.9 U	219	96.2
113-B-106-11-13-141092-083	10/14/92	Enseco-RMA	11-13	4.3 U	1.0	0.62	1.2 U	13	25
113-B-107-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	10.3	7.3	0.37	1.2 U	97	295
113-B-107-02-04-121092-082	10/12/92	Enseco-RMA	02-04	4.4 U	17.1	1.2	1.2 U	73	75
113-B-107-02-04-D-121092-082	10/12/92	Enseco-RMA	02-04	4.4 U	8.3	3.4	1.2 U	47.4	119
113-B-107-04-06-121092-082	10/12/92	Enseco-RMA	04-06	11.4	**41.2**	0.36	1.3 U	18.3	30.9
113-B-107-12-14-141092-083	10/14/92	Enseco-RMA	12-14	4.4 U	1.0	0.44	1.2 U	6.4	9.6
113-B-107-12-14-D-141092-083	10/14/92	Enseco-RMA	12-14	4.3 U	0.99	0.45	1.2 U	7.0	10.1
113-B-108-00-0.5-160992-060	09/16/92	Accutest	00-0.5	0.94	7.0	0.62	1.5	44.7	25.6
113-B-108-02-04-160992-060	09/16/92	Accutest	02-04	3.6	16.5	0.45	0.6 U	9.4	16
113-B-108-02-04-D-160992-060	09/16/92	Accutest	02-04	1.1	14.8	0.48	0.63 U	11.6	17
113-B-108-04-06-160992-060	09/16/92	Accutest	04-06	1.1	9.2	0.4	0.53 U	13.3	19.1
113-B-108-10-12-170992-061	09/17/92	Accutest	10-12	0.25 U	1.0	0.25	0.49 U	6.9	14.8
113-B-108-10-12-D-170992-061	09/17/92	Accutest	10-12	0.24 U	0.89	0.37	0.49 U	6.3	16.6
113-B-109-01-1.5-160992-060	09/16/92	Accutest	01-1.5	0.6	4.5	0.47	0.59	31.3	36.5
113-B-109-02-04-160992-060	09/16/92	Accutest	02-04	0.42	17.1	1.4	0.69	8.6	9.3
113-B-109-06-08-160992-060	09/16/92	Accutest	06-08	0.37	9.0	0.51	0.51 U	38.6	12.2
113-B-109-11-13-180992-061	09/18/92	Accutest	11-13	0.25 U	2.0	0.62	0.5 U	11.4	29.5
113-B-110-00-0.5-140992-058	09/14/92	Accutest	00-0.5	1.3	6.2	0.35	0.47 U	116	529
113-B-110-04-06-140992-058	09/14/92	Accutest	04-06	3.7	13.7	0.39	0.78 U	718	296
113-B-110-08-10-140992-058	09/14/92	Accutest	08-10	7.7	**34.5**	0.31	0.62 U	383	197
113-B-111-00-0.5-150992-059	09/15/92	Accutest	00-0.5	3.0	13.8	0.62	2.0	18.8	75.4
113-B-111-02-04-150992-059	09/15/92	Accutest	02-04	2.1	**22.9**	1.2	0.52 U	69.1	165
113-B-111-06-08-150992-059	09/15/92	Accutest	06-08	0.65	8.8	0.46	0.62 U	108	66.2
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	4.1 U	2.5	0.23 U	1.1 U	148	405

TABLE 113-02-09
Summary of Soil Characterization - Metals of Interest
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft, bgs)	Antimony (mg/Kg)	Arsenic (mg/Kg)	Beryllium (mg/Kg)	Cadmium (mg/Kg)	Nickel (mg/Kg)	Vanadium (mg/Kg)
SRS				450	19	140	78	23,000	1,100
113-B-112-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	4.1 U	2.1	0.23 U	1.1 U	188	519
113-B-112-04-06-220992-064	09/22/92	Enseco-RMA	04-06	4.4 U	6.6	0.31	6.2	52.2	23.2
113-B-112-08-10-220992-064	09/22/92	Enseco-RMA	08-10	5.5 U	8.3	0.31 U	1.5 U	31	25.4
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	29.5	5.1	0.33 U	1.6 U	622	329
113-B-113-2.0-4.0-231192-096	11/23/92	Enseco-RMA	02-04	27.3	2.3	0.33 U	1.7 U	550	293
113-B-113-14.0-16.0-231192-096	11/23/92	Enseco-RMA	14-16	21.3	2.9	0.33 U	1.6 U	436	276
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	4.3 U	6.5	0.97	0.69 U	28.1	57.2
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	4.3 U	6.1	1.1	0.69 U	38.5	86.1
113-B-114-02-04-100293-114	02/10/93	Enseco-RMA	02-04	88.4	15.3	1.5	0.82 U	620	422
113-B-114-12-14-100293-114	02/10/93	Enseco-RMA	12-14	91.9	15.3	1.0	0.82 U	776	245
113-B-115-00-0.5-250892-050	08/25/92	Accutest	00-0.5	0.17	5.0	0.85	0.73	17.2	48.8
113-B-115-02-04-250892-050	08/25/92	Accutest	02-04	1.9	2.0	0.4	0.53 U	283	867
113-B-115-12-14-250892-050	08/25/92	Accutest	12-14	4.3	4.8	0.68	0.68 U	59.3	**1390**
113-B-116(A)-4-6-240907-1336	9/24/2007	Lancaster	04-06	7.7	9.1	0.67	1.1	64.1	155
113-B-116(A)-12-14-280907-1340	9/28/2007	Lancaster	12-14	2.3 U	1.5	0.26	0.22 U	5.2	12.2
113-B-116-00-0.5-010992-051	09/01/92	Accutest	00-0.5	0.4	3.6	0.84	0.48	58	76
113-B-116-02-04-010992-051	09/01/92	Accutest	02-04	0.13	1.3	0.56	0.44 U	16.4	17.6
113-B-116-02-04-D-010992-051	09/01/92	Accutest	02-04	0.15	1.5	0.67	0.44 U	17.9	21.9
113-B-116-08-10-010992-052	09/01/92	Accutest	08-10	1.3	11.8	1.6	0.52 U	145	339
113-B-116-08-10-D-010992-052	09/01/92	Accutest	08-10	1.6	16.7	1.2	0.71 U	172	370
113-B-117-00-0.5-241192-096	11/24/92	Accutest	00-0.5	4.7 U	3.8	1.1	1.3 U	54	73.8
113-B-117-02-04-241192-096	11/24/92	Enseco-RMA	02-04	19.4	3.9	0.33 U	1.7 U	155	927
113-B-117-12-13-241192-096	11/24/92	Enseco-RMA	12-13	16.2	6.3	0.36 U	1.8 U	527	441
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	28	1.3	0.32 U	1.6 U	591	287
113-B-118D-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	32.2	2.5	0.33 U	1.6 U	648	290
113-B-118-2-4-231192-096	11/23/92	Enseco-RMA	02-04	31.1	0.64 U	0.32 U	1.6 U	600	294
113-B-118-8.0-10.0-231192-096	11/23/92	Enseco-RMA	08-10	32.8	3.1	0.32 U	1.6 U	519	270

TABLE 113-02-09
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Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft, bgs)	Antimony (mg/Kg)	Arsenic (mg/Kg)	Beryllium (mg/Kg)	Cadmium (mg/Kg)	Nickel (mg/Kg)	Vanadium (mg/Kg)
SRS				**450**	**19**	**140**	**78**	**23,000**	**1,100**
113-B-119-00-0.5-010992-051	09/01/92	Accutest	00-0.5	4.3	**23.7**	1.1	1.3	41.8	123
113-B-119-02-04-010992-051	09/01/92	Accutest	02-04	2.2	16	2.3	0.71	172	582
113-B-119-12-14-010992-052	09/01/92	Accutest	12-14	0.14 U	5.2	0.69	0.56 U	71.5	94.7
113-B-120-00-0.5-100592-077	10/05/92	Enseco-RMA	00-0.5	4.1 U	1.6	0.24	1.1 U	4.0	42
113-B-120-02-04-100592-077	10/05/92	Enseco-RMA	02-04	6.4	3.3	0.25 U	1.2 U	183	561
113-B-120-06-08-100592-077	10/05/92	Enseco-RMA	06-08	14.2	6.0	0.39 U	1.9 U	540	522
113-B-121-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	23.4	1.7	0.27 U	1.4 U	625	**2260**
113-B-121-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	28	2.2	0.27 U	2.1	612	**1950**
113-B-121-02-04-290992-072	09/29/92	Enseco-RMA	02-04	106	2.4	0.66 U	5.1	711	443
113-B-121-08-10-290992-072	09/29/92	Enseco-RMA	08-10	61.4	2.9	0.29 U	2.6	545	241
113-B-122-00-0.5-140992-058	09/14/92	Accutest	00-0.5	0.22 U	2.6	0.43	0.43 U	34.8	73.3
113-B-122-02-04-140992-058	09/14/92	Accutest	02-04	1.2	2.5	0.16 U	0.65 U	605	218
113-B-122-02-04-D-140992-058	09/14/92	Accutest	02-04	1.5	2.8	0.16 U	0.63 U	545	198
113-B-122-11-13-140992-058	09/14/92	Accutest	11-13	0.46	2.8	0.18 U	0.7 U	518	200
113-B-123-00-0.5-100992-057	09/10/92	Accutest	00-0.5	1.1	3.4	0.47	0.47 U	86.7	230
113-B-123-00-0.5-150992-059	09/15/92	Accutest	00-0.5	44.9	4.5	0.45	0.45 U	91	273
113-B-123-02-04-150992-059	09/15/92	Accutest	02-04	0.89	10.8	0.66	0.66 U	231	116
113-B-123-02-04-D-150992-059	09/15/92	Accutest	02-04	0.93	**21**	0.6	0.6 U	294	133
113-B-123-08-10-150992-059	09/15/92	Accutest	08-10	1.3	3.0	0.18 U	0.71 U	584	214
113-B-124-00-0.5-100992-057	09/10/92	Accutest	00-0.5	1.2	2.2	0.38	0.51 U	62.9	163
113-B-124-02-04-150992-058	09/15/92	Accutest	02-04	0.28 U	3.5	0.42	0.56 U	146	261
113-B-124-08-10-150992-059	09/15/92	Accutest	08-10	0.44	5.1	1.7	0.67 U	70.5	42.5
113-B-125-02-2.5-100992-057	09/10/92	Accutest	02-2.5	1.2	7.4	0.29	0.59 U	581	412
113-B-125-04-06-100992-057	09/10/92	Accutest	04-06	9.2	**37.3**	0.32	0.63 U	452	256
113-B-125-06-08-100992-057	09/10/92	Accutest	06-08	12.6	**36.1**	0.19 U	0.75 U	409	208
113-B-126-00-0.5-150992-058	09/15/92	Accutest	00-0.5	0.8	3.9	0.25	0.51 U	43.8	159
113-B-126-02-04-150992-059	09/15/92	Accutest	02-04	0.83	8.1	0.57	0.57 U	159	102

TABLE 113-02-09
Summary of Soil Characterization - Metals of Interest
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft, bgs)	Antimony (mg/Kg)	Arsenic (mg/Kg)	Beryllium (mg/Kg)	Cadmium (mg/Kg)	Nickel (mg/Kg)	Vanadium (mg/Kg)
SRS				450	19	140	78	23,000	1,100
113-B-126-06-08-150992-059	09/15/92	Accutest	06-08	0.6	21.1	1.1	0.66 U	106	50.2
113-B-127-00-0.5-100592-077	10/05/92	Enseco-RMA	00-0.5	18.1	9.5	0.26 U	1.3 U	411	541
113-B-127-00-0.5-D-100592-077	10/05/92	Enseco-RMA	00-0.5	27.6	4.3	0.28 U	1.4 U	440	650
113-B-127-02-04-100592-077	10/05/92	Enseco-RMA	02-04	5.5	3.6	0.26 U	1.3 U	296	633
113-B-127-12-14-100592-077	10/05/92	Enseco-RMA	12-14	33.7	1.6	0.32 U	1.6 U	625	266
113-B-128-00-0.5-150992-059	09/15/92	Accutest	00-0.5	0.86	4.2	0.57	0.68	47.4	144
113-B-128-05-5.5-221092-086	10/22/92	Enseco-RMA	05-5.5	4.7 U	2.3	1.0	1.3 U	10	37.3
113-B-128-05-5.5-D-221092-086	10/22/92	Enseco-RMA	05-5.5	4.3 U	5.8	1.0	1.2 U	11.8	40
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	3.8 U	0.42 U	0.7	1.1 U	14.8	38.1
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	3.8 U	0.42 U	0.79	1.1 U	14.8	25.6
113-B-128A-02-04-191192-095	11/19/92	Enseco-RMA	02-04	21.5	44.1	1.6	2.4 U	587	299
113-B-128A-06-08-191192-095	11/19/92	Enseco-RMA	06-08	25.2	41.7	0.95	1.9 U	398	213
113-B-128A-06-08-D-191192-095	11/19/92	Enseco-RMA	06-08	--	--	--	--	--	--
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	4.2 U	8.3	0.88	1.2 U	102	275
113-B-128B-02-04-191192-095	11/19/92	Enseco-RMA	02-04	7.1	2.7	0.8	1.6	32.6	106
113-B-128B-08-10-191192-095	11/19/92	Enseco-RMA	08-10	11.3	3.5	1.0	1.4 U	14.1	156
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	4.3 U	5.0	0.24 U	1.2 U	223	661
113-B-129-04-06-220992-064	09/22/92	Enseco-RMA	04-06	4.6 U	3.8	0.27	1.3 U	66.5	138
113-B-129-06-08-220992-064	09/22/92	Enseco-RMA	06-08	5.6 U	9.4	0.36	1.6 U	21.9	38.5
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	10.6	6.1	0.39	1.2 U	69.5	231
113-B-130-02-04-230992-065	09/23/92	Enseco-RMA	02-04	5.0 U	5.2	0.54	2.4	17.9	18.4
113-B-130-04-06-230992-065	09/23/92	Enseco-RMA	04-06	5.1 U	88.9	0.52	1.4 U	21.9	25.7
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	6.2	1.4	0.5	1.3 U	512	1300
113-B-131-02-04-280992-070	09/28/92	Enseco-RMA	02-04	4.7	14.4	0.99	1.3 U	83.5	249
113-B-131-06-08-280992-070	09/28/92	Enseco-RMA	06-08	5.9	12.9	0.5	1.4 U	35	25.6
113-B-132-02-04-280992-070	09/28/92	Enseco-RMA	02-04	11.9	30.7	0.84	1.5 U	193	109
113-B-132-06-08-280992-070	09/28/92	Enseco-RMA	06-08	4.5 U	6.5	2.0	1.3 U	70.5	108

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Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft, bgs)	Antimony (mg/Kg)	Arsenic (mg/Kg)	Beryllium (mg/Kg)	Cadmium (mg/Kg)	Nickel (mg/Kg)	Vanadium (mg/Kg)
SRS				**450**	**19**	**140**	**78**	**23,000**	**1,100**
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	4.4 U	4.3	0.28	1.8	250	729
113-B-133-04-06-220992-064	09/22/92	Enseco-RMA	04-06	5.9 U	**28.6**	1.5	1.6 U	351	256
113-B-133-08-10-220992-064	09/22/92	Enseco-RMA	08-10	5.7 U	**30.1**	1.7	1.6 U	305	203
113-B-134-00-0.5-100992-057	09/10/92	Accutest	00-0.5	1.1	4.1	0.48	0.48 U	214	563
113-B-134-02-04-100992-057	09/10/92	Accutest	02-04	0.61	3.0	0.32	0.65 U	310	261
113-B-134-08-10-100992-057	09/10/92	Accutest	08-10	0.18	4.2	0.17 U	0.67 U	450	192
113-B-134-08-10-D-100992-057	09/10/92	Accutest	08-10	0.25	2.9	0.17 U	0.68	451	198
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	7.2	4.0	0.58	1.3 U	436	**1,140**
113-B-135-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	7.6	4.5	0.59	1.3 U	463	**1240**
113-B-135-02-04-280992-070	09/28/92	Enseco-RMA	02-04	4.6 U	4.2	0.3	1.3 U	204	177
113-B-135-06-08-280992-070	09/28/92	Enseco-RMA	06-08	11.7	**22.5**	0.46	1.6 U	238	328
113-B-302-2-4-210907-1335	9/21/2007	Lancaster	02-04	20.7	0.78	0.026 U	3.0	548	823
113-B-302-20-22-250907-1337	9/25/2007	Lancaster	20-22	2.1 U	3.5	0.23	0.19 U	16.4	19
113-B-302-20-22-D-250907-1337	9/25/2007	Lancaster	20-22	2.2 U	2.2	0.23	0.2 U	13.1	19.9
113-B-303-12-14-021007-1342	10/2/2007	Lancaster	12-14	2.2 U	3.0	0.28	0.2 U	7.3	20.5
113-B-305-2.0-4.0-180907-1332	9/18/2007	Lancaster	02-04	3.9	3.9	0.22	0.011 U	60	63
113-B-305-18-20-041007-1344	10/4/2007	Lancaster	18-20	2.3 U	10.0	0.32	0.22 U	13.8	17.9
113-B-306-0-2-200907-1334	9/20/2007	Lancaster	00-02	2.0 U	2.6	0.25	0.45	14.5	37.8

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Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft, bgs)	Antimony (mg/Kg)	Arsenic (mg/Kg)	Beryllium (mg/Kg)	Cadmium (mg/Kg)	Nickel (mg/Kg)	Vanadium (mg/Kg)
SRS				450	19	140	78	23,000	1,100
113-B-307-8-10-260907-1338	9/26/2007	Lancaster	08-10	79.8	133	0.057 U	0.65	1,190	475
113-B-308-8-10-270907-1339	9/27/2007	Lancaster	08-10	44.5	78.6	0.085	1.4	565	523
113-B-308-18-20-280907-1340	9/28/2007	Lancaster	18-20	2.2 U	3.0	0.29	0.21 U	7.9	19.9
113-B-309-6-8-190907-1333	9/19/2007	Lancaster	06-08	25.2	18.8 U	0.032 U	1.7	557	245
113-B-309-16-18-011007-1341	10/1/2007	Lancaster	16-18	2.3 U	2.1	0.42	0.22 U	9.1	11.3

Notes:
B - Boring
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
D - Field Duplicate
mg/Kg - Milligrams per kilogram
-- "Not Analyzed" or "Not Applicable" or "Not Requested"
bgs - Below ground surface
B-116(A) - Phase II soil boring B-116(A) was collected in proximity to Phase I soil boring B-116 for delineation, this close relationship between the two soil borings is denoted with "(A)".
☐ -Exceeds the Residential Direct Contact Health Based Criteria and Soil Remediation Standards (SRS)

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Aluminum (mg/Kg)	Barium (mg/Kg)	Calcium (mg/Kg)	Chromium (mg/Kg)	Cobalt (mg/Kg)	Copper (mg/Kg)	Cyanide (mg/Kg)
SRS				--	**59,000**	--	--	**590**	**45,000**	**23,000**
113-B-101-00-0.5-030992-053	09/03/92	Accutest	00-0.5	18,700	88	2,840	145	13.2	30.6	0.61 U
113-B-101-02-04-030992-053	09/03/92	Accutest	02-04	28,700	52.5	307,000	36,100	94.9	6.4	0.82 U
113-B-101-12-13-030992-053	09/03/92	Accutest	12-13	30,000	45.2	295,000	32,500	86.8	7.7	0.83 U
113-B-101-14-16-090992-056	09/09/92	Accutest	14-16	11,200	67.4	4,300	88.6	8.5	9.6	0.6 U
113-B-101-14-16-D-090992-056	09/09/92	Accutest	14-16	13,500	71.5	5,260	115	10	9.4	0.6 U
113-B-102-00-0.5-270892-050	08/27/92	Accutest	00-0.5	15,800	65.3	1,880	78.4	12.1	24.7	3.91
113-B-102-02-04-270892-050	08/27/92	Accutest	02-04	90,800	52.2	215,000	20,800	85	40.2	0.83 U
113-B-102-12-14-270892-050	08/27/92	Accutest	12-14	25,600	56.1	83,900 *	5,390	37.5	24.2	0.85 U
113-B-102-12-14-D-270892-050	08/27/92	Accutest	12-14	28,400	40.4	1,530,000 *	16,200	102	43.4	0.88 U
113-B-102-18-20-040992-054	09/04/92	Accutest	18-20	3,040	11.7	1,060	30.1	5.2	4.1	0.67 U
113-B-102-18-20-D-040992-054	09/04/92	Accutest	18-20	4,100	15.7	1,170	47.7	7.2	5.8	0.63 U
113-B-103-00-0.5-030992-053	09/03/92	Accutest	00-0.5	15,200	62.3	45,200	3,830	75.1	61	0.62 U
113-B-103-02-04-030992-053	09/03/92	Accutest	02-04	20,000	65.2	50,000	5,390	70.6	63.7	0.63 U
113-B-103-02-04-D-030992-053	09/03/92	Accutest	02-04	22,700	63.1	50,400	5,200	86.7	56.5	0.62 U
113-B-103-08-10-030992-053	09/03/92	Accutest	08-10	24,700	56.4	275,000	18,700	96.6	39.4	0.94 U
113-B-103-12-14-110992-056	09/11/92	Accutest	12-14	13,300	43.3	1,230	33.9	7.0	8.0	0.61 U
113-B-104-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	24,200	53.4	176,000	17,300	85.3	48.8	0.72 U
113-B-104-02-04-230992-065	09/23/92	Enseco-RMA	02-04	33,200	39.7	293,000	29,200	86.6	13.5	0.81 U
113-B-104-02-04-D-230992-065	09/23/92	Enseco-RMA	02-04	33,100	44.1	280,000	27,300	87.7	14.8	0.78 U
113-B-104-10-12-230992-065	09/23/92	Enseco-RMA	10-12	30,500	31.1	311,000	30,000	136	9.1	0.83 U
113-B-104-14-16-240992-069	09/24/92	Enseco-RMA	14-16	6,340	21	1,100	65.1	2.0	6.7	0.62 U
113-B-104-14-16-D-240992-069	09/24/92	Enseco-RMA	14-16	6,440	19.4	1,120	62.5	2.1	6.3	0.61 U
113-B-105-00-0.5-290992-072	02/29/92	Enseco-RMA	00-0.5	24,200	63.1	174,000	17,400	72.2	44.7	0.72 U
113-B-105-02-04-290992-072	02/29/92	Enseco-RMA	02-04	9,410	108	55,400	2,880	18.7	32.9	0.69 U
113-B-105-06-08-290992-072	02/29/92	Enseco-RMA	06-08	34,100	33.7	327,000	37,200	164	14.6	0.86 U
113-B-105-14-15-300992-073	09/30/92	Enseco-RMA	14-15	4,680	21.2	1,170	54.1	4.9	8.1	0.62 U
113-B-105-14-15-D-300992-073	09/30/92	Enseco-RMA	14-15	3,950	15	1,180	53	4.2	7.0	0.61 U
113-B-106-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	11,900	314	39,900	2,500	65.5	76.2	0.62 U

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Aluminum (mg/Kg)	Barium (mg/Kg)	Calcium (mg/Kg)	Chromium (mg/Kg)	Cobalt (mg/Kg)	Copper (mg/Kg)	Cyanide (mg/Kg)
SRS				--	**59,000**	--	--	**590**	**45,000**	**23,000**
113-B-106-02-04-121092-082	10/12/92	Enseco-RMA	02-04	20,600	37.3	215,000	8,960	87.1	24.7	0.81 U
113-B-106-08-09-121092-082	10/12/92	Enseco-RMA	08-09	18,600	29.7	96,600	5,840	41.8	24.8	1.1
113-B-106-11-13-141092-083	10/14/92	Enseco-RMA	11-13	4,650	11.8	1,180	20.4	6.0	7.0	0.59 U
113-B-107-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	10,100	79.5	26,700	6,470	24.3	55.2	0.58
113-B-107-02-04-121092-082	10/12/92	Enseco-RMA	02-04	11,100	211	63,100	1,720	15.7	18.9	3.5
113-B-107-02-04-D-121092-082	10/12/92	Enseco-RMA	02-04	21,600	477	80,700	1,390	10.6	16.8	4.5
113-B-107-04-06-121092-082	10/12/92	Enseco-RMA	04-06	2,160	71.7	7,320	590	6.2	101	45.3
113-B-107-12-14-141092-083	10/14/92	Enseco-RMA	12-14	2,660	9.1	1,020	7.5	2.2	6.6	0.6 U
113-B-107-12-14-D-141092-083	10/14/92	Enseco-RMA	12-14	2,800	9.9	733	8.9	2.8	6.5	0.62 U
113-B-108-00-0.5-160992-060	09/16/92	Accutest	00-0.5	3,090	230	9,170	631	10.6	294	0.62 U
113-B-108-02-04-160992-060	09/16/92	Accutest	02-04	2,540	140	20,700	3,790	6.9	355	17.7
113-B-108-02-04-D-160992-060	09/16/92	Accutest	02-04	3,370	136	18,900	2,050	6.8	35.9	17.5
113-B-108-04-06-160992-060	09/16/92	Accutest	04-06	2,230	110	14,500	1,970	7.9	28.5	18.4
113-B-108-10-12-170992-061	09/17/92	Accutest	10-12	5,260	19.6	1,740	27.7	4.3	4.9	0.62 U
113-B-108-10-12-D-170992-061	09/17/92	Accutest	10-12	5,410	21.3	1,480	23.9	4.5	5.2	0.61 U
113-B-109-01-1.5-160992-060	09/16/92	Accutest	01-1.5	3,620	55.2	21,300	954	9.5	18.7	0.59 U
113-B-109-02-04-160992-060	09/16/92	Accutest	02-04	9,260	192	61,000	365	5.4	9.4	0.69 U
113-B-109-06-08-160992-060	09/16/92	Accutest	06-08	2,720	62.8	12,000	613	15.3	43.3	0.64 U
113-B-109-11-13-180992-061	09/18/92	Accutest	11-13	7,150	44	3,980	70.4	9.8	9.5	0.62 U
113-B-110-00-0.5-140992-058	09/14/92	Accutest	00-0.5	7,150	102	29,600	3,820	29.5	41.5	0.59 U
113-B-110-04-06-140992-058	09/14/92	Accutest	04-06	42,400	62.7	257,000	45,300	227	20.4	0.98 U
113-B-110-08-10-140992-058	09/14/92	Accutest	08-10	29,600	60.9	253,000	31,900	109	19.5	13.8
113-B-111-00-0.5-150992-059	09/15/92	Accutest	00-0.5	13,100	516	11,000	888	16.7	168	0.62 U
113-B-111-02-04-150992-059	09/15/92	Accutest	02-04	11,200	223	24,300	10,100	20.9	58.6	0.65 U
113-B-111-06-08-150992-059	09/15/92	Accutest	06-08	9,460	61.2	61,100	7,860	31.5	18.3	0.77 U
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	8,920	31.9	37,900	2,120	35.1	39.9	0.57 U
113-B-112-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	10,200	33.3	42,700	2,400	44.6	28	--
113-B-112-04-06-220992-064	09/22/92	Enseco-RMA	04-06	4,660	54.1	7,930	4,220	9.8	154	1.7

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Aluminum (mg/Kg)	Barium (mg/Kg)	Calcium (mg/Kg)	Chromium (mg/Kg)	Cobalt (mg/Kg)	Copper (mg/Kg)	Cyanide (mg/Kg)
SRS				--	**59,000**	--	--	**590**	**45,000**	**23,000**
113-B-112-08-10-220992-064	09/22/92	Enseco-RMA	08-10	3,660	191	6,930	2,400	7.5	93.8	4.8
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	36,100	42.8	179,000	27,200	97.5	15.5	0.91 U
113-B-113-2.0-4.0-231192-096	11/23/92	Enseco-RMA	02-04	32,600	21.1	277,000	26,400	99.2	7.1	0.86 U
113-B-113-14.0-16.0-231192-096	11/23/92	Enseco-RMA	14-16	26,400	42.1	300,000	26,300	98.4	7.7	0.82 U
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	13,900	65.5	2,240	325	11.3	40.2	0.33 U
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	16,700	74.5	2,320	417	14.8	40.2	0.34
113-B-114-02-04-100293-114	02/10/93	Enseco-RMA	02-04	74,700	71.4	260,000	20,000	111	71.7	0.39 U
113-B-114-12-14-100293-114	02/10/93	Enseco-RMA	12-14	29,400	98.8	296,000	20,900	135	54.1	0.4 U
113-B-115-00-0.5-250892-050	08/25/92	Accutest	00-0.5	15,500	80.5	2,720	67.8	11.5	25.6	0.61 U
113-B-115-02-04-250892-050	08/25/92	Accutest	02-04	30,000	164	840,000	8,970	80.8	20.1	0.67 U
113-B-115-12-14-250892-050	08/25/92	Accutest	12-14	131,000	36.4	13,100	44,300	23.6	31.3	1.3 U
113-B-116-00-0.5-010992-051	09/01/92	Accutest	00-0.5	10,900	108	5,530	1,430	23.3	40.6	0.6 U
113-B-116-02-04-010992-051	09/01/92	Accutest	02-04	6,680	84.4	8,790	36.6	5.9	30.9	0.56 U
113-B-116-02-04-D-010992-051	09/01/92	Accutest	02-04	7,900	132	10,500	40	6.2	32.3	0.56 U
113-B-116-08-10-010992-052	09/01/92	Accutest	08-10	25,800	138	89,700	15,300	39.1	62.2	1.3
113-B-116-08-10-D-010992-052	09/01/92	Accutest	08-10	28,200	84.3	54,600	18,200	46.8	73.2	0.89 U
113-B-117-00-0.5-241192-096	11/24/92	Accutest	00-0.5	16,200	73	2,780	403	12.3	58.2	0.63 U
113-B-117-02-04-241192-096	11/24/92	Enseco-RMA	02-04	166,000	11	18,300	8,450	36.9	30	0.78 U
113-B-117-12-13-241192-096	11/24/92	Enseco-RMA	12-13	26,200	64.3	302,000	23,500	109	23.7	0.91 U
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	32,800	31.8	289,000	26,700	89.6	8.1	0.94 U
113-B-118D-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	36,200	29.3	272,000	30,200	99.2	7.7	0.83 U
113-B-118-2-4-231192-096	11/23/92	Enseco-RMA	02-04	34,300	15.3	295,000	36,900	93	7.1	0.83 U
113-B-118-8.0-10.0-231192-096	11/23/92	Enseco-RMA	08-10	31,700	37	267,000	21,500	81.3	26.6	0.83 U
113-B-119-00-0.5-010992-051	09/01/92	Accutest	00-0.5	13,700	247	10,200	78.8	15.8	131	0.6 U
113-B-119-02-04-010992-051	09/01/92	Accutest	02-04	40,200	106	33,400	40,200	47.9	159	0.89 U
113-B-119-12-14-010992-052	09/01/92	Accutest	12-14	14,700	69.7	41,800	6,560	22.6	17.2	0.69 U
113-B-120-00-0.5-100592-077	10/05/92	Enseco-RMA	00-0.5	1,770	23.6	1,140	90.9	2.4	14.6	0.63 U
113-B-120-02-04-100592-077	10/05/92	Enseco-RMA	02-04	11,800	31.3	38,600	3,870	46.6	19	1.6

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Aluminum (mg/Kg)	Barium (mg/Kg)	Calcium (mg/Kg)	Chromium (mg/Kg)	Cobalt (mg/Kg)	Copper (mg/Kg)	Cyanide (mg/Kg)
SRS				--	**59,000**	--	--	**590**	**45,000**	**23,000**
113-B-120-06-08-100592-077	10/05/92	Enseco-RMA	06-08	29,500	37.1	152,000	13,500	118	26.5	1.8
113-B-121-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	31,000	25.1	90,500	8,540	152	16.7	0.7 U
113-B-121-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	30,100	31.5	105,000	10,100	148	23.1	--
113-B-121-02-04-290992-072	09/29/92	Enseco-RMA	02-04	33,300	8.9	304,000	36,600	150	9.4	0.89 U
113-B-121-08-10-290992-072	09/29/92	Enseco-RMA	08-10	27,800	12	259,000	24,900	117	8.0	0.85 U
113-B-122-00-0.5-140992-058	09/14/92	Accutest	00-0.5	11,500	39.8	18,900	483	22.7	192	0.54 U
113-B-122-02-04-140992-058	09/14/92	Accutest	02-04	31,300	63.5	374,000	33,100	195	12.3	0.81 U
113-B-122-02-04-D-140992-058	09/14/92	Accutest	02-04	27,700	63.3	334,000	35,800	173	10.9	0.78 U
113-B-122-11-13-140992-058	09/14/92	Accutest	11-13	23,700	28.1	302,000	25,400	168	11.4	0.88 U
113-B-123-00-0.5-100992-057	09/10/92	Accutest	00-0.5	12,000	60.1	15,700	11,900	32	398	0.58 U
113-B-123-00-0.5-150992-059	09/15/92	Accutest	00-0.5	11,000	109	25,200	3,970	27.2	68.3	0.56 U
113-B-123-02-04-150992-059	09/15/92	Accutest	02-04	23,100	67	140,000	9,950	73.8	25.6	0.82 U
113-B-123-02-04-D-150992-059	09/15/92	Accutest	02-04	27,600	71.9	140,000	11,300	93.4	24.3	0.75 U
113-B-123-08-10-150992-059	09/15/92	Accutest	08-10	39,800	22.9	318,000	29,800	164	5.4	0.89 U
113-B-124-00-0.5-100992-057	09/10/92	Accutest	00-0.5	11,600	114	21,300	2,710	19.9	102	0.64 U
113-B-124-02-04-150992-058	09/15/92	Accutest	02-04	17,300	39.6	95,900	9,230	54.2	21	0.7 U
113-B-124-08-10-150992-059	09/15/92	Accutest	08-10	9,400	197	31,000	1,800	19.8	26.8	0.83 U
113-B-125-02-2.5-100992-057	09/10/92	Accutest	02-2.5	41,500	19.1	231,000	32,200	191	20.7	0.74 U
113-B-125-04-06-100992-057	09/10/92	Accutest	04-06	32,100	49.4	254,000	24,800	121	22.2	6.8
113-B-125-06-08-100992-057	09/10/92	Accutest	06-08	38,300	30.4	275,000	23,000	101	15.5	1,290
113-B-126-00-0.5-150992-058	09/15/92	Accutest	00-0.5	6,010	57.7	52,800	1,510	10.6	16.3	0.63 U
113-B-126-02-04-150992-059	09/15/92	Accutest	02-04	26,100	51.4	95,400	54,000	51.1	30.4	0.71 U
113-B-126-06-08-150992-059	09/15/92	Accutest	06-08	14,100	180	81,500	6,150	35.2	21.1	0.82 U
113-B-127-00-0.5-100592-077	10/05/92	Enseco-RMA	00-0.5	22,600	124	143,000	13,800	79.1	51.1	1.3
113-B-127-00-0.5-D-100592-077	10/05/92	Enseco-RMA	00-0.5	24,100	77.9	144,000	16,800	85.1	48.1	--
113-B-127-02-04-100592-077	10/05/92	Enseco-RMA	02-04	14,100	111	64,600	3,810	74.7	55.5	1.3
113-B-127-12-14-100592-077	10/05/92	Enseco-RMA	12-14	30,500	49.7	300,000	28,400	148	7.2	0.86 U
113-B-128-00-0.5-150992-059	09/15/92	Accutest	00-0.5	9,940	74.2	15,800	1,480	16.6	83.1	0.57 U

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Aluminum (mg/Kg)	Barium (mg/Kg)	Calcium (mg/Kg)	Chromium (mg/Kg)	Cobalt (mg/Kg)	Copper (mg/Kg)	Cyanide (mg/Kg)
SRS				--	**59,000**	--	--	**590**	**45,000**	**23,000**
113-B-128-05-5.5-221092-086	10/22/92	Enseco-RMA	05-5.5	13,000	73.6	43,800	2,040	10.3	40.3	--
113-B-128-05-5.5-D-221092-086	10/22/92	Enseco-RMA	05-5.5	13,500	62.3	53,700	1,680	7.6	42.2	--
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	6,780	56.1	2,640	33.4	7.7	45.3	0.53 U
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	7,110	36.5	4,250	35.8	7.7	31.1	--
113-B-128A-02-04-191192-095	11/19/92	Enseco-RMA	02-04	37,300	51.9	197,000	14,700	125	17	1.2 U
113-B-128A-06-08-191192-095	11/19/92	Enseco-RMA	06-08	27,800	43.5	225,000	20,600	86.2	18.8	1.2
113-B-128A-06-08-D-191192-095	11/19/92	Enseco-RMA	06-08	--	--	--	--	--	--	--
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	11,500	119	22,800	1,030	28.2	75.7	0.6 U
113-B-128B-02-04-191192-095	11/19/92	Enseco-RMA	02-04	7,190	48.6	39,700	1,520	8.8	19.5	0.6 U
113-B-128B-08-10-191192-095	11/19/92	Enseco-RMA	08-10	4,950	54	18,100	20,200	3.3	20.5	0.96 U
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	14,000	58.5	51,000	4,160	57.7	51.7	0.59 U
113-B-129-04-06-220992-064	09/22/92	Enseco-RMA	04-06	6,550	52.2	36,000	1,080	17.1	31.9	--
113-B-129-06-08-220992-064	09/22/92	Enseco-RMA	06-08	3,210	48.9	5,050	2,600	7.5	38.7	1.1
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	9,280	80.4	24,100	7,630	13.6	63.1	1.1
113-B-130-02-04-230992-065	09/23/92	Enseco-RMA	02-04	4,280	90.6	41,700	821	3.8	13.6	0.68 U
113-B-130-04-06-230992-065	09/23/92	Enseco-RMA	04-06	4,180	115	28,700	2,750	6.5	21.8	8.3
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	21,100	38.2	88,800	7,430	128	26.1	0.64 U
113-B-131-02-04-280992-070	09/28/92	Enseco-RMA	02-04	7,010	88.1	11,500	3,700	20.1	42.2	0.97
113-B-131-06-08-280992-070	09/28/92	Enseco-RMA	06-08	1,460	38.8	8,950	4,260	8.6	10.3	0.68 U
113-B-132-02-04-280992-070	09/28/92	Enseco-RMA	02-04	11,200	134	63,300	2,270	37.1	69.7	1.2
113-B-132-06-08-280992-070	09/28/92	Enseco-RMA	06-08	13,500	246	68,200	3,530	16.3	18.6	2.8
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	17,900	92.3	70,800	4,690	62	49.7	0.6 U
113-B-133-04-06-220992-064	09/22/92	Enseco-RMA	04-06	28,200	83.3	214,000	11,600	69.7	21.1	0.82 U
113-B-133-08-10-220992-064	09/22/92	Enseco-RMA	08-10	26,300	75	190,000	22,200	67.8	24.6	3.5
113-B-134-00-0.5-100992-057	09/10/92	Accutest	00-0.5	20,400	62	43,100	4,310	66	53.6	0.6 U
113-B-134-02-04-100992-057	09/10/92	Accutest	02-04	19,000	42.1	152,000	11,500	98.7	16	0.81 U
113-B-134-08-10-100992-057	09/10/92	Accutest	08-10	24,800	43.5	283,000	19,200	138	9.8	0.83 U
113-B-134-08-10-D-100992-057	09/10/92	Accutest	08-10	28,800	54.7	325,000	22,000	138	10.5	0.85 U

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Aluminum (mg/Kg)	Barium (mg/Kg)	Calcium (mg/Kg)	Chromium (mg/Kg)	Cobalt (mg/Kg)	Copper (mg/Kg)	Cyanide (mg/Kg)
SRS				--	**59,000**	--	--	**590**	**45,000**	**23,000**
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	21,100	60.4	85,600	8,370	106	92.8	0.64 U
113-B-135-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	20,700	66.7	89,800	7,700	111	60.2	--
113-B-135-02-04-280992-070	09/28/92	Enseco-RMA	02-04	10,800	38.9	72,000	4,230	36.2	12.2	0.69 U
113-B-135-06-08-280992-070	09/28/92	Enseco-RMA	06-08	15,100	115	101,000	12,700	54.2	49.1	1.3

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Iron (mg/Kg)	Lead (mg/Kg)	Magnesium (mg/Kg)	Manganese (mg/Kg)	Mercury (mg/Kg)	Potassium (mg/Kg)	Selenium (mg/Kg)
SRS				--	**800**	--	**5,900**	**65**	--	**5,700**
113-B-101-00-0.5-030992-053	09/03/92	Accutest	00-0.5	27,700	61.9	2,830	302	0.1	932	0.22
113-B-101-02-04-030992-053	09/03/92	Accutest	02-04	48,900	4.6	51,800	497	0.02 U	208	0.66 U
113-B-101-12-13-030992-053	09/03/92	Accutest	12-13	46,700	11.6	48,300	460	0.05	225	0.33 U
113-B-101-14-16-090992-056	09/09/92	Accutest	14-16	18,100	5.8	2,510	112	0.01 U	1,680	0.12
113-B-101-14-16-D-090992-056	09/09/92	Accutest	14-16	17,900	6.2	2,940	114	0.01 U	1,870	0.12 U
113-B-102-00-0.5-270892-050	08/27/92	Accutest	00-0.5	24,100	41	2,880	566	0.06	454	0.63
113-B-102-02-04-270892-050	08/27/92	Accutest	02-04	45,700	63.8	24,500	712	0.03	167 U	0.83 U
113-B-102-12-14-270892-050	08/27/92	Accutest	12-14	30,700	34.7	10,700	637	0.02 U	471	0.85 U
113-B-102-12-14-D-270892-050	08/27/92	Accutest	12-14	56,700	6	31,600	817	0.02 U	129	0.8 U
113-B-102-18-20-040992-054	09/04/92	Accutest	18-20	11,700	3	1,320	78	0.01 U	339	0.13 U
113-B-102-18-20-D-040992-054	09/04/92	Accutest	18-20	12,400	2.9	1,630	89.7	0.01 U	624	0.13 U
113-B-103-00-0.5-030992-053	09/03/92	Accutest	00-0.5	56,500	162	15,400	490	0.33	558	0.16
113-B-103-02-04-030992-053	09/03/92	Accutest	02-04	48,200	109	23,300	449	0.34	647	0.13 U
113-B-103-02-04-D-030992-053	09/03/92	Accutest	02-04	59,600	116	29,600	510	0.33	684	0.2
113-B-103-08-10-030992-053	09/03/92	Accutest	08-10	34,700	67.7	22,800	657	0.08	681	0.48
113-B-103-12-14-110992-056	09/11/92	Accutest	12-14	15,900	5.7	2,240	56.1	0.01 U	1,540	0.23
113-B-104-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	45,000	43.5	42,600	487	0.14 U	271	0.55 U
113-B-104-02-04-230992-065	09/23/92	Enseco-RMA	02-04	47,300	5.4	53,900	514	0.15 U	66.6	0.6 U
113-B-104-02-04-D-230992-065	09/23/92	Enseco-RMA	02-04	48,600	12.6	52,900	523	0.16 U	82.2	6.2 U
113-B-104-10-12-230992-065	09/23/92	Enseco-RMA	10-12	50,100	7.4	37,900	959	0.16 U	88.9	6.6 U
113-B-104-14-16-240992-069	09/24/92	Enseco-RMA	14-16	10,100	5.2	1,400	48.7	0.12 U	891	0.5 U
113-B-104-14-16-D-240992-069	09/24/92	Enseco-RMA	14-16	9,560	3.8	1,310	48.1	0.12 U	780	0.49 U
113-B-105-00-0.5-290992-072	02/29/92	Enseco-RMA	00-0.5	47,500	513	41,100	456	1.8	275	5.6 U
113-B-105-02-04-290992-072	02/29/92	Enseco-RMA	02-04	17,700	267	7,010	154	0.84	685	0.57 U
113-B-105-06-08-290992-072	02/29/92	Enseco-RMA	06-08	57,600	5.2	42,800	1,120	0.16 U	80.6	6.5 U
113-B-105-14-15-300992-073	09/30/92	Enseco-RMA	14-15	9,320	2.7	1,850	71.7	0.13 U	604	0.5 U
113-B-105-14-15-D-300992-073	09/30/92	Enseco-RMA	14-15	8,130	2.8	1,640	64.6	0.13 U	520	0.51 U
113-B-106-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	34,300	355	27,700	372	1.0	495	4.8 U

