185435

ADMINISTRATIVE RECORD

QUANTA RESOURCES SITE

EDGEWATER, BERGEN COUNTY, NEW JERSEY

VOLUME 3 OF 5

Prepared for:

Robert J. Montgomery, On-Scene Coordinator
U. S. EPA Region II
Removal Action Branch
Edison, New Jersey 08837

Prepared by:

Region II Removal Support Team
Roy F. Weston, Inc
Federal Programs Division
Edison, New Jersey 08837

DCN #: RST-02-F- 00612
TDD #: 02-01-02-0002
PCS #: 2171

June 2002

QUANTA RESOURCES SITE

ADMINISTRATIVE RECORD FILE CONTENTS

INDEX FOR VOLUMES I - V ..... Pages 1 - 22

Quanta Resources Site, Volumes I & II

SITE IDENTIFICATION ..... SECTION 1

REMOVAL RESPONSE ..... SECTION 2

REMEDIAL INVESTIGATION ..... SECTION 3

STATE COORDINATION ..... SECTION 6

ENFORCEMENT ..... SECTION 7

HEALTH ASSESSMENTS ..... SECTION 8

NATURAL RESOURCE TRUSTEES ..... SECTION 9

PUBLIC PARTICIPATION ..... SECTION 10

TECHNICAL SOURCES AND GUIDANCE DOCUMENTS ..... SECTION 11

Celotex Site, Volume III

REMEDIAL INVESTIGATION ..... SECTION 3

HEALTH ASSESSMENTS ..... SECTION 8

Lever Brothers Site, Volume IV

SITE IDENTIFICATION ..... SECTION 1

REMEDIAL INVESTIGATION ..... SECTION 3

Lustrelon Site, Volume IV

REMEDIAL INVESTIGATION ..... SECTION 3

Spencer-Kellogg Site, Volume V

SITE IDENTIFICATION ..... SECTION 1

REMEDIAL INVESTIGATION ..... SECTION 3

Celotex Site

Document #: CE 3.2001 - CE 3.2151
Title: Remedial Investigation Report, Celotex Property Site, Edgewater, Bergen County, New Jersey
Category: Remedial Investigation
Author: Regan A. McGonigle, Hydrogeologist, Enviro-Sciences, Inc.
Recipient: Edgewater Associates
Date: June 1997

Document #: CE 3.2152 - CE 3.2153
Title: Test Pits Determining if Product Existed North of the Celotex Property Line
Category: Remedial Investigation
Author: Robert Hayton, Case Manager, Bureau of Federal Case Management, New Jersey Department of Environmental Protection
Recipient: James Demetrakis, Esquire
Date: April 7, 1998

Document #: CE 3.2154 - CE 3.2178
Title: Remedial Investigation Report Addendum, Groundwater Investigations, Former Celotex Site, Edgewater, New Jersey
Category: Remedial Investigation
Author: Enviro-Sciences, Inc.
Recipient: Edgewater Associates
Date: November 1998

Document #: CE 3.2179 - CE 3.2206
Title: Remedial Investigation Report, Former Celotex Site
Category: Remedial Investigation
Author: John Gear, P.G. Manager, Hydrogeology, Enviro-Sciences, Inc.
Recipient: Robert Hayton, New Jersey Department of Environmental Protection, Bureau of Federal Case Management
Date: November 19, 1998

Document #: CE 3.2207 - CE 3.2226
Title: Soil Sampling Results, Celotex Property
Category: Remedial Investigation
Author: Dawn Neville, Project Engineer, AlliedSignal, Morristown, New Jersey
Recipient: Robert J. Montgomery, On-Scene Coordinator, Removal Action Branch, United States Environmental Protection Agency, Region II
Date: February 18, 1999

Document #: CE 3.2227 - CE 3.2387
Title: Remedial Investigation Report, Former Celotex Industrial Park, Volume I of II
Category: Remedial Investigation
Author: Rich Hodgson, Technician, and Christopher Kirby, Senior Project Manager, Environmental Waste Management Associates
Recipient: Edgewater Enterprises, LLC
Date: September 2000