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Iron (mg/Kg)	Lead (mg/Kg)	Magnesium (mg/Kg)	Manganese (mg/Kg)	Mercury (mg/Kg)	Potassium (mg/Kg)	Selenium (mg/Kg)
SRS				--	**800**	--	**5,900**	**65**	--	**5,700**
113-B-106-02-04-121092-082	10/12/92	Enseco-RMA	02-04	46,100	36.5	39,300	584	0.16 U	307	0.64 U
113-B-106-08-09-121092-082	10/12/92	Enseco-RMA	08-09	29,600	48.2	21,400	338	0.2	2,230	0.76 U
113-B-106-11-13-141092-083	10/14/92	Enseco-RMA	11-13	8,950	3.3	1,560	80.6	0.12 U	536	0.48 U
113-B-107-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	25,600	102	9,630	233	2.6	514	0.49 U
113-B-107-02-04-121092-082	10/12/92	Enseco-RMA	02-04	15,700	26.4	11,300	2,040	0.19	646	0.49 U
113-B-107-02-04-D-121092-082	10/12/92	Enseco-RMA	02-04	14,500	54.4	18,600	**6,580**	0.2	1,280	0.49 U
113-B-107-04-06-121092-082	10/12/92	Enseco-RMA	04-06	25,200	75.9	1,040	289	0.16	378	5.0 U
113-B-107-12-14-141092-083	10/14/92	Enseco-RMA	12-14	6,930	3.4	1,290	41.5	0.12 U	400	0.49 U
113-B-107-12-14-D-141092-083	10/14/92	Enseco-RMA	12-14	7,230	2.5	1,320	45.1	0.12 U	424	0.48 U
113-B-108-00-0.5-160992-060	09/16/92	Accutest	00-0.5	12,800	39.2	2,540	51.9	1.1	346	0.65
113-B-108-02-04-160992-060	09/16/92	Accutest	02-04	21,300	104	660	50.4	0.1	399	0.76
113-B-108-02-04-D-160992-060	09/16/92	Accutest	02-04	15,300	45.1	1,400	32.2	0.14	565	0.67
113-B-108-04-06-160992-060	09/16/92	Accutest	04-06	13,100	25.4	784	35.3	0.04	369	0.89
113-B-108-10-12-170992-061	09/17/92	Accutest	10-12	9,000	2.9	1,430	46	0.01 U	696	0.12 U
113-B-108-10-12-D-170992-061	09/17/92	Accutest	10-12	10,300	2.4	1,460	51.6	0.01 U	668	0.14
113-B-109-01-1.5-160992-060	09/16/92	Accutest	01-1.5	10,500	23.8	5,990	75.9	0.38	395	0.61
113-B-109-02-04-160992-060	09/16/92	Accutest	02-04	11,900	140	17,900	692	0.04	874	0.97
113-B-109-06-08-160992-060	09/16/92	Accutest	06-08	44,900	53	1,290	76.4	0.56	503	0.98
113-B-109-11-13-180992-061	09/18/92	Accutest	11-13	15,400	6.3	2,280	144	0.02	691	0.12 U
113-B-110-00-0.5-140992-058	09/14/92	Accutest	00-0.5	31,900	194	7,940	247	4.4	520	0.51
113-B-110-04-06-140992-058	09/14/92	Accutest	04-06	68,800	19	43,700	1,590	0.02 U	225	2 U
113-B-110-08-10-140992-058	09/14/92	Accutest	08-10	43,600	22.2	33,200	795	0.06	203	0.16 U
113-B-111-00-0.5-150992-059	09/15/92	Accutest	00-0.5	156,000	**1,250**	3,060	663	1.3	1,750	2.2
113-B-111-02-04-150992-059	09/15/92	Accutest	02-04	47,900	685	4,250	339	0.58	1,240	1.4
113-B-111-06-08-150992-059	09/15/92	Accutest	06-08	25,100	83.3	6,910	335	0.05	477	1.1
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	28,600	68.5	12,400	282	0.18	233	0.45 U
113-B-112-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	32,100	405	15,900	321	0.22	227	4.6 U
113-B-112-04-06-220992-064	09/22/92	Enseco-RMA	04-06	26,500	64.8	2,420	234	0.24	715	0.49 U

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Iron (mg/Kg)	Lead (mg/Kg)	Magnesium (mg/Kg)	Manganese (mg/Kg)	Mercury (mg/Kg)	Potassium (mg/Kg)	Selenium (mg/Kg)
SRS				--	**800**	--	**5,900**	**65**	--	**5,700**
113-B-112-08-10-220992-064	09/22/92	Enseco-RMA	08-10	29,100	336	1,730	227	0.39	730	0.61 U
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	53,400	21.4	64,800	598	0.16 U	15.8 U	6.6 U
113-B-113-2.0-4.0-231192-096	11/23/92	Enseco-RMA	02-04	52,100	4.9	57,700	598	0.17 U	16 U	6.7 U
113-B-113-14.0-16.0-231192-096	11/23/92	Enseco-RMA	14-16	50,400	5.1	49,500	603	0.16 U	15.8 U	6.6 U
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	26,900	77.3	3,100	742	0.17	753	0.86
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	27,000	70.1	3,370	825	0.17	851	0.65
113-B-114-02-04-100293-114	02/10/93	Enseco-RMA	02-04	43,000	40.2	29,700	1,050	0.04 U	128	2
113-B-114-12-14-100293-114	02/10/93	Enseco-RMA	12-14	48,300	12.1	34,800	1,290	0.04 U	65.7 U	2.1
113-B-115-00-0.5-250892-050	08/25/92	Accutest	00-0.5	22,400	53.2	2,570	626	0.1	766	0.55
113-B-115-02-04-250892-050	08/25/92	Accutest	02-04	62,700	169	24,300	483	0.1	553	0.67 U
113-B-115-12-14-250892-050	08/25/92	Accutest	12-14	21,000	344	2,990	138	1.6	872	0.8 U
113-B-116-00-0.5-010992-051	09/01/92	Accutest	00-0.5	17,500	115	3,110	431	0.2	896	0.24 U
113-B-116-02-04-010992-051	09/01/92	Accutest	02-04	11,400	113	2,490	394	0.24	1,260	0.47
113-B-116-02-04-D-010992-051	09/01/92	Accutest	02-04	12,600	187	3,190	428	0.2	1,530	0.41
113-B-116-08-10-010992-052	09/01/92	Accutest	08-10	40,500	86	19,700	657	0.44	1,230	0.26 U
113-B-116-08-10-D-010992-052	09/01/92	Accutest	08-10	49,100	127	16,100	445	0.43	966	0.59
113-B-117-00-0.5-241192-096	11/24/92	Accutest	00-0.5	23,900	38.7	3,430	527	0.26	522	0.52 U
113-B-117-02-04-241192-096	11/24/92	Enseco-RMA	02-04	37,000	43.6	16,400	213	0.17 U	205	6.7 U
113-B-117-12-13-241192-096	11/24/92	Enseco-RMA	12-13	58,500	19.3	40,000	909	0.18 U	181	7.2 U
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	48,700	5.7	57,700	536	0.16 U	15.6 U	6.5 U
113-B-118D-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	53,200	5.4	64,000	590	0.16 U	15.7 U	0.66 U
113-B-118-2-4-231192-096	11/23/92	Enseco-RMA	02-04	50,000	6.1	58,900	552	0.16 U	15.5 U	6.4 U
113-B-118-8.0-10.0-231192-096	11/23/92	Enseco-RMA	08-10	45,900	202	50,700	498	0.16 U	290	6.5 U
113-B-119-00-0.5-010992-051	09/01/92	Accutest	00-0.5	40,100	**886**	2,990	335	0.59	1,250	1.6
113-B-119-02-04-010992-051	09/01/92	Accutest	02-04	43,600	181	13,100	450	1.1	707	0.71 U
113-B-119-12-14-010992-052	09/01/92	Accutest	12-14	21,900	21.5	8,530	185	0.29	856	0.39
113-B-120-00-0.5-100592-077	10/05/92	Enseco-RMA	00-0.5	4,660	14.3	168	8	0.11 U	736	0.46 U
113-B-120-02-04-100592-077	10/05/92	Enseco-RMA	02-04	33,400	41.5	15,000	319	0.24	473	5.0 U

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Iron (mg/Kg)	Lead (mg/Kg)	Magnesium (mg/Kg)	Manganese (mg/Kg)	Mercury (mg/Kg)	Potassium (mg/Kg)	Selenium (mg/Kg)
SRS				--	**800**	--	**5,900**	**65**	--	**5,700**
113-B-120-06-08-100592-077	10/05/92	Enseco-RMA	06-08	53,400	51.2	93,500	1,130	0.58	557	7.7 U
113-B-121-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	94,300	51.5	56,200	833	0.14 U	43.6	5.4 U
113-B-121-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	90,600	65.3	51,100	829	0.13 U	88.6	5.4 U
113-B-121-02-04-290992-072	09/29/92	Enseco-RMA	02-04	58,800	6.6	48,900	977	0.17 U	78.1	6.6 U
113-B-121-08-10-290992-072	09/29/92	Enseco-RMA	08-10	46,800	4.5	39,500	818	0.15 U	17.7	5.9 U
113-B-122-00-0.5-140992-058	09/14/92	Accutest	00-0.5	41,400	71.8	9,390	368	0.05	1,550	0.11 U
113-B-122-02-04-140992-058	09/14/92	Accutest	02-04	75,000	9.1	35,800	1,650	0.02 U	242	1.6 U
113-B-122-02-04-D-140992-058	09/14/92	Accutest	02-04	67,800	9.1	33,000	1,510	0.02 U	160 U	1.6 U
113-B-122-11-13-140992-058	09/14/92	Accutest	11-13	58,900	14.3	28,900	1,130	0.02 U	223	0.4
113-B-123-00-0.5-100992-057	09/10/92	Accutest	00-0.5	42,900	201	5,700	331	0.29	714	0.12 U
113-B-123-00-0.5-150992-059	09/15/92	Accutest	00-0.5	37,800	330	7,600	304	0.78	970	0.55
113-B-123-02-04-150992-059	09/15/92	Accutest	02-04	32,300	69.8	15,900	546	0.08	408	0.7
113-B-123-02-04-D-150992-059	09/15/92	Accutest	02-04	39,900	51.6	19,300	661	0.07	387	1.6
113-B-123-08-10-150992-059	09/15/92	Accutest	08-10	60,700	7.8	39,600	1,080	0.05	191	1.2
113-B-124-00-0.5-100992-057	09/10/92	Accutest	00-0.5	31,900	220	6,230	294	0.53	836	0.13 U
113-B-124-02-04-150992-058	09/15/92	Accutest	02-04	49,000	48.1	10,500	320	0.06	234	0.35
113-B-124-08-10-150992-059	09/15/92	Accutest	08-10	23,700	10.9	4,230	99.5	0.02	683	0.73
113-B-125-02-2.5-100992-057	09/10/92	Accutest	02-2.5	79,000	17	43,100	1,240	0.07	169	1.5 U
113-B-125-04-06-100992-057	09/10/92	Accutest	04-06	47,000	24.3	37,100	925	0.04	155	1.6 U
113-B-125-06-08-100992-057	09/10/92	Accutest	06-08	46,600	15.3	34,700	815	0.02 U	192 U	1.9 U
113-B-126-00-0.5-150992-058	09/15/92	Accutest	00-0.5	11,800	98.8	4,960	149	1.18	1,030	0.26
113-B-126-02-04-150992-059	09/15/92	Accutest	02-04	21,100	36.4	8,130	421	0.1	557	0.53
113-B-126-06-08-150992-059	09/15/92	Accutest	06-08	17,700	108	23,800	249	0.09	533	0.64
113-B-127-00-0.5-100592-077	10/05/92	Enseco-RMA	00-0.5	45,100	247	39,200	493	0.82	296	0.53 U
113-B-127-00-0.5-D-100592-077	10/05/92	Enseco-RMA	00-0.5	45,400	100	41,900	490	0.47	263	0.55 U
113-B-127-02-04-100592-077	10/05/92	Enseco-RMA	02-04	40,400	134	33,600	365	0.68	453	0.52 U
113-B-127-12-14-100592-077	10/05/92	Enseco-RMA	12-14	51,000	4.6	38,000	1,000	0.16 U	162	6.5 U
113-B-128-00-0.5-150992-059	09/15/92	Accutest	00-0.5	25,500	567	6,350	286	0.49	1,240	0.39

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Iron (mg/Kg)	Lead (mg/Kg)	Magnesium (mg/Kg)	Manganese (mg/Kg)	Mercury (mg/Kg)	Potassium (mg/Kg)	Selenium (mg/Kg)
SRS				--	**800**	--	**5,900**	**65**	--	**5,700**
113-B-128-05-5.5-221092-086	10/22/92	Enseco-RMA	05-5.5	13,900	4.6	3,690	214	0.13 U	2,160	0.52 U
113-B-128-05-5.5-D-221092-086	10/22/92	Enseco-RMA	05-5.5	20,400	5.3	4,380	328	0.12 U	1,450	0.48 U
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	18,100	4.8	5,330	165	0.11 U	3,210	0.42 U
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	16,400	3.7	5,890	189	0.11 U	2,990	4.2 U
113-B-128A-02-04-191192-095	11/19/92	Enseco-RMA	02-04	52,800	12.9	79,900	1,110	0.24 U	89.8	9.5 U
113-B-128A-06-08-191192-095	11/19/92	Enseco-RMA	06-08	36,200	15.7	33,200	773	0.19 U	122	7.6 U
113-B-128A-06-08-D-191192-095	11/19/92	Enseco-RMA	06-08	--	--	--	--	--	--	--
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	27,400	437	13,300	422	1	759	0.47 U
113-B-128B-02-04-191192-095	11/19/92	Enseco-RMA	02-04	11,500	197	5,880	207	0.8	739	4.8 U
113-B-128B-08-10-191192-095	11/19/92	Enseco-RMA	08-10	10,900	31.4	2,120	133	0.35	549	5.5 U
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	45,400	115	21,500	419	0.23	461	0.48 U
113-B-129-04-06-220992-064	09/22/92	Enseco-RMA	04-06	18,800	75.7	6,690	198	0.13 U	774	0.51 U
113-B-129-06-08-220992-064	09/22/92	Enseco-RMA	06-08	6,660	36.7	1,290	50.4	0.16 U	612	0.9
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	24,500	234	4,900	215	0.58	702	0.47 U
113-B-130-02-04-230992-065	09/23/92	Enseco-RMA	02-04	4,460	17.9	1,580	41.3	0.14 U	288	5.6 U
113-B-130-04-06-230992-065	09/23/92	Enseco-RMA	04-06	9,640	31.1	2,230	60.7	0.27	288	17.7
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	64,400	50.8	56,700	593	0.17	125	0.51 U
113-B-131-02-04-280992-070	09/28/92	Enseco-RMA	02-04	17,700	65.6	6,740	109	0.55	356	0.52 U
113-B-131-06-08-280992-070	09/28/92	Enseco-RMA	06-08	4,540	7.5	957	29.6	0.14 U	77.6	0.56 U
113-B-132-02-04-280992-070	09/28/92	Enseco-RMA	02-04	23,200	714	15,900	329	0.21	608	5.8 U
113-B-132-06-08-280992-070	09/28/92	Enseco-RMA	06-08	14,500	28.8	13,700	3,990	0.13 U	608	0.5 U
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	47,500	108	21,800	472	0.3	583	0.49 U
113-B-133-04-06-220992-064	09/22/92	Enseco-RMA	04-06	33,600	19	28,700	604	0.16 U	814	6.6 U
113-B-133-08-10-220992-064	09/22/92	Enseco-RMA	08-10	32,300	18.2	25,800	556	0.16 U	1,290	0.63 U
113-B-134-00-0.5-100992-057	09/10/92	Accutest	00-0.5	52,800	169	19,300	517	0.53	711	1.2 U
113-B-134-02-04-100992-057	09/10/92	Accutest	02-04	41,000	16.4	25,300	605	0.05	779	0.81 U
113-B-134-08-10-100992-057	09/10/92	Accutest	08-10	43,300	21	29,700	827	0.05	317	1.7 U
113-B-134-08-10-D-100992-057	09/10/92	Accutest	08-10	48,500	10.9	31,900	844	0.07	846	1.7 U

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Iron (mg/Kg)	Lead (mg/Kg)	Magnesium (mg/Kg)	Manganese (mg/Kg)	Mercury (mg/Kg)	Potassium (mg/Kg)	Selenium (mg/Kg)
SRS				--	**800**	--	**5,900**	**65**	--	**5,700**
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	66,300	122	34,100	678	0.33	332	0.51 U
113-B-135-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	67,500	108	37,400	698	0.25	215	0.52 U
113-B-135-02-04-280992-070	09/28/92	Enseco-RMA	02-04	20,000	7.2	13,500	244	0.13 U	240	5.1 U
113-B-135-06-08-280992-070	09/28/92	Enseco-RMA	06-08	33,800	101	19,300	420	0.16 U	382	0.66 U

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Silver (mg/Kg)	Sodium (mg/Kg)	Thallium (mg/Kg)	Zinc (mg/Kg)	Titanium (mg/Kg)	Tin (mg/Kg)
SRS				**5,700**	**--**	**79**	**110,000**	**--**	**--**
113-B-101-00-0.5-030992-053	09/03/92	Accutest	00-0.5	1.2	118	0.14	58	--	--
113-B-101-02-04-030992-053	09/03/92	Accutest	02-04	0.82 U	1,550	0.66 U	114	--	--
113-B-101-12-13-030992-053	09/03/92	Accutest	12-13	0.83 U	1,590	0.67 U	106	--	--
113-B-101-14-16-090992-056	09/09/92	Accutest	14-16	1.5	890	0.12 U	31.1	--	--
113-B-101-14-16-D-090992-056	09/09/92	Accutest	14-16	1.1	1,060	0.12 U	33	--	--
113-B-102-00-0.5-270892-050	08/27/92	Accutest	00-0.5	1.3	7.31 U	0.12 U	76	--	--
113-B-102-02-04-270892-050	08/27/92	Accutest	02-04	0.83	2,320	0.17 U	857	--	--
113-B-102-12-14-270892-050	08/27/92	Accutest	12-14	1.4	1,140	0.17 U	104	--	--
113-B-102-12-14-D-270892-050	08/27/92	Accutest	12-14	0.88 U	2,020	0.16 U	170	--	--
113-B-102-18-20-040992-054	09/04/92	Accutest	18-20	0.67 U	1,130	0.53 U	16.7	--	--
113-B-102-18-20-D-040992-054	09/04/92	Accutest	18-20	0.63 U	1,060	0.51 U	21.3	--	--
113-B-103-00-0.5-030992-053	09/03/92	Accutest	00-0.5	1.9	688	0.12 U	202	--	--
113-B-103-02-04-030992-053	09/03/92	Accutest	02-04	2.0	1,300	0.13 U	265	--	--
113-B-103-02-04-D-030992-053	09/03/92	Accutest	02-04	2.0	1,350	0.12 U	278	--	--
113-B-103-08-10-030992-053	09/03/92	Accutest	08-10	0.94 U	2,620	0.75 U	148	--	--
113-B-103-12-14-110992-056	09/11/92	Accutest	12-14	0.61 U	691	0.12 U	25.9	--	--
113-B-104-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	1.1 U	1,540	0.55 U	159	--	--
113-B-104-02-04-230992-065	09/23/92	Enseco-RMA	02-04	1.2 U	1,540	0.6 U	121	--	--
113-B-104-02-04-D-230992-065	09/23/92	Enseco-RMA	02-04	1.2 U	1,580	0.62 U	121	--	--
113-B-104-10-12-230992-065	09/23/92	Enseco-RMA	10-12	1.3 U	3,610	0.66 U	130	--	--
113-B-104-14-16-240992-069	09/24/92	Enseco-RMA	14-16	0.99 U	1,160	0.25 U	17.6	--	--
113-B-104-14-16-D-240992-069	09/24/92	Enseco-RMA	14-16	0.98 U	1,030	0.25 U	14.5	--	--
113-B-105-00-0.5-290992-072	02/29/92	Enseco-RMA	00-0.5	1.1 U	1,410	0.28 U	200	--	--
113-B-105-02-04-290992-072	02/29/92	Enseco-RMA	02-04	1.1 U	1,810	0.29 U	82.4	--	--
113-B-105-06-08-290992-072	02/29/92	Enseco-RMA	06-08	2.6 U	1,790	0.33 U	161	--	--
113-B-105-14-15-300992-073	09/30/92	Enseco-RMA	14-15	1 U	779	0.25 U	25.1	--	--
113-B-105-14-15-D-300992-073	09/30/92	Enseco-RMA	14-15	1 U	701	0.25 U	21	--	--
113-B-106-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	0.97 U	2,340	0.24 U	491	--	--

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Silver (mg/Kg)	Sodium (mg/Kg)	Thallium (mg/Kg)	Zinc (mg/Kg)	Titanium (mg/Kg)	Tin (mg/Kg)
SRS				**5,700**	--	**79**	**110,000**	--	--
113-B-106-02-04-121092-082	10/12/92	Enseco-RMA	02-04	1.3 U	2,280	0.32 U	162	--	--
113-B-106-08-09-121092-082	10/12/92	Enseco-RMA	08-09	1.5 U	5,360	3.8 U	118	--	--
113-B-106-11-13-141092-083	10/14/92	Enseco-RMA	11-13	0.96 U	715	0.24 U	24.9	--	--
113-B-107-00-0.5-121092-082	10/12/92	Enseco-RMA	00-0.5	0.98 U	921	0.24 U	214	--	--
113-B-107-02-04-121092-082	10/12/92	Enseco-RMA	02-04	0.98 U	1,150	0.24 U	81.4	--	--
113-B-107-02-04-D-121092-082	10/12/92	Enseco-RMA	02-04	0.98 U	1,620	0.24 U	71.8	--	--
113-B-107-04-06-121092-082	10/12/92	Enseco-RMA	04-06	1.0 U	596	0.73	67.2	--	--
113-B-107-12-14-141092-083	10/14/92	Enseco-RMA	12-14	0.98 U	791	0.24 U	20.6	--	--
113-B-107-12-14-D-141092-083	10/14/92	Enseco-RMA	12-14	0.97 U	764	0.24 U	17.4	--	--
113-B-108-00-0.5-160992-060	09/16/92	Accutest	00-0.5	3.5	228	0.12 U	301	--	--
113-B-108-02-04-160992-060	09/16/92	Accutest	02-04	2.4	633	1.1	60.3	--	--
113-B-108-02-04-D-160992-060	09/16/92	Accutest	02-04	1.7	695	0.47	60.3	--	--
113-B-108-04-06-160992-060	09/16/92	Accutest	04-06	1.5	513	0.23	37.9	--	--
113-B-108-10-12-170992-061	09/17/92	Accutest	10-12	0.62	584	0.12 U	47.3	--	--
113-B-108-10-12-D-170992-061	09/17/92	Accutest	10-12	0.61 U	594	0.12 U	42.1	--	--
113-B-109-01-1.5-160992-060	09/16/92	Accutest	01-1.5	1.2	181	0.12 U	79.9	--	--
113-B-109-02-04-160992-060	09/16/92	Accutest	02-04	3.1	599	0.49	75.4	--	--
113-B-109-06-08-160992-060	09/16/92	Accutest	06-08	1.2	496	0.34	209	--	--
113-B-109-11-13-180992-061	09/18/92	Accutest	11-13	0.62 U	265	0.12 U	42.1	--	--
113-B-110-00-0.5-140992-058	09/14/92	Accutest	00-0.5	1.5	308	0.12 U	233	--	--
113-B-110-04-06-140992-058	09/14/92	Accutest	04-06	0.98 U	1,400	0.2 U	243	--	--
113-B-110-08-10-140992-058	09/14/92	Accutest	08-10	0.78 U	2,730	0.16 U	279	--	--
113-B-111-00-0.5-150992-059	09/15/92	Accutest	00-0.5	6.7	468	0.12 U	1,010	--	--
113-B-111-02-04-150992-059	09/15/92	Accutest	02-04	4.7	713	1.0	348	--	--
113-B-111-06-08-150992-059	09/15/92	Accutest	06-08	2.0	675	0.15 U	91.2	--	--
113-B-112-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.9 U	561	0.45 U	117	--	--
113-B-112-00-0.5-D-220992-064	09/22/92	Enseco-RMA	00-0.5	0.91 U	628	0.46 U	132	--	--
113-B-112-04-06-220992-064	09/22/92	Enseco-RMA	04-06	0.97 U	1,320	0.49 U	49.4	--	--

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Silver (mg/Kg)	Sodium (mg/Kg)	Thallium (mg/Kg)	Zinc (mg/Kg)	Titanium (mg/Kg)	Tin (mg/Kg)
SRS				**5,700**	--	**79**	**110,000**	--	--
113-B-112-08-10-220992-064	09/22/92	Enseco-RMA	08-10	1.2 U	1,690	0.61 U	33.5	--	--
113-B-113-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	1.3 U	845	0.33 U	129	--	--
113-B-113-2.0-4.0-231192-096	11/23/92	Enseco-RMA	02-04	1.3 U	1,190	0.33 U	129	--	--
113-B-113-14.0-16.0-231192-096	11/23/92	Enseco-RMA	14-16	1.3 U	1,490	0.33 U	136	--	--
113-B-114-00-0.5-100293-114	02/10/93	Enseco-RMA	00-0.5	0.94 U	101	0.52 U	144	--	--
113-B-114-00-0.5-D-100293-114	02/10/93	Enseco-RMA	00-0.5	0.95 U	100	0.53 U	156	--	--
113-B-114-02-04-100293-114	02/10/93	Enseco-RMA	02-04	1.1 U	991	0.62 U	302	--	--
113-B-114-12-14-100293-114	02/10/93	Enseco-RMA	12-14	1.1 U	1,440	0.62 U	214	--	--
113-B-115-00-0.5-250892-050	08/25/92	Accutest	00-0.5	0.73	21.1	0.12 U	89.1	--	--
113-B-115-02-04-250892-050	08/25/92	Accutest	02-04	2.4	2,080	0.13 U	241	--	--
113-B-115-12-14-250892-050	08/25/92	Accutest	12-14	2.1	13,800	0.16 U	88.4	--	--
113-B-116-00-0.5-010992-051	09/01/92	Accutest	00-0.5	2.2	175	0.12 U	171	--	--
113-B-116-02-04-010992-051	09/01/92	Accutest	02-04	1.6	510	0.11 U	76.1	--	--
113-B-116-02-04-D-010992-051	09/01/92	Accutest	02-04	2.9	569	0.11 U	109	--	--
113-B-116-08-10-010992-052	09/01/92	Accutest	08-10	2.3	8,150	0.13 U	172	--	--
113-B-116-08-10-D-010992-052	09/01/92	Accutest	08-10	3.6	9,210	0.18 U	196	--	--
113-B-117-00-0.5-241192-096	11/24/92	Accutest	00-0.5	1.0 U	95.5	0.26 U	134	--	--
113-B-117-02-04-241192-096	11/24/92	Enseco-RMA	02-04	1.3 U	1,910	0.33 U	128	--	--
113-B-117-12-13-241192-096	11/24/92	Enseco-RMA	12-13	1.4 U	3,020	0.36 U	185	--	--
113-B-118-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	1.3 U	1,290	0.32 U	112	--	--
113-B-118D-0.0-0.5-231192-096	11/23/92	Enseco-RMA	00-0.5	1.3 U	1,400	0.33 U	125	--	--
113-B-118-2-4-231192-096	11/23/92	Enseco-RMA	02-04	1.3 U	1,410	0.32 U	117	--	--
113-B-118-8.0-10.0-231192-096	11/23/92	Enseco-RMA	08-10	1.3 U	1,900	0.32 U	115	--	--
113-B-119-00-0.5-010992-051	09/01/92	Accutest	00-0.5	4.0	537	0.12 U	304	--	--
113-B-119-02-04-010992-051	09/01/92	Accutest	02-04	3.8	8,910	0.18 U	414	--	--
113-B-119-12-14-010992-052	09/01/92	Accutest	12-14	1.4	1,260	0.14 U	68.1	--	--
113-B-120-00-0.5-100592-077	10/05/92	Enseco-RMA	00-0.5	0.92 U	299	0.23 U	15.5	--	--
113-B-120-02-04-100592-077	10/05/92	Enseco-RMA	02-04	1.0 U	970	0.25 U	107	--	--

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Silver (mg/Kg)	Sodium (mg/Kg)	Thallium (mg/Kg)	Zinc (mg/Kg)	Titanium (mg/Kg)	Tin (mg/Kg)
SRS				**5,700**	**--**	**79**	**110,000**	**--**	**--**
113-B-120-06-08-100592-077	10/05/92	Enseco-RMA	06-08	1.5 U	2,180	0.39 U	229	--	--
113-B-121-00-0.5-290992-072	09/29/92	Enseco-RMA	00-0.5	1.1 U	1,980	0.27 U	233	--	--
113-B-121-00-0.5-D-290992-072	09/29/92	Enseco-RMA	00-0.5	1.1 U	1,700	0.27 U	243	--	--
113-B-121-02-04-290992-072	09/29/92	Enseco-RMA	02-04	2.7 U	1,990	0.33 U	174	--	--
113-B-121-08-10-290992-072	09/29/92	Enseco-RMA	08-10	1.2 U	2,580	0.29 U	161	--	--
113-B-122-00-0.5-140992-058	09/14/92	Accutest	00-0.5	0.54	773	0.11 U	153	--	--
113-B-122-02-04-140992-058	09/14/92	Accutest	02-04	0.81 U	1,540	0.16 U	190	--	--
113-B-122-02-04-D-140992-058	09/14/92	Accutest	02-04	0.78 U	1,350	0.16 U	172	--	--
113-B-122-11-13-140992-058	09/14/92	Accutest	11-13	0.88 U	1,340	0.18 U	173	--	--
113-B-123-00-0.5-100992-057	09/10/92	Accutest	00-0.5	1.7	451	0.12 U	203	--	--
113-B-123-00-0.5-150992-059	09/15/92	Accutest	00-0.5	2.4	789	0.11 U	189	--	--
113-B-123-02-04-150992-059	09/15/92	Accutest	02-04	0.98	359	0.16 U	107	--	--
113-B-123-02-04-D-150992-059	09/15/92	Accutest	02-04	1.2	357	0.15 U	117	--	--
113-B-123-08-10-150992-059	09/15/92	Accutest	08-10	0.89 U	2,020	0.18 U	166	--	--
113-B-124-00-0.5-100992-057	09/10/92	Accutest	00-0.5	3.3	508	0.13 U	204	--	--
113-B-124-02-04-150992-058	09/15/92	Accutest	02-04	0.85	777	0.14 U	139	--	--
113-B-124-08-10-150992-059	09/15/92	Accutest	08-10	4.0	1,750	0.17 U	43.2	--	--
113-B-125-02-2.5-100992-057	09/10/92	Accutest	02-2.5	0.74 U	510	0.15 U	210	--	--
113-B-125-04-06-100992-057	09/10/92	Accutest	04-06	0.79	957	0.16 U	295	--	--
113-B-125-06-08-100992-057	09/10/92	Accutest	06-08	0.94 U	2,570	0.19 U	321	--	--
113-B-126-00-0.5-150992-058	09/15/92	Accutest	00-0.5	0.76	411	0.13 U	112	--	--
113-B-126-02-04-150992-059	09/15/92	Accutest	02-04	2.6	269	0.14 U	177	--	--
113-B-126-06-08-150992-059	09/15/92	Accutest	06-08	3.6	482	0.58	85.1	--	--
113-B-127-00-0.5-100592-077	10/05/92	Enseco-RMA	00-0.5	1.1 U	1,310	0.26 U	256	--	--
113-B-127-00-0.5-D-100592-077	10/05/92	Enseco-RMA	00-0.5	1.1 U	1,440	0.28 U	217	--	--
113-B-127-02-04-100592-077	10/05/92	Enseco-RMA	02-04	1 U	2,060	0.26 U	220	--	--
113-B-127-12-14-100592-077	10/05/92	Enseco-RMA	12-14	1.3 U	2,410	0.32 U	139	--	--
113-B-128-00-0.5-150992-059	09/15/92	Accutest	00-0.5	2	870	0.11 U	247	--	--

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Silver (mg/Kg)	Sodium (mg/Kg)	Thallium (mg/Kg)	Zinc (mg/Kg)	Titanium (mg/Kg)	Tin (mg/Kg)
SRS				**5,700**	--	**79**	**110,000**	--	--
113-B-128-05-5.5-221092-086	10/22/92	Enseco-RMA	05-5.5	1 U	5,670	0.26 U	19.7	--	--
113-B-128-05-5.5-D-221092-086	10/22/92	Enseco-RMA	05-5.5	0.96 U	4,970	0.24 U	21.8	--	--
113-B-128A-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.85 U	106	0.21 U	21	--	--
113-B-128A-00-0.5-D-191192-095	11/19/92	Enseco-RMA	00-0.5	0.84 U	118	0.21 U	21.7	--	--
113-B-128A-02-04-191192-095	11/19/92	Enseco-RMA	02-04	1.9 U	1,310	0.47 U	394	--	--
113-B-128A-06-08-191192-095	11/19/92	Enseco-RMA	06-08	1.5 U	1,820	0.38 U	289	430	20.8 U
113-B-128A-06-08-D-191192-095	11/19/92	Enseco-RMA	06-08	--	--	--	--	557	22.6 U
113-B-128B-00-0.5-191192-095	11/19/92	Enseco-RMA	00-0.5	0.93 U	539	0.23 U	218	--	--
113-B-128B-02-04-191192-095	11/19/92	Enseco-RMA	02-04	0.97 U	484	0.24 U	76.4	--	--
113-B-128B-08-10-191192-095	11/19/92	Enseco-RMA	08-10	1.1 U	1,750	0.28 U	52.1	--	--
113-B-129-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.96 U	1,260	0.48 U	238	--	--
113-B-129-04-06-220992-064	09/22/92	Enseco-RMA	04-06	1 U	1,750	0.51 U	108	--	--
113-B-129-06-08-220992-064	09/22/92	Enseco-RMA	06-08	1.2 U	1,590	0.62 U	86.5	--	--
113-B-130-00-0.5-230992-065	09/23/92	Enseco-RMA	00-0.5	0.94 U	600	0.47 U	372	--	--
113-B-130-02-04-230992-065	09/23/92	Enseco-RMA	02-04	1.1 U	1,080	0.56 U	26.4	--	--
113-B-130-04-06-230992-065	09/23/92	Enseco-RMA	04-06	1.1 U	999	2.2	53.6	--	--
113-B-131-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1 U	1,670	0.26 U	217	--	--
113-B-131-02-04-280992-070	09/28/92	Enseco-RMA	02-04	1 U	433	0.28	123	--	--
113-B-131-06-08-280992-070	09/28/92	Enseco-RMA	06-08	1.1 U	340	0.28 U	25.6	--	--
113-B-132-02-04-280992-070	09/28/92	Enseco-RMA	02-04	1.2 U	2,880	0.29 U	441	--	--
113-B-132-06-08-280992-070	09/28/92	Enseco-RMA	06-08	1 U	1,180	0.25 U	74.6	--	--
113-B-133-00-0.5-220992-064	09/22/92	Enseco-RMA	00-0.5	0.97 U	2,060	0.49 U	183	--	--
113-B-133-04-06-220992-064	09/22/92	Enseco-RMA	04-06	1.3 U	3,090	0.66 U	201	--	--
113-B-133-08-10-220992-064	09/22/92	Enseco-RMA	08-10	1.3 U	9,330	0.63 U	210	--	--
113-B-134-00-0.5-100992-057	09/10/92	Accutest	00-0.5	2.5	945	0.12 U	194	--	--
113-B-134-02-04-100992-057	09/10/92	Accutest	02-04	1.1	985	0.16 U	110	--	--
113-B-134-08-10-100992-057	09/10/92	Accutest	08-10	0.83 U	1,820	0.17 U	107	--	--
113-B-134-08-10-D-100992-057	09/10/92	Accutest	08-10	0.85 U	2,420	0.17	117	--	--

Table 113-02-10
Summary of Soil Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Silver (mg/Kg)	Sodium (mg/Kg)	Thallium (mg/Kg)	Zinc (mg/Kg)	Titanium (mg/Kg)	Tin (mg/Kg)
SRS				**5,700**	**--**	**79**	**110,000**	**--**	**--**
113-B-135-00-0.5-280992-070	09/28/92	Enseco-RMA	00-0.5	1 U	1,330	0.26 U	367	--	--
113-B-135-00-0.5-D-280992-070	09/28/92	Enseco-RMA	00-0.5	1 U	1,290	0.26 U	253	--	--
113-B-135-02-04-280992-070	09/28/92	Enseco-RMA	02-04	1 U	793	0.26 U	66.7	--	--
113-B-135-06-08-280992-070	09/28/92	Enseco-RMA	06-08	1.3 U	3,120	0.33 U	530	--	--

Notes:

B - Boring

U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value.

D - Field Duplicate

mg/Kg - Milligrams per kilogram

-- "Not Analyzed" or "Not Applicable" or "Not Requested"

bgs - Below ground surface

* The duplicate calcium result for sample 113-B-102-12-14 is more than 18 times that of the original sample and is therefore highly suspect.

[ ] -Exceeds the Residential Direct Contact Health Based Criteria and Soil Remediation Standards (SRS)

Table 113-02-11
Summary of Soil Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Chloromethane (mg/Kg)	Bromomethane (mg/Kg)	Vinyl Chloride (mg/Kg)	Chloroethane (mg/Kg)	Methylene Chloride (mg/Kg)	Acetone (mg/Kg)	Carbon Disulfide (mg/Kg)	1,1-Dichloroethene (mg/Kg)
SRS				11	53	2	1,100	87	--	110,000	130
113-B-101-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.042	0.011 U	0.011 U
113-B-102-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-103-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.097	0.012 U	0.012 U
113-B-104-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.045	0.016 U	0.016 U
113-B-105-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-106-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U
113-B-107-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.008	0.002	0.012 U
113-B-108-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-109-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-110-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.01	0.015 U	0.015 U
113-B-111-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.094	0.012 U	0.012 U
113-B-112-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.017	0.011 U	0.011 U
113-B-113-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.036	0.016 U	0.016 U
113-B-114-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-115-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-116-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-117-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-118-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.96	0.016 U	0.016 U
113-B-119-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.079	0.014 U	0.014 U
113-B-120-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.096	0.012 U	0.012 U
113-B-121-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.079	0.016 U	0.016 U
113-B-122-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.006	0.013 U	0.013 U
113-B-123-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-B-124-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-125-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-126-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-127-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.018	0.013 U	0.013 U
113-B-127-1.5-02-D-250593-158	05/25/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.017	0.014 U	0.014 U

Table 113-02-11
Summary of Soil Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Chloromethane (mg/Kg)	Bromomethane (mg/Kg)	Vinyl Chloride (mg/Kg)	Chloroethane (mg/Kg)	Methylene Chloride (mg/Kg)	Acetone (mg/Kg)	Carbon Disulfide (mg/Kg)	1,1-Dichloroethene (mg/Kg)
SRS				**11**	**53**	**2**	**1,100**	**87**	**--**	**110,000**	**130**
113-B-128-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.11	0.011 U	0.011 U
113-B-128A-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.054	0.033 U	0.033 U
113-B-129-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.12	0.011 U	0.011 U
113-B-130-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.13	0.016 U	0.016 U
113-B-131-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-132-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-133-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.04	0.012 U	0.012 U
113-B-134-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.071	0.011 U	0.011 U
113-B-135-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014	0.014 U	0.014 U
113-B-135-1.5-02-D-260593-159	05/26/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.029	0.013 U	0.013 U

Table 113-02-11
Summary of Soil Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	1,1-Dichloroethane (mg/Kg)	Total 1,2-Dichlorethene (mg/Kg)	Chloroform (mg/Kg)	1,2-Dichloroethane (mg/Kg)	2-Butanone (mg/Kg)	1,1,1-Trichloroethane (mg/Kg)	Carbon Tetrachloride (mg/Kg)	Bromo-dichloromethane (mg/Kg)
SRS				21	500	2	2	44,000	4,200	2	3
113-B-101-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-102-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-103-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.031	0.012 U	0.012 U	0.012 U
113-B-104-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-105-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-106-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U
113-B-107-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-108-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-109-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-110-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-111-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-112-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-113-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-114-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-115-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-116-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-117-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-118-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-119-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.014 U	0.014 U	0.001	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-B-120-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-121-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-122-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-123-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-B-124-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-125-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-126-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-127-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-127-1.5-02-D-250593-158	05/25/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U

Table 113-02-11
Summary of Soil Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	1,1-Dichloroethane (mg/Kg)	Total 1,2-Dichlorethene (mg/Kg)	Chloroform (mg/Kg)	1,2-Dichloroethane (mg/Kg)	2-Butanone (mg/Kg)	1,1,1-Trichloroethane (mg/Kg)	Carbon Tetrachloride (mg/Kg)	Bromo-dichloromethane (mg/Kg)
SRS				21	500	2	2	44,000	4,200	2	3
113-B-128-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-128A-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U
113-B-129-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.011 U	0.011 U	0.001	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-130-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-131-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-132-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-133-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-134-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.011 U	0.011 U	0.001	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-135-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.014 U	0.014 U	0.001	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-B-135-1.5-02-D-260593-159	05/26/93	Accutest	1.5-02	0.013 U	0.013 U	0.002	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U

Table 113-02-11
Summary of Soil Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	1,2-Dichloropropane (mg/Kg)	cis-1,3-Dichloropropene (mg/Kg)	Trichloroethene (mg/Kg)	Dibromochloromethane (mg/Kg)	1,1,2-Trichloroethane (mg/Kg)	Benzene (mg/Kg)	trans-1,3-Dichloropropene (mg/Kg)
SRS				5	6	18	7	5	4	6
113-B-101-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-102-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-103-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-104-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-105-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-106-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U
113-B-107-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.001	0.012 U
113-B-108-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-109-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-110-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.002	0.015 U
113-B-111-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-112-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-113-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-114-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-115-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-116-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-117-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-118-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-119-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-B-120-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-121-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-122-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-123-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-B-124-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-125-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-126-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-127-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-127-1.5-02-D-250593-158	05/25/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U

Table 113-02-11
Summary of Soil Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	1,2-Dichloropropane (mg/Kg)	cis-1,3-Dichloropropene (mg/Kg)	Trichloroethene (mg/Kg)	Dibromochloromethane (mg/Kg)	1,1,2-Trichloroethane (mg/Kg)	Benzene (mg/Kg)	trans-1,3-Dichloropropene (mg/Kg)
SRS				5	6	18	7	5	4	6
113-B-128-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-128A-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U
113-B-129-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-130-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-131-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-132-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-133-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-134-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-135-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.004	0.014 U
113-B-135-1.5-02-D-260593-159	05/26/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.007	0.013 U

Table 113-02-11
Summary of Soil Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Bromoform (mg/Kg)	4-Methyl-2-Pentanone (mg/Kg)	2-Hexanone (mg/Kg)	Tetrachloroethene (mg/Kg)	1,1,2,2-Tetrachloroethane (mg/Kg)
SRS				**250**	--	--	**5**	**3**
113-B-101-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-102-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-103-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-104-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-105-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-106-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U
113-B-107-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-108-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-109-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-110-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-111-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-112-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-113-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-114-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-115-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-116-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-117-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-118-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-119-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-B-120-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-121-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-122-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-123-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-B-124-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-125-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-126-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-127-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-127-1.5-02-D-250593-158	05/25/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U

Table 113-02-11
Summary of Soil Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Bromoform (mg/Kg)	4-Methyl-2-Pentanone (mg/Kg)	2-Hexanone (mg/Kg)	Tetrachloroethene (mg/Kg)	1,1,2,2-Tetrachloroethane (mg/Kg)
SRS				250	--	--	5	3
113-B-128-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-128A-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U
113-B-129-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-130-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-131-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-132-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-133-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.011	0.012 U
113-B-134-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-135-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-B-135-1.5-02-D-260593-159	05/26/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U

Table 113-02-11
Summary of Soil Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Toluene (mg/Kg)	Chlorobenzene (mg/Kg)	Ethylbenzene (mg/Kg)	Styrene (mg/Kg)	Total Xylenes (mg/Kg)
SRS				**91,000**	**7,400**	**110,000**	**230**	**170,000**
113-B-101-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-102-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-103-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.001	0.012 U	0.012 U	0.012 U	0.012 U
113-B-104-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-105-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-106-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U
113-B-107-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.012 U	0.014	0.012 U	0.012 U	0.012 U
113-B-108-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-109-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-110-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.004	0.015 U	0.015 U	0.015 U	0.011
113-B-111-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-112-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-113-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-114-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-115-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-116-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-117-1.5-02-270593-159	05/27/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-118-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-119-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-B-120-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-121-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
113-B-122-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-B-123-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-B-124-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-125-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-B-126-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-127-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.005	0.013 U	0.013 U	0.013 U	0.013 U
113-B-127-1.5-02-D-250593-158	05/25/93	Accutest	1.5-02	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U

Table 113-02-11
Summary of Soil Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Toluene (mg/Kg)	Chlorobenzene (mg/Kg)	Ethylbenzene (mg/Kg)	Styrene (mg/Kg)	Total Xylenes (mg/Kg)
SRS				**91,000**	**7,400**	**110,000**	**230**	**170,000**
113-B-128-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-128A-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U
113-B-129-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-130-1.5-02-240593-156	05/24/93	Accutest	1.5-02	0.002	0.016 U	0.016 U	0.016 U	0.016 U
113-B-131-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-132-1.5-02-250593-158	05/25/93	Accutest	1.5-02	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
113-B-133-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.003	0.029	0.012 U	0.012 U	0.017
113-B-134-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
113-B-135-1.5-02-260593-159	05/26/93	Accutest	1.5-02	0.021	0.014 U	0.008	0.014 U	0.055
113-B-135-1.5-02-D-260593-159	05/26/93	Accutest	1.5-02	0.037	0.013 U	0.016	0.013 U	0.101

Notes:
B - Boring
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value.
D - Field Duplicate
mg/Kg - Milligrams per kilogram
-- "Not Analyzed" or "Not Applicable" or "Not Requested"
bgs - Below ground surface
☐ -Exceeds the Residential Direct Contact Health Based Criteria and Soil Remediation Standards (SRS)

Table 113-02-12
Summary of Soil Characterization - Total Petroleum Hydrocarbons
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Total Petroleum Hydrocarbons (mg/Kg)
113-B-101-02-04-030992-053	09/03/92	Accutest	02-04	40 U
113-B-101-12-13-030992-053	09/03/92	Accutest	12-13	42.0 U
113-B-102-02-04-270892-050	08/27/92	Accutest	02-04	42.0 U
113-B-102-12-14-270892-050	08/27/92	Accutest	12-14	42 U
113-B-102-12-14-D-270892-050	08/27/92	Accutest	12-14	44 U
113-B-103-02-04-030992-053	09/03/92	Accutest	02-04	116
113-B-103-02-04-D-030992-053	09/03/92	Accutest	02-04	59.6
113-B-103-08-10-030992-053	09/03/09	Accutest	08-10	47 U
113-B-104-02-04-230992-065	09/23/92	Accutest	02-04	40 U
113-B-104-02-04-D-230992-065	09/23/92	Accutest	02-04	39 U
113-B-104-10-12-230992-065	09/23/92	Accutest	10-12	42 U
113-B-105-02-04-290992-072	09/29/92	Accutest	02-04	761
113-B-105-06-08-290992-072	09/29/92	Accutest	06-08	43 U
113-B-106-02-04-121092-082	10/12/92	Accutest	02-04	328
113-B-106-08-09-121092-082	10/12/92	Accutest	08-09	706
113-B-107-02-04-121092-082	10/12/92	Accutest	02-04	74.2
113-B-107-02-04-D-121092-082	10/12/92	Accutest	02-04	108
113-B-107-04-06-121092-082	10/12/92	Accutest	04-06	237
113-B-108-02-04-160992-060	09/16/92	Accutest	02-04	134
113-B-108-02-04-D-160992-060	09/16/92	Accutest	02-04	95.9
113-B-108-04-06-160992-060	09/16/92	Accutest	04-06	44.5
113-B-109-02-04-160992-060	09/16/92	Accutest	02-04	35.5
113-B-109-06-08-160992-060	09/16/92	Accutest	06-08	32 U
113-B-110-04-06-140992-058	09/14/92	Accutest	04-06	47.9
113-B-110-08-10-140992-058	09/14/92	Accutest	08-10	82.8
113-B-111-02-04-150992-059	09/15/92	Accutest	02-04	5,560
113-B-111-06-08-150992-059	09/15/92	Accutest	06-08	79.9
113-B-112-04-06-220992-064	09/22/92	Accutest	04-06	64.5
113-B-112-08-10-220992-064	09/22/92	Accutest	08-10	160
113-B-113-2.0-4.0-231192-096	11/23/92	Accutest	02-04	42 U
113-B-113-14.0-16.0-231192-096	11/23/92	Accutest	14-16	39 U
113-B-114-02-04-100293-114	02/10/93	Lancaster	02-04	44 U
113-B-114-02-04-D-100293-114	02/10/93	Lancaster	02-04	45 U
113-B-114-12-14-100293-114	02/10/93	Lancaster	12-14	45 U
113-B-115-02-04-250892-050	08/25/92	Accutest	02-04	1,460
113-B-115-12-14-250892-050	08/25/92	Accutest	12-14	343
113-B-116-02-04-010992-051	09/01/92	Accutest	02-04	28.9
113-B-116-02-04-D-010992-051	09/01/92	Accutest	02-04	67.4
113-B-116-08-10-010992-052	09/01/92	Accutest	08-10	41 U
113-B-116-08-10-D-010992-052	09/01/92	Accutest	08-10	40 U
113-B-117-02-04-241192-096	11/24/92	Accutest	02-04	39 U

Table 113-02-12
Summary of Soil Characterization - Total Petroleum Hydrocarbons
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Total Petroleum Hydrocarbons (mg/Kg)
113-B-117-12-13-241192-096	11/24/92	Accutest	12-13	45 U
113-B-118-2.0-4.0-231192-096	11/23/92	Accutest	02-04	42 U
113-B-118D-2.0-4.0-231192-096	11/23/92	Accutest	02-04	42 U
113-B-118-8.0-10.0-231192-096	11/23/92	Accutest	08-10	42 U
113-B-119-02-04-010992-051	09/01/92	Accutest	02-04	50.4
113-B-119-12-14-010992-052	09/01/92	Accutest	12-14	342
113-B-120-02-04-100592-077	10/05/92	Accutest	02-04	86.2
113-B-120-06-08-100592-077	10/05/92	Accutest	06-08	50 U
113-B-121-02-04-290992-072	09/29/92	Accutest	02-04	45 U
113-B-121-02-04-D-290992-072	09/29/92	Accutest	02-04	44 U
113-B-121-08-10-290992-072	09/29/92	Accutest	08-10	42 U
113-B-122-2-4-140992-058	09/14/92	Accutest	02-04	435
113-B-122-02-04-D-140992-058	09/14/92	Accutest	02-04	18,200
113-B-122-11-13-140992-058	09/14/92	Accutest	11-13	46.2
113-B-123-02-04-150992-059	09/15/92	Accutest	02-04	163
113-B-123-02-04-D-150992-059	09/15/92	Accutest	02-04	258
113-B-123-08-10-150992-059	09/15/92	Accutest	08-10	51.8
113-B-124-02-04-150992-058	09/15/92	Accutest	02-04	70.5
113-B-124-08-10-150992-059	09/15/92	Accutest	08-10	42 U
113-B-125-04-06-100992-057	09/10/92	Accutest	04-06	40
113-B-125-06-08-100992-057	09/10/92	Accutest	06-08	44
113-B-126-02-04-150992-059	09/15/92	Accutest	02-04	36.1
113-B-126-06-08-150992-059	09/15/92	Accutest	06-08	398
113-B-127-02-04-100592-077	10/05/92	Accutest	02-04	156
113-B-127-02-04-D-100592-077	10/05/92	Accutest	02-04	154
113-B-127-12-14-100592-077	10/05/92	Accutest	12-14	43 U
113-B-128A-02-04-191192-095	11/19/92	Accutest	02-04	3,270
113-B-128A-02-04-D-191192-095	11/19/92	Accutest	02-04	401
113-B-128A-06-08-191192-095	11/19/92	Accutest	06-08	51 U
113-B-128B-02-04-191192-095	11/19/92	Accutest	02-04	131
113-B-128B-08-10-191192-095	11/19/92	Accutest	08-10	72.8
113-B-129-02-04-220992-064	09/22/92	Accutest	02-04	490
113-B-129-06-08-220992-064	09/22/92	Accutest	06-08	66.9
113-B-130-02-04-230992-065	09/23/92	Accutest	02-04	34 U
113-B-130-04-06-230992-065	09/23/92	Accutest	04-06	100
113-B-131-02-04-280992-070	09/28/92	Accutest	02-04	398
113-B-131-02-04-D-280992-070	09/28/92	Accutest	02-04	107
113-B-131-06-08-280992-070	09/28/92	Accutest	06-08	34 U
113-B-132-02-04-280992-070	09/28/92	Accutest	02-04	36 U
113-B-132-06-08-280992-070	09/28/92	Accutest	06-08	58.4
113-B-133-04-06-220992-064	09/22/92	Accutest	04-06	1,160

Table 113-02-12
Summary of Soil Characterization - Total Petroleum Hydrocarbons
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Sample Depth Interval (ft bgs)	Total Petroleum Hydrocarbons (mg/Kg)
113-B-133-04-06-D-220992-064	09/22/92	Accutest	04-06	686
113-B-133-08-10-220992-064	09/22/92	Accutest	08-10	42 U
113-B-134-02-04-100992-057	09/10/92	Accutest	02-04	39.0
113-B-134-08-10-100992-057	09/10/92	Accutest	08-10	37
113-B-134-08-10-D-100992-057	09/10/92	Accutest	08-10	36 U
113-B-135-02-04-280992-070	09/28/92	Accutest	02-04	58,900
113-B-135-06-08-280992-070	09/28/92	Accutest	06-08	7,910

Notes:
B - Boring
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value.
D - Field Duplicate
mg/Kg - Milligrams per kilogram
bgs - Below ground surface

TABLE 113-02-13
Summary of Groundwater Characterization - Total Cr, Cr(VI), pH, ORP, TDS, Chlorides, and Sodium
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Dilution Factor for Cr(VI)	Total Cr (µg/L)	Cr(VI) (µg/L)	pH (s.u.)	Field pH	ORP Eh (mV)	Field ORP Eh (mV)	Sodium (µg/L)	Cl (mg/L)	TDS (mg/L)
NJGWQS					70	--	6.5-8.5	--	--	--	--	--	--
Upper Water Bearing Zone													
113-W-113-070693-162T	U	06/07/93	Lancaster	10	19,900	8,900	13.0	--	61	--	--	--	--
113-W-113-070693-162F	F	06/07/93	Lancaster	10	8,330	9,000	--	--	--	--	--	--	--
113-W-113-040696-853T	U	06/04/96	Lancaster	25	8,260	7,300	12.7	--	274	--	--	--	--
113-W-113-040696-853F	F	06/04/96	Lancaster	25	7,600	8,600	--	--	--	--	--	--	--
113-W-113S-T-301007-1349	U	10/30/07	Lancaster	1	4,220	5,090	12.6	9.3	363	5	237,000	65	2,110
113-W-113S-D-301007-1349	F	10/30/07	Lancaster	100	4,370	4,380	--	--	--	--	--	--	--
113-W-113S-T-170108-1363	U	01/17/08	Lancaster	100	4,230	5,690	11.3	13.1	534	25	436,000	90.7	2,940
113-W-113S-F-170108-1363	F	01/17/08	Lancaster	100	4,530	5,670	--	--	--	--	--	--	--
113-W-114-100693-165T	U	06/10/93	Lancaster	100	91,900	56,700	13.0	--	-10	--	--	--	--
113-W-114-100693-165F	F	06/10/93	Lancaster	100	54,900	57,700	--	--	--	--	--	--	--
113-W-114-030696-853T	U	06/03/96	Lancaster	100	49,300	52,000	12.8	--	65	--	--	--	--
113-W-114-030696-853F	F	06/03/96	Lancaster	100	45,100	52,000	--	--	--	--	--	--	--
113-W-114S-T-311007-1350	U	10/31/07	Lancaster	100	26,700	12,200	12.7	12.7	519	-166	1,040,000	130	3,500
113-W-114S-T-D-311007-1350	U	10/31/07	Lancaster	100	27,000	11,300	12.7	12.7	507	-166	1,100,000	118	3,560
113-W-114S-D-311007-1350	F	10/31/07	Lancaster	100	24,000	12,100	--	--	--	--	--	--	--
113-W-114S-D-D-311007-1350	F	10/31/07	Lancaster	100	26,200	12,100	--	--	--	--	--	--	--
113-W-114S-T-170108-1363	U	01/17/08	Lancaster	200	30,300	19,100	12.5	12.9	556	15	882,000	93.8	8,100
113-W-114S-F-170108-1363	F	01/17/08	Lancaster	200	30,600	18,300	--	--	--	--	--	--	--
113-W-115-090693-164T	U	06/09/93	Lancaster	50	47,700	24,300	12.0	--	87	--	--	--	--
113-W-115-100693-164F	F	06/10/93	Lancaster	50	22,100	24,200	--	--	--	--	--	--	--
113-W-115-290596-851T	U	05/29/96	Lancaster	25	17,600	17,600	12.2	--	139	--	--	--	--
113-W-115-290596-851F	F	05/29/96	Lancaster	25	18,600	17,600	--	--	--	--	--	--	--
113-W-115S-T-261007-1347	U	10/26/07	Lancaster	1	5,590	42.7	9.6	9.4	443	-58	188,000	100 U	1,160
113-W-115S-D-261007-1347	F	10/26/07	Lancaster	1	7,320	25.3	--	--	--	--	--	--	--

BROWN AND CALDWELL

TABLE 113-02-13
Summary of Groundwater Characterization - Total Cr, Cr(VI), pH, ORP, TDS, Chlorides, and Sodium
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Dilution Factor for Cr(VI)	Total Cr (µg/L)	Cr(VI) (µg/L)	pH (s.u.)	Field pH	ORP Eh (mV)	Field ORP Eh (mV)	Sodium (µg/L)	Cl (mg/L)	TDS (mg/L)
NJGWQS					70	--	6.5-8.5	--	--	--	--	--	--
113-W-115S-T-150108-1361	U	01/15/08	Lancaster	1	597	199	10.8	6.8	261	-7	86,400	19.5	374
113-W-115S-F-150108-1361	F	01/15/08	Lancaster	1	827	203	--	--	--	--	--	--	--
113-W-116-070693-162T	U	06/07/93	Lancaster	10	5,880	6,400	13.0	--	-51	--	--	--	--
113-W-116-070693-162F	F	06/07/93	Lancaster	10	4,240	6,000	--	--	--	--	--	--	--
113-W-116-290596-851T	U	05/29/96	Lancaster	1	41.2	10 U	6.6	--	123	--	--	--	--
113-W-116-290596-851F	F	05/29/96	Lancaster	1	2.8 U	10 U	--	--	--	--	--	--	--
113-W-116S-T-251007-1346	U	10/25/07	Lancaster	50	5,290	5,540	12.7	10.3	474	-19	995,000	654	4,140
113-W-116S-D-251007-1346	F	10/25/07	Lancaster	50	4,960	5,490	--	--	--	--	--	--	--
113-W-116S-T-140108-1360	U	01/14/08	Lancaster	1	5,080	5,170	12.7	13.1	561	-39	879,000	626	3,520
113-W-116S-F-140108-1360	F	01/14/08	Lancaster	1	4,470	5,350	--	--	--	--	--	--	--
113-W-117-090693-164T	U	06/09/93	Lancaster	10	7,120	4,900	12.0	--	108	--	--	--	--
113-W-117-090693-164F	F	06/09/93	Lancaster	10	5,830	5,400	--	--	--	--	--	--	--
113-W-117-030696-853T	U	06/03/96	Lancaster	10	35,600	9,500	12.4	--	206	--	--	--	--
113-W-117-030696-853F	F	06/03/96	Lancaster	25	24,700	14,000	--	--	--	--	--	--	--
113-W-117S-T-251007-1346	U	10/25/07	Lancaster	100	13,400	13,100	12.3	10.6	462	2	1,170,000	200 U	2,720
113-W-117S-D-251007-1346	F	10/25/07	Lancaster	100	12,800	13,500	--	--	--	--	--	--	--
113-W-117S-T-180108-1364	U	01/18/08	Lancaster	200	10,700	14,400	12.4	12.7	557	-40	350,000	87.0	1,740
113-W-117S-T-D-180108-1364	U	01/18/08	Lancaster	200	12,100	12,100	12.4	--	556	--	418,000	84.0	2,100
113-W-117S-F-180108-1364	F	01/18/08	Lancaster	200	13,700	18,500	--	--	--	--	--	--	--
113-W-117S-F-D-180108-1364	F	01/18/08	Lancaster	200	13,400	18,200	--	--	--	--	--	--	--
113-W-118-080693-162T	U	06/08/93	Lancaster	50	71,800	55,700	13.0	--	137	--	--	--	--
113-W-118-080693-162F	F	06/08/93	Lancaster	100	46,900	56,000	--	--	--	--	--	--	--
113-W-118-040696-855T	U	06/04/96	Lancaster	100	77,900	77,000	12.6	--	180	--	--	--	--
113-W-118-040696-855F	F	06/04/96	Lancaster	100	77,900	86,000	--	--	--	--	--	--	--
113-W-118-T-251007-1346	U	10/25/07	Lancaster	500	38,000	34,200	12.6	10.5	461	26	441,000	473	2,750

TABLE 113-02-13
Summary of Groundwater Characterization - Total Cr, Cr(VI), pH, ORP, TDS, Chlorides, and Sodium
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Dilution Factor for Cr(VI)	Total Cr (µg/L)	Cr(VI) (µg/L)	pH (s.u.)	Field pH	ORP Eh (mV)	Field ORP Eh (mV)	Sodium (µg/L)	Cl (mg/L)	TDS (mg/L)
NJGWQS					70	--	6.5-8.5	--	--	--	--	--	--
113-W-118-T-DUP-251007-1346	U	10/25/07	Lancaster	500	32,800	32,600	12.6	10.5	424	26	490,000	473	2,930
113-W-118-D-251007-1346	F	10/25/07	Lancaster	500	29,300	33,800	--	--	--	--	--	--	--
113-W-118-D-DUP-251007-1346	F	10/25/07	Lancaster	500	29,400	34,100	--	--	--	--	--	--	--
113-W-118S-T-180108-1364	U	01/18/08	Lancaster	200	25,900	29,800	12.6	12.9	554	26	397,000	373	2,770
113-W-118S-F-180108-1364	F	01/18/08	Lancaster	200	24,900	30,600	--	--	--	--	--	--	--
113-W-119-090693-164T	U	06/09/93	Lancaster	1	2,020	10 U	8.6	--	72	--	--	--	--
113-W-119-090693-164F	F	06/09/93	Lancaster	1	99.1	10 U	--	--	--	--	--	--	--
113-W-119-300596-851T	U	05/30/96	Lancaster	1	380	10 U	7.5	--	21	--	--	--	--
113-W-119-300596-851F	F	05/30/96	Lancaster	1	89.3	10 U	--	--	--	--	--	--	--
113-W-119S-T-261007-1347	U	10/26/07	Lancaster	1	170	10 U	7.4	10.2	0	-190	225,000	93	804
113-W-119S-D-261007-1347	F	10/26/07	Lancaster	1	80.6	10 U	--	--	--	--	--	--	--
113-W-119S-T-140108-1360	U	01/14/08	Lancaster	1	70.1	10 U	7.4	7.8	481	-161	198,000	49.3	834
113-W-119S-T-D-140108-1360	U	01/14/08	Lancaster	1	82.4	10 U	7.5	--	488	--	214,000	49	824
113-W-119S-F-140108-1360	F	01/14/08	Lancaster	1	40.4	10 U	--	--	--	--	--	--	--
113-W-119S-F-D-140108-1360	F	01/14/08	Lancaster	1	41.9	10 U	--	--	--	--	--	--	--
113-W-120-100693-165T	U	06/10/93	Lancaster	1	3,980	10 U	7.3	--	119	--	--	--	--
113-W-120-100693-165F	F	06/10/93	Lancaster	1	149	10 U	--	--	--	--	--	--	--
113-W-120-040696-853T	U	06/04/96	Lancaster	1	260	10 U	7.4	--	444	--	--	--	--
113-W-120-040696-853F	F	06/04/96	Lancaster	1	97.3	10 U	--	--	--	--	--	--	--
113-W-120S-T-291007-1348	U	10/29/07	Lancaster	1	184	10 U	7.2	8.7	595	5	383,000	477	1,320
113-W-120S-D-291007-1348	F	10/29/07	Lancaster	1	60	10 U	--	--	--	--	--	--	--
113-W-120S-T-150108-1361	U	01/15/08	Lancaster	1	106	10 U	7.2	6.8	393	94	399,000	482	1,300
113-W-120S-T-D-150108-1361	U	01/15/08	Lancaster	1	88	10 U	7.2	--	406	--	393,000	476	1,390
113-W-120S-F-150108-1361	F	01/15/08	Lancaster	1	52.9	10 U	--	--	--	--	--	--	--
113-W-120S-F-D-150108-1361	F	01/15/08	Lancaster	1	48.5	10 U	--	--	--	--	--	--	--

TABLE 113-02-13
Summary of Groundwater Characterization - Total Cr, Cr(VI), pH, ORP, TDS, Chlorides, and Sodium
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Dilution Factor for Cr(VI)	Total Cr (µg/L)	Cr(VI) (µg/L)	pH (s.u.)	Field pH	ORP Eh (mV)	Field ORP Eh (mV)	Sodium (µg/L)	Cl (mg/L)	TDS (mg/L)
NJGWQS					70	--	6.5-8.5	--	--	--	--	--	--
113-W-121-080693-164T	U	06/08/93	Lancaster	1	17,400	10 U	11.0	--	37	--	--	--	--
113-W-121-080693-164F	F	06/08/93	Lancaster	1	65.3	10 U	--	--	--	--	--	--	--
113-W-121-050696-855T	U	06/05/96	Lancaster	1	66	10 U	10.3	--	200	--	--	--	--
113-W-121-050696-855F	F	06/05/96	Lancaster	1	2.8 U	10 U	--	--	--	--	--	--	--
113-W-121S-T-291007-1348	U	10/29/07	Lancaster	1	758	10 U	11.4	9.0	474	-114	87,000	27	437
113-W-121S-D-291007-1348	F	10/29/07	Lancaster	1	340	10 U	--	--	--	--	--	--	--
113-W-121S-T-160108-1362	U	01/16/08	Lancaster	1	117	10 U	11.2	11.8	178	-113	72,500	25	388
113-W-121S-F-160108-1362	F	01/16/08	Lancaster	1	50.7	10 U	--	--	--	--	--	--	--
113-W-122S-T-291007-1348	U	10/29/07	Lancaster	1	298	10 U	11.1	9.2	468	-57	158,000	42	610
113-W-122S-D-T-291007-1348	U	10/29/07	Lancaster	1	327	10 U	11.1	--	464	--	162,000	43	593
113-W-122S-D-291007-1348	F	10/29/07	Lancaster	1	105	10 U	--	--	--	--	--	--	--
113-W-122S-D-D-291007-1348	F	10/29/07	Lancaster	1	99.7	10 U	--	--	--	--	--	--	--
113-W-122S-T-160108-1362	U	01/16/08	Lancaster	1	94.2	10 U	10.8	11.3	215	-87	171,000	48	594
113-W-122S-F-160108-1362	F	01/16/08	Lancaster	1	9.6	10 U	--	--	--	--	--	--	--
113-W-123S-T-261007-1347	U	10/26/07	Lancaster	1	682	10 U	8.2	10.2	0	-245	557,000	346	1,710
113-W-123S-D-261007-1347	F	10/26/07	Lancaster	1	363	10 U	--	--	--	--	--	--	--
113-W-123S-T-150108-1361	U	01/15/08	Lancaster	1	354	10 U	8.9	9.3	-88	-230	349,000	235	1,200
113-W-123S-F-150108-1361	F	01/15/08	Lancaster	1	305	10 U	--	--	--	--	--	--	--
113-W-124S-T-301007-1349	U	10/30/07	Lancaster	1	2,170	2,310	12.3	12.3	86	-87	165,000	202	1,490
113-W-124S-D-301007-1349	F	10/30/07	Lancaster	50	2,150	2,380	--	--	--	--	--	--	--
113-W-124S-T-140108-1360	U	01/14/08	Lancaster	1	1,040	993	12.3	12.8	544	-67	159,000	190	1,200
113-W-124S-F-140108-1360	F	01/14/08	Lancaster	5	867	1,040	--	--	--	--	--	--	--
113-W-301S-T-301007-1349	U	10/30/07	Lancaster	1	85.5	10 U	7.7	8.2	461	-16	76,900	36	478
113-W-301S-T-D-301007-1349	U	10/30/07	Lancaster	1	85.6	10 U	7.9	--	469	--	89,400	41	486
113-W-301S-D-301007-1349	F	10/30/07	Lancaster	1	53.2	10 U	--	--	--	--	--	--	--

TABLE 113-02-13
Summary of Groundwater Characterization - Total Cr, Cr(VI), pH, ORP, TDS, Chlorides, and Sodium
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Dilution Factor for Cr(VI)	Total Cr (µg/L)	Cr(VI) (µg/L)	pH (s.u.)	Field pH	ORP Eh (mV)	Field ORP Eh (mV)	Sodium (µg/L)	Cl (mg/L)	TDS (mg/L)
NJGWQS					70	--	6.5-8.5	--	--	--	--	--	--
113-W-301S-D-D-301007-1349	F	10/30/07	Lancaster	1	35.8	10 U	--	--	--	--	--	--	--
113-W-301S-T-160108-1362	U	01/16/08	Lancaster	1	59.9	10 U	8.8	9.0	29	-121	373,000	117	--
113-W-301S-T-D-160108-1362	U	01/16/08	Lancaster	1	58.4	10 U	8.7	--	138	--	306,000	119	1,080
113-W-301S-F-160108-1362	F	01/16/08	Lancaster	1	10.8	10 U	--	--	--	--	--	--	--
113-W-301S-F-D-160108-1362	F	01/16/08	Lancaster	1	17	10 U	--	--	--	--	--	--	--
113-W-302S-T-311007-1350	U	10/31/07	Lancaster	500	27,800	30,800	12.7	9.3	170	-202	875,000	54	3,800
113-W-302S-D-311007-1350	F	10/31/07	Lancaster	500	24,900	31,200	--	--	--	--	--	--	--
113-W-302S-T-170108-1363	U	01/17/08	Lancaster	200	20,400	30,600	11.7	13.3	560	32	817,000	43.6	3,500
113-W-302S-T-D-170108-1363	U	01/17/08	Lancaster	500	19,300	31,500	11.8	--	557	--	874,000	40.0 U	3,560
113-W-302S-F-170108-1363	F	01/17/08	Lancaster	200	24,900	29,100	--	--	--	--	--	--	--
113-W-302S-F-D-170108-1363	F	01/17/08	Lancaster	500	25,300	32,300	--	--	--	--	--	--	--
113-W-303S-T-301007-1349	U	10/30/07	Lancaster	50	209,000	230,000	12.3	12.3	238	-30	4,280,000	260	14,700
113-W-303S-D-301007-1349	F	10/30/07	Lancaster	1000	216,000	228,000	--	--	--	--	--	--	--
113-W-303S-T-160108-1362	U	01/16/08	Lancaster	2000	258,000	308,000	12.2	12.7	82.4	-97	5,410,000	274	16,800
113-W-303S-F-160108-1362	F	01/16/08	Lancaster	2000	279,000	310,000	--	--	--	--	--	--	--
Lower Water Bearing Zone													
113-W-101-070693-162T	U	6/7/1993	Lancaster	1	616	10 U	6.4	--	173	--	--	--	--
113-W-101-070693-162F	F	6/7/1993	Lancaster	1	14.3	10 U	--	--	173	--	--	--	--
113-W-101-040696-853T	U	6/4/1996	Lancaster	1	321	10 U	6.0	--	144	--	--	--	--
113-W-101-040696-853F	F	6/4/1996	Lancaster	1	92.2	10 U	--	--	--	--	--	--	--
113-W-101D-T-301007-1349	U	10/30/2007	Lancaster	1	955	10 U	6.2	8.5	303	55	3,890,000	890	16,800
113-W-101D-D-301007-1349	F	10/30/2007	Lancaster	1	103	10 U	--	--	--	--	--	--	--
113-W-101D-T-170108-1363	U	1/17/2008	Lancaster	1	1,010	10 U	6.3	6.6	573	48	3,810,000	912	16,300
113-W-101D-F-170108-1363	F	1/17/2008	Lancaster	1	273	10 U							

TABLE 113-02-13
Summary of Groundwater Characterization - Total Cr, Cr(VI), pH, ORP, TDS, Chlorides, and Sodium
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Dilution Factor for Cr(VI)	Total Cr (µg/L)	Cr(VI) (µg/L)	pH (s.u.)	Field pH	ORP Eh (mV)	Field ORP Eh (mV)	Sodium (µg/L)	Cl (mg/L)	TDS (mg/L)
NJGWQS					70	--	6.5-8.5	--	--	--	--	--	--
113-W-102-100693-165T	U	6/10/1993	Lancaster	2	21,300	20 U	7.3	--	365	--	--	--	--
113-W-102-100693-165F	F	6/10/1993	Lancaster	2	18,100	20 U	--	--	--	--	--	--	--
113-W-102-230596-849T	U	5/23/1996	Lancaster	100	22,800	1,000 U	7.2	--	71	--	--	--	--
113-W-102-D-230596-849T	U	5/23/1996	Lancaster	100	20,000	1,000 U	7.2	--	--	--	--	--	--
113-W-102-230596-849F	F	5/23/1996	Lancaster	100	22,500	1,000 U	--	--	--	--	--	860	24,700
113-W-102-D-230596-849F	F	5/23/1996	Lancaster	100	21,600	1,000 U	--	--	--	--	--	900	24,200
113-W-102D-T-311007-1350	U	10/31/2007	Lancaster	100	30,700	1,000 U	7.5	7.6	560	-90	4,000,000	980	22,900
113-W-102D-D-311007-1350	F	10/31/2007	Lancaster	100	76,800	1,000 U	--	--	--	--	--	--	--
113-W-102D-T-170108-1363	U	1/17/2008	Lancaster	1	56,300	177	7.6	7.7	590	-66	6,160,000	1,000	23,700
113-W-102D-F-170108-1363	F	1/17/2008	Lancaster	1	49,900	209							
113-W-103-090693-164T	U	6/9/1993	Lancaster	2	1,510	20 U	7.1	--	278	--	--	--	--
113-W-103-D-090693-164T	U	6/9/1993	Lancaster	2	1,640	20 U	7.1	--	--	--	--	--	--
113-W-103-090693-164F	F	6/9/1993	Lancaster	2	228	20 U	--	--	--	--	--	--	--
113-W-103-290596-851T	U	5/29/1996	Lancaster	20	2,640	200 U	7.0	--	204	--	--	--	--
113-W-103-290596-851F	F	5/29/1996	Lancaster	20	1,730	200 U	--	--	--	--	--	--	--
113-W-103-050696-855T	U	6/5/1996	Lancaster	20	2,540	200 U	7.3	--	150	--	--	--	--
113-W-103-050696-855F	F	6/5/1996	Lancaster	20	3,210	200 U	--	--	--	--	--	--	--
113-W-103-220796-865T	U	7/22/1996	Lancaster	10	1,730	100 U	7.0	--	200	--	--	--	--
113-W-103-220796-865F	F	7/22/1996	Lancaster	10	1,550	100 U	--	--	--	--	--	--	--
113-W-103D-T-261007-1347	U	10/26/2007	Lancaster	1	1,630	10 U	7.1	9.8	528	28	2,460,000	1,150	6,210
113-W-103D-D-261007-1347	F	10/26/2007	Lancaster	1	1,010	10 U	--	--	--	--	--	--	--
113-W-103D-T-150108-1361	U	1/15/2008	Lancaster	1	1,420	10 U	7.1	6.8	386	-26	1,480,000	1,230	6,370
113-W-103D-F-150108-1361	F	1/15/2008	Lancaster	1	1,120	10 U							
113-W-104-070693-162T	U	6/7/1993	Lancaster	1	499	10 U	6.7	--	89	--	--	--	--
113-W-104-070693-162F	F	6/7/1993	Lancaster	1	3.1	10 U	--	--	--	--	--	--	--

BROWN AND CALDWELL

TABLE 113-02-13
Summary of Groundwater Characterization - Total Cr, Cr(VI), pH, ORP, TDS, Chlorides, and Sodium
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Dilution Factor for Cr(VI)	Total Cr (µg/L)	Cr(VI) (µg/L)	pH (s.u.)	Field pH	ORP Eh (mV)	Field ORP Eh (mV)	Sodium (µg/L)	Cl (mg/L)	TDS (mg/L)
NJGWQS					70	--	6.5-8.5	--	--	--	--	--	--
113-W-104-280596-851T	U	5/28/1996	Lancaster	4	2,810	2,270	12.7	--	201	--	--	--	--
113-W-104-D-280596-851T	U	5/28/1996	Lancaster	4	2,900	2,560	12.8	--	--	--	--	--	--
113-W-104-280596-851F	F	5/28/1996	Lancaster	4	2,970	3,000	--	--	--	--	--	1,000	5,100
113-W-104-D-280596-851F	F	5/28/1996	Lancaster	4	2,770	3,550	--	--	--	--	--	--	--
113-W-104D-T-251007-1346	U	10/25/2007	Lancaster	1	4.8	10 U	12.5	10.3	421	-129	676,000	851	2,920
113-W-104D-D-251007-1346	F	10/25/2007	Lancaster	1	2.8 U	10 U	--	--	--	--	--	--	--
113-W-104D-T-140108-1360	U	1/14/2008	Lancaster	1	1.4 U	10 U	12.6	12.9	522	-97	593,000	753	3,280
113-W-104D-F-140108-1360	F	1/14/2008	Lancaster	1	1.4 U	10 U							
113-W-105-090693-164T	U	6/9/1993	Lancaster	1	245	10 U	6.2	--	147	--	--	--	--
113-W-105-090693-164F	F	6/9/1993	Lancaster	1	44.1	10 U	--	--	--	--	--	--	--
113-W-105-D-090693-164F	F	6/9/1993	Lancaster	1	41.2	10 U	--	--	--	--	--	--	--
113-W-105-030696-853T	U	6/3/1996	Lancaster	1	54.2	10 U	6.0	--	197	--	--	94	--
113-W-105-D-030696-853T	U	6/3/1996	Lancaster	1	57	10 U	6.0	--	--	--	--	--	--
113-W-105-030696-853F	F	6/3/1996	Lancaster	1	40.1	10 U	--	--	--	--	--	--	--
113-W-105-D-030596-853F	F	6/3/1996	Lancaster	1	43.2	10 U	--	--	--	--	--	--	--
113-W-105D-T-251007-1346	U	10/25/2007	Lancaster	1	165	10 U	6.5	10.5	521	92	2,330,000	1,420	7,720
113-W-105D-D-251007-1346	F	10/25/2007	Lancaster	1	104	10 U	--	--	--	--	--	--	--
113-W-105D-T-180108-1364	U	1/18/2008	Lancaster	1	217	10 U	6.3	6.5	586	77	2,210,000	1,480	7,830
113-W-105D-F-180108-1364	F	1/18/2008	Lancaster	1	190	10 U							
113-W-106-080693-162T	U	6/8/1993	Lancaster	1	195	10 U	5.2	--	337	--	--	--	--
113-W-106-D-080693-162T	U	6/8/1993	Lancaster	1	209	10 U	5.2	--	--	--	--	--	--
113-W-106-080693-162F	F	6/8/1993	Lancaster	1	118	10 U	--	--	--	--	--	--	--
113-W-106-D-080693-162F	F	6/8/1993	Lancaster	1	111	10 U	--	--	--	--	--	--	--
113-W-106-040696-855T	U	6/4/1996	Lancaster	5	192	50 U	6.9	--	36	--	--	--	--
113-W-106-040696-855F	F	6/4/1996	Lancaster	1	59.6	10 U	--	--	--	--	--	--	--

TABLE 113-02-13
Summary of Groundwater Characterization - Total Cr, Cr(VI), pH, ORP, TDS, Chlorides, and Sodium
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Dilution Factor for Cr(VI)	Total Cr (µg/L)	Cr(VI) (µg/L)	pH (s.u.)	Field pH	ORP Eh (mV)	Field ORP Eh (mV)	Sodium (µg/L)	Cl (mg/L)	TDS (mg/L)
NJGWQS					70	--	6.5-8.5	--	--	--	--	--	--
113-W-106-T-251007-1346	U	10/25/2007	Lancaster	1	178	10 U	6.1	10.5	255	141	1,460,000	735	5,380
113-W-106-D-251007-1346	F	10/25/2007	Lancaster	1	97.2	10 U	--	--	--	--	--	--	--
113-W-106D-T-180108-1364	U	1/18/2008	Lancaster	1	17.5	10 U	5.8	7.2	567	342	20,700	45	171
113-W-106D-F-180108-1364	F	1/18/2008	Lancaster	1	11.3	10 U							
113-W-107-070693-162T	U	6/7/1993	Lancaster	5	5,490	2,100	6.7	--	289	--	--	--	--
113-W-107-070693-162F	F	6/7/1993	Lancaster	5	4,820	2,100	--	--	--	--	--	--	--
113-W-107-300596-851T	U	5/30/1996	Lancaster	1	888	10 U	6.5	--	172	--	--	--	--
113-W-107-300596-851F	F	5/30/1996	Lancaster	1	645	10 U	--	--	--	--	--	--	--
113-W-107D-T-261007-1347	U	10/26/2007	Lancaster	1	245	10 U	6.5	10.2	503	99	971,000	501	4,110
113-W-107D-D-261007-1347	F	10/26/2007	Lancaster	1	138	10 U	--	--	--	--	--	--	--
113-W-107D-T-140108-1360	U	1/14/2008	Lancaster	1	71.4	10 U	6.5	6.5	570	177	714,000	564	2,780
113-W-107D-F-140108-1360	F	1/14/2008	Lancaster	1	67.7	10 U							
113-W-108-100693-165T	U	6/10/1993	Lancaster	1	377	10 U	6.6	--	103	--	--	--	--
113-W-108-D-100693-165T	U	6/10/1993	Lancaster	1	377	10 U	6.6	--	--	--	--	--	--
113-W-108-100693-165F	F	6/10/1993	Lancaster	1	122	10 U	--	--	--	--	--	--	--
113-W-108-D-100693-165F	F	6/10/1993	Lancaster	1	141	10 U	--	--	--	--	--	--	--
113-W-108-040696-853T	U	6/4/1996	Lancaster	1	681	10 U	7.3	--	223	--	--	--	--
113-W-108-040696-853F	F	6/4/1996	Lancaster	1	264	10 U	--	--	--	--	--	--	--
113-W-108D-T-291007-1348	U	10/29/2007	Lancaster	1	3,210	10 U	6.6	8.8	566	6	5,080,000	659	17,100
113-W-108D-D-291007-1348	F	10/29/2007	Lancaster	1	1,890	10 U	--	--	--	--	--	--	--
113-W-108D-T-150108-1361	U	1/15/2008	Lancaster	1	238	10 U	6.8	6.8	340	-88	717,000	393	8,290
113-W-108D-F-150108-1361	F	1/15/2008	Lancaster	1	1,030	10 U							
113-W-109-080693-164T	U	6/8/1993	Lancaster	1	484	10 U	6.7	--	125	--	--	--	--
113-W-109-080693-164F	F	6/8/1993	Lancaster	1	81.2	10 U	--	--	--	--	--	--	--
113-W-109-050696-855T	U	6/5/1996	Lancaster	1	49.6	10 U	6.7	--	203	--	--	--	--