Document #: CE 3.2388 - CE 3.2526
Title: Remedial Investigation Report, Former Celotex Industrial Park, Volume II of II
Category: Remedial Investigation
Author: Rich Hodgson, Technician, and Christopher Kirby, Senior Project Manager, Environmental Waste Management Associates
Recipient: Edgewater Enterprises, LLC
Date: September 2000

Document #: CE 3.3001 - CE 3.3025
Title: Ecological Assessment (EA) - Remedial Action Work Plan (RAW), Former Celotex and Lustrelon Properties
Category: Remedial Investigation
Author: Mark London, Vice-President, Enviro-Services, Inc.
Recipient: Robert Hayton, Sharon Bruder, New Jersey Department of Environmental Protection, Bureau of Federal Case Management
Date: April 15, 1988

Document #: CE 8.1001 - CE 8.1007
Note: Since this document pertains to two sites it was included in the Quanta Edgewater Site section of the Administrative Record
Title: Quanta/Celotex Public Health Consultation
Category: Health Assessments
Author: Tom Mignone, U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry (ATSDR), New York
Recipient: Robert J. Montgomery, On-Scene Coordinator, Removal Action Branch, United States Environmental Protection Agency, Region II
Date: October 13, 1998

Document #: CE 8.3001 - CE 8.3002
Title: Letter Regarding Potential for Ecological Risk Associated with Sediment and Surface Water Data, Celotex Park Site
Category: Health Assessments
Author: Mindy J. Pensak, Environmental Scientist, Hazardous Waste Support Branch, United States Environmental Protection Agency, Region II
Recipient: Robert J. Montgomery, On-Scene Coordinator, Removal Action Branch, United States Environmental Protection Agency, Region II
Date: January 22, 1998

For the complete index of the Quanta Resources Site Administrative Record, refer to Volume I of the document.

REMEDIAL INVESTIGATION REPORT

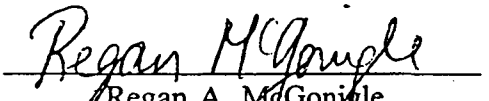
Celotex Property
One River Road
Edgewater, Bergen County
New Jersey 07632

June 1997

Prepared on behalf of:

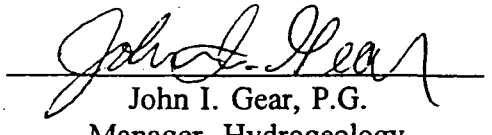
Edgewater Associates
473 Sylvan Avenue
Englewood Cliffs, NJ 07632

Prepared by:



Regan A. McGonigle
Hydrogeologist

Approved for Release by:



John I. Gear, P.G.
Manager, Hydrogeology

ENVIRO-SCIENCES, INC.
111 Howard Boulevard, Suite 108
Mount Arlington, New Jersey 07856
(201) 398-8183

REMEDIAL INVESTIGATION REPORT

Celotex Property
One River Road
Edgewater, New Jersey

Table of Contents

Page #

1.0 INTRODUCTION 1

2.0 BACKGROUND 2

2.1 Site History 2

2.1.1 Chain-of-Title 2
2.1.2 Past Operations 2

2.2 Physical Setting 7

2.2.1 Site and Surrounding Area 7
2.2.2 Geology 8

2.3 Summary of Previous Investigations 8

3.0 ADDITIONAL AREAS OF POTENTIAL ENVIRONMENTAL CONCERN . . . 8

4.0 REMEDIAL INVESTIGATION 10

4.1 Soil Investigation 10
4.2 Groundwater Investigation 11

5.0 DRILLING AND SAMPLING PROCEDURES 11

5.1 Soil Boring Drilling 11
5.2 Soil Sampling 11
5.3 Groundwater Monitoring Well Installation 12
5.4 Monitoring Well Sampling 12

REMEDIAL INVESTIGATION REPORT

Celotex Property
One River Road
Edgewater, New Jersey

Table of Contents (cont'd.)