TABLE 113-02-13
Summary of Groundwater Characterization - Total Cr, Cr(VI), pH, ORP, TDS, Chlorides, and Sodium
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Dilution Factor for Cr(VI)	Total Cr (µg/L)	Cr(VI) (µg/L)	pH (s.u.)	Field pH	ORP Eh (mV)	Field ORP Eh (mV)	Sodium (µg/L)	Cl (mg/L)	TDS (mg/L)
NJGWQS					70	--	6.5-8.5	--	--	--	--	--	--
113-W-109-D-050696-855T	U	6/5/1996	Lancaster	1	54.6	10 U	6.5	--	--	--	--	--	--
113-W-109-050696-855F	F	6/5/1996	Lancaster	1	28.3	10 U	--	--	--	--	--	--	--
113-W-109-D-050696-855F	F	6/5/1996	Lancaster	1	33.2	10 U	--	--	--	--	--	--	--
113-W-109D-T-291007-1348	U	10/29/2007	Lancaster	1	22	10 U	6.8	9.0	553	80	262,000	112	1,000
113-W-109D-D-291007-1348	F	10/29/2007	Lancaster	1	14.9	10 U	--	--	--	--	--	--	--
113-W-109D-T-160108-1362	U	1/16/2008	Lancaster	1	11.3	10 U	6.7	6.8	214	141	274,000	96	984
113-W-109D-F-160108-1362	F	1/16/2008	Lancaster	1	10 U	10 U							
113-W-301D-T-261007-1349	U	10/30/2007	Lancaster	100	**14,900**	1,000 U	**8.8**	8.8	480	-216	3,350,000	1,290	11,100
113-W-301D-D-301007-1349	F	10/30/2007	Lancaster	100	**12,600**	1,000 U	--	--	--	--	--	--	--
113-W-301D-T-160108-1362	U	1/16/2008	Lancaster	1	**14,300**	39.5	**8.9**	9.1	-95	-164	3,700,000	1,410	11,400
113-W-301D-F-160108-1362	F	1/16/2008	Lancaster	1	**12,400**	39.8							
113-W-302D-T-311007-1350	U	10/31/2007	Lancaster	1	**44,900**	33	8.4	13.0	342	7	5,930,000	550	21,100
113-W-302D-D-311007-1350	F	10/31/2007	Lancaster	1	**41,000**	36.4	--	--	--	--	--	--	--
113-W-302D-T-170108-1363	U	1/17/2008	Lancaster	1	**55,000**	10 U	7.8	9.0	592	-129	5,910,000	553	21,200
113-W-302D-F-170108-1363	F	1/17/2008	Lancaster	1	**51,600**	10 U							
113-W-303D-T-301007-1349	U	10/30/2007	Lancaster	1	**4,630**	10 U	**10.6**	10.6	242	-333	4,190,000	460	15,000
113-W-303D-D-301007-1349	F	10/30/2007	Lancaster	1	**3,670**	10 U	--	--	--	--	--	--	--
113-W-303D-T-160108-1362	U	1/16/2008	Lancaster	1	**8,280**	10 U	**8.7**	9.8	151	-293	7,190,000	1,120	23,100
113-W-303D-F-160108-1362	F	1/16/2008	Lancaster	1	**6,970**	10 U							
113-W-122-D-T-291007-1348 [1]	U	10/29/2007	Lancaster	100	**3,420**	1,000 U	7.8	9.1	544	-226	1,720,000	51	6,340
113-W-122-D-D-291007-1348 [1]	F	10/29/2007	Lancaster	100	**3,130**	1,000 U	--	--	--	--	--	--	--
113-W-304D-T-160108-1362	U	1/16/2008	Lancaster	1	**3,250**	22	**9.9**	10.2	271	-298	1,880,000	404	6,540
113-W-304D-F-160108-1362	F	1/16/2008	Lancaster	1	**1,640**	25.2							
113-W-123-D-T-261007-1347 [2]	U	10/26/2007	Lancaster	1	**451**	10 U	**6.3**	10.2	174	77	1,120,000	992	6,570
113-W-123-D-T-D-261007-1347 [2]	U	10/26/2007	Lancaster	1	**462**	10 U	**6.3**	10.2	197	77	1,120,000	941	6,330

BROWN AND CALDWELL

TABLE 113-02-13
Summary of Groundwater Characterization - Total Cr, Cr(VI), pH, ORP, TDS, Chlorides, and Sodium
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Dilution Factor for Cr(VI)	Total Cr (µg/L)	Cr(VI) (µg/L)	pH (s.u.)	Field pH	ORP Eh (mV)	Field ORP Eh (mV)	Sodium (µg/L)	Cl (mg/L)	TDS (mg/L)
NJGWQS					70	--	6.5-8.5	--	--	--	--	--	--
113-W-123-D-D-291007-1347[2]	F	10/26/2007	Lancaster	1	487	10 U	--	--	--	--	--	--	--
113-W-123-D-D-D-261007-1347[2]	F	10/26/2007	Lancaster	1	472	10 U	--	--	--	--	--	--	--
113-W-305-D-T-150108-1361	U	1/15/2008	Lancaster	1	512	10 U	6.1	6.2	220	-32	1,150,000	1,070	6,290
113-W-305-F-150108-1361	F	1/15/2008	Lancaster	1	866	10 U							

Notes:
W - Monitoring well
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value.
Field ORP Eh - Field ORP measurement has been converted to Eh based on the reference electrode used.
DUP - Field Duplicate
mV - Millivolts
mg/Kg - Milligrams per kilogram
µg/L - Micrograms per liter
- - - "Not Analyzed" or "Not Applicable" or "Not Requested"
(s.u.) - Standard Units
U and T - Unfiltered
F and D (single) - Filtered
D (to the right of the well number) - Indicates deep wells
"D-D" - indicates Deep well - filtered sample
"D-D-D" - indicates Deep well - filtered sample - Duplicate sample
S - Shallow well
[ ] - Exceeds NJGWQS - New Jersey Groundwater Quality Standards
[1] These samples were collected from monitoring well 113-W-304D.
[2] These samples were collected from 113-W-305D.

Table 113-02-14
Summary of Geochemistry Analysis
Site 113 Diamond Site
Kearny, New Jersey

Sample Location	Sample Depth (ft, bgs)	ORP (mV)	pH	Comments	Cr(VI) mg/L	Cr(III) mg/L	Total Cr mg/L
113-W-101	5-7	2	12.8	Yellow	0.0217	-0.00119	0.0206
113-W-101	10.5-12.5	-139	12.8	Brown/green - cedar odor	0.00187	0.00401	0.00588
113-W-101	17-19	-261	6.7	Brown turbid	0.00004	0.00049	0.00052
113-W-101	19.5-21.5	-141	6.4	Gray turbid	0.00001	0.00074	0.00075
113-W-102	6-8	-23	13.1	Yellow	0.109	-0.0345	0.0742
113-W-102	18.5-20.5	-253	7.8	Black staining	0.00008	0.0174	0.0175
113-W-102	22-24	-240	6.9	Dark brown	0.00006	0.0053	0.00536
113-W-105	4-6	-121	12.7	Green	0.125	-0.0294	0.0952
113-W-105	15-17	-64	6.7	Orange-brown	0.00006	0.00139	0.00145
113-W-105	17.5-19.5	-28	5.8	Brown - chemical odor	0.00003	0.00047	0.00049
54-W-110	7.5-9.5	1	9.2	Dark gray	0.00004	0.00126	0.0013
54-W-110	13-15	-57	6.8	Brown	0.00002	0.00005	0.00007
54-W-110	19.21	-56	7.2	Gray	0.00001	0.00005	0.00007

Notes:
W - Monitoring well
mg/L - Milligrams per liter
mV - Millivolts
bgs - Below ground surface
* - In-situ groundwater samples collected immediately adjacent to existing groundwater monitoring well.
- Relative position of meadow mat; refer to boring logs in Appendix J.
Samples filtered through 0.1 and/or 0.4 µm filter

Table 113-02-15
Summary of Groundwater Characterization - Pesticides/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	alpha-BHC (µg/L)	beta-BHC (µg/L)	delta-BHC (µg/L)	gamma-BHC (Lindane) (µg/L)	Heptachlor (µg/L)	Aldrin (µg/L)	Heptachlor Epoxide (µg/L)
NJGWQS			**0.02**	**0.04**	**--**	**0.03**	**0.05**	**0.04**	**0.20**
Upper Water Bearing Zone									
113-W-113-070693-162	06/07/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-113-040696-854T	06/04/96	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-114-100693-165	06/10/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.017
113-W-114-030696-854T	06/03/96	Lancaster	0.0039	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-115-090693-164	06/09/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-115-290596-852T	05/29/96	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-116-070693-162	06/07/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-116-290596-852T	05/29/96	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-117-090693-164	06/09/93	Lancaster	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
113-W-117-030696-854T	06/03/96	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-118-080693-162	06/08/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-118-040696-854T	06/04/96	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-119-090693-164	06/09/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-119-300596-852T	05/30/96	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-120-100693-165	06/10/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-120-040696-854T	06/04/96	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-121-080693-164	06/08/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-121-050696-854T	06/05/96	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Lower Water Bearing Zone									
113-W-101-070693-162	06/07/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-101-040696-854T	06/04/96	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-102-100693-165	06/10/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-102-230596-850T	05/23/96	Lancaster	0.5 U	0.5 U	0.5 U	0.012	0.5 U	0.5 U	0.5 U
113-W-102-D-230596-850T	05/23/96	Lancaster	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.013
113-W-103-090693-164	06/09/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-103-290596-852T	05/29/96	Lancaster	0.05 U	0.05 U	0.05 U	0.0015	0.05 U	0.05 U	0.0027

Table 113-02-15
Summary of Groundwater Characterization - Pesticides/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	alpha-BHC (µg/L)	beta-BHC (µg/L)	delta-BHC (µg/L)	gamma-BHC (Lindane) (µg/L)	Heptachlor (µg/L)	Aldrin (µg/L)	Heptachlor Epoxide (µg/L)
NJGWQS			**0.02**	**0.04**	**--**	**0.03**	**0.05**	**0.04**	**0.20**
113-W-104-070693-162	06/07/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-104-280596-852T	05/28/96	Lancaster	0.05 U	0.034	0.014	0.05 U	0.05 U	0.05 U	0.05 U
113-W-104-D-280596-852T	05/28/96	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-105-090693-164	06/09/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-105-030696-854T	06/03/96	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	**0.12**	0.008	0.01
113-W-105-D-030696-854T	06/03/96	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05	0.017	0.043
113-W-106-080693-162	06/08/93	Lancaster	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**0.9**	5.0 U
113-W-106-D-080693-162	06/08/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-106-040696-854T	06/04/96	Lancaster	**1.0**	**0.26**	0.05 U	**0.065**	**1.6**	**0.37**	0.05 U
113-W-107-070693-162	06/07/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-107-300596-852T	05/30/96	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.0074	0.05 U	0.05 U
113-W-108-100693-165	06/10/93	Lancaster	0.0071	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-108-D-100693-165	06/10/93	Lancaster	0.05 U	0.05 U	0.014	0.05 U	0.05 U	0.05 U	0.05 U
113-W-108-040696-854T	06/04/96	Lancaster	0.0039	0.05 U	0.05 U	0.05 U	0.05 U	0.014	0.015
113-W-109-080693-164	06/08/93	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
113-W-109-050696-854T	06/05/96	Lancaster	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Table 113-02-15
Summary of Groundwater Characterization - Pesticides/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Endosulfan (µg/L)	Dieldrin (µg/L)	4,4-DDE (µg/L)	Endrin (µg/L)	Endosulfan II (µg/L)	4,4'-DDD (µg/L)	Endosulfan Sulfate (µg/L)	4,4'-DDT (µg/L)	Methoxychlor (µg/L)
NJGWQS			40	0.03	0.10	2.0	40	0.10	40	0.10	40
Upper Water Bearing Zone											
113-W-113-070693-162	06/07/93	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
113-W-113-040696-854T	06/04/96	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
113-W-114-100693-165	06/10/93	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
113-W-114-030696-854T	06/03/96	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.0017	0.1 U	0.1 U	0.1 U	0.5 U
113-W-115-090693-164	06/09/93	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.006	0.1 U	0.1 U	0.014
113-W-115-290596-852T	05/29/96	Lancaster	0.05 U	0.002	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.0077
113-W-116-070693-162	06/07/93	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.017
113-W-116-290596-852T	05/29/96	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.0028	0.1 U	0.5 U
113-W-117-090693-164	06/09/93	Lancaster	0.1 U	0.023	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.015
113-W-117-030696-854T	06/03/96	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
113-W-118-080693-162	06/08/93	Lancaster	0.05 U	0.018	0.01	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.035
113-W-118-040696-854T	06/04/96	Lancaster	0.05 U	0.1 U	0.0027	0.1 U	0.003	0.1 U	0.0029	0.1 U	0.5 U
113-W-119-090693-164	06/09/93	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.058
113-W-119-300596-852T	05/30/96	Lancaster	0.05 U	0.1 U	0.016	0.011	0.1 U	0.1 U	0.1 U	0.0024	0.5 U
113-W-120-100693-165	06/10/93	Lancaster	0.039	**0.035**	0.1 U	0.017	0.1 U	0.1 U	0.1 U	0.1 U	0.025
113-W-120-040696-854T	06/04/96	Lancaster	0.05 U	0.019	0.1 U	0.031	0.1 U	0.034	0.1 U	0.012	0.02
113-W-121-080693-164	06/08/93	Lancaster	0.05 U	0.012	0.019	0.025	0.1 U	0.1 U	0.1 U	0.0094	0.11
113-W-121-050696-854T	06/05/96	Lancaster	0.05 U	0.0094	0.018	0.012	0.1 U	0.0047	0.023	0.018	0.11
Lower Water Bearing Zone											
113-W-101-070693-162	06/07/93	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
113-W-101-040696-854T	06/04/96	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
113-W-102-100693-165	06/10/93	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
113-W-102-230596-850T	05/23/96	Lancaster	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
113-W-102-D-230596-850T	05/23/96	Lancaster	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
113-W-103-090693-164	06/09/93	Lancaster	0.0015	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.032
113-W-103-290596-852T	05/29/96	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.0035	0.1 U	0.5 U

Table 113-02-15
Summary of Groundwater Characterization - Pesticides/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Endosulfan (µg/L)	Dieldrin (µg/L)	4,4-DDE (µg/L)	Endrin (µg/L)	Endosulfan II (µg/L)	4,4'-DDD (µg/L)	Endosulfan Sulfate (µg/L)	4,4'-DDT (µg/L)	Methoxychlor (µg/L)
NJGWQS			**40**	**0.03**	**0.10**	**2.0**	**40**	**0.10**	**40**	**0.10**	**40**
113-W-104-070693-162	06/07/93	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
113-W-104-280596-852T	05/28/96	Lancaster	0.05 U	0.024	0.1 U	0.1 U	0.1 U	0.0052	0.1 U	0.1 U	0.5 U
113-W-104-D-280596-852T	05/28/96	Lancaster	0.05 U	0.0064	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
113-W-105-090693-164	06/09/93	Lancaster	0.05 U	0.1 U	0.1 U	0.017	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
113-W-105-030696-854T	06/03/96	Lancaster	0.05 U	0.1 U	0.0086	0.1 U	0.1 U	0.1 U	0.1 U	0.017	0.5 U
113-W-105-D-030696-854T	06/03/96	Lancaster	0.05 U	0.1 U	0.1 U	0.061	0.1 U	0.1 U	0.1 U	0.1 U	0.045
113-W-106-080693-162	06/08/93	Lancaster	5.0 U	10 U	10 U	10 U	2.0	10 U	10 U	10 U	50 U
113-W-106-D-080693-162	06/08/93	Lancaster	0.008	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
113-W-106-040696-854T	06/04/96	Lancaster	0.05 U	0.1 U	**1.5**	0.1 U	0.1 U	**1.0**	0.1 U	0.1 U	0.5 U
113-W-107-070693-162	06/07/93	Lancaster	0.05 U	**0.045**	0.1 U	0.1 U	0.035	0.1 U	0.14	0.11 U	0.02
113-W-107-300596-852T	05/30/96	Lancaster	0.05 U	0.1 U	0.1 U	0.12	0.1 U	0.1 U	0.036	0.1 U	0.041
113-W-108-100693-165	06/10/93	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
113-W-108-D-100693-165	06/10/93	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
113-W-108-040696-854T	06/04/96	Lancaster	0.05 U	0.1 U	0.032	0.011	0.1 U	0.1 U	0.1 U	0.1 U	0.052
113-W-109-080693-164	06/08/93	Lancaster	0.05 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
113-W-109-050696-854T	06/05/96	Lancaster	0.05 U	0.1 U	0.0069	0.1 U	0.1 U	0.0023	0.0045	0.1 U	0.016

Table 113-02-15
Summary of Groundwater Characterization - Pesticides/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Endrin Ketone (µg/L)	Endrin Aldehyde (µg/L)	alpha Chlordane (µg/L)	gamma Chlordane (µg/L)	Toxaphene (µg/L)	PCB-1016 (µg/L)
NJGWQS			--	--	--	--	2.0	0.50
Upper Water Bearing Zone								
113-W-113-070693-162	06/07/93	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-113-040696-854T	06/04/96	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-114-100693-165	06/10/93	Lancaster	0.1 U	0.0095	0.05 U	0.05 U	5.0 U	1.0 U
113-W-114-030696-854T	06/03/96	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-115-090693-164	06/09/93	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-115-290596-852T	05/29/96	Lancaster	0.1 U	0.1 U	0.05 U	0.005 U	5.0 U	1.0 U
113-W-116-070693-162	06/07/93	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-116-290596-852T	05/29/96	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-117-090693-164	06/09/93	Lancaster	0.2 U	0.2 U	0.1 U	0.1 U	10 U	2.0 U
113-W-117-030696-854T	06/03/96	Lancaster	0.1 U	0.1 U	0.0017	0.05 U	5.0 U	1.0 U
113-W-118-080693-162	06/08/93	Lancaster	0.1 U	0.015	0.016	0.05 U	5.0 U	1.0 U
113-W-118-040696-854T	06/04/96	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-119-090693-164	06/09/93	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-119-300596-852T	05/30/96	Lancaster	0.0019	0.0052	0.05 U	0.0021	5.0 U	1.0 U
113-W-120-100693-165	06/10/93	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-120-040696-854T	06/04/96	Lancaster	0.1 U	0.016	0.0036	0.012	5.0 U	1.0 U
113-W-121-080693-164	06/08/93	Lancaster	0.041	0.1 U	0.019	0.05 U	5.0 U	1.0 U
113-W-121-050696-854T	06/05/96	Lancaster	0.0037	0.1 U	0.05 U	0.01	5.0 U	1.0 U
Lower Water Bearing Zone								
113-W-101-070693-162	06/07/93	Lancaster	0.1 U	0.1 U	0.5 U	0.05 U	5.0 U	1.0 U
113-W-101-040696-854T	06/04/96	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-102-100693-165	06/10/93	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-102-230596-850T	05/23/96	Lancaster	1.0 U	1.0 U	0.5 U	0.5 U	5.0 U	1.0 U
113-W-102-D-230596-850T	05/23/96	Lancaster	1.0 U	1.0 U	0.5 U	0.5 U	50 U	10 U
113-W-103-090693-164	06/09/93	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-103-290596-852T	05/29/96	Lancaster	0.1 U	0.1 U	0.05 U	0.0023	5.0 U	1.0 U

Table 113-02-15
Summary of Groundwater Characterization - Pesticides/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Endrin Ketone (µg/L)	Endrin Aldehyde (µg/L)	alpha Chlordane (µg/L)	gamma Chlordane (µg/L)	Toxaphene (µg/L)	PCB-1016 (µg/L)
NJGWQS			--	--	--	--	**2.0**	**0.50**
113-W-104-070693-162	06/07/93	Lancaster	0.1 U	0.1 U	0.5 U	0.05 U	5.0 U	1.0 U
113-W-104-280596-852T	05/28/96	Lancaster	0.1 U	0.1 U	0.088	0.013	5.0 U	1.0 U
113-W-104-D-280596-852T	05/28/96	Lancaster	0.1 U	0.1 U	0.0053	0.003	5.0 U	1.0 U
113-W-105-090693-164	06/09/93	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-105-030696-854T	06/03/96	Lancaster	0.1 U	0.1 U	0.028	0.05 U	5.0 U	1.0 U
113-W-105-D-030696-854T	06/03/96	Lancaster	0.1 U	0.087	0.05 U	0.05 U	5.0 U	1.0 U
113-W-106-080693-162	06/08/93	Lancaster	10 U	10 U	0.54	5.0 U	500 U	100 U
113-W-106-D-080693-162	06/08/93	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-106-040696-854T	06/04/96	Lancaster	0.1 U	0.1 U	0.05 U	0.64	5.0 U	1.0 U
113-W-107-070693-162	06/07/93	Lancaster	0.1 U	0.1 U	0.042	0.05 U	5.0 U	1.0 U
113-W-107-300596-852T	05/30/96	Lancaster	0.1 U	0.1 U	0.027	0.05 U	5.0 U	1.0 U
113-W-108-100693-165	06/10/93	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-108-D-100693-165	06/10/93	Lancaster	0.1 U	0.1 U	0.05 U	0.0025	5.0 U	1.0 U
113-W-108-040696-854T	06/04/96	Lancaster	0.1 U	0.1 U	0.0053	0.0039	5.0 U	1.0 U
113-W-109-080693-164	06/08/93	Lancaster	0.1 U	0.1 U	0.05 U	0.05 U	5.0 U	1.0 U
113-W-109-050696-854T	06/05/96	Lancaster	0.1 U	0.1 U	0.0026	0.05 U	5.0 U	1.0 U

Table 113-02-15
Summary of Groundwater Characterization - Pesticides/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	PCB-1221 (µg/L)	PCB-1232 (µg/L)	PCB-1242 (µg/L)	PCB-1248 (µg/L)	PCB-1254 (µg/L)	PCB-1260 (µg/L)
NJGWQS			0.50 *	0.50 *	0.50 *	0.50 *	0.50 *	0.50 *
Upper Water Bearing Zone								
113-W-113-070693-162	06/07/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-113-040696-854T	06/04/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-114-100693-165	06/10/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-114-030696-854T	06/03/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-115-090693-164	06/09/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-115-290596-852T	05/29/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-116-070693-162	06/07/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-116-290596-852T	05/29/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-117-090693-164	06/09/93	Lancaster	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
113-W-117-030696-854T	06/03/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-118-080693-162	06/08/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-118-040696-854T	06/04/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-119-090693-164	06/09/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-119-300596-852T	05/30/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-120-100693-165	06/10/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-120-040696-854T	06/04/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-121-080693-164	06/08/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-121-050696-854T	06/05/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Lower Water Bearing Zone								
113-W-101-070693-162	06/07/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-101-040696-854T	06/04/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-102-100693-165	06/10/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-102-230596-850T	05/23/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-102-D-230596-850T	05/23/96	Lancaster	20 U	10 U	1 U	10 U	10 U	1 U
113-W-103-090693-164	06/09/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-103-290596-852T	05/29/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 113-02-15
Summary of Groundwater Characterization - Pesticides/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	PCB-1221 (µg/L)	PCB-1232 (µg/L)	PCB-1242 (µg/L)	PCB-1248 (µg/L)	PCB-1254 (µg/L)	PCB-1260 (µg/L)
NJGWQS			**0.50 ***	**0.50 ***	**0.50 ***	**0.50 ***	**0.50 ***	**0.50 ***
113-W-104-070693-162	06/07/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-104-280596-852T	05/28/96	Lancaster	2.0 U	1.0 U	**9.2**	1.0 U	**6.2**	1.0 U
113-W-104-D-280596-852T	05/28/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-105-090693-164	06/09/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-105-030696-854T	06/03/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-105-D-030696-854T	06/03/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-106-080693-162	06/08/93	Lancaster	200 U	100 U	100 U	100 U	100 U	100 U
113-W-106-D-080693-162	06/08/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-106-040696-854T	06/04/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-107-070693-162	06/07/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-107-300596-852T	05/30/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-108-100693-165	06/10/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-108-D-100693-165	06/10/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-108-040696-854T	06/04/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-109-080693-164	06/08/93	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-W-109-050696-854T	06/05/96	Lancaster	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:
W - Monitoring well
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
D - Field Duplicate
µg/L - Micrograms per liter
-- - "Not Analyzed" or "Not Applicable" or "Not Requested"
T - Unfiltered (total)
[ ] - Exceeds NJGWQS - New Jersey Groundwater Quality Standards
* Groundwater Quality Criteria listed for PCBs is for total PCBs

TABLE 113-02-16
Summary of Groundwater Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Chloromethane (µg/L)	Bromomethane (µg/L)	Vinyl Chloride (µg/L)	Chloroethane (µg/L)	Methylene Chloride (µg/L)	Acetone (µg/L)	Carbon Disulfide (µg/L)	1,1-Dichloroethene (µg/L)	1,1-Dichloroethane (µg/L)
NJGWQS			--	10	1.0	--	3.0	6,000	700	1.0	50
Upper Water Bearing Zone											
113-W-113-070693-162	06/07/93	Lancaster	100 U	100 U	100 U	100 U	100 U	270	100 U	16	100 U
113-W-113-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	2.0	78	10 U	10 U	10 U
113-W-114-100693-165	06/10/93	Lancaster	100 U	100 U	100 U	100 U	100 U	340	100 U	100 U	100 U
113-W-114-030696-854T	06/03/96	Lancaster	100 U	100 U	100 U	100 U	100 U	280	100 U	100 U	100 U
113-W-115-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	270	10 U	10 U	10 U
113-W-115-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	360	10 U	10 U	10 U
113-W-116-070693-162	06/07/93	Lancaster	100 U	100 U	100 U	100 U	100 U	1,200	100 U	100 U	100 U
113-W-116-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	6.0	10 U	10 U	10 U
113-W-116S-T-251007-1346	10/25/07	Lancaster	10 U	10 U	10 U	10 U	10 U	440	10 U	10 U	10 U
113-W-116S-T-140108-1360	01/14/08	Lancaster	50 U	50 U	50 U	50 U	50 U	350	50 U	50 U	50 U
113-W-117-090693-164	06/09/93	Lancaster	100 U	100 U	100 U	100 U	100 U	260	100 U	100 U	100 U
113-W-117-030696-854T	06/03/96	Lancaster	10 U	10 U	10 U	10 U	10 U	130	10 U	10 U	10 U
113-W-118-080693-162	06/08/93	Lancaster	100 U	100 U	100 U	100 U	100 U	260	100 U	100 U	100 U
113-W-118-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	3.0	63	10 U	10 U	10 U
113-W-119-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	16	10 U	10 U	10 U
	05/30/96	Lancaster	10 U	10 U	10 U	10 U	10 U	6.0	10 U	10 U	10 U
113-W-120-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-120-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	2.0	10 U	10 U	10 U	10 U
113-W-121-080693-164	06/08/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10	10 U	10 U	10 U
113-W-121-050696-854T	06/05/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Lower Water Bearing Zone											
113-W-101-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	6.0	2.0	10 U	10 U
113-W-101-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-100693-165	06/10/93	Lancaster	50 U	50 U	50 U	50 U	50 U	50 U	13	50 U	50 U
113-W-102-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	2	10 U	10 U	10 U	10 U
113-W-102-D-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	5.0	10 U	10 U	10 U	10 U
113-W-103-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	15	1.0	10 U	10 U

BROWN AND CALDWELL

TABLE 113-02-16
Summary of Groundwater Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Chloromethane (µg/L)	Bromomethane (µg/L)	Vinyl Chloride (µg/L)	Chloroethane (µg/L)	Methylene Chloride (µg/L)	Acetone (µg/L)	Carbon Disulfide (µg/L)	1,1-Dichloroethene (µg/L)	1,1-Dichloroethane (µg/L)
NJGWQS			--	**10**	**1.0**	--	**3.0**	**6,000**	**700**	**1.0**	**50**
113-W-103-D-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	7	10 U	10 U	10 U
113-W-103-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	3	10 U	10 U	10 U
113-W-104-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	5.0	10 U	10 U
113-W-104-280596-852T	05/28/96	Lancaster	10 U	10 U	10 U	10 U	**4.0**	520	10 U	10 U	10 U
113-W-104-D-280596-852T	05/28/96	Lancaster	10 U	10 U	10 U	10 U	**8.0**	650	10 U	10 U	10 U
113-W-104D-T-251007-1346	10/25/07	Lancaster	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	180	5.0 U	5.0 U	5.0 U
113-W-104D-T-140108-1360	01/14/08	Lancaster	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	160	5.0 U	5.0 U	5.0 U
113-W-105-090693-164	06/09/93	Lancaster	100 U	100 U	100 U	100 U	**48**	120	100 U	100 U	100 U
113-W-105-030696-854T	06/03/96	Lancaster	10 U	10 U	10 U	10 U	**4.0**	20	10 U	10 U	10 U
113-W-105-D-030696-854T	06/03/96	Lancaster	10 U	10 U	10 U	10 U	3	21	10 U	10 U	10 U
113-W-106-080693-162	06/08/93	Lancaster	100 U	100 U	**40**	100 U	**42**	180	100 U	**15**	100 U
113-W-106-D-080693-162	06/08/93	Lancaster	100 U	100 U	**42**	100 U	**61**	140	100 U	**25**	100 U
113-W-106-040696-854T	06/04/96	Lancaster	50 U	50 U	**150**	50 U	**26**	26	50 U	**20**	50 U
113-W-107-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	220	5.0	10 U	10 U
113-W-107-300596-852T	05/30/96	Lancaster	10 U	10 U	1.0	10 U	1.0	81	15	10 U	10 U
113-W-108-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	13	7.0	10 U	10 U
113-W-108-D-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	22	3.0	10 U	10 U
113-W-108-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	2.0	78	10 U	10 U	10 U
113-W-109-080693-164	06/08/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10	10 U	10 U	10 U
113-W-109-050696-854T	06/05/96	Lancaster	10 U	10 U	10 U	10 U	10 U	9	10 U	10 U	10 U

TABLE 113-02-16
Summary of Groundwater Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Total 1,2-Dichlorethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Chloroform (µg/L)	1,2-Dichloroethane (µg/L)	2-Butanone (µg/L)	1,1,1-Trichloroethane (µg/L)	Carbon Tetrachloride (µg/L)	Bromo-dichloromethane (µg/L)
NJGWQS			70 *	100	70	70	2.0	300	30	1.0	1.0
Upper Water Bearing Zone											
113-W-113-070693-162	06/07/93	Lancaster	100 U	--	--	10	100 U	100 U	100 U	100 U	100 U
113-W-113-040696-854T	06/04/96	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-114-100693-165	06/10/93	Lancaster	100 U	--	--	100 U	100 U	100 U	100 U	100 U	100 U
113-W-114-030696-854T	06/03/96	Lancaster	100 U	--	--	100 U	100 U	32	100 U	100 U	100 U
113-W-115-090693-164	06/09/93	Lancaster	10 U	--	--	10 U	10 U	34	10 U	10 U	10 U
113-W-115-290596-852T	05/29/96	Lancaster	10 U	--	--	10 U	10 U	32	10 U	10 U	10 U
113-W-116-070693-162	06/07/93	Lancaster	100 U	--	--	100 U	100 U	100 U	100 U	100 U	100 U
113-W-116-290596-852T	05/29/96	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-116S-T-251007-1346	10/25/07	Lancaster	--	10 U	10 U	10 U	10 U	23	10 U	10 U	10 U
113-W-116S-T-140108-1360	01/14/08	Lancaster	--	50 U	50 U	50 U	50 U	100 U	50 U	50 U	50 U
113-W-117-090693-164	06/09/93	Lancaster	100 U	--	--	100 U	100 U	100 U	100 U	100 U	100 U
113-W-117-030696-854T	06/03/96	Lancaster	10 U	--	--	10 U	10 U	16	10 U	10 U	10 U
113-W-118-080693-162	06/08/93	Lancaster	100 U	--	--	100 U	100 U	100 U	100 U	100 U	100 U
113-W-118-040696-854T	06/04/96	Lancaster	10 U	--	--	10 U	10 U	16	10 U	10 U	10 U
113-W-119-090693-164	06/09/93	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
	05/30/96	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-120-100693-165	06/10/93	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-120-040696-854T	06/04/96	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-121-080693-164	06/08/93	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-121-050696-854T	06/05/96	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
Lower Water Bearing Zone											
113-W-101-070693-162	06/07/93	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-101-040696-854T	06/04/96	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-100693-165	06/10/93	Lancaster	50 U	--	--	50 U	50 U	50 U	50 U	50 U	50 U
113-W-102-230596-850T	05/23/96	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-D-230596-850T	05/23/96	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-103-090693-164	06/09/93	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U

TABLE 113-02-16
Summary of Groundwater Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Total 1,2-Dichlorethene (µg/L)	trans-1,2-Dichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Chloroform (µg/L)	1,2-Dichloroethane (µg/L)	2-Butanone (µg/L)	1,1,1-Trichloroethane (µg/L)	Carbon Tetrachloride (µg/L)	Bromo-dichloromethane (µg/L)
NJGWQS			70 *	100	70	70	2.0	300	30	1.0	1.0
113-W-103-D-090693-164	06/09/93	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-103-290596-852T	05/29/96	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-104-070693-162	06/07/93	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-104-280596-852T	05/28/96	Lancaster	10 U	--	--	10 U	10 U	28	10 U	10 U	10 U
113-W-104-D-280596-852T	05/28/96	Lancaster	10 U	--	--	10 U	10 U	36	10 U	10 U	10 U
113-W-104D-T-251007-1346	10/25/07	Lancaster	--	5.0 U	5.0 U	5.0 U	5.0 U	13.0	5.0 U	5.0 U	5.0 U
113-W-104D-T-140108-1360	01/14/08	Lancaster	--	5.0 U	5.0 U	5.0 U	5.0 U	10.0 U	5.0 U	5.0 U	5.0 U
113-W-105-090693-164	06/09/93	Lancaster	60	--	--	100 U	100 U	100 U	100 U	100 U	100 U
113-W-105-030696-854T	06/03/96	Lancaster	3.0	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-105-D-030696-854T	06/03/96	Lancaster	3.0	--	--	10 U	10 U	2.0	10 U	10 U	10 U
113-W-106-080693-162	06/08/93	Lancaster	300	--	--	100 U	100 U	69	100 U	100 U	100 U
113-W-106-D-080693-162	06/08/93	Lancaster	360	--	--	100 U	100 U	73	100 U	100 U	100 U
113-W-106-040696-854T	06/04/96	Lancaster	540	--	--	50 U	50 U	50 U	50 U	50 U	50 U
113-W-107-070693-162	06/07/93	Lancaster	1.0	--	--	10 U	10 U	24	10 U	10 U	10 U
113-W-107-300596-852T	05/30/96	Lancaster	3.0	--	--	10 U	10 U	13	10 U	10 U	10 U
113-W-108-100693-165	06/10/93	Lancaster	1.0	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-108-D-100693-165	06/10/93	Lancaster	1.0	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-108-040696-854T	06/04/96	Lancaster	10 U	--	--	10 U	10 U	12	10 U	10 U	10 U
113-W-109-080693-164	06/08/93	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U
113-W-109-050696-854T	06/05/96	Lancaster	10 U	--	--	10 U	10 U	10 U	10 U	10 U	10 U

TABLE 113-02-16
Summary of Groundwater Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	1,2-Dichloropropane (µg/L)	cis-1,3-Dichloropropene (µg/L)	Trichloroethene (µg/L)	Dibromochloromethane (µg/L)	1,1,2-Trichloroethane (µg/L)	Benzene (µg/L)	trans-1,3-Dichloropropene (µg/L)	Bromoform (µg/L)	4-Methyl-2-Pentanone (µg/L)
NJGWQS			1.0	1.0	1.0	1.0	30	1.0	1.0	4.0	--
Upper Water Bearing Zone											
113-W-113-070693-162	06/07/93	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-113-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-114-100693-165	06/10/93	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-114-030696-854T	06/03/96	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-115-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-115-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-116-070693-162	06/07/93	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-116-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	3.0	10 U	10 U	10 U
113-W-116S-T-251007-1346	10/25/07	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U
113-W-116S-T-140108-1360	01/14/08	Lancaster	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	100 U
113-W-117-090693-164	06/09/93	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-117-030696-854T	06/03/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-118-080693-162	06/08/93	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-118-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	2.0
113-W-119-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	3.0	10 U	10 U	10 U
	05/30/96	Lancaster	10 U	10 U	10 U	10 U	10 U	2.0	10 U	10 U	10 U
113-W-120-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-120-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-121-080693-164	06/08/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-121-050696-854T	06/05/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Lower Water Bearing Zone											
113-W-101-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-101-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-100693-165	06/10/93	Lancaster	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
113-W-102-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-D-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-103-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

TABLE 113-02-16
Summary of Groundwater Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	1,2-Dichloropropane (µg/L)	cis-1,3-Dichloropropene (µg/L)	Trichloroethene (µg/L)	Dibromochloromethane (µg/L)	1,1,2-Trichloroethane (µg/L)	Benzene (µg/L)	trans-1,3-Dichloropropene (µg/L)	Bromoform (µg/L)	4-Methyl-2-Pentanone (µg/L)
NJGWQS			1.0	1.0	1.0	1.0	30	1.0	1.0	4.0	--
113-W-103-D-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-103-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-104-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	2.0	10 U	10 U	10 U
113-W-104-280596-852T	05/28/96	Lancaster	10 U	10 U	10 U	10 U	10 U	1.0	10 U	10 U	10 U
113-W-104-D-280596-852T	05/28/96	Lancaster	10 U	10 U	10 U	10 U	10 U	1.0	10 U	10 U	1.0
113-W-104D-T-251007-1346	10/25/07	Lancaster	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U
113-W-104D-T-140108-1360	01/14/08	Lancaster	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U
113-W-105-090693-164	06/09/93	Lancaster	100 U	100 U	5,800	100 U	24	340	100 U	100 U	100 U
113-W-105-030696-854T	06/03/96	Lancaster	10 U	10 U	170	10 U	1.0	14	10 U	10 U	10 U
113-W-105-D-030696-854T	06/03/96	Lancaster	10 U	10 U	190	10 U	1.0	16	10 U	10 U	10 U
113-W-106-080693-162	06/08/93	Lancaster	100 U	100 U	6,600	100 U	31	890	100 U	100 U	100 U
113-W-106-D-080693-162	06/08/93	Lancaster	100 U	100 U	9,600	100 U	28	1,200	100 U	100 U	100 U
113-W-106-040696-854T	06/04/96	Lancaster	50 U	50 U	8,200	50 U	255	800	50 U	50 U	10
113-W-107-070693-162	06/07/93	Lancaster	10 U	10 U	2	10 U	10 U	210	10 U	10 U	10 U
113-W-107-300596-852T	05/30/96	Lancaster	10 U	10 U	3	10 U	10 U	320	10 U	10 U	2.0
113-W-108-100693-165	06/10/93	Lancaster	10 U	10 U	14	10 U	10 U	53	10 U	10 U	10 U
113-W-108-D-100693-165	06/10/93	Lancaster	10 U	10 U	13	10 U	10 U	50	10 U	10 U	10 U
113-W-108-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	1.0	10 U	10 U	6.0
113-W-109-080693-164	06/08/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-109-050696-854T	06/05/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

TABLE 113-02-16
Summary of Groundwater Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	2-Hexanone (µg/L)	Tetrachloroethene (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	Toluene (µg/L)	Chlorobenzene (µg/L)	Ethylbenzene (µg/L)	Styrene (µg/L)	Total Xylenes (µg/L)
NJGWQS			--	1	1	600	50	700	100	1,000
Upper Water Bearing Zone										
113-W-113-070693-162	06/07/93	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-113-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-114-100693-165	06/10/93	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-114-030696-854T	06/03/96	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-115-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-115-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-116-070693-162	06/07/93	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-116-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	37	10 U	10 U	10 U
113-W-116S-T-251007-1346	10/25/07	Lancaster	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-116S-T-140108-1360	01/14/08	Lancaster	100 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
113-W-117-090693-164	06/09/93	Lancaster	100 U	100 U	100 U	100 U	15	100 U	100 U	100 U
113-W-117-030696-854T	06/03/96	Lancaster	10 U	10 U	10 U	3.0	10 U	10 U	10 U	10 U
113-W-118-080693-162	06/08/93	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-118-040696-854T	06/04/96	Lancaster	1.0	10 U	10 U	2.0	10 U	10 U	10 U	10 U
113-W-119-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	5.0	10 U	2.0
	05/30/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-120-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	1.0	10 U	10 U
113-W-120-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-121-080693-164	06/08/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-121-050696-854T	06/05/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Lower Water Bearing Zone										
113-W-101-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-101-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-100693-165	06/10/93	Lancaster	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
113-W-102-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-D-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-103-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

TABLE 113-02-16
Summary of Groundwater Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	2-Hexanone (µg/L)	Tetrachloroethene (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	Toluene (µg/L)	Chlorobenzene (µg/L)	Ethylbenzene (µg/L)	Styrene (µg/L)	Total Xylenes (µg/L)
NJGWQS			--	1	1	600	50	700	100	1,000
113-W-103-D-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-103-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-104-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	34	10 U	10 U	10 U
113-W-104-280596-852T	05/28/96	Lancaster	1.0	10 U	10 U	7.0	10 U	10 U	10 U	3.0
113-W-104-D-280596-852T	05/28/96	Lancaster	2.0	10 U	10 U	7.0	10 U	10 U	10 U	3.0
113-W-104D-T-251007-1346	10/25/07	Lancaster	10 U	5.0 U	5.0 U	5.0 U	38	5.0 U	5.0 U	5.0 U
113-W-104D-T-140108-1360	01/14/08	Lancaster	10 U	5.0 U	5.0 U	5.0 U	40	5.0 U	5.0 U	5.0 U
113-W-105-090693-164	06/09/93	Lancaster	100 U	**570**	100 U	73	**4,200**	41	100 U	160
113-W-105-030696-854T	06/03/96	Lancaster	10 U	**41**	10 U	5.0	**160**	4.0	10 U	14
113-W-105-D-030696-854T	06/03/96	Lancaster	10 U	**45**	10 U	5.0	**170**	4.0	10 U	15
113-W-106-080693-162	06/08/93	Lancaster	100 U	**2,800**	100 U	16	**5,200**	100 U	100 U	41
113-W-106-D-080693-162	06/08/93	Lancaster	100 U	**1,500**	100 U	14	**4,400**	100 U	100 U	16
113-W-106-040696-854T	06/04/96	Lancaster	50 U	**1,900**	50 U	18	**4,200**	5.0	50 U	22
113-W-107-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	390	10 U	230	30	780
113-W-107-300596-852T	05/30/96	Lancaster	10 U	10 U	10 U	500	10 U	260	10 U	890
113-W-108-100693-165	06/10/93	Lancaster	10 U	1	10 U	1	**1,200**	4.0	10 U	10 U
113-W-108-D-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	1	**1,200**	3.0	10 U	10 U
113-W-108-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	1	21	10 U	10 U	3
113-W-109-080693-164	06/08/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-109-050696-854T	06/05/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Notes:
W - Monitoring well
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
D - Field Duplicate
µg/L - Micrograms per liter
-- "Not Analyzed" or "Not Applicable" or "Not Requested"
[ ] - Exceeds NJGWQC - New Jersey Groundwater Quality Critieria
* 70 µg/L is the criteria for cis-1,2-dichloroethene, which is the lower of the criteria for the 1,2-dichloroethene cogeners

BROWN AND CALDWELL

Table 113-02-17
Summary of Groundwater Characterization - Total Petroleum Hydrocarbons
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Total Petroleum Hydrocarbons (µg/L)
Upper Water Bearing Zone			
113-W-113-070693-162	6/7/1993	Lancaster	500 U
113-W-113-040696-854T	6/4/1996	Lancaster	500 U
113-W-114-100693-165	6/10/1993	Lancaster	500 U
113-W-114-030696-854T	6/4/1996	Lancaster	500 U
113-W-115-090693-164	6/9/1993	Lancaster	500 U
113-W-115-160693-172	6/16/1993	Lancaster	500 U
113-W-115-290596-852T	5/29/1996	Lancaster	500 U
113-W-116-070693-162	6/7/1993	Lancaster	6,000
113-W-116-290596-852T	5/29/1996	Lancaster	500 U
113-W-117-090693-164	6/9/1993	Lancaster	500 U
113-W-117-030696-854T	6/3/1996	Lancaster	500 U
113-W-118-080693-162	6/8/1993	Lancaster	11,000
113-W-119-090693-164	6/9/1993	Lancaster	500 U
113-W-119-300596-852T	5/30/1996	Lancaster	500 U
113-W-120-100693-165	6/10/1993	Lancaster	2,300
113-W-120-040696-854T	6/4/1996	Lancaster	500 U
113-W-121-080693-164	6/8/1993	Lancaster	8,000
Lower Water Bearing Zone			
113-W-101-070693-162	6/7/1993	Lancaster	2,000 U
113-W-101-040696-854T	6/4/1996	Lancaster	500 U
113-W-102-100693-165	6/10/1993	Lancaster	500 U
113-W-102-230596-850T	5/23/1996	Lancaster	3,000 U
113-W-102-D-230596-850T	5/23/1996	Lancaster	2,000 U
113-W-103-090693-164	6/9/1993	Lancaster	500 U
113-W-103-D-090693-164	6/9/1993	Lancaster	500 U
113-W-103-290596-852T	5/29/1996	Lancaster	2,000 U
113-W-104-070693-162	6/7/1993	Lancaster	600
113-W-104-290596-852T	5/29/1996	Lancaster	500 U
113-W-104-D-290596-852T	5/29/1996	Lancaster	500 U
113-W-105-090693-164	6/9/1993	Lancaster	500 U

Table 113-02-17
Summary of Groundwater Characterization - Total Petroleum Hydrocarbons
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Total Petroleum Hydrocarbons (µg/L)
113-W-105-030696-854T	6/3/1996	Lancaster	500
113-W-105-D-030696-854T	6/3/1996	Lancaster	500 U
113-W-106-080693-162	6/8/1993	Lancaster	8,100
113-W-106-D-080693-162	6/8/1993	Lancaster	500 U
113-W-107-070693-162	6/7/1993	Lancaster	4,000
113-W-107-300596-852T	5/30/1996	Lancaster	800
113-W-108-100693-165	6/10/1993	Lancaster	500 U
113-W-108-D-100693-165	6/10/1993	Lancaster	500 U
113-W-108-040696-854T	6/4/1996	Lancaster	2,400
113-W-109-080693-164	6/8/1993	Lancaster	2,000

Notes:
W - Monitoring well
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value.
D - Field Duplicate
µg/L - Micrograms per liter
T - Unfiltered (total) Each sample was unfiltered, only some were labeled with a "T".

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Phenol (µg/L)	bis(2-Chloroethyl) ether (µg/L)	2-Chlorophenol (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	1,2-Dichlorobenzene (µg/L)	2-Methylphenol (µg/L)	2,2'-oxybis-(1-Chloropropane) (µg/L)
NJGWQS			2,000	7.0	40	600	75	600	--	--
Upper Water Bearing Zone										
113-W-113-070693-162	06/07/93	Lancaster	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-113-040696-854T	06/04/96	Lancaster	9.0	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-114-100693-165	06/10/93	Lancaster	37	10 U	10 U	3.0	6.0	4.0	2.0	10 U
113-W-114-030696-854T	06/03/96	Lancaster	25	10 U	10 U	10 U	10 U	10 U	1.0	10 U
113-W-115-090693-164	06/09/93	Lancaster	67	10 U	10 U	1.0	2.0	3.0	10 U	10 U
113-W-115-290596-852T	05/29/96	Lancaster	74	10 U	10 U	1.0	10 U	10 U	10 U	10 U
113-W-116-070693-162	06/07/93	Lancaster	180	10 U	10 U	10 U	10 U	10 U	3.0	10 U
113-W-116-290596-852T	05/29/96	Lancaster	11	10 U	10 U	2.0	5.0	22	10 U	10 U
113-W-117-090693-164	06/09/93	Lancaster	16	10 U	10 U	10 U	2.0	4.0	2.0	10 U
113-W-117-030696-854T	06/03/96	Lancaster	15	10 U	10 U	10 U	2.0	4.0	1.0	10 U
113-W-118-080693-162	06/08/93	Lancaster	200	10 U	10 U	7.0	9.0	20	9.0	10 U
113-W-118-040696-854T	06/04/96	Lancaster	75	10 U	10 U	10 U	10 U	2.0	5.0	10 U
113-W-119-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-119-300596-852T	05/30/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-120-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-120-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-121-080693-164	06/08/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-121-050696-854T	06/05/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Lower Water Bearing Zone										
113-W-101-070693-162	06/07/93	Lancaster	2.0	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-101-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	3.0	5.0	4.0	10 U	10 U
113-W-102-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-D-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-103-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-103-D-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Phenol (µg/L)	bis(2-Chloroethyl) ether (µg/L)	2-Chlorophenol (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	1,2-Dichlorobenzene (µg/L)	2-Methylphenol (µg/L)	2,2'-oxybis-(1-Chloropropane) (µg/L)
NJGWQS			**2,000**	**7.0**	**40**	**600**	**75**	**600**	--	--
113-W-103-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-104-070693-162	06/07/93	Lancaster	9.0	10 U	10 U	4.0	7.0	33	10 U	10 U
113-W-104-280596-852T	05/28/96	Lancaster	190	10 U	10 U	10 U	10 U	10 U	1.0	10 U
113-W-104-D-280596-852T	05/28/96	Lancaster	160	10 U	10 U	10 U	10 U	10 U	1.0	10 U
113-W-105-090693-164	06/09/93	Lancaster	**2,600**	100 U	**58**	**2,900**	**3,500**	**4,800**	2,300 U	100 U
113-W-105-030696-854T	06/03/96	Lancaster	680	100 U	15	**1,800**	**4,400**	**10,000**	1,300	100 U
113-W-105-D-030696-854T	06/03/96	Lancaster	1,300	100 U	30	**3,200**	**8,100**	**19,000**	2,200	100 U
113-W-106-080693-162	06/08/93	Lancaster	**6,600**	100 U	**90**	**27,000**	**29,000**	**66,000**	240	100 U
113-W-106-D-080693-162	06/08/93	Lancaster	**7,000**	1,000 U	1,000 U	**97,000**	**100,000**	**210,000**	2,800	1,000 U
113-W-106-040696-854T	06/04/96	Lancaster	**2,700**	500 U	500 U	**17,000**	**20,000**	**49,000**	500 U	500 U
113-W-107-300596-852T	05/30/96	Lancaster	74	100 U	100 U	100 U	100 U	100 U	120	100 U
113-W-107-070693-162	06/07/93	Lancaster	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
113-W-108-100693-165	06/10/93	Lancaster	4.0	10 U	**73**	**6,300**	**6,100**	**6,400**	10 U	10 U
113-W-108-D-100693-165	06/10/93	Lancaster	10 U	10 U	27	**4,000**	**3,800**	**4,200**	10 U	10 U
113-W-108-040696-854T	06/04/96	Lancaster	20	10 U	10 U	**1,300**	**2,300**	**2,100**	5.0	10 U
113-W-109-080693-164	06/08/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-109-050696-854T	06/05/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	4-Methylphenol (µg/L)	N-Nitroso-di-n-Propylamine (µg/L)	Hexachloroethane (µg/L)	Nitrobenzene (µg/L)	Isophorone (µg/L)	2-Nitrophenol (µg/L)	2,4-Dimethylphenol (µg/L)	bis(2-Chloroethoxy) Methane (µg/L)
NJGWQS			--	10	7.0	6.0	40	--	100	--
Upper Water Bearing Zone										
113-W-113-070693-162	06/07/93	Lancaster	2.0	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-113-040696-854T	06/04/96	Lancaster	3.0	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-114-100693-165	06/10/93	Lancaster	19	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-114-030696-854T	06/03/96	Lancaster	13	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-115-090693-164	06/09/93	Lancaster	7.0	10 U	10 U	10 U	10 U	2.0	10 U	10 U
113-W-115-290596-852T	05/29/96	Lancaster	11	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-116-070693-162	06/07/93	Lancaster	52	10 U	10 U	10 U	10 U	10 U	4.0	10 U
113-W-116-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-117-090693-164	06/09/93	Lancaster	21	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-117-030696-854T	06/03/96	Lancaster	11	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-118-080693-162	06/08/93	Lancaster	79	10 U	10 U	10 U	10 U	18	5.0	10 U
113-W-118-040696-854T	06/04/96	Lancaster	43	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-119-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	2.0	10 U
113-W-119-300596-852T	05/30/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-120-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	25 U	10 U	10 U
113-W-120-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-121-080693-164	06/08/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-121-050696-854T	06/05/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Lower Water Bearing Zone										
113-W-101-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-101-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-D-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-103-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-103-D-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	4-Methylphenol (µg/L)	N-Nitroso-di-n-Propylamine (µg/L)	Hexachloroethane (µg/L)	Nitrobenzene (µg/L)	Isophorone (µg/L)	2-Nitrophenol (µg/L)	2,4-Dimethylphenol (µg/L)	bis(2-Chloroethoxy) Methane (µg/L)
NJGWQS			--	10	7.0	6.0	40	--	100	--
113-W-103-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-104-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-104-280596-852T	05/28/96	Lancaster	39	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-104-D-280596-852T	05/28/96	Lancaster	38	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-105-090693-164	06/09/93	Lancaster	4,100	100 U	100 U	100 U	100 U	100 U	**2,500**	100 U
113-W-105-030696-854T	06/03/96	Lancaster	2,600	100 U	100 U	100 U	100 U	100 U	**2,400**	100 U
113-W-105-D-030696-854T	06/03/96	Lancaster	5,100	100 U	100 U	100 U	100 U	100 U	**3,000**	100 U
113-W-106-080693-162	06/08/93	Lancaster	5,700	100 U	100 U	100 U	100 U	100 U	**1,200**	100 U
113-W-106-D-080693-162	06/08/93	Lancaster	6,000	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	**1,100**	1,000 U
113-W-106-040696-854T	06/04/96	Lancaster	2,000	500 U	500 U	500 U	500 U	500 U	**870**	500 U
113-W-107-300596-852T	05/30/96	Lancaster	66	100 U	100 U	100 U	100 U	100 U	**400**	100 U
113-W-107-070693-162	06/07/93	Lancaster	19	50 U	50 U	50 U	50 U	50 U	**110**	50 U
113-W-108-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-108-D-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-108-040696-854T	06/04/96	Lancaster	3.0	10 U	10 U	10 U	10 U	10 U	2.0	10 U
113-W-109-080693-164	06/08/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-109-050696-854T	06/05/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	2,4-Dichlorophenol (µg/L)	1,2,4-Trichlorobenzene (µg/L)	Naphthalene (µg/L)	4-Chloroaniline (µg/L)	Hexachlorobutadiene (µg/L)	4-Chloro-3-Methylphenol (µg/L)	2-Methylnaphthalene (µg/L)	Hexachlorocyclopentadiene (µg/L)
NJGWQS			20	9.0	300	30	1.0	--	--	40
Upper Water Bearing Zone										
113-W-113-070693-162	06/07/93	Lancaster	10 U	10 U	5.0	10 U	10 U	10 U	10 U	10 U
113-W-113-040696-854T	06/04/96	Lancaster	10 U	10 U	3.0	10 U	10 U	10 U	10 U	10 U
113-W-114-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-114-030696-854T	06/03/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-115-090693-164	06/09/93	Lancaster	10 U	10 U	4.0	10 U	10 U	10 U	10 U	10 U
113-W-115-290596-852T	05/29/96	Lancaster	10 U	10 U	3.0	10 U	10 U	10 U	10 U	10 U
113-W-116-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-116-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-117-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-117-030696-854T	06/03/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-118-080693-162	06/08/93	Lancaster	10 U	74	2,600	10 U	10 U	10 U	1,100	10 U
113-W-118-040696-854T	06/04/96	Lancaster	10 U	8.0	350	10 U	10 U	10 U	260	10 U
113-W-119-090693-164	06/09/93	Lancaster	10 U	10 U	180	10 U	10 U	10 U	37	10 U
113-W-119-300596-852T	05/30/96	Lancaster	10 U	10 U	7.0	10 U	10 U	10 U	10 U	10 U
113-W-120-100693-165	06/10/93	Lancaster	10 U	10 U	44	10 U	10 U	10 U	4.0	10 U
113-W-120-040696-854T	06/04/96	Lancaster	10 U	10 U	9.0	10 U	10 U	10 U	10 U	10 U
113-W-121-080693-164	06/08/93	Lancaster	10 U	1.0	50	10 U	10 U	10 U	15	10 U
113-W-121-050696-854T	06/05/96	Lancaster	10 U	10 U	3.0	10 U	10 U	10 U	10 U	10 U
Lower Water Bearing Zone										
113-W-101-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-101-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-102-D-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-103-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-103-D-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

BROWN AND CALDWELL

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	2,4-Dichlorophenol (µg/L)	1,2,4-Trichlorobenzene (µg/L)	Naphthalene (µg/L)	4-Chloroaniline (µg/L)	Hexachlorobutadiene (µg/L)	4-Chloro-3-Methylphenol (µg/L)	2-Methylnaphthalene (µg/L)	Hexachlorocyclopentadiene (µg/L)
NJGWQS			20	9.0	300	30	1.0	--	--	40
113-W-103-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-104-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-104-280596-852T	05/28/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-104-D-280596-852T	05/28/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-105-090693-164	06/09/93	Lancaster	14	370	18	100 U	100 U	100 U	12	100 U
113-W-105-030696-854T	06/03/96	Lancaster	100 U	560	100 U	100 U	100 U	100 U	100 U	100 U
113-W-105-D-030696-854T	06/03/96	Lancaster	100 U	1,000	100 U	100 U	100 U	100 U	100 U	100 U
113-W-106-080693-162	06/08/93	Lancaster	100 U	150,000	11,000	100 U	10	100 U	250	100 U
113-W-106-D-080693-162	06/08/93	Lancaster	1,000 U	650,000	55,000	1,000 U	1,000 U	1,000 U	3,100	1,000 U
113-W-106-040696-854T	06/04/96	Lancaster	500 U	100,000	11,000	500 U	500 U	500 U	950	500 U
113-W-107-300596-852T	05/30/96	Lancaster	100 U	100 U	10,000	100 U	100 U	100 U	1,400	100 U
113-W-107-070693-162	06/07/93	Lancaster	50 U	50 U	10,000	50 U	50 U	50 U	2,100	50 U
113-W-108-100693-165	06/10/93	Lancaster	140	12	14	10 U	10 U	10 U	1.0	10 U
113-W-108-D-100693-165	06/10/93	Lancaster	140	13	15	10 U	10 U	10 U	1.0	10 U
113-W-108-040696-854T	06/04/96	Lancaster	4.0	1.0	140	10 U	10 U	10 U	19	10 U
113-W-109-080693-164	06/08/93	Lancaster	10 U	3.0	1.0	10 U	10 U	10 U	10 U	10 U
113-W-109-050696-854T	06/05/96	Lancaster	10 U	10 U	1.0	10 U	10 U	10 U	10 U	10 U

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	2,4,6-Trichlorophenol (µg/L)	2,4,5-Trichlorophenol (µg/L)	2-Chloronaphthalene (µg/L)	2-Nitroaniline (µg/L)	Dimethylphthalate (µg/L)	2,6-Dinitrotoluene (µg/L)	Acenaphthylene (µg/L)	Acenaphthene (µg/L)
NJGWQS			20	700	600	--	--	10	--	400
Upper Water Bearing Zone										
113-W-113-070693-162	06/07/93	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-113-040696-854T	06/04/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-114-100693-165	06/10/93	Lancaster	10 U	25 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-114-030696-854T	06/03/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-115-090693-164	06/09/93	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-115-290596-852T	05/29/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	1.0
113-W-116-070693-162	06/07/93	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-116-290596-852T	05/29/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-117-090693-164	06/09/93	Lancaster	10 U	26 U	10 U	26 U	10 U	10 U	10 U	10 U
113-W-117-030696-854T	06/03/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-118-080693-162	06/08/93	Lancaster	10 U	2.0	10 U	25 U	10 U	10 U	10	160
113-W-118-040696-854T	06/04/96	Lancaster	10 U	6.0	10 U	25 U	10 U	10 U	2.0	44
113-W-119-090693-164	06/09/93	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	9
113-W-119-300596-852T	05/30/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	6.0
113-W-120-100693-165	06/10/93	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	1.0
113-W-120-040696-854T	06/04/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-121-080693-164	06/08/93	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	15	10 U
113-W-121-050696-854T	06/05/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
Lower Water Bearing Zone										
113-W-101-070693-162	06/07/93	Lancaster	10 U	25	10 U	25 U	10 U	10 U	10 U	10 U
113-W-101-040696-854T	06/04/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-102-100693-165	06/10/93	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-102-230596-850T	05/23/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-102-D-230596-850T	05/23/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-103-090693-164	06/09/93	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-103-D-090693-164	06/09/93	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	2,4,6-Trichlorophenol (µg/L)	2,4,5-Trichlorophenol (µg/L)	2-Chloronaphthalene (µg/L)	2-Nitroaniline (µg/L)	Dimethylphthalate (µg/L)	2,6-Dinitrotoluene (µg/L)	Acenaphthylene (µg/L)	Acenaphthene (µg/L)
NJGWQS			20	700	600	--	--	10	--	400
113-W-103-290596-852T	05/29/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-104-070693-162	06/07/93	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-104-280596-852T	05/28/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-104-D-280596-852T	05/28/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-105-090693-164	06/09/93	Lancaster	100 U	250 U	100 U	250 U	100 U	100 U	100 U	100 U
113-W-105-030696-854T	06/03/96	Lancaster	100 U	250 U	100 U	250 U	100 U	100 U	100 U	100 U
113-W-105-D-030696-854T	06/03/96	Lancaster	100 U	250 U	100 U	250 U	100 U	100 U	100 U	100 U
113-W-106-080693-162	06/08/93	Lancaster	100 U	250 U	100 U	250 U	100 U	100 U	100 U	120
113-W-106-D-080693-162	06/08/93	Lancaster	1,000 U	2,500 U	1,000 U	2,500 U	1,000 U	1,000 U	1,000 U	630
113-W-106-040696-854T	06/04/96	Lancaster	500 U	1,200 U	500 U	1,200 U	500 U	500 U	500 U	120
113-W-107-300596-852T	05/30/96	Lancaster	100 U	250 U	100 U	250 U	100 U	100 U	23	130
113-W-107-070693-162	06/07/93	Lancaster	50 U	120 U	50 U	120 U	50 U	50 U	25	190
113-W-108-100693-165	06/10/93	Lancaster	10 U	25 U	2.0	25 U	10 U	10 U	10 U	10 U
113-W-108-D-100693-165	06/10/93	Lancaster	10 U	25 U	2.0	25 U	10 U	10 U	10 U	10 U
113-W-108-040696-854T	06/04/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	20
113-W-109-080693-164	06/08/93	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
113-W-109-050696-854T	06/05/96	Lancaster	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	2,4-Dinitrophenol (µg/L)	4-Nitrophenol (µg/L)	Dibenzofuran (µg/L)	2,4-Dinitrotoluene (µg/L)	Diethylphthalate (µg/L)	4-Chlorophenyl-phenylether (µg/L)	Fluorene (µg/L)	4-Nitroaniline (µg/L)
NJGWQS			40	--	--	10	6,000	--	300	--
Upper Water Bearing Zone										
113-W-113-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-113-040696-854T	06/04/96	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-114-100693-165	06/10/93	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-114-030696-854T	06/03/96	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-115-090693-164	06/09/93	Lancaster	10 U	2.0	10 U	10 U	10 U	10 U	10 U	25 U
113-W-115-290596-852T	05/29/96	Lancaster	25 U	25 U	10 U	10 U	2.0	10 U	10 U	25 U
113-W-116-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-116-290596-852T	05/29/96	Lancaster	25 U	25 U	10 U	10 U	2.0	10 U	10 U	25 U
113-W-117-090693-164	06/09/93	Lancaster	10 U	1.0	10 U	10 U	10 U	10 U	10 U	25 U
113-W-117-030696-854T	06/03/96	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-118-080693-162	06/08/93	Lancaster	10 U	4.0	150	10 U	10 U	10 U	38	25 U
113-W-118-040696-854T	06/04/96	Lancaster	10 U	10 U	58	10 U	10 U	10 U	6.0	25 U
113-W-119-090693-164	06/09/93	Lancaster	10 U	10 U	1.0	10 U	10 U	10 U	6.0	25 U
113-W-119-300596-852T	05/30/96	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-120-100693-165	06/10/93	Lancaster	25 U	10 U	10 U	10 U	10 U	10 U	3.0	25 U
113-W-120-040696-854T	06/04/96	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-121-080693-164	06/08/93	Lancaster	10 U	10 U	14	10 U	10 U	10 U	15	25 U
113-W-121-050696-854T	06/05/96	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	1.0	25 U
Lower Water Bearing Zone										
113-W-101-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-101-040696-854T	06/04/96	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-102-100693-165	06/10/93	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-102-230596-850T	05/23/96	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-102-D-230596-850T	05/23/96	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-103-090693-164	06/09/93	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-103-D-090693-164	06/09/93	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	2,4-Dinitrophenol (µg/L)	4-Nitrophenol (µg/L)	Dibenzofuran (µg/L)	2,4-Dinitrotoluene (µg/L)	Diethylphthalate (µg/L)	4-Chlorophenyl-phenylether (µg/L)	Fluorene (µg/L)	4-Nitroaniline (µg/L)
NJGWQS			40	--	--	10	6,000	--	300	--
113-W-103-290596-852T	05/29/96	Lancaster	25 U	25 U	10 U	10 U	2.0	10 U	10 U	25 U
113-W-104-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-104-280596-852T	05/28/96	Lancaster	25 U	25 U	10 U	10 U	2.0	10 U	10 U	25 U
113-W-104-D-280596-852T	05/28/96	Lancaster	25 U	25 U	10 U	10 U	2.0	10 U	10 U	25 U
113-W-105-090693-164	06/09/93	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-105-030696-854T	06/03/96	Lancaster	250 U	250 U	100 U	100 U	100 U	100 U	100 U	250 U
113-W-105-D-030696-854T	06/03/96	Lancaster	250 U	250 U	100 U	100 U	100 U	100 U	100 U	250 U
113-W-106-080693-162	06/08/93	Lancaster	250 U	250 U	150	100 U	100 U	100 U	91	100 U
113-W-106-D-080693-162	06/08/93	Lancaster	2,500 U	2,500 U	830	1,000 U	1,000 U	1,000 U	570	2,500 U
113-W-106-040696-854T	06/04/96	Lancaster	1,200 U	1,200 U	160	500 U	500 U	500 U	100	1,200 U
113-W-107-300596-852T	05/30/96	Lancaster	250 U	250 U	120	100 U	100 U	100 U	34	250 U
113-W-107-070693-162	06/07/93	Lancaster	50 U	50 U	200	50 U	50 U	50 U	80	50 U
113-W-108-100693-165	06/10/93	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-108-D-100693-165	06/10/93	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-108-040696-854T	06/04/96	Lancaster	25 U	25 U	20	10 U	10 U	10 U	13	25 U
113-W-109-080693-164	06/08/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-109-050696-854T	06/05/96	Lancaster	25 U	25 U	10 U	10 U	10 U	10 U	10 U	25 U

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	4,6-Dinitro-2-Methylphenol (µg/L)	N-Nitroso-diphenylamine (µg/L)	4-Bromophenyl-phenylether (µg/L)	Hexachlorobenzene (µg/L)	Pentachlorophenol (µg/L)	Phenanthrene (µg/L)	Anthracene (µg/L)	Carbazole (µg/L)
NJGWQS			--	10	--	0.02	0.3	--	2,000	--
Upper Water Bearing Zone										
113-W-113-070693-162	06/07/93	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-113-040696-854T	06/04/96	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-114-100693-165	06/10/93	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-114-030696-854T	06/03/96	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-115-090693-164	06/09/93	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-115-290596-852T	05/29/96	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-116-070693-162	06/07/93	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-116-290596-852T	05/29/96	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-117-090693-164	06/09/93	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-117-030696-854T	06/03/96	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-118-080693-162	06/08/93	Lancaster	25 U	10 U	10 U	10 U	25 U	130	12	18
113-W-118-040696-854T	06/04/96	Lancaster	25 U	10 U	10 U	10 U	25 U	39	4.0	6.0
113-W-119-090693-164	06/09/93	Lancaster	25 U	10 U	10 U	10 U	25 U	16	5.0	10 U
113-W-119-300596-852T	05/30/96	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-120-100693-165	06/10/93	Lancaster	25 U	10 U	10 U	10 U	25 U	6.0	10 U	10 U
113-W-120-040696-854T	06/04/96	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-121-080693-164	06/08/93	Lancaster	25 U	10 U	10 U	10 U	25 U	43	12	8.0
113-W-121-050696-854T	06/05/96	Lancaster	25 U	10 U	10 U	10 U	25 U	9.0	2.0	1.0
Lower Water Bearing Zone										
113-W-101-070693-162	06/07/93	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-101-040696-854T	06/04/96	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-102-100693-165	06/10/93	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-102-230596-850T	05/23/96	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-102-D-230596-850T	05/23/96	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-103-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-103-D-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	4,6-Dinitro-2-Methylphenol (µg/L)	N-Nitroso-diphenylamine (µg/L)	4-Bromophenyl-phenylether (µg/L)	Hexachlorobenzene (µg/L)	Pentachlorophenol (µg/L)	Phenanthrene (µg/L)	Anthracene (µg/L)	Carbazole (µg/L)
NJGWQS			--	**10**	--	**0.02**	**0.3**	--	**2,000**	--
113-W-103-290596-852T	05/29/96	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-104-070693-162	06/07/93	Lancaster	25 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-104-280596-852T	05/28/96	Lancaster	10 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-104-D-280596-852T	05/28/96	Lancaster	10 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U
113-W-105-090693-164	06/09/93	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-105-030696-854T	06/03/96	Lancaster	250 U	100 U	100 U	100 U	250 U	100 U	100 U	100 U
113-W-105-D-030696-854T	06/03/96	Lancaster	250 U	100 U	100 U	100 U	250 U	100 U	100 U	100 U
113-W-106-080693-162	06/08/93	Lancaster	100 U	100 U	100 U	**44**	100 U	110	37	100 U
113-W-106-D-080693-162	06/08/93	Lancaster	2,500 U	1,000 U	1,000 U	**250**	2,500 U	590	210	1,000 U
113-W-106-040696-854T	06/04/96	Lancaster	1,200 U	500 U	500 U	500 U	1,200 U	100	500 U	500 U
113-W-107-300596-852T	05/30/96	Lancaster	250 U	100 U	100 U	100 U	250 U	14	100 U	25
113-W-107-070693-162	06/07/93	Lancaster	50 U	50 U	50 U	50 U	50 U	51	14	10
113-W-108-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	25 U	1.0	10 U	10 U
113-W-108-D-100693-165	06/10/93	Lancaster	25 U	10 U	10 U	10 U	25 U	1.0	10 U	10 U
113-W-108-040696-854T	06/04/96	Lancaster	25 U	10 U	10 U	10 U	25 U	19	5.0	37
113-W-109-080693-164	06/08/93	Lancaster	25 U	10 U	10 U	10 U	25 U	1.0	10 U	10 U
113-W-109-050696-854T	06/05/96	Lancaster	25 U	10 U	10 U	10 U	25 U	2.0	10 U	10 U

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Di-n-Butylphthalate (µg/L)	Fluoranthene (µg/L)	Pyrene (µg/L)	Butylbenzylphthalate (µg/L)	3,3'-Dichlorobenzidine (µg/L)	Benzo(a)anthracene (µg/L)	bis(2-Ethylhexyl) phthalate (µg/L)	Chrysene (µg/L)
NJGWQS			700	300	200	100	30	0.1	3.0	5.0
Upper Water Bearing Zone										
113-W-113-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-113-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-114-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	2.0	10 U
113-W-114-030696-854T	06/03/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	2.0	10 U
113-W-115-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-115-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	**4.0**	10 U
113-W-116-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	2	10 U
113-W-116-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-117-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	2.0	10 U
113-W-117-030696-854T	06/03/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	2.0	10 U
113-W-118-080693-162	06/08/93	Lancaster	10 U	8.0	8.0	10 U	10 U	10 U	2.0	10 U
113-W-118-040696-854T	06/04/96	Lancaster	3.0	2.0	1.0	10 U	10 U	10 U	2.0	10 U
113-W-119-090693-164	06/09/93	Lancaster	10 U	5.0	7.0	10 U	10 U	**2.0**	**38**	2.0
113-W-119-300596-852T	05/30/96	Lancaster	10 U	10 U	1.0	10 U	10 U	10 U	2.0	10 U
113-W-120-100693-165	06/10/93	Lancaster	10 U	2.0	4.0	10 U	10 U	**1.0**	**18**	1.0
113-W-120-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-121-080693-164	06/08/93	Lancaster	10 U	35	32	10 U	10 U	**14**	**6.0**	**15**
113-W-121-050696-854T	06/05/96	Lancaster	10 U	13	13	10 U	10 U	**5.0**	**6.0**	**7.0**
Lower Water Bearing Zone										
113-W-101-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	3.0	10 U
113-W-101-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	1.0	10 U
113-W-102-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	2.0	10 U
113-W-102-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	2.0	10 U
113-W-102-D-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	1.0	10 U
113-W-103-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-103-D-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Di-n-Butylphthalate (µg/L)	Fluoranthene (µg/L)	Pyrene (µg/L)	Butylbenzylphthalate (µg/L)	3,3'-Dichlorobenzidine (µg/L)	Benzo(a)anthracene (µg/L)	bis(2-Ethylhexyl) phthalate (µg/L)	Chrysene (µg/L)
NJGWQS			700	300	200	100	30	0.1	3.0	5.0
113-W-103-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	2.0	10 U
113-W-104-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	2.0	10 U
113-W-104-280596-852T	05/28/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	1.0	10 U
113-W-104-D-280596-852T	05/28/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	1.0	10 U
113-W-105-090693-164	06/09/93	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-105-030696-854T	06/03/96	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	15	100 U
113-W-105-D-030696-854T	06/03/96	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	18	100 U
113-W-106-080693-162	06/08/93	Lancaster	100 U	15	13	100 U	100 U	100 U	100 U	100 U
113-W-106-D-080693-162	06/08/93	Lancaster	1,000 U	110	55	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
113-W-106-040696-854T	06/04/96	Lancaster	500 U	500 U	500 U	500 U	500 U	500 U	500 U	500 U
113-W-107-300596-852T	05/30/96	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
113-W-107-070693-162	06/07/93	Lancaster	50 U	5.0	5.0	50 U	50 U	50 U	50 U	50 U
113-W-108-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	2.0	10 U
113-W-108-D-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-W-108-040696-854T	06/04/96	Lancaster	10 U	13	15	10 U	10 U	5.0	2.0	6.0
113-W-109-080693-164	06/08/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	4.0	10 U
113-W-109-050696-854T	06/05/96	Lancaster	10 U	4.0	4.0	10 U	10 U	2.0	10 U	2.0

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Di-n-Octylphthalate (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(k) fluoranthene (µg/L)	Benzo(a) pyrene (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	Dibenz(a,h) anthracene (µg/L)	Benzo(g,h,i) perylene (µg/L)	3-Nitroaniline (µg/L)
NJGWQS			100	0.2	0.5	0.1	0.2	0.3	--	--
Upper Water Bearing Zone										
113-W-113-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
113-W-113-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-114-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
113-W-114-030696-854T	06/03/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-115-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
113-W-115-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-116-070693-162	06/07/93	Lancaster	1.0	10 U	10 U	10 U	10 U	10 U	10 U	--
113-W-116-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-117-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
113-W-117-030696-854T	06/03/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-118-080693-162	06/08/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
113-W-118-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	120 U
113-W-119-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	1.0	10 U	10 U	10 U	--
113-W-119-300596-852T	05/30/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-120-100693-165	06/10/93	Lancaster	10 U	1.0	10 U	10 U	10 U	10 U	10 U	--
113-W-120-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-121-080693-164	06/08/93	Lancaster	10 U	17	6.0	14	11	3.0	10	--
113-W-121-050696-854T	06/05/96	Lancaster	10 U	8.0	3.0	5.0	3.0	10 U	3.0	25 U
Lower Water Bearing Zone										
113-W-101-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
113-W-101-040696-854T	06/04/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-102-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
113-W-102-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-102-D-230596-850T	05/23/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-103-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
113-W-103-D-090693-164	06/09/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--

Table 113-02-18
Summary of Groundwater Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Di-n-Octylphthalate (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(k) fluoranthene (µg/L)	Benzo(a) pyrene (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	Dibenz(a,h) anthracene (µg/L)	Benzo(g,h,i) perylene (µg/L)	3-Nitroaniline (µg/L)
NJGWQS			**100**	**0.2**	**0.5**	**0.1**	**0.2**	**0.3**	--	--
113-W-103-290596-852T	05/29/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
113-W-104-070693-162	06/07/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
113-W-104-280596-852T	05/28/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	75 U
113-W-104-D-280596-852T	05/28/96	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	75 U
113-W-105-090693-164	06/09/93	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--
113-W-105-030696-854T	06/03/96	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	5,000 U
113-W-105-D-030696-854T	06/03/96	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	10,000 U
113-W-106-080693-162	06/08/93	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	--
113-W-106-D-080693-162	06/08/93	Lancaster	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	--
113-W-106-040696-854T	06/04/96	Lancaster	500 U	500 U	500 U	500 U	500 U	500 U	500 U	38,000 U
113-W-107-300596-852T	05/30/96	Lancaster	100 U	100 U	100 U	100 U	100 U	100 U	100 U	5,000 U
113-W-107-070693-162	06/07/93	Lancaster	50 U	50 U	50 U	50 U	50 U	50 U	50 U	--
113-W-108-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
113-W-108-D-100693-165	06/10/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
113-W-108-040696-854T	06/04/96	Lancaster	10 U	**6.0**	**2.0**	**5.0**	**2.0**	10 U	3.0	1,200 U
113-W-109-080693-164	06/08/93	Lancaster	10 U	10 U	10 U	10 U	10 U	10 U	10 U	--
113-W-109-050696-854T	06/05/96	Lancaster	10 U	**2.0**	10 U	**2.0**	**1.0**	10 U	1.0	25 U

Notes:
W - Monitoring well
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value.
D - Field Duplicate
µg/L - Micrograms per liter
-- "Not Analyzed" or "Not Applicable" or "Not Requested"
T - Unfiltered (total). Each sample was unfiltered, only some were labeled with a "T".
[ ] - Concentration exceeds higher of PQL and NJDEP Groundwater Quality Criteria

Table 113-02-19
Summary of Groundwater Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Aluminum (µg/L)	Antimony (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Calcium (µg/L)	Chromium (µg/L)
NJGWQS				200	6.0	3.0	6,000	1.0	4.0	--	70
Upper Water Bearing Zone											
113-W-113-040696-854T	U	6/04/96	Lancaster	487	17.6 U	6.0	491	0.71 U	2.9 U	452,000	7,970
113-W-113-040696-854F	F	6/04/96	Lancaster	24.1 U	17.6 U	0.58 U	497	0.71 U	2.9 U	479,000	7,920
113-W-114-030696-854T	U	6/04/96	Lancaster	733	17.6 U	0.58 U	658	1.5	2.9 U	356,000	45,100
113-W-114-030696-854F	F	6/04/96	Lancaster	571	17.6 U	0.58 U	88.1	0.71 U	2.9 U	393,000	48,600
113-W-115-290596-852T	U	5/29/96	Lancaster	5,740	17.6 U	9.3	79.6	0.71 U	0.99 U	77,600	17,300
113-W-115-290596-852F	F	5/29/96	Lancaster	5,870	17.6 U	11.9	74.4	0.71 U	0.99 U	77,300	18,300
113-W-116-290596-852T	U	5/29/96	Lancaster	3,570	17.6 U	43.5	92.5	0.81	2.6	112,000	196
113-W-116-290596-852F	F	5/29/96	Lancaster	24.1 U	17.6 U	31.2	57.4	1.2	0.99 U	112,000	3.3 U
113-W-117-030696-854T	U	6/03/96	Lancaster	1,470	17.6 U	0.76	776	0.71 U	2.9 U	216,000	33,600
113-W-117-030696-854F	F	6/03/96	Lancaster	1,540	17.6 U	4.4	84.7	0.71 U	2.9 U	90,800	19,800
113-W-118-040696-856T	U	6/04/96	Lancaster	1,590	17.6 U	0.58 U	90.9	0.71 U	2.9 U	843,000	74,500
113-W-118-040696-856F	F	6/04/96	Lancaster	73.7	17.6 U	0.58 U	536	0.71 U	2.9 U	780,000	78,800
113-W-119-300596-852T	U	5/30/96	Lancaster	162	17.6 U	0.58 U	20	0.71 U	8.2	32,300	137
113-W-119-300596-852F	F	5/30/96	Lancaster	63.9	17.6 U	0.58 U	17.7	0.71 U	0.99 U	32,600	92.5
113-W-120-040696-854T	U	6/04/96	Lancaster	516	17.6 U	8.6	90.2	0.71 U	4.6	64,800	501
113-W-120-040696-854F	F	6/04/96	Lancaster	24.1 U	17.6 U	4.5	85.1	0.71 U	2.9 U	67,600	111
113-W-121-050696-856T	U	6/05/96	Lancaster	1,640	17.6 U	5.8	64.4	0.71 U	23.1	26,300	90.1
113-W-121-050696-856F	F	6/05/96	Lancaster	274	17.6 U	5.6	34.4	0.71 U	2.9 U	20,700	3.3 U

Table 113-02-19
Summary of Groundwater Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Aluminum (µg/L)	Antimony (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Calcium (µg/L)	Chromium (µg/L)
NJGWQS				200	6.0	3.0	6,000	1.0	4.0	--	70
Lower Water Bearing Zone											
113-W-101-040696-854T	U	6/04/96	Lancaster	466	17.6 U	89.2	207	1.5	7.7	456,000	384
113-W-101-040696-854F	F	6/04/96	Lancaster	24.1 U	17.6 U	87.5	11.5	0.71 U	36.7	475,000	3.3 U
113-W-102-230596-850T	U	5/23/96	Lancaster	8,780	17.6 U	603	478	18.9	1.4	169,000	19,500
113-W-102-D-230596-850T	U	5/23/96	Lancaster	8,440	17.6 U	466	481	20.2	3.0	173,000	16,000
113-W-102-230596-850F	F	5/23/96	Lancaster	8,130	17.6 U	449	406	21	1.7	166,000	18,700
113-W-102-D-230596-850F	F	5/23/96	Lancaster	7,820	17.6 U	432	462	21.2	0.99 U	170,000	20,300
113-W-102-130696-860T	U	6/13/96	Lancaster	--	--	--	--	--	--	--	--
113-W-102-D-130696-860T	U	6/13/96	Lancaster	--	--	--	--	--	--	--	--
113-W-102-130696-860F	F	6/13/96	Lancaster	--	--	--	--	--	--	--	--
113-W-102-D-130696-860F	F	6/13/96	Lancaster	--	--	--	--	--	--	--	--
113-W-103-290596-852T	U	5/29/96	Lancaster	2,090	17.6 U	155	70.8	1.7	8.1	121,000	2,760
113-W-103-290596-852F	F	5/29/96	Lancaster	1,530	17.6 U	153	63.7	1.8	0.99 U	117,000	2,770
113-W-104-290596-852T	U	5/29/96	Lancaster	225	17.6 U	5.0	438	0.71 U	0.99 U	520,000	5,980
113-W-104-D-290596-852T	U	5/29/96	Lancaster	218	17.6 U	4.2	411	0.71 U	0.99 U	492,000	5,640
113-W-104-290596-852F	F	5/29/96	Lancaster	582	17.6 U	6.8	328	0.71 U	0.99 U	403,000	4,690
113-W-104-D-290596-852F	F	5/29/96	Lancaster	552	17.6 U	6.7	318	1.2	0.99 U	395,000	4,990
113-W-105-030696-854T	U	6/03/96	Lancaster	230	17.6 U	37.8	376	1.6	2.9 U	222,000	57
113-W-105-D-030696-854T	U	6/03/96	Lancaster	225	17.6 U	98.1	378	1.6	2.9 U	224,000	56
113-W-105-030696-854F	F	6/03/96	Lancaster	24.1 U	17.6 U	52.8	28.4	0.95	9.3	221,000	43.9
113-W-105-D-030696-854F	F	6/03/96	Lancaster	24.1 U	17.6 U	54.9	28.4	0.71 U	9.2	225,000	41.7