Page #

SOIL INVESTIGATION 12

6.1 Celotex Contaminant Delineation 13
6.2 Landfill Investigation 23

7.0 GROUNDWATER INVESTIGATION 24

7.1 Monitoring Well Sampling Results 24

8.0 PROPOSED REMEDIATION 25

8.1 Site Capping 25
8.2 Groundwater Remediation 25

9.0 ADDITIONAL REMEDIAL INVESTIGATION ACTIVITIES 26

10.0 SCHEDULE 26

11.0 CONCLUSIONS 26

FIGURES

1 - Site Location Map
2 - Site Plan
3 - Soil Boring and Monitoring Well Locations
4 - Upper Fill Surface - Arsenic Contamination Map
5 - Historical Fill Surface - Arsenic Contamination Map
6 - Six-Inch Interval Above the Groundwater - Arsenic Contamination Map
7 - Upper Fill Surface - BN/PAH Contamination Map
8 - Historical Fill Surface - BN/PAH Contamination Map

REMEDIAL INVESTIGATION REPORT

Celotex Property
One River Road
Edgewater, New Jersey

Table of Contents (cont'd.)

FIGURES (cont'd)

9 - Six-Inch Interval Above the Groundwater - BN/PAH Contamination Map
10 - Upper Fill Surface - Cadmium Contamination Map
11 - Historical Fill Surface - Cadmium Contamination Map
12 - Six-Inch Interval Above the Groundwater - Cadmium Contamination Map
13 - Upper Fill Surface - Copper Contamination Map
14 - Historical Fill Surface - Copper Contamination Map
15 - Six-Inch Interval Above the Groundwater - Copper Contamination Map
16 - Upper Fill Surface - Lead Contamination Map
17 - Historical Fill Surface - Lead Contamination Map
18 - Six-Inch Interval Above the Groundwater - Lead Contamination Map
19 - Historical Fill Surface - PCBs Contamination Map
20 - Six-Inch Interval Above the Groundwater - PCBs Contamination Map
21 - Upper Fill Surface - Thallium Contamination Map
22 - Historical Fill Surface - Thallium Contamination Map
23 - Six-Inch Interval Above the Groundwater - Thallium Contamination Map
24 - Upper Fill Surface - TPH Contamination Map
25 - Historical Fill Surface - TPH Contamination Map
26 - Six-Inch Interval Above the Groundwater - TPH Contamination Map
27 - Monitoring Well Locations and Water Table Contour Map

TABLES

1 - Soil Analytical Results - Celotex
2 - Groundwater Analytical Results - Celotex

APPENDICES

A - Past Ownership and Operations Documentation
B - Monitoring Well and Soil Boring Logs
C - Analytical Data Reports
D - Schedule

REMEDIAL INVESTIGATION REPORT

Celotex Property
One River Road
Edgewater, New Jersey

1.0 INTRODUCTION

The property located at One River Road in Edgewater, Bergen County, New Jersey is presently owned by Edgewater Associates (EA) (see Figure 1 for the site location). For regulatory purposes, the property is divided into two separate portions: the northern, or former Lustrelon, Inc. (Lustrelon); and the southern, or former Celotex Industrial Park (Celotex) portion. These portions were named after the previous occupant, and previous owner, respectively. In this report, "EA property" or "the site" refers to the entire site, "Lustrelon" refers to the northern portion, and "Celotex" refers to the southern portion. Enviro-Sciences, Inc. (Enviro-Sciences) was retained by EA to develop and implement the Remedial Investigation Workplan (RIW) for the Celotex portion.

On June 25, 1996, EA signed a Memorandum of Agreement (MOA), Case #96-05-02-1722-24, with the NJDEP to perform remedial activities at the Celotex portion. A Remedial Investigation Workplan (RIW) was prepared by Enviro-Sciences and submitted to the New Jersey Department of Environmental Protection (NJDEP) on March 19, 1997. The Remedial Investigation (RI) commenced in March 1997. Sampling activities were performed in accordance with the applicable requirements of N.J.A.C. 7:26E-4.1 through 4.7, and with Quality Assurance/Quality Control (QA/QC) procedures.

The following issues were addressed during the RI:

- delineation of priority pollutant metals (PPM), polynuclear aromatic hydrocarbon (PAH), total petroleum hydrocarbon (TPH), and polychlorinated biphenyl (PCB) contamination previously identified at the Celotex portion (see Section 2.3 for a description of the previous investigations);
- investigation of the gypsum board landfill to confirm that it is free of contaminants;
- vertical and horizontal delineation of the historical fill at the site; and
- investigation of groundwater at the site to determine groundwater quality.
- investigation of the status of an aboveground storage tank (AST) located on the

property that contains sludge, waste oil and solvents contaminated with PCBs. (The U.S. Environmental Protection Agency (EPA) has jurisdiction over the cleanup of this tank).