Table 113-02-19
Summary of Groundwater Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Aluminum (µg/L)	Antimony (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Calcium (µg/L)	Chromium (µg/L)
NJGWQS				200	6.0	3.0	6,000	1.0	4.0	--	70
113-W-106-040696-856T	U	6/04/96	Lancaster	22,000	17.6 U	24	27	4.8	23.2	269,000	196
113-W-106-040696-856F	F	6/04/96	Lancaster	7,520	17.6 U	15.2	309	0.88	13.7	262,000	47.2
113-W-107-300596-852T	U	5/30/96	Lancaster	1,030	17.6 U	0.58 U	25.2	0.81	0.99 U	116,000	665
113-W-107-300596-852F	F	5/30/96	Lancaster	54	17.6 U	2.9	22.1	1.2	0.99 U	133,000	449
113-W-108-040696-854T	U	6/04/96	Lancaster	17,700	17.6 U	58.9	545	3.2	18.2	382,000	684
113-W-108-040696-854F	F	6/04/96	Lancaster	207	17.6 U	5.8 U	153	0.71 U	10.2	297,000	240
113-W-109-050696-856T	U	6/05/96	Lancaster	234	17.6 U	9.0	88.6	0.71 U	2.9 U	41,200	52.9
113-W-109-D-050696-856T	U	6/05/96	Lancaster	263	17.6 U	6.2	87.4	0.71 U	3.6	39,800	51.9
113-W-109-050696-856F	F	6/05/96	Lancaster	24.1 U	17.6 U	8.6	86.1	0.71 U	2.9 U	40,400	33.7
113-W-109-D-050696-856F	F	6/05/96	Lancaster	24.1 U	17.6 U	8.0	86.1	0.71 U	2.9 U	38,600	29

Table 113-02-19
Summary of Groundwater Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Cobalt (µg/L)	Copper (µg/L)	Cyanide (µg/L)	Iron (µg/L)	Lead (µg/L)	Magnesium (µg/L)	Manganese (µg/L)	Mercury (µg/L)
NJGWQS				--	1,300	100	300	5.0	--	50	2.0
Upper Water Bearing Zone											
113-W-113-040696-854T	U	6/04/96	Lancaster	8.6	7.0 U	5.0 U	305	11.6	823	5.3	0.021 U
113-W-113-040696-854F	F	6/04/96	Lancaster	6.8	7.0 U	5.5	37.1	1.6	21.1 U	3.3 U	0.03
113-W-114-030696-854T	U	6/04/96	Lancaster	4.5	19.4	56.2	199	1.1	146	4.8	0.025
113-W-114-030696-854F	F	6/04/96	Lancaster	5.7	15.9	20.1	9.8 U	1.0 U	21.1 U	3.3 U	0.021 U
113-W-115-290596-852T	U	5/29/96	Lancaster	4.0 U	23.9	120	304	12	195	3.3 U	0.074
113-W-115-290596-852F	F	5/29/96	Lancaster	5.6	27.4	45.4	259	20.7	182	3.3 U	0.072
113-W-116-290596-852T	U	5/29/96	Lancaster	6.1	9.5	45.9	81,700	4.7	83,100	1,430	0.044
113-W-116-290596-852F	F	5/29/96	Lancaster	4.0 U	7.0 U	6.8	47,200	1.0 U	87,600	1,430	0.035
113-W-117-030696-854T	U	6/03/96	Lancaster	7.9	17.7	59.3	622	2.7	613	5.8	0.022
113-W-117-030696-854F	F	6/03/96	Lancaster	4.0 U	7.0 U	70	91.7	1.0 U	1,950	3.3 U	0.021 U
113-W-118-040696-856T	U	6/04/96	Lancaster	9.0	9.4	52.3	2,050	1.3	2,170	22.9	0.091
113-W-118-040696-856F	F	6/04/96	Lancaster	4.3	26.2	53.4	59.5	1.1	21.1 U	3.3 U	0.086
113-W-119-300596-852T	U	5/30/96	Lancaster	4.0 U	21.8	44.5	659	1.0 U	6,110	57.3	0.044
113-W-119-300596-852F	F	5/30/96	Lancaster	4.0 U	7.0 U	56	79.8	1.0 U	6,160	45.8	0.042
113-W-120-040696-854T	U	6/04/96	Lancaster	8.0	34.8	247	4,230	11.6	10,700	135	0.037
113-W-120-040696-854F	F	6/04/96	Lancaster	4.0 U	7.0 U	201	1,930	10 U	11,700	122	0.021 U
113-W-121-050696-856T	U	6/05/96	Lancaster	4.0 U	17.5	5.0 U	5,920	20.7	2,510	57.2	0.11
113-W-121-050696-856F	F	6/05/96	Lancaster	4.0 U	7.0 U	5.0 U	14.1	0.75 U	800	3.3 U	0.083

Table 113-02-19
Summary of Groundwater Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Cobalt (µg/L)	Copper (µg/L)	Cyanide (µg/L)	Iron (µg/L)	Lead (µg/L)	Magnesium (µg/L)	Manganese (µg/L)	Mercury (µg/L)
NJGWQS				--	1,300	100	300	5.0	--	50	2.0
Lower Water Bearing Zone											
113-W-101-040696-854T	U	6/04/96	Lancaster	4 U	7 U	5 U	596,000	5 U	428,000	5,950	0.03
113-W-101-040696-854F	F	6/04/96	Lancaster	5.3	7 U	5 U	548,000	20 U	423,000	5,830	0.029
113-W-102-230596-850T	U	5/23/96	Lancaster	9.6	21.8	28.4	84,500	5 U	226,000	1,340	2.6
113-W-102-D-230596-850T	U	5/23/96	Lancaster	7.8	14.3	29.9	85,700	5 U	230,000	1,340	0.57
113-W-102-230596-850F	F	5/23/96	Lancaster	6.0	14.2	32.8	85,600	5 U	228,000	1,320	2.4
113-W-102-D-230596-850F	F	5/23/96	Lancaster	4.9	31.1	20.4	86,800	5 U	233,000	1,330	0.56
113-W-102-130696-860T	U	6/13/96	Lancaster	--	--	5.0 U	--	--	--	--	--
113-W-102-D-130696-860T	U	6/13/96	Lancaster	--	--	5.0 U	--	--	--	--	--
113-W-102-130696-860F	F	6/13/96	Lancaster	--	--	35.7	--	--	--	--	--
113-W-102-D-130696-860F	F	6/13/96	Lancaster	--	--	33.7	--	--	--	--	--
113-W-103-290596-852T	U	5/29/96	Lancaster	4.4	7.0 U	6.0	26,600	1.0 U	187,000	184	0.085
113-W-103-290596-852F	F	5/29/96	Lancaster	4.0 U	10	9.4	24,900	1.0 U	183,000	155	0.078
113-W-104-290596-852T	U	5/29/96	Lancaster	26.9	25	46.3	9.8 U	2.6	21.1 U	3.3 U	0.063
113-W-104-D-290596-852T	U	5/29/96	Lancaster	22.9	24.1	41.6	9.8 U	3.0	21.1 U	3.3 U	0.072
113-W-104-290596-852F	F	5/29/96	Lancaster	26.6	28.9	10.8	10.1	2.0	21.1 U	3.3 U	0.21
113-W-104-D-290596-852F	F	5/29/96	Lancaster	26.6	25.6	8.4	9.8 U	2.2	21.1 U	3.3 U	0.069
113-W-105-030696-854T	U	6/03/96	Lancaster	25.7	7 U	74.2	213,000	1.0 U	186,000	22,800	0.027 U
113-W-105-D-030696-854T	U	6/03/96	Lancaster	25.3	7 U	67.4	216,000	5 U	188,000	23,100	0.021 U
113-W-105-030696-854F	F	6/03/96	Lancaster	27.5	7 U	72.7	202,000	10 U	183,000	21,800	0.021 U
113-W-105-D-030696-854F	F	6/03/96	Lancaster	27.5	7 U	68.6	207,000	10 U	186,000	22,200	0.021 U

Table 113-02-19
Summary of Groundwater Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Cobalt (µg/L)	Copper (µg/L)	Cyanide (µg/L)	Iron (µg/L)	Lead (µg/L)	Magnesium (µg/L)	Manganese (µg/L)	Mercury (µg/L)
NJGWQS				--	**1,300**	**100**	**300**	**5.0**	--	**50**	**2.0**
113-W-106-040696-856T	U	6/04/96	Lancaster	42.5	13.1	76.4	**441,000**	2.4	183,000	**20,300**	0.32
113-W-106-040696-856F	F	6/04/96	Lancaster	27.3	8.6	93	**285,000**	3.8 U	156,000	**14,200**	0.088
113-W-107-300596-852T	U	5/30/96	Lancaster	4.6	7.0 U	5.0 U	**6,830**	5.0 U	75,200	**3,560**	0.045
113-W-107-300596-852F	F	5/30/96	Lancaster	4.0 U	7.0 U	5.0 U	**5,660**	5.0 U	82,800	**3,510**	0.043
113-W-108-040696-854T	U	6/04/96	Lancaster	12.6	126	24.7	**112,000**	**125**	168,000	**2,710**	0.12
113-W-108-040696-854F	F	6/04/96	Lancaster	4.0 U	7.0 U	43.5	**157,000**	20 U	139,000	**2,200**	0.029
113-W-109-050696-856T	U	6/05/96	Lancaster	4.0 U	7.0 U	5.0 U	**24,500**	1.2	29,400	**666**	0.076
113-W-109-D-050696-856T	U	6/05/96	Lancaster	4.0 U	7.0 U	5.0 U	**23,900**	1.1	28,300	**645**	0.081
113-W-109-050696-856F	F	6/05/96	Lancaster	4.0 U	7.0 U	5.0 U	**23,800**	0.75 U	27,400	**636**	0.083
113-W-109-D-050696-856F	F	6/05/96	Lancaster	4.0 U	7.0 U	5.0 U	**22,900**	0.75 U	27,300	**614**	0.086

Table 113-02-19
Summary of Groundwater Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Nickel (µg/L)	Potassium (µg/L)	Selenium (µg/L)	Silver (µg/L)	Sodium (µg/L)	Thallium (µg/L)	Vanadium (µg/L)	Zinc (µg/L)
NJGWQS				**100**	--	**40**	**40**	**50,000**	**2.0**	--	**2,000**
Upper Water Bearing Zone											
113-W-113-040696-854T	U	6/04/96	Lancaster	6.4	164,000	3.4	3.0 U	**1,170,000**	3.2 U	3.4 U	5.2 U
113-W-113-040696-854F	F	6/04/96	Lancaster	8.2	171,000	1.7	3.0 U	**1,020,000**	3.2 U	4.4	5.2 U
113-W-114-030696-854T	U	6/04/96	Lancaster	35.8	54,700	3.1	3.0 U	**1,480,000**	3.2 U	3.4 U	464
113-W-114-030696-854F	F	6/04/96	Lancaster	34.8	59,100	2.8	3.0 U	**1,360,000**	3.2 U	27.4	9.0
113-W-115-290596-852T	U	5/29/96	Lancaster	41.3	26,500	1.7	3.0 U	**434,000**	1.4 U	263	47.6
113-W-115-290596-852F	F	5/29/96	Lancaster	**132**	28,800	0.65 U	3.0 U	**455,000**	1.4 U	311	51.2
113-W-116-290596-852T	U	5/29/96	Lancaster	29.3	45,600	2.8	3.0 U	**686,000**	7.0 U	30	47.2
113-W-116-290596-852F	F	5/29/96	Lancaster	4.3 U	46,900	0.65 U	3.0 U	**726,000**	7.0 U	10.2	5.2 U
113-W-117-030696-854T	U	6/03/96	Lancaster	22.3	60,300	0.65 U	3.0 U	**686,000**	3.2 U	3.4 U	472
113-W-117-030696-854F	F	6/03/96	Lancaster	29	77,200	2.2	3.0 U	**913,000**	3.2 U	30.1	5.2 U
113-W-118-040696-856T	U	6/04/96	Lancaster	44.6	69,800	2.7	3.0 U	**1,650,000**	14 U	50.1	18
113-W-118-040696-856F	F	6/04/96	Lancaster	22.7	73,100	8.0	3.0 U	**1,630,000**	14 U	44.3	391
113-W-119-300596-852T	U	5/30/96	Lancaster	4.3 U	22,000	1.3	3.0 U	**479,000**	1.4 U	5.1	44.5
113-W-119-300596-852F	F	5/30/96	Lancaster	4.3 U	22,100	3.2 U	3.0 U	**485,000**	1.4 U	8.2	13
113-W-120-040696-854T	U	6/04/96	Lancaster	**122**	44,100	0.65 U	3.0 U	**399,000**	3.2 U	11.5	41.6
113-W-120-040696-854F	F	6/04/96	Lancaster	5.8 U	46,400	1.2	3.0 U	**431,000**	3.2 U	3.5	5.2 U
113-W-121-050696-856T	U	6/05/96	Lancaster	7.9	44,900	1.5	3.0 U	**251,000**	1.4 U	6.3	92.3
113-W-121-050696-856F	F	6/05/96	Lancaster	5.8 U	43,500	1.6	3.0 U	**216,000**	1.4 U	3.4 U	5.2 U

Table 113-02-19
Summary of Groundwater Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Nickel (µg/L)	Potassium (µg/L)	Selenium (µg/L)	Silver (µg/L)	Sodium (µg/L)	Thallium (µg/L)	Vanadium (µg/L)	Zinc (µg/L)
NJGWQS				**100**	**--**	**40**	**40**	**50,000**	**2.0**	**--**	**2,000**
Lower Water Bearing Zone											
113-W-101-040696-854T	U	6/04/96	Lancaster	5.8 U	11,200	6.5 U	3.0 U	**4,530,000**	3.2 U	17.2	295
113-W-101-040696-854F	F	6/04/96	Lancaster	5.8 U	11,200	6.5 U	3.0 U	**4,400,000**	3.2 U	7.3	15.4
113-W-102-230596-850T	U	5/23/96	Lancaster	95.5	55,600	13.4	3.0 U	**6,900,000**	14 U	1,960	358
113-W-102-D-230596-850T	U	5/23/96	Lancaster	78.2	55,600	12.6	3.0 U	**7,190,000**	14 U	1,870	465
113-W-102-230596-850F	F	5/23/96	Lancaster	85.3	51,300	14.8	3.0 U	**6,870,000**	14 U	2,060	251
113-W-102-D-230596-850F	F	5/23/96	Lancaster	**101**	53,400	27.7	3.0 U	**6,760,000**	14 U	2,120	447
113-W-102-130696-860T	U	6/13/96	Lancaster	--	--	--	--	--	--	--	--
113-W-102-D-130696-860T	U	6/13/96	Lancaster	--	--	--	--	--	--	--	--
113-W-102-130696-860F	F	6/13/96	Lancaster	--	--	--	--	--	--	--	--
113-W-102-D-130696-860F	F	6/13/96	Lancaster	--	--	--	--	--	--	--	--
113-W-103-290596-852T	U	5/29/96	Lancaster	17.6	30,200	2.5	3.0 U	**1,390,000**	14 U	256	33.2
113-W-103-290596-852F	F	5/29/96	Lancaster	43.3	30,000	0.65 U	3.0 U	**1,380,000**	14 U	249	33.3
113-W-104-290596-852T	U	5/29/96	Lancaster	**267 ***	51,100	12.6	3.0 U	**1,630,000**	14 U	3.4 U	14.5
113-W-104-D-290596-852T	U	5/29/96	Lancaster	**257**	48,900	2.0	3.0 U	**1,650,000**	14 U	3.4 U	5.3
113-W-104-290596-852F	F	5/29/96	Lancaster	**289 ****	46,300	19.4	3.0 U	**1,610,000**	14 U	13.4	12.6
113-W-104-D-290596-852F	F	5/29/96	Lancaster	**282**	47,900	8.9	3.0 U	**1,670,000**	14 U	13.5	5.2 U
113-W-105-030696-854T	U	6/03/96	Lancaster	5.8 U	35,800	2.8	3.0 U	**1,570,000**	0.63 U	7.2	441
113-W-105-D-030696-854T	U	6/03/96	Lancaster	5.8 U	36,500	0.65 U	3.0 U	**1,610,000**	3.2 U	7.4	449
113-W-105-030696-854F	F	6/03/96	Lancaster	5.8 U	35,500	5.9	3.0 U	**1,500,000**	3.2 U	3.4 U	5.2 U
113-W-105-D-030696-854F	F	6/03/96	Lancaster	5.8 U	36,200	0.65 U	3.0 U	**1,500,000**	3.2 U	3.4 U	5.2 U

Table 113-02-19
Summary of Groundwater Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Filtered /Unfiltered	Date Collected	Laboratory	Nickel (µg/L)	Potassium (µg/L)	Selenium (µg/L)	Silver (µg/L)	Sodium (µg/L)	Thallium (µg/L)	Vanadium (µg/L)	Zinc (µg/L)
NJGWQS				**100**	**--**	**40**	**40**	**50,000**	**2.0**	**--**	**2,000**
113-W-106-040696-856T	U	6/04/96	Lancaster	14.4	48,100	3.2 U	3.0 U	**1,490,000**	1.4 U	19.6	266
113-W-106-040696-856F	F	6/04/96	Lancaster	9.9	48,400	3.6	3.0 U	**1,490,000**	7.0 U	4.4	639
113-W-107-300596-852T	U	5/30/96	Lancaster	4.3 U	38,000	6.5 U	3.0 U	**2,230,000**	7.0 U	32.4	19.2
113-W-107-300596-852F	F	5/30/96	Lancaster	4.3 U	39,800	6.5 U	3.0 U	**2,210,000**	7.0 U	16	6.3
113-W-108-040696-854T	U	6/04/96	Lancaster	40.2	53,100	19.4	3.0 U	**6,480,000**	3.2 U	96.6	903
113-W-108-040696-854F	F	6/04/96	Lancaster	9.6	57,400	6.5 U	3.0 U	**5,800,000**	3.2 U	43.3	13
113-W-109-050696-856T	U	6/05/96	Lancaster	5.8 U	17,500	0.65 U	3.0 U	**455,000**	**2.1**	3.9	12.6
113-W-109-D-050696-856T	U	6/05/96	Lancaster	5.8 U	16,800	0.65 U	3.0 U	**420,000**	1.4 U	3.4 U	15.7
113-W-109-050696-856F	F	6/05/96	Lancaster	5.8 U	17,000	0.65 U	3.0 U	**430,000**	1.4 U	3.4 U	7.6
113-W-109-D-050696-856F	F	6/05/96	Lancaster	5.8 U	16,800	0.65 U	3.0 U	**414,000**	1.4 U	3.4 U	5.8

Notes:
W - Monitroing well
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value.
D - Field Duplicate
µg/L - Micrograms per liter
-- "Not Analyzed" or "Not Applicable" or "Not Requested"
T and U - Unfiltered (total)
F - Filtered (dissolved)
*Sample 113-W-104-290596-852T was also analyzed for nickel by Furnace and a result of 292 µg/L was obtained.
**Sample 113-W-104-290596-852F was also analyzed for nickel by Furnace and a result of 336 µg/L was obtained.
☐ -Concentration exceeds higher of PQL and NJDEP Groundwater Quality Criteria.

TABLE 113-02-20
Summary of Surface Water Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Total Cr (µg/L)	Total Cr (Enseco-RMA) (µg/L)	Cr(VI) (µg/L)	Cr(VI) Dilution	pH (s.u.)	Field pH (s.u.)	ORP mV (Eh)	Field ORP mV (Eh)
113-S-122A-151092-085F	10/15/92	Accutest	--	80 U	10 U	1.0	--	--	--	--
113-S-122A-151092-085T	10/15/92	Accutest	--	80 U	10 U	1.0	7.5	--	--	--
113-S-122A-D-151092-085F	10/15/92	Accutest	--	80 U	10 U	1.0	--	--	--	--
113-S-122A-D-151092-085T	10/15/92	Accutest	--	80 U	10 U	1.0	7.5	--	--	--
113-S-122B-151092-085F	10/15/92	Accutest	--	80 U	10 U	1.0	--	--	--	--
113-S-122B-151092-085T	10/15/92	Accutest	--	80 U	10 U	1.0	7.5	--	--	--
113-S-122C-151092-085F	10/15/92	Accutest	--	80 U	10 U	1.0	--	--	--	--
113-S-122C-151092-085T	10/15/92	Accutest	--	80 U	10 U	1.0	7.5	--	--	--
113-S-123A-081092-081F	10/08/92	Accutest	--	80 U	10 U	1.0	--	--	--	--
113-S-123A-081092-081T	10/08/92	Accutest	--	80 U	104	1.0	7.7	--	--	--
113-S-123A-D-081092-081F	10/08/92	Accutest	--	80 U	10 U	1.0	--	--	--	--
113-S-123A-D-081092-081T	10/08/92	Accutest	--	80 U	35.2	1.0	7.7	--	--	--
113-S-123B-081092-081F	10/08/92	Accutest	--	80 U	10 U	1.0	--	--	--	--
113-S-123B-081092-081T	10/08/92	Accutest	--	80 U	10 U	1.0	7.6	--	--	--
113-S-123C-081092-081F	10/08/92	Accutest	--	80 U	10 U	1.0	--	--	--	--
113-S-123C-081092-081T	10/08/92	Accutest	--	80 U	10 U	1.0	7.7	--	--	--
113-S-124A-011092-074F	10/01/92	Accutest	--	80	10 U	1.0	--	--	--	--
113-S-124A-011092-074T	10/01/92	Accutest	--	40 U	13.4	1.0	7.6	--	--	--
113-S-124B-011092-074F	10/01/92	Accutest	--	80 U	10 U	1.0	--	--	--	--
113-S-124B-011092-074T	10/01/92	Accutest	--	40 U	10 U	1.0	7.6	--	--	--
113-S-124B-D-011092-074F	10/01/92	Accutest	--	80 U	10 U	1.0	--	--	--	--
113-S-124B-D-011092-074T	10/01/92	Accutest	--	40 U	10 U	1.0	7.6	--	--	--
113-S-124C-011092-074F	10/01/92	Accutest	--	80 U	10 U	1.0	--	--	--	--
113-S-124C-011092-074T	10/01/92	Accutest	--	40 U	10 U	1.0	7.6	--	--	--
113-S-125A-240992-068F	09/24/92	Accutest	9.0	80 U	18	1.0	--	--	--	--

TABLE 113-02-20
Summary of Surface Water Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Total Cr (µg/L)	Total Cr (Enseco-RMA) (µg/L)	Cr(VI) (µg/L)	Cr(VI) Dilution	pH (s.u.)	Field pH (s.u.)	ORP mV (Eh)	Field ORP mV (Eh)
113-S-125A-240992-068T	09/24/92	Accutest	63	139	17	1.0	7.3	--	--	--
113-S-125B-240992-068F	09/24/92	Accutest	3.0 U	80 U	10 U	1.0	--	--	--	--
113-S-125B-240992-068T	09/24/92	Accutest	6.0	80 U	27	1.0	7.7	--	--	--
113-S-125C-240992-068F	09/24/92	Accutest	5.0	80 U	10	1.0	--	--	--	--
113-S-125C-240992-068T	09/24/92	Accutest	10	80 U	24	1.0	7.7	--	--	--
113-S-126A-230992-068F	09/23/92	Accutest	4.0	80 U	10 U	1.0	--	--	--	--
113-S-126A-230992-068T	09/23/92	Accutest	23	83.4	10 U	1.0	7.6	--	--	--
113-S-126A-D-230992-068F	09/23/92	Accutest	3.0 U	80 U	10 U	1.0	--	--	--	--
113-S-126A-D-230992-068T	09/23/92	Accutest	18	80 U	10 U	1.0	6.8	--	--	--
113-S-126B-230992-068F	09/23/92	Accutest	2.0 U	80 U	10 U	1.0	--	--	--	--
113-S-126B-230992-068T	09/23/92	Accutest	5.0	80 U	10 U	1.0	7.3	--	--	--
113-S-126C-230992-068F	09/23/92	Accutest	3.0 U	80 U	10 U	1.0	--	--	--	--
113-S-126C-230992-068T	09/23/92	Accutest	9.0	80 U	10 U	1.0	7.8	--	--	--
113-SW-01-T-131107-1353	11/13/07	Lancaster	2.4 U	--	10 U	1.0	7.6	7.7	532	388
113-SW-01-D-131107-1353	11/13/07	Lancaster	2.4 U	--	10 U	1.0	--	--	--	--
113-SW-02-T-131107-1353	11/13/07	Lancaster	2.4 U	--	10 U	1.0	7.6	7.4	556	192
113-SW-02-D-131107-1353	11/13/07	Lancaster	2.4 U	--	10 U	1.0	--	--	--	--
113-SW-03-T-131107-1353	11/13/07	Lancaster	2.4 U	--	10 U	1.0	7.6	7.6	565	227
113-SW-03-D-131107-1353	11/13/07	Lancaster	2.4 U	--	10 U	1.0	--	--	--	--
113-SW-04-T-131107-1353	11/13/07	Lancaster	2.4 U	--	10 U	1.0	7.6	7.5	573	176
113-SW-04-D-131107-1353	11/13/07	Lancaster	2.4 U	--	10 U	1.0	--	--	--	--
113-SW-04-T-D-131107-1353	11/13/07	Lancaster	2.4 U	--	10 U	1.0	7.5	7.5	584	176

TABLE 113-02-20
Summary of Surface Water Characterization - Total Cr, Cr(VI), pH, and ORP
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Total Cr (µg/L)	Total Cr (Enseco-RMA) (µg/L)	Cr(VI) (µg/L)	Cr(VI) Dilution	pH (s.u.)	Field pH (s.u.)	ORP mV (Eh)	Field ORP mV (Eh)
113-SW-04-D-D-131107-1353	11/13/07	Lancaster	2.4 U	--	10 U	1.0	--	--	--	--
113-SW-05-T-131107-1353	11/13/07	Lancaster	2.4 U	--	10 U	1.0	7.5	7.4	582	216
113-SW-05-D-131107-1353	11/13/07	Lancaster	2.4 U	--	10 U	1.0	--	--	--	--
113-SW-06-T-131107-1353	11/13/07	Lancaster	2.4 U	--	10 U	1.0	7.6	7.4	585	161
113-SW-06-D-131107-1353	11/13/07	Lancaster	3.4 B	--	10 U	1.0	--	--	--	--

Notes:
S, SW - Surface water
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
Field ORP Eh - Field ORP measurement has been converted to Eh based on the reference electrode used.
D - Field Duplicate
mV - Millivolts
µg/L - Micrograms per liter
-- "Not Analyzed" or "Not Applicable" or "Not Requested"
(s.u.) - Standard Units
RE - Reanalyzed sample. Results from samples reanalyzed in 2004 were obtained using Method 7199 (IC) due to elevated detection limits using Method 7196A.
B - Value is less than the contract required detection limit, but greater than the intrument detection limit.
A,B,C - Designates relatively increasing distance of sediment samples from shoreline; A being the closest and C the furthest from the shoreline.
T - Unfiltered (total)
F - Filtered

Table 113-02-21
Summary of Surface Water Characterization - Pesticides/PCBs
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	alpha-BHC (ug/L)	beta-BHC (ug/L)	delta-BHC (ug/L)	gamma-BHC (Lindane) (ug/L)	Heptachlor (ug/L)	Aldrin (ug/L)	Heptachlor Epoxide (ug/L)	Endosulfan (ug/L)	Dieldrin (ug/L)	4,4-DDE (ug/L)
NJDEP Human Health Based SWQC			**0.0049**	**0.017**	**--**	**1.80**	**0.000079**	**0.00005**	**0.000039**	**89**	**0.000054**	**0.00022**
113-S-122A-151092-085	10/15/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-122A-D-151092-085	10/15/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-122B-151092-085	10/15/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-122C-151092-085	10/15/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-123A-081092-081	10/08/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-123A-D-081092-081	10/08/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-123B-081092-081	10/08/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-123C-081092-081	10/08/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-124A-011092-074	10/01/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-124B-011092-074	10/01/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-124B-D-011092-074	10/01/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-124C-011092-074	10/01/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-125A-240992-068	09/24/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-125B-240992-068	09/24/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-125C-240992-068	09/24/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U
113-S-126A-230992-068	09/24/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-126A-D-230992-068	09/23/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-126B-230992-068	09/23/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U
113-S-126C-230992-068	09/23/92	Enseco-RMA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U

Table 113-02-21
Summary of Surface Water Characterization - Pesticides/PCBs
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Endrin (ug/L)	Endosulfan II (ug/L)	4,4'-DDD (ug/L)	Endosulfan Sulfate (ug/L)	4,4'-DDT (ug/L)	Methoxychlor (ug/L)	Endrin Ketone (ug/L)	Endrin Aldehyde (ug/L)	alpha Chlordane (ug/L)	gamma Chlordane (ug/L)
NJDEP Human Health Based SWQC			0.06	89	0.00031	89	0.00022	--	--	0.06	--	--
113-S-122A-151092-085	10/15/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-122A-D-151092-085	10/15/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-122B-151092-085	10/15/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-122C-151092-085	10/15/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-123A-081092-081	10/08/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-123A-D-081092-081	10/08/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-123B-081092-081	10/08/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-123C-081092-081	10/08/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-124A-011092-074	10/01/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-124B-011092-074	10/01/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-124B-D-011092-074	10/01/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-124C-011092-074	10/01/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-125A-240992-068	09/24/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-125B-240992-068	09/24/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-125C-240992-068	09/24/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-126A-230992-068	09/24/92	Enseco-RMA	0.1 U	0.05 U	0.1 U	0.05 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-126A-D-230992-068	09/23/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-126B-230992-068	09/23/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U
113-S-126C-230992-068	09/23/92	Enseco-RMA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.05 U	0.1 U	0.1 U	0.05 U	0.05 U

Table 113-02-21
Summary of Surface Water Characterization - Pesticides/PCBs
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Toxaphene (ug/L)	PCB-1016 (ug/L)	PCB-1221 (ug/L)	PCB-1232 (ug/L)	PCB-1242 (ug/L)	PCB-1248 (ug/L)	PCB-1254 (ug/L)	PCB-1260 (ug/L)
NJDEP Human Health Based SWQC			**0.0028**	**0.000064 ***	**0.000064 ***	**0.000064 ***	**0.000064 ***	**0.000064 ***	**0.000064 ***	**0.000064 ***
113-S-122A-151092-085	10/15/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-122A-D-151092-085	10/15/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-122B-151092-085	10/15/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-122C-151092-085	10/15/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-123A-081092-081	10/08/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-123A-D-081092-081	10/08/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-123B-081092-081	10/08/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-123C-081092-081	10/08/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-124A-011092-074	10/01/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-124B-011092-074	10/01/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-124B-D-011092-074	10/01/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-124C-011092-074	10/01/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-125A-240992-068	09/24/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-125B-240992-068	09/24/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-125C-240992-068	09/24/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-126A-230992-068	09/24/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-126A-D-230992-068	09/23/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-126B-230992-068	09/23/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
113-S-126C-230992-068	09/23/92	Enseco-RMA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

S - Surface water

U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value.

D - Field Duplicate

µg/L - Micrograms per liter

-- "Not Analyzed" or "Not Applicable" or "Not Requested"

A,B,C - Designates relatively increasing distance of sediment samples from shoreline; A being the closest and C the furthest from the shoreline.

☐ - Concentration exceeds the NJDEP human health based surface water quality criteria

* Surface Water Quality Criteria listed for PCBs is for total PCBs

BROWN AND CALDWELL

P:\TSI\Site_113\133697(RRI)\RRIR\Tables\SRI_Tables_(061108).xls\T-113-2-21(SW_PestPCB)
6/11/2008

Table 113-02-22
Summary of Surface Water Characterization - Total Petroleum Hydrocarbons
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Total Petroleum Hydrocarbons (µg/L)
113-S-122A-151092-085	10/15/1992	Accutest	530 U
113-S-122A-D-151092-085	10/15/1992	Accutest	530 U
113-S-122B-151092-085	10/15/1992	Accutest	510 U
113-S-122C-151092-085	10/15/1992	Accutest	510 U
113-S-123A-081092-081	10/8/1992	Accutest	510 U
113-S-123A-D-081092-081	10/8/1992	Accutest	510 U
113-S-123B-081092-081	10/8/1992	Accutest	510 U
113-S-123C-081092-081	10/8/1992	Accutest	510 U
113-S-124A-011092-074	10/1/1992	Accutest	510 U
113-S-124B-011092-074	10/1/1992	Accutest	510 U
113-S-124B-D-011092-074	10/1/1992	Accutest	510 U
113-S-124C-011092-074	10/1/1992	Accutest	510 U
113-S-125A-240992-068	9/24/1992	Accutest	510 U
113-S-125B-240992-068	9/24/1992	Accutest	510 U
113-S-125C-240992-068	9/24/1992	Accutest	510 U
113-S-126A-230992-068	9/23/1992	Accutest	510 U
113-S-126A-D-230992-068	9/23/1992	Accutest	510 U
113-S-126B-230992-068	9/23/1992	Accutest	510 U
113-S-126C-230992-068	9/23/1992	Accutest	510 U

Notes:

S - Surface water

U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value

D - Field Duplicate

µg/L - Micrograms per liter

A,B,C - Designates relatively increasing distance of sediment samples from shoreline; A being the closest and C the furthest from the shoreline.

Table 113-02-23
Summary of Surface Water Characterization - SVOCS
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Phenol (µg/L)	bis(2-Chloroethyl) ether (µg/L)	2-Chlorophenol (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	1,2-Dichlorobenzene (µg/L)	2-Methylphenol (µg/L)	2,2'-oxybis-(1-Chloropropane) (µg/L)	4-Methylphenol (µg/L)
NJDEP Human Health Based SWQS			860,000	0.53	150	8,300	2,200	6,200	--	--	--
113-S-122A-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-122A-D-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-122B-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-122C-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123A-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123A-D-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123B-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123C-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124A-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124B-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124B-D-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124C-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-125A-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-125B-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-125C-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-126A-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	1.0	2.0	2.0	10 U	10 U	10 U
113-S-126A-D-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	1.0	2.0	2.0	10 U	10 U	10 U
113-S-126B-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-126C-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 113-02-23
Summary of Surface Water Characterization - SVOCS
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	N-Nitroso-di-n-Propylamine (µg/L)	Hexachloroethane (µg/L)	Nitrobenzene (µg/L)	Isophorone (µg/L)	2-Nitrophenol (µg/L)	2,4-Dimethylphenol (µg/L)	bis(2-Chloroethoxy) Methane (µg/L)	2,4-Dichlorophenol (µg/L)	1,2,4-Trichlorobenzene (µg/L)
NJDEP Human Health Based SWQS			0.51	3.3	690	980	--	850	--	290	42
113-S-122A-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-122A-D-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-122B-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-122C-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123A-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123A-D-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123B-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123C-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124A-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124B-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124B-D-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124C-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-125A-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-125B-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-125C-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-126A-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	2.0
113-S-126A-D-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	2.0
113-S-126B-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-126C-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 113-02-23
Summary of Surface Water Characterization - SVOCS
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Naphthalene (µg/L)	4-Chloroaniline (µg/L)	Hexachlorobutadiene (µg/L)	4-Chloro-3-Methylphenol (µg/L)	2-Methylnaphthalene (µg/L)	Hexachlorocyclo pentadiene (µg/L)	2,4,6-Trichlorophenol (µg/L)	2,4,5-Trichlorophenol (µg/L)	2-Chloronaphthalene (µg/L)
NJDEP Human Health Based SWQS			–	–	18	–	–	1,100	1	3,600	1,600
113-S-122A-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-122A-D-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-122B-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-122C-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-123A-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-123A-D-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-123B-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-123C-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-124A-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-124B-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-124B-D-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-124C-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-125A-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-125B-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-125C-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-126A-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-126A-D-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-126B-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U
113-S-126C-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U

Table 113-02-23
Summary of Surface Water Characterization - SVOCS
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	2-Nitroaniline (µg/L)	Dimethylphthalate (µg/L)	2,6-Dinitrotoluene (µg/L)	Acenaphthylene (µg/L)	Acenaphthene (µg/L)	2,4-Dinitrophenol (µg/L)	4-Nitrophenol (µg/L)	Dibenzofuran (µg/L)	2,4-Dinitrotoluene (µg/L)
NJDEP Human Health Based SWQS			--	--	3.4	--	990	5,300	--	--	3.4
113-S-122A-151092-085	10/15/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-122A-D-151092-085	10/15/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-122B-151092-085	10/15/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-122C-151092-085	10/15/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-123A-081092-081	10/08/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-123A-D-081092-081	10/08/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-123B-081092-081	10/08/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-123C-081092-081	10/08/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-124A-011092-074	10/01/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-124B-011092-074	10/01/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-124B-D-011092-074	10/01/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-124C-011092-074	10/01/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-125A-240992-068	09/24/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-125B-240992-068	09/24/92	Enseco-RMA	25 U	10 U	10 U	25 U	10 U	10 U	25 U	10 U	25 U
113-S-125C-240992-068	09/24/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-126A-230992-068	09/23/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U	25 U
113-S-126A-D-230992-068	09/23/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	10 U	25 U	10 U	10 U
113-S-126B-230992-068	09/23/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U
113-S-126C-230992-068	09/23/92	Enseco-RMA	25 U	10 U	10 U	10 U	10 U	25 U	25 U	10 U	10 U

Table 113-02-23
Summary of Surface Water Characterization - SVOCS
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Diethylphthalate (µg/L)	4-Chlorophenyl-phenylether (µg/L)	Fluorene (µg/L)	4-Nitroaniline (µg/L)	4,6-Dinitro-2-Methylphenol (µg/L)	N-Nitroso-diphenylamine (µg/L)	4-Bromophenyl-phenylether (µg/L)	Hexachlorobenzene (µg/L)	Pentachlorophenol (µg/L)
NJDEP Human Health Based SWQS			44,000	--	5,300	--	--	6	--	0.00029	3
113-S-122A-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-122A-D-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-122B-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-122C-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-123A-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-123A-D-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-123B-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-123C-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-124A-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-124B-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-124B-D-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-124C-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-125A-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-125B-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	25 U	10 U	10 U	10 U	25 U
113-S-125C-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-126A-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-126A-D-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-126B-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U
113-S-126C-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	25 U	25 U	10 U	10 U	10 U	25 U

Table 113-02-23
Summary of Surface Water Characterization - SVOCS
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Phenanthrene (µg/L)	Anthracene (µg/L)	Carbazole (µg/L)	Di-n-Butylphthalate (µg/L)	Fluoranthene (µg/L)	Pyrene (µg/L)	Butylbenzylphthalate (µg/L)	3,3'-Dichlorobenzidine (µg/L)	Benzo(a)anthracene (µg/L)
NJDEP Human Health Based SWQS			–	40,000	–	4,500	140	4,000	190	0.0280	0.18
113-S-122A-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-122A-D-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-122B-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-122C-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123A-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123A-D-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123B-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123C-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124A-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124B-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124B-D-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124C-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-125A-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-125B-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-125C-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-126A-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-126A-D-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-126B-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-126C-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 113-02-23
Summary of Surface Water Characterization - SVOCS
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	bis(2-Ethylhexyl) phthalate (µg/L)	Chrysene (µg/L)	Di-n-Octylphthalate (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(k) fluoranthene (µg/L)	Benzo(a) pyrene (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	Dibenz(a,h) anthracene (µg/L)	Benzo(g,h,i) perylene (µg/L)
NJDEP Human Health Based SWQS			2.2	18	--	0.180	1.8	0.018	0.18	0.018	--
113-S-122A-151092-085	10/15/92	Enseco-RMA	1.0	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-122A-D-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-122B-151092-085	10/15/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-122C-151092-085	10/15/92	Enseco-RMA	2	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123A-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123A-D-081092-081	10/08/92	Enseco-RMA	11	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123B-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-123C-081092-081	10/08/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124A-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124B-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124B-D-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-124C-011092-074	10/01/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-125A-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-125B-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-125C-240992-068	09/24/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-126A-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-126A-D-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-126B-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
113-S-126C-230992-068	09/23/92	Enseco-RMA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Notes:
S - Surface water
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
D - Field Duplicate
µg/L - Micrograms per liter
-- "Not Analyzed" or "Not Applicable" or "Not Requested"
A,B,C - Designates relatively increasing distance of sediment samples from shoreline; A being the closest and C the furthest from the shoreline.
[ ] - Concentration exceeds higher of PQL and NJDEP Groundwater Quality Criterion of NJDEP Human Health Based Surface Water Qulaity Criteria, depending on sample type.

Table 113-02-24
Summary of Surface Water Characterization - TAL Metals
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Aluminum (µg/L)	Antimony (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Calcium (µg/L)	Chromium (µg/L)
NJDEP Human Health Based SWQC			--	640	0.061	--	42	16	--	750
113-S-122A-151092-085F	10/15/92	Enseco-RMA	270	180 U	20 U	60 U	10 U	50 U	182,000	80 U
113-S-122A-151092-085T	10/15/92	Enseco-RMA	872	180 U	20 U	60 U	10 U	50 U	184,000	80 U
113-S-122A-D-151092-085F	10/15/92	Enseco-RMA	170 U	180 U	20 U	60 U	10 U	50 U	176,000	80 U
113-S-122A-D-151092-085T	10/15/92	Enseco-RMA	960	180 U	20 U	65.8	10 U	50 U	176,000	80 U
113-S-122B-151092-085F	10/15/92	Enseco-RMA	590	180 U	20 U	60 U	10 U	50 U	179,000	80 U
113-S-122B-151092-085T	10/15/92	Enseco-RMA	767	180 U	20 U	60 U	10 U	50 U	179,000	80 U
113-S-122C-151092-085F	10/15/92	Enseco-RMA	1,250	180 U	20 U	60 U	10 U	50 U	176,000	80 U
113-S-122C-151092-085T	10/15/92	Enseco-RMA	1,030	180 U	20 U	60 U	10 U	50 U	173,000	80 U
113-S-123A-081092-081F	10/08/92	Enseco-RMA	170 U	180 U	20 U	60 U	10 U	50 U	165,000	80 U
113-S-123A-081092-081T	10/08/92	Enseco-RMA	1,770	180 U	20 U	60 U	10 U	50 U	160,000	80 U
113-S-123A-D-081092-081F	10/08/92	Enseco-RMA	170 U	180 U	20 U	60 U	10 U	50 U	167,000	80 U
113-S-123A-D-081092-081T	10/08/92	Enseco-RMA	1,960	180 U	20 U	67.9	11.1 U	50 U	158,000	80 U
113-S-123B-081092-081F	10/08/92	Enseco-RMA	170 U	180 U	20 U	60 U	10 U	50 U	158,000	80 U
113-S-123B-081092-081T	10/08/92	Enseco-RMA	301	180 U	20 U	60 U	10.3	50 U	153,000	80 U
113-S-123C-081092-081F	10/08/92	Enseco-RMA	170 U	180 U	20 U	60 U	10 U	50 U	167,000	80 U
113-S-123C-081092-081T	10/08/92	Enseco-RMA	192	180 U	20 U	60 U	10.5	50 U	118,000	80 U
113-S-124A-011092-074F	10/01/92	Enseco-RMA	170 U	180 U	10 U	60 U	16.7	50 U	159,000	80 U
113-S-124A-011092-074T	10/01/92	Enseco-RMA	200	90 U	**2.5**	42	5 U	25 U	149,000	40 U
113-S-124B-011092-074F	10/01/92	Enseco-RMA	170 U	180 U	2 U	60 U	16.6	50 U	166,000	80 U
113-S-124B-011092-074T	10/01/92	Enseco-RMA	519	90 U	**2.8**	50.4	5 U	25 U	158,000	40 U
113-S-124B-D-011092-074F	10/01/92	Enseco-RMA	170 U	180 U	2 U	60 U	16.7	50 U	172,000	80 U
113-S-124B-D-011092-074T	10/01/92	Enseco-RMA	303	90 U	2 U	50.5	10.9	25 U	165,000	40 U
113-S-124C-011092-074F	10/01/92	Enseco-RMA	170 U	180 U	**65.7**	60 U	16.6	50 U	164,000	80 U
113-S-124C-011092-074T	10/01/92	Enseco-RMA	203	90 U	**2.5**	46.2	10.3	25 U	155,000	40 U
113-S-125A-240992-068F	09/24/92	Enseco-RMA	170 U	180 U	2 U	60 U	27	50 U	139,000	80 U
113-S-125A-240992-068T	09/24/92	Enseco-RMA	4,410	180 U	**4.1**	82.7	10 U	50 U	176,000	139

Table 113-02-24
Summary of Surface Water Characterization - TAL Metals
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Aluminum (µg/L)	Antimony (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Calcium (µg/L)	Chromium (µg/L)
NJDEP Human Health Based SWQC			--	640	0.061	--	42	16	--	750
113-S-125B-240992-068F	09/24/92	Enseco-RMA	170 U	180 U	2 U	60 U	28	50 U	77,000	80 U
113-S-125B-240992-068T	09/24/92	Enseco-RMA	438	180 U	**4.8**	64.6	10 U	50 U	163,000	80 U
113-S-125C-240992-068F	09/24/92	Enseco-RMA	170 U	180 U	2 U	70.6	25.1	50 U	157,000	80 U
113-S-125C-240992-068T	09/24/92	Enseco-RMA	699	180 U	**2.6**	60 U	10 U	50 U	166,000	80 U
113-S-126A-230992-068F	09/24/92	Enseco-RMA	170 U	180 U	**2.3**	60 U	10 U	50 U	149,000	80 U
113-S-126A-230992-068T	09/24/92	Enseco-RMA	1,140	180 U	**3.5**	60 U	10 U	50 U	156,000	83.4
113-S-126A-D-230992-068F	09/24/92	Enseco-RMA	170 U	180 U	**2.1**	70.6	27	50 U	149,000	80 U
113-S-126A-D-230992-068T	09/24/92	Enseco-RMA	1,250	180 U	**2.8**	64.5	10 U	50 U	158,000	80 U
113-S-126B-230992-068F	09/24/92	Enseco-RMA	170 U	180 U	**2.5**	70.6	25.2	50 U	145,000	80 U
113-S-126B-230992-068T	09/24/92	Enseco-RMA	367	180 U	**2.8**	60 U	10 U	50 U	156,000	80 U
113-S-126C-230992-068F	09/24/92	Enseco-RMA	170 U	180 U	2 U	70.6	25.2	50 U	149,000	80 U
113-S-126C-230992-068T	09/24/92	Enseco-RMA	408	180 U	**2.8**	60 U	10 U	50 U	153,000	80 U

Table 113-02-24
Summary of Surface Water Characterization - TAL Metals
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Cobalt (µg/L)	Copper (µg/L)	Cyanide (µg/L)	Iron (µg/L)	Lead (µg/L)	Magnesium (µg/L)	Manganese (µg/L)	Mercury (µg/L)
NJDEP Human Health Based SWQC			–	–	140	–	–	–	100	0.051
113-S-122A-151092-085F	10/15/92	Enseco-RMA	40 U	30 U	–	90 U	20 U	501,000	**196**	0.2 U
113-S-122A-151092-085T	10/15/92	Enseco-RMA	40 U	31.7	5 U	1,000	20 U	507,000	**245**	0.2 U
113-S-122A-D-151092-085F	10/15/92	Enseco-RMA	40 U	30 U	–	90 U	20 U	487,000	**185**	0.2 U
113-S-122A-D-151092-085T	10/15/92	Enseco-RMA	53.7	30 U	5 U	901	20 U	483,000	**245**	0.2 U
113-S-122B-151092-085F	10/15/92	Enseco-RMA	43.2	30 U	–	90 U	20 U	490,000	**219**	0.2 U
113-S-122B-151092-085T	10/15/92	Enseco-RMA	48.4	30 U	5 U	598	20 U	494,000	**257**	0.2 U
113-S-122C-151092-085F	10/15/92	Enseco-RMA	40 U	30 U	–	90 U	20 U	483,000	**202**	0.2 U
113-S-122C-151092-085T	10/15/92	Enseco-RMA	40 U	30 U	5 U	601	20 U	473,000	**245**	**0.29**
113-S-123A-081092-081F	10/08/92	Enseco-RMA	40 U	30 U	–	90 U	20 U	444,000	**168**	0.2 U
113-S-123A-081092-081T	10/08/92	Enseco-RMA	40 U	30 U	5 U	3,330	20 U	419,000	**248**	**0.27**
113-S-123A-D-081092-081F	10/08/92	Enseco-RMA	40 U	30 U	–	90 U	20 U	447,000	**139**	0.2 U
113-S-123A-D-081092-081T	10/08/92	Enseco-RMA	40 U	30 U	5 U	3,530	20 U	412,000	**258**	**0.34**
113-S-123B-081092-081F	10/08/92	Enseco-RMA	40 U	30 U	–	90 U	20 U	419,000	**167**	0.2 U
113-S-123B-081092-081T	10/08/92	Enseco-RMA	40 U	30 U	5 U	454	20 U	401,000	**197**	**0.25**
113-S-123C-081092-081F	10/08/92	Enseco-RMA	40 U	30 U	–	90 U	20 U	444,000	**139**	0.2 U
113-S-123C-081092-081T	10/08/92	Enseco-RMA	40 U	30 U	5 U	392	20 U	313,000	**130**	**0.32**
113-S-124A-011092-074F	10/01/92	Enseco-RMA	40 U	30 U	–	90 U	20 U	431,000	**163**	0.2 U
113-S-124A-011092-074T	10/01/92	Enseco-RMA	20 U	15 U	5 U	848	20 U	394,000	**204**	0.2 U
113-S-124B-011092-074F	10/01/92	Enseco-RMA	40 U	35.2	–	90 U	20 U	457,000	**189**	0.2 U
113-S-124B-011092-074T	10/01/92	Enseco-RMA	20 U	15 U	5 U	1,090	20 U	427,000	**185**	0.2 U
113-S-124B-D-011092-074F	10/01/92	Enseco-RMA	40 U	30 U	–	90 U	20 U	473,000	**180**	0.2 U
113-S-124B-D-011092-074T	10/01/92	Enseco-RMA	20 U	18.9	5 U	1,010	20 U	438,000	**192**	0.2 U
113-S-124C-011092-074F	10/01/92	Enseco-RMA	40 U	30	–	90	20 U	445,000	**172**	0.2 U
113-S-124C-011092-074T	10/01/92	Enseco-RMA	20 U	17.7	5 U	988	2 U	410,000	**215**	0.2 U
113-S-125A-240992-068F	09/24/92	Enseco-RMA	40 U	30 U	–	90 U	20 U	405,000	**116**	0.2 U
113-S-125A-240992-068T	09/24/92	Enseco-RMA	40 U	55.7	5 U	8,790	26	470,000	**464**	**0.79**

Table 113-02-24
Summary of Surface Water Characterization - TAL Metals
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Cobalt (µg/L)	Copper (µg/L)	Cyanide (µg/L)	Iron (µg/L)	Lead (µg/L)	Magnesium (µg/L)	Manganese (µg/L)	Mercury (µg/L)
NJDEP Human Health Based SWQC			--	--	140	--	--	--	100	0.051
113-S-125B-240992-068F	09/24/92	Enseco-RMA	40 U	32.1	--	90 U	20 U	225,000	50 U	0.2 U
113-S-125B-240992-068T	09/24/92	Enseco-RMA	40 U	30 U	5 U	827	20 U	438,000	**248**	0.2 U
113-S-125C-240992-068F	09/24/92	Enseco-RMA	40 U	40.2	--	90 U	20 U	451,000	**123**	0.2 U
113-S-125C-240992-068T	09/24/92	Enseco-RMA	40 U	30 U	5 U	1,370	20 U	446,000	**232**	0.2 U
113-S-126A-230992-068F	09/24/92	Enseco-RMA	40 U	58.9	--	90 U	20 U	412,000	**158**	0.2 U
113-S-126A-230992-068T	09/24/92	Enseco-RMA	40 U	30 U	5 U	2,590	20 U	408,000	**298**	**0.22**
113-S-126A-D-230992-068F	09/24/92	Enseco-RMA	40 U	58.9	--	90 U	20 U	427,000	**143**	0.2 U
113-S-126A-D-230992-068T	09/24/92	Enseco-RMA	40 U	30 U	5 U	2,400	20 U	418,000	**297**	0.2 U
113-S-126B-230992-068F	09/24/92	Enseco-RMA	40 U	30 U	--	90 U	20 U	408,000	**143**	0.2 U
113-S-126B-230992-068T	09/24/92	Enseco-RMA	40 U	30 U	5 U	676	20 U	413,000	**232**	**0.49**
113-S-126C-230992-068F	09/24/92	Enseco-RMA	40 U	40.2	--	90 U	20 U	412,000	**116**	**0.24**
113-S-126C-230992-068T	09/24/92	Enseco-RMA	40 U	30 U	5 U	764	20 U	403,000	**264**	**1.1**

Table 113-02-24
Summary of Surface Water Characterization - TAL Metals
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Nickel (µg/L)	Potassium (µg/L)	Selenium (µg/L)	Silver (µg/L)	Sodium (µg/L)	Thallium (µg/L)	Vanadium (µg/L)	Zinc (µg/L)
NJDEP Human Health Based SWQC			1,700	--	4,200	40,000	--	0.47	--	26,000
113-S-122A-151092-085F	10/15/92	Enseco-RMA	70 U	16,500	20 U	40 U	4,020,000	10 U	50 U	40 U
113-S-122A-151092-085T	10/15/92	Enseco-RMA	70 U	177,000	20 U	40 U	4,240,000	10 U	50 U	69.7
113-S-122A-D-151092-085F	10/15/92	Enseco-RMA	70 U	165,000	20 U	40 U	3,990,000	10 U	50 U	40 U
113-S-122A-D-151092-085T	10/15/92	Enseco-RMA	70 U	160,000	20 U	40 U	3,900,000	10 U	50 U	40 U
113-S-122B-151092-085F	10/15/92	Enseco-RMA	70 U	161,000	20 U	40 U	3,920,000	10 U	50 U	40 U
113-S-122B-151092-085T	10/15/92	Enseco-RMA	70 U	166,000	20 U	40 U	4,020,000	10 U	50 U	43.3
113-S-122C-151092-085F	10/15/92	Enseco-RMA	70 U	159,000	20 U	40 U	3,890,000	10 U	50 U	40 U
113-S-122C-151092-085T	10/15/92	Enseco-RMA	70 U	164,000	20 U	40 U	3,930,000	10 U	50 U	40 U
113-S-123A-081092-081F	10/08/92	Enseco-RMA	70 U	141,000	20 U	40 U	3,640,000	10 U	50 U	81.7
113-S-123A-081092-081T	10/08/92	Enseco-RMA	70 U	127,000	20 U	40 U	3,470,000	10 U	50 U	81.1
113-S-123A-D-081092-081F	10/08/92	Enseco-RMA	70 U	164,000	20 U	40 U	3,920,000	10 U	50 U	70.6
113-S-123A-D-081092-081T	10/08/92	Enseco-RMA	70 U	120,000	20 U	40 U	3,340,000	10 U	50 U	59
113-S-123B-081092-081F	10/08/92	Enseco-RMA	70 U	132,000	20 U	40 U	3,520,000	10 U	50 U	119
113-S-123B-081092-081T	10/08/92	Enseco-RMA	70 U	120,000	20 U	40 U	3,330,000	10 U	50 U	40 U
113-S-123C-081092-081F	10/08/92	Enseco-RMA	70 U	138,000	20 U	40 U	3,710,000	10 U	50 U	59.3
113-S-123C-081092-081T	10/08/92	Enseco-RMA	70 U	85,400	20 U	40 U	2,480,000	10 U	50 U	40 U
113-S-124A-011092-074F	10/01/92	Enseco-RMA	70 U	142,000	20 U	40 U	3,600,000	10 U	50 U	61.3
113-S-124A-011092-074T	10/01/92	Enseco-RMA	35 U	115,000	20 U	20 U	3,020,000	10 U	25 U	30.3
113-S-124B-011092-074F	10/01/92	Enseco-RMA	70 U	157,000	20 U	40 U	3,910,000	10 U	50 U	57.9
113-S-124B-011092-074T	10/01/92	Enseco-RMA	35 U	125,000	20 U	20 U	3,310,000	10 U	25 U	33.3
113-S-124B-D-011092-074F	10/01/92	Enseco-RMA	70 U	143,000	20 U	40 U	3,680,000	10 U	50 U	67.8
113-S-124B-D-011092-074T	10/01/92	Enseco-RMA	35 U	125,000	20 U	20 U	3,480,000	10 U	25 U	34.7
113-S-124C-011092-074F	10/01/92	Enseco-RMA	70 U	137,000	20 U	40 U	3,480,000	10 U	50 U	83.9
113-S-124C-011092-074T	10/01/92	Enseco-RMA	35 U	130,000	20 U	20 U	3,450,000	10 U	25 U	44.8
113-S-125A-240992-068F	09/24/92	Enseco-RMA	70 U	122,000	20 U	40 U	3,190,000	10 U	50 U	40 U
113-S-125A-240992-068T	09/24/92	Enseco-RMA	70 U	144,000	20 U	40 U	3,790,000	10 U	50 U	94.6

Table 113-02-24
Summary of Surface Water Characterization - TAL Metals
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Nickel (µg/L)	Potassium (µg/L)	Selenium (µg/L)	Silver (µg/L)	Sodium (µg/L)	Thallium (µg/L)	Vanadium (µg/L)	Zinc (µg/L)
NJDEP Human Health Based SWQC			1,700	--	4,200	40,000	--	0.47	--	26,000
113-S-125B-240992-068F	09/24/92	Enseco-RMA	70 U	73,800	2 U	40 U	1,940,000	10 U	50 U	40 U
113-S-125B-240992-068T	09/24/92	Enseco-RMA	70 U	145,000	9.7	40 U	3,740,000	10 U	50 U	40 U
113-S-125C-240992-068F	09/24/92	Enseco-RMA	70 U	132,000	20 U	40 U	3,440,000	10 U	50 U	95.6
113-S-125C-240992-068T	09/24/92	Enseco-RMA	70 U	143,000	40 U	40 U	3,690,000	10 U	50 U	40 U
113-S-126A-230992-068F	09/24/92	Enseco-RMA	70 U	129,000	20 U	40 U	3,320,000	10 U	50 U	52.9
113-S-126A-230992-068T	09/24/92	Enseco-RMA	70 U	121,000	11.9	40 U	3,240,000	10 U	50 U	47.3
113-S-126A-D-230992-068F	09/24/92	Enseco-RMA	70 U	149,000	181	40 U	3,830,000	10 U	50 U	42.2
113-S-126A-D-230992-068T	09/24/92	Enseco-RMA	70 U	127,000	18.2	40 U	3,390,000	10 U	50 U	40 U
113-S-126B-230992-068F	09/24/92	Enseco-RMA	70 U	144,000	20 U	40 U	3,650,000	10 U	50 U	40 U
113-S-126B-230992-068T	09/24/92	Enseco-RMA	70 U	134,000	20 U	40 U	3,490,000	10 U	50 U	40 U
113-S-126C-230992-068F	09/24/92	Enseco-RMA	70 U	146,000	20 U	40 U	3,740,000	10 U	50 U	42.2
113-S-126C-230992-068T	09/24/92	Enseco-RMA	70 U	125,000	20 U	40 U	3,290,000	10 U	50 U	40 U

Notes:
S - Surface Water
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
D - Field Duplicate
µg/L - Micrograms per liter
-- "Not Analyzed" or "Not Applicable" or "Not Requested"
A,B,C - Designates relatively increasing distance of sediment samples from shoreline; A being the closest and C the furthest from the shoreline.
T - Unfiltered (total)
F - Filtered
[ ] -Concentration exceeds NJDEP Human Health Based Surface Water Qulaity Criterion

Table 113-02-25
Summary of Sediment Characterization - Total Cr, Cr(VI), pH and ORP
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Cr(VI) Dilution Factor	Total Cr (mg/Kg)	Total Cr (Enesco-RMA) (mg/Kg)	Cr(VI) (mg/Kg)	pH (s.u	Field pH (s.u.)	ORP Eh (mV)	Field ORP Eh (mV)	Percent Solids (%)	Percent Solids (Enesco-RMA) (%)
113-SE-122A-151092-084	10/15/92	Accutest	1.0	--	908	0.56 U	7.2	--	--	--	60	52
113-SE-122A-D-151092-084	10/15/92	Accutest	1.0	--	1,120	3.9	7.2	--	--	--	55	51
113-SE-123A-081092-079	10/08/92	Accutest	1.0	--	675	1.0	7.6	--	--	--	51	53
113-SE-123A-D-081092-079	10/08/92	Accutest	1.0	--	751	0.64 U	7.7	--	--	--	53	52
113-SE-123B-081092-079	10/08/92	Accutest	1.0	--	3,660	0.61 U	8.7	--	--	--	55	71
113-SE-123C-081092-080	10/08/92	Accutest	1.0	--	1,050	0.69	8.6	--	--	--	69	76
113-SE-123C-D-081092-080	10/08/92	Accutest	1.0	--	222	8.6	8.4	--	--	--	70	74
113-SE-124A-011092-075	10/01/92	Accutest	1.0	--	531	0.97 U	7.7	--	--	--	35	38
113-SE-124A-D-011092-075	10/01/92	Accutest	1.0	--	547	2.8	7.7	--	--	--	35	40
113-SE-124B-011092-075	10/01/92	Accutest	1.0	--	39.3	7.0	7.8	--	--	--	74	77
113-SE-124C-011092-076	10/01/92	Accutest	1.0	--	54.8	0.49 U	8.2	--	--	--	69	73
113-SE-124C-D-011092-076	10/01/92	Accutest	1.0	--	29.3	3.2	8.1	--	--	--	70	70
113-SE-125A-240992-066	09/24/92	Accutest	1.0	3,000	--	19	8.3	--	--	--	65	--
113-SE-125B-240992-066	09/24/92	Accutest	1.0	520	--	0.91 U	7.3	--	--	--	37	--
113-SE-125C-240992-067	09/24/92	Accutest	1.0	429	--	6.3	8.3	--	--	--	62	--
113-SE-126A-230992-066	09/23/92	Accutest	1.0	312	--	6.5	7.5	--	--	--	38	--
113-SE-126A-D-230992-066	09/23/92	Accutest	1.0	347	--	6.0	7.6	--	--	--	39	--
113-SE-126B-230992-066	09/23/92	Accutest	1.0	282	--	4.7	7.1	--	--	--	43	--
113-SE-126C-230992-067	09/23/92	Accutest	1.0	3,000	--	2.5	8.4	--	--	--	58	--

Table 113-02-25
Summary of Sediment Characterization - Total Cr, Cr(VI), pH and ORP
Site 113 - Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Cr(VI) Dilution Factor	Total Cr (mg/Kg)	Total Cr (Enesco-RMA) (mg/Kg)	Cr(VI) (mg/Kg)	pH	(s.u	Field pH (s.u.)	ORP Eh (mV)	Field ORP Eh (mV)	Percent Solids (%)	Percent Solids (Enesco-RMA) (%)
113-SE-126C-D-230992-067	09/23/92	Accutest	1.0	2,000	--	16.1	8.6		--	--	--	55	--
113-SE-01-131107-1355	11/13/07	Lancaster	1.0	2,780	--	1.8 U	7.9		7.8	183	240	54.3	--
113-SE-01-D-131107-1355	11/13/07	Lancaster	1.0	1,510	--	1.7 U	8.0		--	172	--	58.1	--

Notes:
SE- Sediment
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
Field ORP Eh - Field ORP measurement has been converted to Eh based on the reference electrode used.
D - Field Duplicate
mV - Millivolts
mg/Kg - Milligrams per kilogram
-- "Not Analyzed" or "Not Applicable" or "Not Requested"
(s.u.) - Standard Units
A,B,C - Designates relatively increasing distance of sediment samples from shoreline; A being the closest and C the furthest from the shoreline.

Table 113-02-26
Summary of Sediment Characterization - Pesticides/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	alpha-BHC (mg/Kg)	beta-BHC (mg/Kg)	delta-BHC (mg/Kg)	gamma-BHC (Lindane) (mg/Kg)	Heptachlor (mg/Kg)
113-SE-122A-151092-084	10/15/92	Accutest	0.0028 U	0.0028 U	0.0028 U	0.0028 U	0.0028 U
113-SE-122A-D-151092-084	10/15/92	Accutest	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
113-SE-123A-081092-079	10/08/92	Accutest	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
113-SE-123A-D-081092-079	10/08/92	Accutest	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U
113-SE-123B-081092-079	10/08/92	Accutest	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
113-SE-123C-081092-080	10/08/92	Accutest	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
113-SE-123C-D-081092-080	10/08/92	Accutest	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
113-SE-124A-011092-075	10/01/92	Accutest	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U
113-SE-124A-D-011092-075	10/01/92	Accutest	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
113-SE-124B-011092-075	10/01/92	Accutest	0.0023 U	0.0023 U	0.0023 U	0.0023 U	0.0023 U
113-SE-124C-011092-076	10/01/92	Accutest	0.0024 U	0.0024 U	0.0024 U	0.0024 U	0.0024 U
113-SE-124C-D-011092-076	10/01/92	Accutest	0.0024 U	0.0024 U	0.0024 U	0.0024 U	0.0024 U
113-SE-125A-240992-066	09/24/92	Accutest	0.0062 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U
113-SE-125B-240992-066	09/24/92	Accutest	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U
113-SE-125C-240992-067	09/24/92	Accutest	0.0022 U	0.0022 U	0.0022 U	0.0022 U	0.0022 U
113-SE-126A-230992-066	09/23/92	Accutest	0.0083 U	0.0083 U	0.0083 U	0.0083 U	0.0083 U
113-SE-126A-D-230992-066	09/23/92	Accutest	0.0083 U	0.0083 U	0.0083 U	0.0083 U	0.0083 U
113-SE-126B-230992-066	09/23/92	Accutest	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U
113-SE-126C-230992-067	09/23/92	Accutest	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-SE-126C-D-230992-067	09/23/92	Accutest	0.0028 U	0.0028 U	0.0028 U	0.0028 U	0.0028 U

Table 113-02-26
Summary of Sediment Characterization - Pesticides/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Aldrin (mg/Kg)	Heptachlor Epoxide (mg/Kg)	Endosulfan (mg/Kg)	Dieldrin (mg/Kg)	4,4-DDE (mg/Kg)
113-SE-122A-151092-084	0.0028 U	0.0028 U	0.0028 U	0.0055 U	0.0079
113-SE-122A-D-151092-084	0.003 U	0.003 U	0.003 U	0.0059 U	0.012
113-SE-123A-081092-079	0.018 U	0.042	0.018 U	0.034 U	0.018
113-SE-123A-D-081092-079	0.017 U	0.037	0.017 U	0.033 U	0.017
113-SE-123B-081092-079	0.0052 U	0.0052 U	0.0052 U	0.01 U	0.01 U
113-SE-123C-081092-080	0.0025 U	0.0025 U	0.0025 U	0.0049 U	0.0049 U
113-SE-123C-D-081092-080	0.0025 U	0.0025 U	0.0025 U	0.0049 U	0.0049 U
113-SE-124A-011092-075	0.0035 U	0.0035 U	0.0035 U	0.0069 U	0.011
113-SE-124A-D-011092-075	0.004 U	0.004 U	0.004 U	0.0077 U	0.0072
113-SE-124B-011092-075	0.0023 U	0.0023 U	0.0023 U	0.0044 U	0.0044 U
113-SE-124C-011092-076	0.0024 U	0.0024 U	0.0024 U	0.0047 U	0.0047 U
113-SE-124C-D-011092-076	0.0024 U	0.0024 U	0.0024 U	0.0047 U	0.0047 U
113-SE-125A-240992-066	0.0062 U	0.0062 U	0.0062 U	0.0072	0.013
113-SE-125B-240992-066	0.0076 U	0.0076 U	0.0076 U	0.015 U	0.015 U
113-SE-125C-240992-067	0.0022 U	0.0022 U	0.0022 U	0.0042 U	0.0031
113-SE-126A-230992-066	0.0083 U	0.0083 U	0.0083 U	0.016 U	0.022
113-SE-126A-D-230992-066	0.0083 U	0.0083 U	0.0083 U	0.016 U	0.022
113-SE-126B-230992-066	0.0075 U	0.0075 U	0.0075 U	0.015 U	0.015 U
113-SE-126C-230992-067	0.015 U	0.015 U	0.015 U	0.028 U	0.028 U
113-SE-126C-D-230992-067	0.0028 U	0.0028 U	0.0028 U	0.0055 U	0.0055 U

Table 113-02-26
Summary of Sediment Characterization - Pesticides/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Endrin (mg/Kg)	Endosulfan II (mg/Kg)	4,4'-DDD (mg/Kg)	Endosulfan Sulfate (mg/Kg)	4,4'-DDT (mg/Kg)
113-SE-122A-151092-084	0.0055 U	0.0055 U	0.0057	0.0055 U	0.0055 U
113-SE-122A-D-151092-084	0.0059 U	0.0059 U	0.0071	0.0059 U	0.0059 U
113-SE-123A-081092-079	0.034 U	0.034 U	0.034 U	0.034 U	0.034 U
113-SE-123A-D-081092-079	0.033 U	0.033 U	0.033 U	0.033 U	0.041
113-SE-123B-081092-079	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
113-SE-123C-081092-080	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U
113-SE-123C-D-081092-080	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U
113-SE-124A-011092-075	0.0069 U	0.0069 U	0.0061	0.0069 U	0.0069 U
113-SE-124A-D-011092-075	0.0077 U	0.0077 U	0.0043	0.0077 U	0.0077 U
113-SE-124B-011092-075	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U
113-SE-124C-011092-076	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U
113-SE-124C-D-011092-076	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U
113-SE-125A-240992-066	0.012 U	0.012 U	0.0065	0.012 U	0.012 U
113-SE-125B-240992-066	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-SE-125C-240992-067	0.0042 U	0.0042 U	0.0023	0.0042 U	0.0042 U
113-SE-126A-230992-066	0.016 U	0.016 U	0.014	0.016 U	0.016 U
113-SE-126A-D-230992-066	0.016 U	0.016 U	0.012	0.016 U	0.016 U
113-SE-126B-230992-066	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-SE-126C-230992-067	0.028 U	0.028 U	0.028 U	0.028 U	0.028 U
113-SE-126C-D-230992-067	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.003

Table 113-02-26
Summary of Sediment Characterization - Pesticides/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Methoxychlor (mg/Kg)	Endrin Ketone (mg/Kg)	Endrin Aldehyde (mg/Kg)	alpha Chlordane (mg/Kg)
113-SE-122A-151092-084	0.028 U	0.0055 U	0.0055 U	0.0028 U
113-SE-122A-D-151092-084	0.03 U	0.0059 U	0.0059 U	0.003 U
113-SE-123A-081092-079	0.18 U	0.034 U	0.034 U	0.018 U
113-SE-123A-D-081092-079	0.17 U	0.033 U	0.033 U	0.017 U
113-SE-123B-081092-079	0.052 U	0.01 U	0.01 U	0.0052 U
113-SE-123C-081092-080	0.025 U	0.0049 U	0.0049 U	0.0025 U
113-SE-123C-D-081092-080	0.025 U	0.0049 U	0.0049 U	0.0025 U
113-SE-124A-011092-075	0.035 U	0.0069 U	0.0069 U	0.0035 U
113-SE-124A-D-011092-075	0.04 U	0.0077 U	0.0077 U	0.0025
113-SE-124B-011092-075	0.023 U	0.0044 U	0.0044 U	0.0023 U
113-SE-124C-011092-076	0.024 U	0.0047 U	0.0047 U	0.0024 U
113-SE-124C-D-011092-076	0.024 U	0.0024 U	0.0024 U	0.0024 U
113-SE-125A-240992-066	0.062 U	0.012 U	0.012 U	0.0062 U
113-SE-125B-240992-066	0.076 U	0.015 U	0.015 U	0.0076 U
113-SE-125C-240992-067	0.022 U	0.0042 U	0.0042 U	0.0022 U
113-SE-126A-230992-066	0.083 U	0.016 U	0.016 U	0.0083 U
113-SE-126A-D-230992-066	0.083 U	0.016 U	0.016 U	0.0045
113-SE-126B-230992-066	0.075 U	0.015 U	0.015 U	0.0075 U
113-SE-126C-230992-067	0.15 U	0.028 U	0.028 U	0.015 U
113-SE-126C-D-230992-067	0.028 U	0.0055 U	0.0055 U	0.0028 U

Table 113-02-26
Summary of Sediment Characterization - Pesticides/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	gamma Chlordane (mg/Kg)	Toxaphene (mg/Kg)	PCB-1016 (mg/Kg)	PCB-1221 (mg/Kg)
113-SE-122A-151092-084	0.0028 U	0.28 U	0.055 U	0.11 U
113-SE-122A-D-151092-084	0.003 U	0.3 U	0.059 U	0.12 U
113-SE-123A-081092-079	0.018 U	1.8 U	0.34 U	0.7 U
113-SE-123A-D-081092-079	0.017 U	1.7 U	0.33 U	0.67 U
113-SE-123B-081092-079	0.0052 U	0.52 U	0.1 U	0.21 U
113-SE-123C-081092-080	0.0025 U	0.25 U	0.049 U	0.1 U
113-SE-123C-D-081092-080	0.0025 U	0.25 U	0.049 U	0.099 U
113-SE-124A-011092-075	0.0022	0.35 U	0.069 U	0.14 U
113-SE-124A-D-011092-075	0.004 U	0.4 U	0.077 U	0.16 U
113-SE-124B-011092-075	0.0023 U	0.23 U	0.044 U	0.09 U
113-SE-124C-011092-076	0.0024 U	0.24 U	0.047 U	0.095 U
113-SE-124C-D-011092-076	0.0024 U	0.24 U	0.047 U	0.096 U
113-SE-125A-240992-066	0.0062 U	0.62 U	0.12 U	0.25 U
113-SE-125B-240992-066	0.0076 U	0.76 U	0.15 U	0.3 U
113-SE-125C-240992-067	0.0022 U	0.22 U	0.042 U	0.086 U
113-SE-126A-230992-066	0.0051	0.83 U	0.16 U	0.33 U
113-SE-126A-D-230992-066	0.0083 U	0.83 U	0.16 U	0.33 U
113-SE-126B-230992-066	0.0075 U	0.75 U	0.15 U	0.3 U
113-SE-126C-230992-067	0.015 U	1.5 U	0.28 U	0.58 U
113-SE-126C-D-230992-067	0.0028 U	0.28 U	0.055 U	0.11 U

Table 113-02-26
Summary of Sediment Characterization - Pesticides/PCBs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	PCB-1232 (mg/Kg)	PCB-1242 (mg/Kg)	PCB-1248 (mg/Kg)	PCB-1254 (mg/Kg)	PCB-1260 (mg/Kg)
113-SE-122A-151092-084	0.055 U	0.055 U	0.055 U	0.062	0.055 U
113-SE-122A-D-151092-084	0.059 U	0.059 U	0.059 U	0.061	0.059 U
113-SE-123A-081092-079	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
113-SE-123A-D-081092-079	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
113-SE-123B-081092-079	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
113-SE-123C-081092-080	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U
113-SE-123C-D-081092-080	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U
113-SE-124A-011092-075	0.069 U	0.069 U	0.069 U	0.11	0.069 U
113-SE-124A-D-011092-075	0.077 U	0.077 U	0.077 U	0.081	0.077 U
113-SE-124B-011092-075	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U
113-SE-124C-011092-076	0.047 U	0.047 U	0.034	0.047 U	0.047 U
113-SE-124C-D-011092-076	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U
113-SE-125A-240992-066	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
113-SE-125B-240992-066	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
113-SE-125C-240992-067	0.042 U	0.042 U	0.03	0.042 U	0.042 U
113-SE-126A-230992-066	0.16 U	0.16 U	0.16 U	0.21	0.16 U
113-SE-126A-D-230992-066	0.16 U	0.16 U	0.16 U	0.2	0.16 U
113-SE-126B-230992-066	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
113-SE-126C-230992-067	0.28 U	0.28 U	0.33	0.28 U	0.28 U
113-SE-126C-D-230992-067	0.055 U	0.055 U	0.17	0.055 U	0.055 U

Notes:
SE- Sediment
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
D - Field Duplicate
mg/Kg - Milligrams per kilogram
A,B,C - Designates relatively increasing distance of sediment samples from shoreline; A being the closest and C the furthest from the shoreline.

Table 113-02-27
Summary of Sediment Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	1,1,1-Trichloroethane (mg/Kg)	1,1,2,2-Tetrachloroethane (mg/Kg)	1,1,2-Trichloroethane (mg/Kg)	1,1-Dichloroethane (mg/Kg)	1,1-Dichloroethene (mg/Kg)	1,2-Dichloroethane (mg/Kg)	1,2-Dichloropropane (mg/Kg)	2-Butanone (mg/Kg)
113-SE-122A-260593-157	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U
113-SE-122B-260593-157	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-SE-122C-260593-157	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-SE-123A-250593-157	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
113-SE-123B-250593-157	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.039
113-SE-123C-250593-157	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-SE-124A-240593-156	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-SE-124A-D-240593-156	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-SE-124B-240593-156	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.055
113-SE-124C-240593-156	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-SE-125A-250593-157	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
113-SE-125A-D-250593-157	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
113-SE-125B-250593-157	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.056
113-SE-125C-250593-157	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.016
113-SE-126A-260593-157	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U
113-SE-126B-260593-157	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
113-SE-126C-260593-157	3.9	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 113-02-27
Summary of Sediment Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	2-Hexanone (mg/Kg)	4-Methyl-2-Pentanone (mg/Kg)	Acetone (mg/Kg)	Benzene (mg/Kg)	Bromodichloromethane (mg/Kg)	Bromoform (mg/Kg)	Bromomethane (mg/Kg)	Carbon Tetrachloride (mg/Kg)
113-SE-122A-260593-157	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U
113-SE-122B-260593-157	0.015 U	0.015 U	0.071	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-SE-122C-260593-157	0.013 U	0.013 U	0.025	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-SE-123A-250593-157	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
113-SE-123B-250593-157	0.019 U	0.019 U	0.18	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U
113-SE-123C-250593-157	0.014 U	0.014 U	0.004	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-SE-124A-240593-156	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-SE-124A-D-240593-156	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-SE-124B-240593-156	0.021 U	0.021 U	0.21	0.018	0.021 U	0.021 U	0.021 U	0.021 U
113-SE-124C-240593-156	0.014 U	0.014 U	0.008	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-SE-125A-250593-157	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
113-SE-125A-D-250593-157	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
113-SE-125B-250593-157	0.025 U	0.025 U	0.21	0.014	0.025 U	0.025 U	0.025 U	0.025 U
113-SE-125C-250593-157	0.019 U	0.019 U	0.083	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U
113-SE-126A-260593-157	0.026 U	0.026 U	0.034	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U
113-SE-126B-260593-157	2.6 U	2.6 U	2.6 U	0.41	2.6 U	2.6 U	2.6 U	2.6 U
113-SE-126C-260593-157	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 113-02-27
Summary of Sediment Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Carbon Disulfide (mg/Kg)	Chlorobenzene (mg/Kg)	Chloroethane (mg/Kg)	Chloroform (mg/Kg)	Chloromethane (mg/Kg)	cis-1,3 Dichloropropene (mg/Kg)	Dibromochloromethane (mg/Kg)	Ethylbenzene (mg/Kg)
13-SE-122A-260593-157	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U
13-SE-122B-260593-157	0.002	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
13-SE-122C-260593-157	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
13-SE-123A-250593-157	0.024 U	0.003	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
13-SE-123B-250593-157	0.019 U	0.019 U	0.019 U	0.002	0.019 U	0.019 U	0.019 U	0.019 U
13-SE-123C-250593-157	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
13-SE-124A-240593-156	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
13-SE-124A-D-240593-156	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
13-SE-124B-240593-156	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	0.021
13-SE-124C-240593-156	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
13-SE-125A-250593-157	0.029 U	0.004	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
13-SE-125A-D-250593-157	0.024 U	0.003	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
13-SE-125B-250593-157	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.73
13-SE-125C-250593-157	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U
13-SE-126A-260593-157	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U
13-SE-126B-260593-157	2.6 U	120	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
13-SE-126C-260593-157	10 U	340	10 U	10 U	10 U	10 U	10 U	10 U

Table 113-02-27
Summary of Sediment Characterization - VOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Methylene Chloride (mg/Kg)	Styrene (mg/Kg)	Tetrachloroethene (mg/Kg)	Toluene (mg/Kg)	Total 1,2-Dichlorethene (mg/Kg)	Total Xylenes (mg/Kg)	trans-1,3-Dichloro-propene (mg/Kg)	Trichloroethene (mg/Kg)	Vinyl Chloride (mg/Kg)
113-SE-122A-260593-157	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U
113-SE-122B-260593-157	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
113-SE-122C-260593-157	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-SE-123A-250593-157	0.024 U	0.024 U	0.024 U	0.003	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
113-SE-123B-250593-157	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U
113-SE-123C-250593-157	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-SE-124A-240593-156	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-SE-124A-D-240593-156	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U
113-SE-124B-240593-156	0.021 U	0.021 U	0.021 U	0.01	0.021 U	0.067	0.021 U	0.021 U	0.021 U
113-SE-124C-240593-156	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U	0.014 U
113-SE-125A-250593-157	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U
113-SE-125A-D-250593-157	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U	0.024 U
113-SE-125B-250593-157	0.025 U	0.025 U	0.025 U	0.017	0.025 U	0.16	0.025 U	0.025 U	0.025 U
113-SE-125C-250593-157	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U
113-SE-126A-260593-157	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U
113-SE-126B-260593-157	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
113-SE-126C-260593-157	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Notes:
SE- Sediment
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
D - Field Duplicate
mg/Kg - Milligrams per kilogram
A,B,C - Designates relatively increasing distance of sediment samples from shoreline; A being the closest and C the furthest from the shoreline.

Table 113-02-28
Summary of Sediment Characterization - Total Petroleum Hydrocarbons
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Total Petroleum Hydrocarbons (mg/Kg)
113-SE-122A-151092-084	10/15/92	Accutest	124
113-SE-122A-D-151092-084	10/15/92	Accutest	70.1
113-SE-123A-081092-079	10/08/92	Accutest	153
113-SE-123A-D-081092-079	10/08/92	Accutest	98.5
113-SE-123B-081092-079	10/08/92	Accutest	264
113-SE-123C-081092-080	10/08/92	Accutest	35 U
113-SE-123C-D-081092-080	10/08/92	Accutest	32 U
113-SE-124A-011092-075	10/01/92	Accutest	71 U
113-SE-124A-D-011092-075	10/01/92	Accutest	70 U
113-SE-124B-011092-075	10/01/92	Accutest	33 U
113-SE-124C-011092-076	10/01/92	Accutest	36 U
113-SE-124C-D-011092-076	10/01/92	Accutest	36 U
113-SE-125A-240992-066	09/24/92	Accutest	192
113-SE-125B-240992-066	09/24/92	Accutest	331
113-SE-125C-240992-067	09/24/92	Accutest	92.1
113-SE-126A-230992-066	09/23/92	Accutest	112
113-SE-126A-D-230992-066	09/23/92	Accutest	94.4
113-SE-126B-230992-066	09/23/92	Accutest	74.7
113-SE-126C-230992-067	09/23/92	Accutest	246
113-SE-126C-D-230992-067	09/23/92	Accutest	424

Notes:
SE- Sediment
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
D - Field Duplicate
mg/Kg - Milligrams per kilogram
A,B,C - Designates relatively increasing distance of sediment samples from shoreline; A being the closest and C the furthest from the shoreline.