2.0 BACKGROUND

A site history and description of the physical setting are presented in Sections 2.1 and 2.2, respectively.

2.1 Site History

2.1.1 Chain-of-Title

Past owners of the site and the dates of ownership obtained from a review of deeds of the property are:

Northern Parcel

General Chemical Co.	1857	-	Circa 1950
Allied Chemical Corp.	Circa 1950	-	8/1/67
Celotex Corp.	8/1/67	-	1/7/81
Edgewater Associates	1/7/81	-	Present

Southern Parcel

Barrett Manufacturing	1896	-	12/1/41
Allied Chemical Corp.	12/1/41	-	8/1/67
Celotex Corp.	8/1/67	-	1/7/81
Edgewater Associates	1/7/81	-	Present

2.1.2 Past Operations

Historic atlases, surveys and other literature were used in determining the historic operations on the former Celotex site (see Appendix A).

Northern Parcel

General Chemical Co., was originally founded as James Morgan & Co., in 1857. The James Morgan & Co., manufactured chemicals and acids. By 1899, the company name had changed to General Chemical.

By 1876 the James Morgan & Company had erected several buildings, primarily on the eastern portion of the site. Buildings shown on the 1876 atlas map included: an Oil of Vitrol Works building, boiler house, sulphur burner, dye wood mill, ammonia building, covered dock office and miscellaneous buildings. Approximately five small buildings were located on the western edge of the property along River Road.

An 1897 topographic map shows several buildings along River Road and River Street. One large rectangular building is orientated parallel to the Hudson River and another square building just south.

Based on the 1911 Sanborn Insurance map and 1912 atlas, most of the property was developed, with the majority of the buildings on the eastern two thirds of the property. There was also a north-south railroad siding, along River Road, with an east-west spur. New industrial buildings on the western part of the property housed acid chambers, rod chambers, pyrites, an ore crusher, plating still room, packing facilities and a shed. Four new tanks were located west of the plating still room. To the east were several other new buildings, including, a laboratory, boiler houses (coal), a cooperage and soda drying plant. The eastern most buildings housed nitric and muriatic acid stills. A dock shed was located over the pier with three tanks on the roof.

By 1946, General Chemical produced industrial chemicals (acids, alums, sodium compounds, etc), reagent and fine chemicals, insecticides and fungicides (1946-1947 Industrial Directory of New Jersey).

Based on the 1947 topographic map, the entire EA property is level, at 20-foot elevation.

A 1950 Sanborn map shows additional rail spurs crossed the site. The northwest corner of the property (previously residences) was converted into a parking lot. To the east of the parking lot was a new manufacturing building and to the east of that was three fuel oil tanks. Along the northern border was another manufacturing building with a furnace, a welding area, some transformers and at least six associated tanks. Further east was material storage and coal piles.

The building north of the pyrite storage was an ore burner. Six acid tanks had been erected along the southeast property border. The dock shed had been converted into a 500-foot pier.

A review of a 1956 topographic map and a 1957 aerial photo reveals that in 1957, a large building (Gypsum Mill Building) had been constructed. It was along the northern property border, beginning in the location of the three fuel oil tanks mentioned above, continuing east across two thirds of the property.

On or about 1957, General Chemical became a division of Allied Chemical and Dye. At this time General Chemical produced chemicals for industry, including sulphuric acid and photographic chemicals. ("What Edgewater Offers Industry" Brochure, 1956).

A Fire Insurance Map, dated 1957, shows the southern part of the property. The map indicates the presence of six gypsum storage silos to the east. Near Buildings 55 - 57, three tanks and an asphalt heater remain on the southern border of the site.

Based on aerial photographs, dumping appears to have occurred in the river between the Navy pier and the General Chemical pier. This area is now the light colored landfill.

A review of a 1965 aerial photograph and a 1966 topographic map, reveals that south of the eastern portion of the Mill building, a warehouse addition was constructed. Based on a 1967 engineering map, the warehouse was a storage area for gypsum board, with a small calcining building to the east. To the south of the new addition all of the buildings were demolished and cleared. In this area conveyors were constructed leading to the piers. A second conveyor connected the two piers.