Table 113-02-29
Summary of Sediment Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Phenol (mg/Kg)	bis(2-Chloroethyl) ether (mg/Kg)	2-Chlorophenol (mg/Kg)	1,3-Dichlorobenzene (mg/Kg)	1,4-Dichlorobenzene (mg/Kg)	1,2-Dichlorobenzene (mg/Kg)	2-Methylphenol (mg/Kg)
113-SE-122A-151092-084	10/15/92	Accutest	0.55 U	0.55 U	0.55 U	0.55 U	0.12	0.55 U	0.55 U
113-SE-122A-D-151092-084	10/15/92	Accutest	0.59 U	0.59 U	0.59 U	0.59 U	0.13	0.59 U	0.59 U
113-SE-123A-081092-079	10/08/92	Accutest	1.7 U	1.7 U	1.7 U	1.7 U	0.19	1.7 U	1.7 U
113-SE-123A-D-081092-079	10/08/92	Accutest	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
113-SE-123B-081092-079	10/08/92	Accutest	0.51 U	0.51 U	0.51 U	0.086	0.086	0.51 U	0.51 U
113-SE-123C-081092-080	10/08/92	Accutest	0.25 U	0.25 U	0.25 U	0.081	0.23	0.05	0.25 U
113-SE-123C-D-081092-080	10/08/92	Accutest	0.49 U	0.49 U	0.49 U	0.17	0.45	0.13	0.45
113-SE-124A-011092-075	10/01/92	Accutest	0.69 U	0.69 U	0.69 U	0.17	0.39	0.69 U	0.69 U
113-SE-124A-D-011092-075	10/01/92	Accutest	3.1 U	3.1 U	3.1 U	3.1 U	0.57	3.1 U	3.1 U
113-SE-124B-011092-075	10/01/92	Accutest	0.44 U	0.44 U	0.44 U	0.046	0.13	0.44 U	0.44 U
113-SE-124C-011092-076	10/01/92	Accutest	0.47 U	0.47 U	0.47 U	0.39	2.0	0.19	0.47 U
113-SE-124C-D-011092-076	10/01/92	Accutest	0.47 U	0.47 U	0.47 U	0.24	0.89	0.077	0.47 U
113-SE-125A-240992-066	09/24/92	Accutest	0.97 U	0.97 U	0.97 U	0.15	0.19	0.97 U	0.97 U
113-SE-125B-240992-066	09/24/92	Accutest	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
113-SE-125C-240992-067	09/24/92	Accutest	0.43 U	0.43 U	0.43 U	1.1	4.3	0.17	0.43 U
113-SE-126A-230992-066	09/23/92	Accutest	1.6 U	1.6 U	1.6 U	0.65	1.0	1.6 U	1.6 U
113-SE-126A-D-230992-066	09/23/92	Accutest	4.0 U	4.0 U	4.0 U	1.2	1.8	4.0 U	4.0 U
113-SE-126B-230992-066	09/23/92	Accutest	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U
113-SE-126C-230992-067	09/23/92	Accutest	200 U	200 U	200 U	290	360	280	200 U
113-SE-126C-D-230992-067	09/23/92	Accutest	110 U	110 U	110 U	140	200	170	110 U

Table 113-02-29
Summary of Sediment Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	2,2'-oxybis-(1-Chloropropane) (mg/Kg)	4-Methylphenol (mg/Kg)	N-Nitroso-di-n-Propylamine (mg/Kg)	Hexachloroethane (mg/Kg)	Nitrobenzene (mg/Kg)	Isophorone (mg/Kg)	2-Nitrophenol (mg/Kg)
113-SE-122A-151092-084	10/15/92	Accutest	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
113-SE-122A-D-151092-084	10/15/92	Accutest	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
113-SE-123A-081092-079	10/08/92	Accutest	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
113-SE-123A-D-081092-079	10/08/92	Accutest	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
113-SE-123B-081092-079	10/08/92	Accutest	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
113-SE-123C-081092-080	10/08/92	Accutest	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
113-SE-123C-D-081092-080	10/08/92	Accutest	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
113-SE-124A-011092-075	10/01/92	Accutest	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
113-SE-124A-D-011092-075	10/01/92	Accutest	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
113-SE-124B-011092-075	10/01/92	Accutest	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
113-SE-124C-011092-076	10/01/92	Accutest	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
113-SE-124C-D-011092-076	10/01/92	Accutest	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
113-SE-125A-240992-066	09/24/92	Accutest	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U
113-SE-125B-240992-066	09/24/92	Accutest	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
113-SE-125C-240992-067	09/24/92	Accutest	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
113-SE-126A-230992-066	09/23/92	Accutest	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
113-SE-126A-D-230992-066	09/23/92	Accutest	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
113-SE-126B-230992-066	09/23/92	Accutest	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U
113-SE-126C-230992-067	09/23/92	Accutest	200 U	200 U	200 U	200 U	200 U	200 U	200 U
113-SE-126C-D-230992-067	09/23/92	Accutest	110 U	110 U	110 U	110 U	110 U	110 U	110 U

Table 113-02-29
Summary of Sediment Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	2,4-Dimethylphenol (mg/Kg)	bis(2-Chloroethoxy) Methane (mg/Kg)	2,4-Dichlorophenol (mg/Kg)	1,2,4-Trichlorobenzene (mg/Kg)	Naphthalene (mg/Kg)	4-Chloroaniline (mg/Kg)	Hexachlorobutadiene (mg/Kg)
113-SE-122A-151092-084	10/15/92	Accutest	0.55 U	0.55 U	0.55 U	0.45	0.16	0.55 U	0.55 U
113-SE-122A-D-151092-084	10/15/92	Accutest	0.59 U	0.59 U	0.59 U	0.39	0.16	0.59 U	0.59 U
113-SE-123A-081092-079	10/08/92	Accutest	1.7 U	1.7 U	1.7 U	0.57	0.26	1.7 U	1.7 U
113-SE-123A-D-081092-079	10/08/92	Accutest	1.3 U	1.3 U	1.3 U	0.42	0.2	1.3 U	1.3 U
113-SE-123B-081092-079	10/08/92	Accutest	0.51 U	0.51 U	0.51 U	0.37	0.056	0.51 U	0.51 U
113-SE-123C-081092-080	10/08/92	Accutest	0.25 U	0.25 U	0.25 U	0.045	0.074	0.25 U	0.25 U
113-SE-123C-D-081092-080	10/08/92	Accutest	0.49 U	0.49 U	0.49 U	0.16	0.49 U	0.49 U	0.49 U
113-SE-124A-011092-075	10/01/92	Accutest	0.69 U	0.69 U	0.69 U	0.22	0.5	0.69 U	0.69 U
113-SE-124A-D-011092-075	10/01/92	Accutest	3.1 U	3.1 U	3.1 U	0.38	0.59	3.1 U	3.1 U
113-SE-124B-011092-075	10/01/92	Accutest	0.44 U	0.44 U	0.44 U	0.087	0.2	0.44 U	0.44 U
113-SE-124C-011092-076	10/01/92	Accutest	0.47 U	0.47 U	0.47 U	0.35	0.23	0.47 U	0.47 U
113-SE-124C-D-011092-076	10/01/92	Accutest	0.47 U	0.47 U	0.47 U	0.095	0.1	0.47 U	0.47 U
113-SE-125A-240992-066	09/24/92	Accutest	0.97 U	0.97 U	0.97 U	0.14	1.1	0.97 U	0.97 U
113-SE-125B-240992-066	09/24/92	Accutest	2.9 U	2.9 U	2.9 U	2.9 U	0.77	2.9 U	2.9 U
113-SE-125C-240992-067	09/24/92	Accutest	0.43 U	0.43 U	0.43 U	0.23	0.5	0.43 U	0.43 U
113-SE-126A-230992-066	09/23/92	Accutest	1.6 U	1.6 U	1.6 U	0.27	0.48	1.6 U	1.6 U
113-SE-126A-D-230992-066	09/23/92	Accutest	4.0 U	4.0 U	4.0 U	0.58	1.5	4.0 U	4.0 U
113-SE-126B-230992-066	09/23/92	Accutest	7.3 U	7.3 U	7.3 U	7.3 U	7.6	7.3 U	7.3 U
113-SE-126C-230992-067	09/23/92	Accutest	200 U	200 U	200 U	1200	170	200 U	200 U
113-SE-126C-D-230992-067	09/23/92	Accutest	110 U	110 U	110 U	660	99	110 U	110 U

Table 113-02-29
Summary of Sediment Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	4-Chloro-3-Methylphenol (mg/Kg)	2-Methylnaphthalene (mg/Kg)	Hexachlorocyclo pentadiene (mg/Kg)	2,4,6-Trichlorophenol (mg/Kg)	2,4,5-Trichlorophenol (mg/Kg)	2-Chloronaphthalene (mg/Kg)	2-Nitroaniline (mg/Kg)
113-SE-122A-151092-084	10/15/92	Accutest	0.55 U	0.063	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
113-SE-122A-D-151092-084	10/15/92	Accutest	0.59 U	0.59 U	0.59 U	0.59 U	1.4 U	0.59 U	0.59 U
113-SE-123A-081092-079	10/08/92	Accutest	1.7 U	1.7 U	1.7 U	1.7 U	4.2 U	1.7 U	4.2 U
113-SE-123A-D-081092-079	10/08/92	Accutest	1.3 U	1.3 U	1.3 U	1.3 U	3.2 U	1.3 U	3.2 U
113-SE-123B-081092-079	10/08/92	Accutest	0.51 U	0.51 U	0.51 U	0.51 U	1.2 U	0.51 U	1.2 U
113-SE-123C-081092-080	10/08/92	Accutest	0.25 U	0.25 U	0.25 U	0.25 U	0.6 U	0.25 U	0.6 U
113-SE-123C-D-081092-080	10/08/92	Accutest	0.49 U	0.49 U	0.49 U	0.49 U	1.2 U	0.49 U	1.2 U
113-SE-124A-011092-075	10/01/92	Accutest	0.69 U	0.17	0.69 U	0.69 U	1.7 U	0.69 U	1.7 U
113-SE-124A-D-011092-075	10/01/92	Accutest	3.1 U	3.1 U	3.1 U	3.1 U	7.4 U	3.1 U	7.4 U
113-SE-124B-011092-075	10/01/92	Accutest	0.44 U	0.44 U	0.44 U	0.44 U	1.1 U	0.44 U	1.1 U
113-SE-124C-011092-076	10/01/92	Accutest	0.47 U	0.47 U	0.47 U	0.47 U	1.1 U	0.47 U	1.1 U
113-SE-124C-D-011092-076	10/01/92	Accutest	0.47 U	0.47 U	0.47 U	0.47 U	1.1 U	0.47 U	1.1 U
113-SE-125A-240992-066	09/24/92	Accutest	0.97 U	0.17	0.97 U	0.97 U	2.3 U	0.97 U	2.3 U
113-SE-125B-240992-066	09/24/92	Accutest	2.9 U	0.69	2.9 U	2.9 U	7.1 U	2.9 U	7.1 U
113-SE-125C-240992-067	09/24/92	Accutest	0.43 U	0.054	0.43 U	0.43 U	1.0 U	0.43 U	1.0 U
113-SE-126A-230992-066	09/23/92	Accutest	1.6 U	1.6 U	1.6 U	1.6 U	3.9 U	1.6 U	3.9 U
113-SE-126A-D-230992-066	09/23/92	Accutest	4.0 U	4.0 U	4.0 U	4.0 U	9.7 U	4.0 U	9.7 U
113-SE-126B-230992-066	09/23/92	Accutest	7.3 U	5.4	7.3 U	7.3 U	18 U	7.3 U	18 U
113-SE-126C-230992-067	09/23/92	Accutest	200 U	200 U	200 U	200 U	500 U	200 U	500 U
113-SE-126C-D-230992-067	09/23/92	Accutest	110 U	110 U	110 U	110 U	280 U	110 U	280 U

Table 113-02-29
Summary of Sediment Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Dimethylphthalate (mg/Kg)	2,6-Dinitrotoluene (mg/Kg)	Acenaphthylene (mg/Kg)	Acenaphthene (mg/Kg)	2,4-Dinitrophenol (mg/Kg)	4-Nitrophenol (mg/Kg)	Dibenzofuran (mg/Kg)
113-SE-122A-151092-084	10/15/92	Accutest	0.55 U	0.55 U	0.069	0.12	1.3 U	1.3 U	0.073
113-SE-122A-D-151092-084	10/15/92	Accutest	0.59 U	0.59 U	0.078	0.087	1.4 U	1.4 U	0.59 U
113-SE-123A-081092-079	10/08/92	Accutest	1.7 U	1.7 U	0.23	0.35	4.2 U	4.2 U	0.4
113-SE-123A-D-081092-079	10/08/92	Accutest	1.3 U	1.3 U	1.3 U	0.29	3.2 U	3.2 U	0.23
113-SE-123B-081092-079	10/08/92	Accutest	0.51 U	0.51 U	0.11	0.063	1.2 U	1.2 U	0.51 U
113-SE-123C-081092-080	10/08/92	Accutest	0.25 U	0.25 U	0.25 U	0.25 U	0.6 U	0.6 U	0.25 U
113-SE-123C-D-081092-080	10/08/92	Accutest	0.49 U	0.49 U	0.49 U	0.49 U	1.2 U	1.2 U	0.49 U
113-SE-124A-011092-075	10/01/92	Accutest	0.69 U	0.69 U	0.28	0.26	1.7 U	1.7 U	0.17
113-SE-124A-D-011092-075	10/01/92	Accutest	3.1 U	3.1 U	0.42	0.44	7.4 U	7.4 U	3.1 U
113-SE-124B-011092-075	10/01/92	Accutest	0.44 U	0.44 U	0.44 U	0.44 U	1.1 U	1.1 U	0.44 U
113-SE-124C-011092-076	10/01/92	Accutest	0.47 U	0.47 U	0.47 U	0.091	1.1 U	1.1 U	0.47 U
113-SE-124C-D-011092-076	10/01/92	Accutest	0.47 U	0.47 U	0.47 U	0.47 U	1.1 U	1.1 U	0.47 U
113-SE-125A-240992-066	09/24/92	Accutest	0.97 U	0.97 U	0.19	0.34	2.3 U	2.3 U	0.23
113-SE-125B-240992-066	09/24/92	Accutest	2.9 U	2.9 U	0.82	5.9	7.1 U	7.1 U	2.9 U
113-SE-125C-240992-067	09/24/92	Accutest	0.43 U	0.43 U	0.43 U	0.43 U	1.0 U	1.0 U	0.43 U
113-SE-126A-230992-066	09/23/92	Accutest	1.6 U	1.6 U	1.6 U	0.35	3.9 U	3.9 U	1.6 U
113-SE-126A-D-230992-066	09/23/92	Accutest	4.0 U	4.0 U	4.0 U	0.58	9.7 U	9.7 U	4.0 U
113-SE-126B-230992-066	09/23/92	Accutest	7.3 U	7.3 U	2.0	7.1	18 U	18 U	7.3 U
113-SE-126C-230992-067	09/23/92	Accutest	200 U	200 U	200 U	200 U	500 U	500 U	200 U
113-SE-126C-D-230992-067	09/23/92	Accutest	110 U	110 U	110 U	110 U	280 U	280 U	110 U

Table 113-02-29
Summary of Sediment Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	2,4-Dinitrotoluene (mg/Kg)	Diethylphthalate (mg/Kg)	4-Chlorophenyl-phenylether (mg/Kg)	Fluorene (mg/Kg)	4-Nitroaniline (mg/Kg)	4,6-Dinitro-2-Methylphenol (mg/Kg)	N-Nitroso-diphenylamine (mg/Kg)
113-SE-122A-151092-084	10/15/92	Accutest	0.55 U	0.55 U	0.55 U	0.08	1.3 U	1.3 U	0.55 U
113-SE-122A-D-151092-084	10/15/92	Accutest	0.59 U	0.59 U	0.59 U	0.067	1.4 U	1.4 U	0.59 U
113-SE-123A-081092-079	10/08/92	Accutest	1.7 U	1.7 U	1.7 U	0.68	4.2 U	4.2 U	1.7 U
113-SE-123A-D-081092-079	10/08/92	Accutest	1.3 U	1.3 U	1.3 U	0.35	3.2 U	3.2 U	1.3 U
113-SE-123B-081092-079	10/08/92	Accutest	0.51 U	0.51 U	0.51 U	0.08	1.2 U	1.2 U	0.51 U
113-SE-123C-081092-080	10/08/92	Accutest	0.25 U	0.25 U	0.25 U	0.25 U	0.6 U	0.6 U	0.25 U
113-SE-123C-D-081092-080	10/08/92	Accutest	0.49 U	0.49 U	0.49 U	0.49 U	1.2 U	0.49 U	0.49 U
113-SE-124A-011092-075	10/01/92	Accutest	0.69 U	0.69 U	0.69 U	0.29	1.7 U	1.7 U	0.69 U
113-SE-124A-D-011092-075	10/01/92	Accutest	3.1 U	3.1 U	3.1 U	3.1 U	7.4 U	7.4 U	3.1 U
113-SE-124B-011092-075	10/01/92	Accutest	0.44 U	0.44 U	0.44 U	0.44 U	1.1 U	1.1 U	0.44 U
113-SE-124C-011092-076	10/01/92	Accutest	0.47 U	0.47 U	0.47 U	0.47 U	1.1 U	1.1 U	0.47 U
113-SE-124C-D-011092-076	10/01/92	Accutest	0.47 U	0.47 U	0.47 U	0.47 U	1.1 U	1.1 U	0.47 U
113-SE-125A-240992-066	09/24/92	Accutest	0.97 U	0.97 U	0.97 U	0.2	2.3 U	2.3 U	0.15
113-SE-125B-240992-066	09/24/92	Accutest	2.9 U	2.9 U	2.9 U	4.2	7.1 U	7.1 U	2.9 U
113-SE-125C-240992-067	09/24/92	Accutest	0.43 U	0.43 U	0.43 U	0.43 U	1.0 U	1.0 U	0.044
113-SE-126A-230992-066	09/23/92	Accutest	1.6 U	1.6 U	1.6 U	1.6 U	3.9 U	3.9 U	1.6 U
113-SE-126A-D-230992-066	09/23/92	Accutest	4.0 U	4.0 U	4.0 U	4.0 U	9.7 U	9.7 U	4.0 U
113-SE-126B-230992-066	09/23/92	Accutest	7.3 U	7.3 U	7.3 U	7.3	18 U	18 U	7.3 U
113-SE-126C-230992-067	09/23/92	Accutest	200 U	200 U	200 U	200 U	500 U	500 U	200 U
113-SE-126C-D-230992-067	09/23/92	Accutest	110 U	110 U	110 U	110 U	280 U	280 U	110 U

Table 113-02-29
Summary of Sediment Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	4-Bromophenyl-phenylether (mg/Kg)	Hexachlorobenzene (mg/Kg)	Pentachlorophenol (mg/Kg)	Phenanthrene (mg/Kg)	Anthracene (mg/Kg)	Carbazole (mg/Kg)	Di-n-Butylphthalate (mg/Kg)
113-SE-122A-151092-084	10/15/92	Accutest	0.55 U	0.55 U	0.68	0.8	0.63	0.088	0.55 U
113-SE-122A-D-151092-084	10/15/92	Accutest	0.59 U	0.59 U	1.4 U	0.65	0.39	0.079	0.59 U
113-SE-123A-081092-079	10/08/92	Accutest	1.7 U	1.7 U	4.2 U	7.1	1.9	1.3	1.7 U
113-SE-123A-D-081092-079	10/08/92	Accutest	1.3 U	1.3 U	3.2 U	7.2	1.6	0.84	1.3 U
113-SE-123B-081092-079	10/08/92	Accutest	0.51 U	0.51 U	1.2 U	0.65	0.33	0.51 U	0.51 U
113-SE-123C-081092-080	10/08/92	Accutest	0.25 U	0.25 U	0.23	0.25 U	0.25 U	0.25 U	0.25 U
113-SE-123C-D-081092-080	10/08/92	Accutest	0.49 U	0.49 U	1.2 U	0.49 U	0.49 U	0.49 U	0.49 U
113-SE-124A-011092-075	10/01/92	Accutest	0.69 U	0.69 U	1.7 U	1.9	1.2	0.53	0.69 U
113-SE-124A-D-011092-075	10/01/92	Accutest	3.1 U	3.1 U	7.4 U	1.4	1.4	0.31	3.1 U
113-SE-124B-011092-075	10/01/92	Accutest	0.44 U	0.44 U	1.1 U	0.44 U	0.44 U	0.44 U	0.44 U
113-SE-124C-011092-076	10/01/92	Accutest	0.47 U	0.47 U	1.1 U	0.096	0.062	0.47 U	0.062
113-SE-124C-D-011092-076	10/01/92	Accutest	0.47 U	0.47 U	1.1 U	0.47 U	0.47 U	0.47 U	0.061
113-SE-125A-240992-066	09/24/92	Accutest	0.97 U	0.97 U	2.3 U	1.5	0.82	0.97 U	0.97 U
113-SE-125B-240992-066	09/24/92	Accutest	2.9 U	2.9 U	7.1 U	20	6.9	2.9 U	2.9 U
113-SE-125C-240992-067	09/24/92	Accutest	0.43 U	0.43 U	0.78	0.18	0.067	0.43 U	0.43 U
113-SE-126A-230992-066	09/23/92	Accutest	1.6 U	1.6 U	3.9 U	0.62	0.73	1.6 U	1.6 U
113-SE-126A-D-230992-066	09/23/92	Accutest	4.0 U	4.0 U	9.7 U	1.5	2.0	4.0 U	4.0 U
113-SE-126B-230992-066	09/23/92	Accutest	7.3 U	7.3 U	18 U	43	21	7.3 U	7.3 U
113-SE-126C-230992-067	09/23/92	Accutest	200 U	200 U	500 U	200 U	200 U	200 U	200 U
113-SE-126C-D-230992-067	09/23/92	Accutest	110 U	110 U	280 U	110 U	110 U	110 U	110 U

Table 113-02-29
Summary of Sediment Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Fluoranthene (mg/Kg)	Pyrene (mg/Kg)	Butylbenzylphthalate (mg/Kg)	3,3'-Dichlorobenzidine (mg/Kg)	Benzo(a)anthracene (mg/Kg)	bis(2-Ethylhexyl) phthalate (mg/Kg)	Chrysene (mg/Kg)
113-SE-122A-151092-084	10/15/92	Accutest	1.8	0.9	0.55 U	0.55 U	0.77	2.9	0.55
113-SE-122A-D-151092-084	10/15/92	Accutest	0.99	0.62	0.59 U	0.59 U	0.66	2.2	0.55
113-SE-123A-081092-079	10/08/92	Accutest	13	9.3	0.25	1.7 U	4.9	5.3	4.8
113-SE-123A-D-081092-079	10/08/92	Accutest	9.6	5.3	1.3 U	1.3 U	3.8	3.6	3.3
113-SE-123B-081092-079	10/08/92	Accutest	3.3	2.5	0.51 U	0.51 U	1.7	0.47	1.1
113-SE-123C-081092-080	10/08/92	Accutest	0.051	0.036	0.25 U	0.25 U	0.25 U	0.14	0.25 U
113-SE-123C-D-081092-080	10/08/92	Accutest	0.081	0.074	0.49 U	0.49 U	0.49 U	0.17	0.49 U
113-SE-124A-011092-075	10/01/92	Accutest	5.0	3.0	0.69 U	0.69 U	2.6	6.9	2.0
113-SE-124A-D-011092-075	10/01/92	Accutest	4.3	3.3	3.1 U	3.1 U	2.0	9.2	2.1
113-SE-124B-011092-075	10/01/92	Accutest	0.19	0.15	0.44 U	0.44 U	0.44 U	0.53	0.083
113-SE-124C-011092-076	10/01/92	Accutest	0.34	0.23	0.47 U	0.47 U	0.054	0.39	0.069
113-SE-124C-D-011092-076	10/01/92	Accutest	0.067	0.056	0.47 U	0.47 U	0.47 U	0.29	0.47 U
113-SE-125A-240992-066	09/24/92	Accutest	7.2	7.1	0.97 U	0.97 U	3.0	3.7	3.0
113-SE-125B-240992-066	09/24/92	Accutest	10	17	2.9 U	2.9 U	7.8	2.9 U	8.0
113-SE-125C-240992-067	09/24/92	Accutest	0.68	0.61	0.43 U	0.43 U	0.26	1.7	0.27
113-SE-126A-230992-066	09/23/92	Accutest	2.5	2.2	1.6 U	1.6 U	1.5	10	1.3
113-SE-126A-D-230992-066	09/23/92	Accutest	6.2	5.3	4.0 U	4.0 U	2.9	15	2.5
113-SE-126B-230992-066	09/23/92	Accutest	35	46	7.3 U	7.3 U	26	7.3 U	26
113-SE-126C-230992-067	09/23/92	Accutest	200 U	200 U	200 U	200 U	200 U	200 U	200 U
113-SE-126C-D-230992-067	09/23/92	Accutest	110 U	110 U	110 U	110 U	110 U	110 U	110 U

Table 113-02-29
Summary of Sediment Characterization - SVOCs
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Date Collected	Laboratory	Di-n-Octylphthalate (mg/Kg)	Benzo(b) fluoranthene (mg/Kg)	Benzo(k) fluoranthene (mg/Kg)	Benzo(a) pyrene (mg/Kg)	Indeno(1,2,3-cd) pyrene (mg/Kg)	Dibenz(a,h) anthracene (mg/Kg)	Benzo(g,h,i) perylene (mg/Kg)
113-SE-122A-151092-084	10/15/92	Accutest	0.55 U	0.93	0.55 U	0.51	0.41	0.072	0.16
113-SE-122A-D-151092-084	10/15/92	Accutest	0.59 U	0.93	0.34	0.45	0.28	0.17	0.14
113-SE-123A-081092-079	10/08/92	Accutest	1.7 U	6.4	2.4	3.4	2.6	0.62	1.3
113-SE-123A-D-081092-079	10/08/92	Accutest	1.3 U	4.9	1.3 U	2.5	1.7	0.42	0.87
113-SE-123B-081092-079	10/08/92	Accutest	0.51 U	2.1	0.51 U	1.2	0.78	0.18	0.57
113-SE-123C-081092-080	10/08/92	Accutest	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
113-SE-123C-D-081092-080	10/08/92	Accutest	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
113-SE-124A-011092-075	10/01/92	Accutest	0.69 U	3.2	1.2	2.3	1.5	1.0	1.5
113-SE-124A-D-011092-075	10/01/92	Accutest	3.1 U	2.3	1.9	2.0	1.5	0.73	3.1 U
113-SE-124B-011092-075	10/01/92	Accutest	0.44 U	0.095	0.44 U	0.065	0.44 U	0.44 U	0.44 U
113-SE-124C-011092-076	10/01/92	Accutest	0.47 U	0.095	0.056	0.05	0.47 U	0.47 U	0.05
113-SE-124C-D-011092-076	10/01/92	Accutest	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
113-SE-125A-240992-066	09/24/92	Accutest	0.97 U	5.1	0.97 U	2.9	1.0	0.97 U	0.77
113-SE-125B-240992-066	09/24/92	Accutest	2.9 U	6.5	2.9 U	6.4	2.2	0.69	2.3
113-SE-125C-240992-067	09/24/92	Accutest	0.43 U	0.54	0.43 U	0.3	0.43 U	0.43 U	0.043
113-SE-126A-230992-066	09/23/92	Accutest	1.6 U	1.8	0.81	1.4	0.54	1.6 U	0.48
113-SE-126A-D-230992-066	09/23/92	Accutest	4.0 U	4.4	4.0 U	2.6	4.0 U	4.0 U	4.0 U
113-SE-126B-230992-066	09/23/92	Accutest	7.3 U	19	7.3 U	17	5.6	7.3 U	4.9
113-SE-126C-230992-067	09/23/92	Accutest	200 U	200 U	200 U	200 U	200 U	200 U	200 U
113-SE-126C-D-230992-067	09/23/92	Accutest	110 U	110 U	110 U	110 U	110 U	110 U	110 U

Notes:
SE- Sediment
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
D - Field Duplicate
mg/Kg - Milligrams per kilogram
A,B,C - Designates relatively increasing distance of sediment samples from shoreline; A being the closest and C the furthest from the shoreline.

Table 113-02-30
Summary of Sediment Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Laboratory	Date Collected	Units	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium
113-SE-122A-151092-084	Accutest	10/15/1992	mg/Kg	11,500	7 U	16.5	83.3	1.5	2.3	9,120
113-SE-122A-D-151092-084	Accutest	10/15/1992	mg/Kg	12,500	7.1 U	14.5	89.5	1.5	2 U	11,400
113-SE-123A-081092-079	Accutest	10/8/1992	mg/Kg	8,360	6.9 U	8.7	117	0.83	1.9 U	10,200
113-SE-123A-D-081092-079	Accutest	10/8/1992	mg/Kg	8,810	12.7	8.8	74	0.91	2.1	7,570
113-SE-123B-081092-079	Accutest	10/8/1992	mg/Kg	8,980	5.1 U	32	54.1	0.75	1.4 U	22,300
113-SE-123C-081092-080	Accutest	10/8/1992	mg/Kg	10,100	5 U	9	75.5	0.86	1.4 U	40,500
113-SE-123C-D-081092-080	Accutest	10/8/1992	mg/Kg	14,800	5.3 U	7	88.9	1.2	1.5 U	27,900
113-SE-124A-011092-075	Accutest	10/1/1992	mg/Kg	14,100	9.5 U	12	103	1.7	2.7	7,920
113-SE-124A-D-011092-075	Accutest	10/1/1992	mg/Kg	12,700	9 U	13.4	100	1.6	2.5 U	8,100
113-SE-124B-011092-075	Accutest	10/1/1992	mg/Kg	12,900	4.7 U	6.1	70	1.1	1.3 U	9,510
113-SE-124C-011092-076	Accutest	10/1/1992	mg/Kg	17,600	5 U	6.3	130	1.4	1.4 U	7,820
113-SE-124C-D-011092-076	Accutest	10/1/1992	mg/Kg	16,900	5 U	7.2	95.6	1.4	1.4 U	6,610
113-SE-125A-240992-066	Accutest	9/24/1992	mg/Kg	13,100	7.3	19.9	60.5	0.27 U	1.4 U	37,600
113-SE-125B-240992-066	Accutest	9/24/1992	mg/Kg	17,000	7.9 U	98	316	1	3.4	4,780
113-SE-125C-240992-067	Accutest	9/24/1992	mg/Kg	15,400	4.9 U	9.3	94.8	0.84	1.4 U	10,300
113-SE-126A-230992-066	Accutest	9/23/1992	mg/Kg	14,200	8.8 U	14.1	121	0.77	2.4 U	7,750
113-SE-126A-D-230992-066	Accutest	9/23/1992	mg/Kg	15,400	8.8 U	13	129	0.9	3	8,140
113-SE-126B-230992-066	Accutest	9/23/1992	mg/Kg	17,100	8.1 U	101	227	0.88	2.2 U	4,010
113-SE-126C-230992-067	Accutest	9/23/1992	mg/Kg	11,400	8 0	19.2	97	1.3	3.1	11,700
113-SE-126C-D-230992-067	Accutest	9/23/1992	mg/Kg	14,600	8.8 0	18.1	100	0.59	1.7 U	21,000

Table 113-02-30
Summary of Sediment Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Laboratory	Date Collected	Units	Chromium	Cobalt	Copper	Cyanide	Iron	Lead	Magnesium	Manganese	Mer
113-SE-122A-151092-084	Accutest	10/15/1992	mg/Kg	908	16.2	83.7	0.83 U	27,600	213	8,290	420	1.7
113-SE-122A-D-151092-084	Accutest	10/15/1992	mg/Kg	1,120	15.9	108	0.91 U	30,500	361	8,950	469	1.7
113-SE-123A-081092-079	Accutest	10/8/1992	mg/Kg	675	10.7	60.3	0.98 U	20,000	737	6,520	404	1.7
113-SE-123A-D-081092-079	Accutest	10/8/1992	mg/Kg	751	12.7	82.3	0.94 U	22,400	83.7	7,190	436	1.6
113-SE-123B-081092-079	Accutest	10/8/1992	mg/Kg	3,660	21.3	110	2.3	23,200	75.3	11,700	396	1.9
113-SE-123C-081092-080	Accutest	10/8/1992	mg/Kg	1,050	17.8	32.7	0.72 U	29,300	34.8	8,410	504	0.56
113-SE-123C-D-081092-080	Accutest	10/8/1992	mg/Kg	222	14.8	34.7	0.71 U	31,200	35.9	10,300	707	0.37
113-SE-124A-011092-075	Accutest	10/1/1992	mg/Kg	531	15.2	122	1.4 U	32,000	101	9,650	681	3.2
113-SE-124A-D-011092-075	Accutest	10/1/1992	mg/Kg	547	15.2	113	1.4 U	31,100	127	8,780	600	2.7
113-SE-124B-011092-075	Accutest	10/1/1992	mg/Kg	39.3	12.8	28.7	0.68 U	27,700	11.1	9,490	690	0.14
113-SE-124C-011092-076	Accutest	10/1/1992	mg/Kg	54.8	15.1	37.1	0.72 U	35,300	13	11,500	747	0.14
113-SE-124C-D-011092-076	Accutest	10/1/1992	mg/Kg	29.3	15.8	35.9	0.71 U	34,800	12.1	11,300	701	0.14
113-SE-125A-240992-066	Accutest	9/24/1992	mg/Kg	3,000	71	31.3	0.77 U	46,300	56.7	30,700	800	0.95
113-SE-125B-240992-066	Accutest	9/24/1992	mg/Kg	520	11.8	358	1.8	38,600	437	7,900	461	5.7
113-SE-125C-240992-067	Accutest	9/24/1992	mg/Kg	467	26	43	0.81 U	34,100	24.9	12,500	746	0.45
113-SE-126A-230992-066	Accutest	9/23/1992	mg/Kg	312	12.6	126	1.3 U	30,800	124	8,990	590	3.1
113-SE-126A-D-230992-066	Accutest	9/23/1992	mg/Kg	347	13.4	131	1.3 U	33,400	130	9,680	637	2.6
113-SE-126B-230992-066	Accutest	9/23/1992	mg/Kg	282	11.5	419	8.4	35,500	359	7,640	433	5.9
113-SE-126C-230992-067	Accutest	9/23/1992	mg/Kg	3,000	32.2	132	1.4	30,500	303	12,600	352	2.8
113-SE-126C-D-230992-067	Accutest	9/23/1992	mg/Kg	2,000	66.8	102	0.91 U	39,800	124	22,300	459	2.7

Table 113-02-30
Summary of Sediment Characterization - TAL Metals
Site 113 Diamond Site
Kearny, New Jersey

Sample ID	Laboratory	Date Collected	Units	rcury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
113-SE-122A-151092-084	Accutest	10/15/1992	mg/Kg		62	2,320	0.78 U	2.2	6,010	0.39 U	96.9	199
113-SE-122A-D-151092-084	Accutest	10/15/1992	mg/Kg		65.1	2,410	0.78 U	1.6	6,140	0.39 U	88.7	216
113-SE-123A-081092-079	Accutest	10/8/1992	mg/Kg		38.7	1,390	0.76 U	2.1	4,830	0.38 U	65.5	135
113-SE-123A-D-081092-079	Accutest	10/8/1992	mg/Kg		46.3	1,490	0.76 U	2.2	5,050	0.38 U	73.6	148
113-SE-123B-081092-079	Accutest	10/8/1992	mg/Kg		103	895	0.56 U	1.5	2,830	0.28 U	133	183
113-SE-123C-081092-080	Accutest	10/8/1992	mg/Kg		68.4	1,560	0.56 U	1.1 U	2,930	0.28 U	90.6	128
113-SE-123C-D-081092-080	Accutest	10/8/1992	mg/Kg		38.8	2,390	0.59 U	1.2 U	3,030	0.29 U	42.3	103
113-SE-124A-011092-075	Accutest	10/1/1992	mg/Kg		52.5	3,190	1.1 U	2.8	10,800	0.53 U	71.2	256
113-SE-124A-D-011092-075	Accutest	10/1/1992	mg/Kg		55.9	2,790	1 U	2.3	8,600	0.5 U	87.4	234
113-SE-124B-011092-075	Accutest	10/1/1992	mg/Kg		27.3	2,290	0.52 U	1 U	1,590	0.26 U	27.7	62.7
113-SE-124C-011092-076	Accutest	10/1/1992	mg/Kg	U	35.2	3,550	0.55 U	1.1 U	2,520	0.28 U	37.7	85.1
113-SE-124C-D-011092-076	Accutest	10/1/1992	mg/Kg	U	33.7	3,140	0.55 U	1.1 U	2,580	0.28 U	34.1	77.1
113-SE-125A-240992-066	Accutest	9/24/1992	mg/Kg		272	542	0.55 U	1.1 U	3,200	0.55 U	560	229
113-SE-125B-240992-066	Accutest	9/24/1992	mg/Kg		54.3	2,490	8.7 U	3	6,450	0.87 U	47.9	608
113-SE-125C-240992-067	Accutest	9/24/1992	mg/Kg		70.9	2,340	0.58 U	0.82 U	2,260	0.58 U	106	116
113-SE-126A-230992-066	Accutest	9/23/1992	mg/Kg		41.1	2,660	0.98 U	3.5	8,210	0.98 U	43.3	257
113-SE-126A-D-230992-066	Accutest	9/23/1992	mg/Kg		45.4	2,820	9.8 U	3.6	8,710	0.98 U	47.1	270
113-SE-126B-230992-066	Accutest	9/23/1992	mg/Kg		43.1	2,330	9 U	3.3	6,680	0.9 U	38.7	413
113-SE-126C-230992-067	Accutest	9/23/1992	mg/Kg		115	1,450	0.77 U	1.4	4,290	0.77 U	194	301
113-SE-126C-D-230992-067	Accutest	9/23/1992	mg/Kg		244	1,190	0.74 U	1 U	4,630	0.74 U	532	350

Notes:
SE- Sediment
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value
D - Field Duplicate
mg/Kg - Milligrams per kilogram
- - "Not Analyzed" or "Not Applicable" or "Not Requested"
A,B,C - Designates relatively increasing distance of sediment samples from shoreline; A being the closest and C the furthest from the shoreline.

Table 113-02-31
Summary of Porewater Characterization - Total Cr, Cr(VI) pH, ORP, Chlorides, and DO
Site 113 Diamond Site
Kearny, New Jersey

TSI Sample ID	Collection Date	Laboratory	Total Cr (µg/L)	Cr(VI) (µg/L)	Field pH	Field ORP (mv)	Cl (mg/L)	Field DO (mg/L)
113-PW-01-131107-1354	11/13/07	Lancaster	2.0 U	10 U	7.1	139	10,800	2.22
113-PW-02-131107-1354	11/13/07	Lancaster	3.9	10 U	7.3	–61	10,800	2.61
113-PW-03-131107-1354	11/13/07	Lancaster	5.3	10 U	6.9	–84	7,300	2.24
113-PW-03-D-131107-1354	11/13/07	Lancaster	2.0 U	10 U	6.8	–81	7,300	1.54
113-PW-04-131107-1354	11/13/07	Lancaster	2.0 U	10 U	7.4	–68	10,600	1.55
113-PW-05-131107-1354	11/13/07	Lancaster	2.0 U	10 U	7.2	-40	8,210	2.04

Notes:
PW - Porewater
mg/L - Milligram per liter
µg/L - Microgram per liter
mv - Millivolt
ORP - Oxidation-Reduction Potential
D - Field duplicate
Cl - Chlorides
DO - Dissolved Oxygen
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value

Table 113-02-32
Comparison of Chromium Concentrations in Pore Water Samples to Applicable Water Quality Criteria
Site 113 Diamond Site
Kearny, New Jersey

	Porewater Sample ID						Marine Acute Criterion (µg/L)	Marine Chronic Criterion (µg/L)	Freshwater Acute Criterion (µg/L)	Freshwater Chronic Criterion (µg/L)
Chemical	113-PW-01	113-PW-02	113-PW-03	113-PW-03-D	113-PW-04	113-PW-05				
Hexavalent chromium result (µg/L)	10 U	10 U	10 U	10 U	10 U	10 U	1,100	50	15	10
Total chromium result (µg/L)	2.0 U	3.9	5.3	2.0 U	2.0 U	2.0 U	--	--	--	--

Notes:
PW - Porewater
-- "Not Analyzed" or "Not Applicable" or "Not Requested"
Criteria are on a dissolved basis.
Criteria are based on the New Jersey surface water quality criteria (N.J.C. 7:9B1.14(c)(13)).
µg/L - micrograms per liter
U - The material was analyzed for this parameter, but was not detected at or above the associated numerical value

Table 113-02-33
Summary of Air Characterization - Total Cr(VI), Respirable Cr(VI), Total Cr, and TSP
Site 113 Diamond Site
Kearny, New Jersey

Location	Sample Date	Total Cr(VI) (ng/m^3)	Respirable Cr(VI) (ng/m^3)	Total Cr (ng/m^3)	TSP (mg/m^3)
Area 1 (outdoor)	6/6/90	1.6 (15 L/min)	NS	NS	NS
		1.5 (30 L/min)			
	6/7/90	0.62 (15 L/min)	NS	NS	NS
		0.81 (30 L/min)			
	6/9/90	0.91 (15 L/min)	NS	NS	NS
		0.46 (30 L/min)			
Area 2 (outdoor)	6/26/90	1.9 (15 L/min)	NS	NS	NS
		2.2 (30 L/min)			
	6/27/90	1.5 (15 L/min)	NS	NS	NS
		1.2 (30 L/min)			
	7/12/90	0.93 (15 L/min)	NS	NS	NS
		0.64 (30 L/min)			
	7/13/90	0.54 (15 L/min)	NS	NS	NS
		0.44 (30 L/min)			
	7/25/90	0.16 (15 L/min)	NS	NS	NS
		0.21 (30 L/min)			
	7/27/90	0.05 (15 L/min)	NS	NS	NS
		0.74 (30 L/min)			
	7/31/90	0.89 (15 L/min)	NS	NS	NS
		0.98 (30 L/min)			
	8/1/90	0.65 (15 L/min)	NS	NS	NS
		0.77 (30 L/min)			
	8/2/90	0.57 (15 L/min)	NS	NS	NS
		0.64 (30 L/min)			
Area 3 (outdoor)	10/5/89	0.5 (R)	NS	14	0.05
		0.6 (R)			
		0.4 (R)			
Area 4 (indoor)	9/21/89	0.8	NS	300	NA
Area 5 (indoor)	9/22/89	2.2 (R)	NS	NS	NS
		3.4 (R)			
Area 6 (indoor)	9/21/89	3.0 (R)	NS	200	NA
		2.8 (R)			
	4/18/90	0.97 (R)	NS	17 (R)	0.003
		1.2 (R)		18 (R)	NA

Notes:
NS - Not Sampled
NA - Not Analyzed
R - Replicate Samples
() - Air flow rate in liters per minute (air flow rate comparison study areas 1 and 2)
Samples were collected using the impinger method
TSP - Total Suspended Particles