In 1965 the gypsum board landfill between the two piers extended halfway along the navy pier. The landfill had already assumed its present configuration.

On August 1, 1967, Celotex purchased Block 91, Lots 1.01, 1.02, 3.01, 5 and 6; and Block 92, Lots 1, 3, and 4 from Allied Chemical.

Southern Parcel

In 1876, Page, Kidder & Fletcher Palisade Chemical Works occupied the eastern portion of the property (atlas and deeds). A large pitch tank was present along the northern border of the property (then River Street) and five tar tanks were located on the eastern third of the property towards the Hudson River. Page, Kidder & Fletcher became New York Coal Tar, Co., and sold the land to Barrett Manufacturing in 1896.

Based on the 1911 Sanborn map and 1912 atlas, on or within the current EA property were tar stills, paper storage, roofing factory, and tar paper factory. Also within the property boundary were five tar tanks with a total capacity of 12,200 barrels and a pitch cooling process, in an open shed. Within 100 feet of the property boundary were eight tar tanks with a total capacity of 60,500 barrels and two ammonia tanks.

On December 1, 1941, Barrett Manufacturing Company was dissolved and 20,000 shares of stock, all property and operations were transferred to Allied Chemical and Dye Corporation. However, a 1956 brochure entitled "What Edgewater Offers Industry" indicates Barretts still manufactured coal tar chemicals, paving and roofing materials. In 1957 a new plant began making gypsum board.

Based on the 1956 topographic map and the 1957 aerial photograph, the large tanks on and near the property line in the 1940s were no longer present. The large buildings that housed the paper storage, roofing factory and tar paper factory were replaced by smaller buildings. Many of the tanks and small buildings on the eastern part of the property were taken down.

On August 1, 1967, Celotex purchased Block 91, Lots 1.01, 1.02, 3.01, 5 and 6; and Block 92, Lots 1, 3, and 4 from Allied Chemical and Dye.

Celotex operated a facility immediately south of Lustrelon. Celotex manufactured building materials, such as gypsum board. Many large containers were stored outdoors to the east of the two northernmost buildings. By 1971 Celotex leased out portions of its property. Most of the businesses that leased space would be considered small businesses. The only large scale manufacturing operation was that of Lustrelon, which also leased from Celotex and manufactured lamps and lighting fixtures.

In 1981 EA purchased Block 91, Lots 1.01, 1.02, 3.01, 5 and 6; and Block 92, Lots 1, 3, and 4 from Celotex. EA did not have any operations on site; they leased to other businesses.

EA purchased the site in 1981 and leased space to several tenants. Formerly, five buildings were located on the site; four of these buildings have been demolished. Only one building on the Celotex portion, located on the pier, remains. The following is a list of tenants that occupied the site in 1986, and a brief description of their operations, according to an environmental site inspection report prepared by Paulus, Sokolowski and Sartor, Inc., Consulting Engineers (PS&S) in 1987.

The pier building was occupied by two tenants; Banco International and Academy Film. Banco International occupied a warehouse that primarily stored garden hoses, cat food, kitchen equipment, gardening pots and seeds. Academy Film developed and spliced film at the west end of the pier.

Building No. 1 was occupied by four tenants: J&T Leasing operated a chemical storage warehouse and freight forwarding operation; Arbed Company, Inc. manufactured box springs and distributed mattresses and box springs; JEDS Consolidating warehoused department store goods; and Havana Potato and Transport Company distributed and packed potatoes, onions, and other vegetables. Building No. 1 has been demolished.

Delta Contractors occupied Building No. 2. The building was vacated in 1986, and subsequently demolished.

The building south of Building No. 1, called the Mill Building, was occupied by A & B Sardina Moving and Storage, Delta Bulk Warehouse, and Rotundo Disposal Company. Rotundo Disposal Company rented space for storing disposal trucks. There were also two buildings adjacent to the Mill building. One was a shed which was used by Vic's Auto, and Miodrag Jecminica Truck Builders and Repair. The other was a warehouse used by Delta Bulk. In 1986, while responding to a sprinkler system low pressure alarm, the Edgewater Fire Department discovered approximately 200, 55-gallon drums in the Delta Bulk Warehouse. The EPA subsequently inspected the building in April and May, 1986. Based on their findings, EA entered into an ACO with EPA (CERCLA-60114) on October 8, 1986. EA cleaned up the site to EPA's satisfaction, as stated in a March 2, 1989 letter from EPA. All structures have been demolished.

A garage occupied by Harbour Auto was located on the west portion of the property. There was also an entrance office in which Nonco Services, Robert Genna, EA, and MSC Corporation operated. EA also occupied the gate house located next to the entrance office building.

A two-story building and a three-story building previously occupied the southern-most portion of the site. The two-story building had one tenant, USA Metals, which was in the business of scraping, baling, and selling non-ferrous metals. A courier service also operated out of this building. Two tenants occupied the three-story building: Industrial Surface Systems (ISS) was in the business of installing industrial epoxy floors; and Treaty Floors was a floor installation business. Treaty Floors and ISS used their space in the three-story building for storing flooring materials and automobiles.

Emile Trucking shared Building No. 55, located on the southern property border, with Havana Potato and Transport. Havana Potato and Transport rented their space in Building No. 55 to Gilberta Garcia, a trucking firm, for vehicle maintenance. The adjacent buildings, Buildings No. 56 and 57, were occupied by S.P.M./United Electric Enterprises. The nature of their operations was repairing electric motors and amusement park rides.

P & P Equipment used an area at the southwest portion of the site for outdoor storage of scrapped equipment and metal.

All County Environmental (All-County) operated a waste oil reclamation business at the site in the early 1980s. Waste oil was transferred into two 150,000-gallon ASTs (one of which remains today) and nine tanker trucks, also located in an outside storage area. The NJDEP forced cessation of the operation after learning that All-County was receiving waste oil that contained PCBs. Additional information regarding the All-County AST is provided in Section 3.0.

2.2 Physical Setting

2.2.1 Site and Surrounding Area

The Celotex portion is approximately 29.5 acres and is located at One River Road in Edgewater, Bergen County, New Jersey. Formerly, five buildings were located on the Celotex portion; only the pier building remains. A detailed site history is presented in Section 2.1. The property is bordered on the north by an apartment building, on the east by the Hudson River, and on the west by River Road. The property to the south is currently vacant. It was previously owned by Allied Corporation.

The Celotex portion is designated as Block 92, Lots 3 and 4, and Block 91, Lot 4 (portion). The site is located at:

Latitude:	40° 48' 23"
Longitude:	73° 59' 22"

Figure 1 shows the location of the site on the United States Geological Survey (U.S.G.S.) 7.5-minute Central Park, N.Y. - N.J. quadrangle, and Figure 2 shows the general site plan.

2.2.2 Geology

The site is located within the Newark Basin, in the Piedmont Physiographic Providence of New Jersey. The site is underlain by Newark Supergroup sediments, deposited in the shallow, non-marine conditions during the late Triassic and early Jurassic time. One of the lower Newark Supergroup units, the Stockton Formation, outcrops west of the site in a roadcut along River Road. This unit is generally composed of yellow-gray to pale-brown arkose, siltstone, and mudstone deposits with minor conglomerate beds. In addition to the sediment deposits, igneous intrusions and flows of basalt and diabase of Triassic and Jurassic age are found throughout the area.

The EA property consists of miscellaneous fill overlying marsh sediments. The property, which is currently flat, has been filled adjacent to and into the original Hudson River tidal zone. An additional two to nine feet of fill was added to various locations for development purposes sometime after January 1988. In the Lustrelon portion, the fill consists of black, fine-to-medium sand with some silt, as well as ashes, cinders, brick, wood, and concrete fragments. The southern area was probably filled at the same time, therefore the fill material may likely be similar in composition. This will be confirmed during the remedial investigation.

Typically, depth to groundwater at the site is 7 to 14 feet below present grade. The groundwater flow direction is generally east to southeast, and is minimally affected by the tidal fluctuations in the Hudson River.

2.3 Summary of Previous Investigations

3.0 ADDITIONAL AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

Based on a review of the site history, aerial photographs, and Sanborn Fire Insurance Maps, the following additional areas of environmental concern (AOCs) were investigated. The sampling plan to investigate these AOCs is presented in Section 4.2. AOCs 1 through 11 had been previously identified and investigated on the northern portion of the site. Therefore, these additional AOCs were numbered starting with AOC 12.

AOC 12 Stained Soil

The 1990 aerial photograph shows two large areas of bare soil with black surface stains. The first is located immediately south and southwest of the ASTs previously used by All-County Environmental. Several tractor trailers are seen parked in the

stained area. The second is located in the southeastern section of the site. Here too, several tractor trailers are located in this area. The 1994 aerial photograph shows the majority of the site to be overgrown with vegetation; however, this area is only sparsely vegetated, and some staining is still visible. Neither the 1988 nor the 1990 investigation involved soil sampling at these locations. Based on the age of the photograph and the addition of fill at the site subsequent to building demolitions, the staining is now approximately six to eight feet below grade.

AOC 13 Academy Film

Academy Film occupied space in the far western portion of the pier building, which is located over land. According to the 1987 environmental site inspection by PS&S, there were stained floors, and corroded floor drains. Although the floor drains discharged to the sanitary sewer, corrosion of the drains and or sewers may have caused a release of film-developing chemicals to the soil.

AOC 14 J&T Leasing

During the 1987 environmental site inspection, PS&S reported a "large quantity" of oil dripping from a trash dumpster outside J&T's truck shop area. The dripping caused a "large oil spill" outside the entrance to the shop, and may have released oil to the soil. Based on photographs taken during the environmental site inspection, the large oil spill was located between Buildings No. 1 and 3.

AOC 15 All County Environmental

All County Environmental collected shipments of waste oil in two 150,000-gallon ASTs at the site. One tank received two waste oil shipments in 1983 that contained more than 500 parts per million (ppm) of PCBs. Due to these shipments, the contents must be disposed of in accordance with the Toxic Substances Control Act (TSCA), even though the PCB concentrations are less than 50 ppm. The EPA has invoked the "source rule" stating that dilution of TSCA waste (by receipt of additional non-PCB contaminated oil) is not an acceptable means of treating the waste. Cleanup of the ASTs are under the jurisdiction of EPA Case #TSCA-94-0233. The tank that did not receive PCB-contaminated oil has been properly disposed.

During the 1987 environmental site inspection, PS&S reported "evidence of a diesel fuel underground storage tank within the All-County Environmental area." If located, the tank will be removed following the NJDEP's UST regulations.

AOC 16 Havana Potato and Transport Company

During the 1987 environmental site inspection, PS&S observed an area adjacent to a diesel fuel AST that was "approximately 20 feet long by 20 feet wide which was heavily stained." Photographs show the stained area to be located southwest of Building No. 1.

4.0 REMEDIAL INVESTIGATION

The objectives of the RI were to:

- Delineate and characterize the historical fill and post-1988 fill. The borings were advanced through the fill material to the native soil.
- Develop a baseline contaminant profile in areas that had not been previously investigated.
- Investigate the previous operations performed at the Edgewater property as well as those conducted at the adjacent property (located along the south/southwest property boundary), and determine the potential impacts these operations may have had on the soil and groundwater quality.
- Determine which contaminants are related to fill and which may have resulted from previous operations at the site.
- Perform a groundwater investigation to determine groundwater quality.
- Investigate the gypsum board landfill to confirm the suspected absence of contaminants.
- Investigate and delineate any contamination found as a result of the additional AOCs.

4.1 Soil Investigation

To fully characterize the site, soil borings were advanced or test pits were dug to investigate AOCs or to serve as base line samples. as shown in Figure 3. Ninety-eight borings/pits were advanced to address the AOCs. Barring refusal, each boring was advanced to an ultimate depth ranging from 10 feet to 20 feet below grade. Typically two to three soil samples were obtained from each borehole. Samples were collected from the upper fill surface, the historical fill surface, and the six-inch interval above

the water table (historic fill). Sample analysis included PP+40, BNs, PPM, TPH, and hexavalent chromium.

In total two hundred soil samples were submitted to the laboratory for analytical testing during Enviro-Sciences' remedial investigation.

4.2 Groundwater Investigation

Seven monitoring wells (MW-1 through MW-7) were installed and sampled during Enviro-Sciences' remedial investigation (see Figure 3 for monitoring well locations). The wells were completed to depths of 16 to 25 feet below grade. The groundwater samples collected from these wells were analyzed for PP+40.

5.0 DRILLING AND SAMPLING PROCEDURES

Ninety-eight borings/pits were completed at the site during the remedial investigation. Borings were completed to depths ranging from 10 feet to 20 feet below grade. Upon completion, all borings/pits were back filled with soil cuttings.

5.1 Soil Boring Drilling

All borings were drilled using either a Mobile Drill B-57 or B-61 drill rig, utilizing hollow stem augers, or using hydropunch equipment. A track hoe was used to dig the test pits. An underground utility markout was completed prior to commencement of field drilling/digging activities. Continuous air monitoring using a photo-ionization detector (PID) organic vapor meter was conducted during all subsurface activities. Lithologic boring logs showing the soil column descriptions, sample locations, blow counts, and PID readings are presented in Appendix B.

5.2 Soil Sampling

Soil samples were obtained with either split spoons when using a drill rig or hand sampling equipment when using a track hoe. Two to three soil samples were obtained from each borehole or test pit. Samples were collected from the upper fill surface, the historical fill surface, and the six-inch interval above the water table (historic fill). All drilling activities were completed by New Jersey licensed drillers. In most instances, the split-spoon samples were advanced two feet using a 140-pound hammer, in general accordance with ASTM standards.

5.3 Groundwater Monitoring Well Installation

Seven overburden groundwater monitoring wells (MW-1 through MW-7) were completed throughout the site using four-inch-diameter, PVC riser pipe and number ten slot PVC well screen. The sand pack consisted of number 0 silica sand; the seal was accomplished by using bentonite and grout. The wells ranged in depth from 16 to 25 feet below grade. Groundwater was encountered between 8 and 13 feet below grade. Due to the proximity of the well locations to the Hudson River, the wells were screened for a 10 to 15 foot interval to account for tidal fluctuations in the groundwater table. Each of the groundwater monitoring wells was finished above the surface with a locking, stick-up steel protective casing set in concrete. Monitoring well installation was completed by Horizon-Environmental Drilling & Excavating, a licensed New Jersey well driller. The final overburden groundwater monitoring well installations were surveyed by a licensed New Jersey surveyor, to determine their elevation relative to a temporary benchmark. The overburden groundwater monitoring well locations are provided in Figure 3. The monitoring well/boring logs are presented in Appendix B.

After the monitoring wells were installed, and prior to the collection of the groundwater samples, each well was developed until a silt free discharge was observed.

5.4 Monitoring Well Sampling

Prior to sampling, all wells were purged by removing three well volumes using a submersible pump. After purging, groundwater from each well was sampled using a laboratory cleaned dedicated "Teflon" bailer. The samples were transferred from the bailers to appropriate laboratory cleaned and supplied bottles. Groundwater samples were stored at 4°C and submitted to a New Jersey certified laboratory for PP+40 analyses.

6.0 SOIL INVESTIGATION

Approximately two to nine feet of fill had been placed on the property since 1988. Previous work conducted by PS&S indicates that both the historical and upper fill are contaminated. The extent of contamination/fill is not known. Enviro-Sciences delineated contamination associated with the fill (4.2.1 Contaminant Delineation) and sampled areas that were not previously investigated (4.2.2 Baseline Profile). A total of 98 borings were completed throughout the Celotex portion of the site. The boring locations are shown on Figure 3. Two samples were obtained from most borings, and three samples were obtained from the base line sample borings. The sample depths were generally zero to six inches bgs (upper fill), three to nine feet bgs (historic fill) and the six-inch interval above groundwater (historic fill). This

sample plan was developed based on previous work performed at the site and based on the identification of additional AOCs.

6.1 Celotex Contaminant Delineation

Baseline Profile

Twenty-nine borings (C-74 through C-98, C-27, C-30A, C-61, and C-67) were completed on the Celotex property determine if contamination was present in areas that were not previously investigated. A total of 85 samples were collected form the borings and analyzed for metals, BNs and hexavalent chromium. Three samples were obtained from every boring. The samples were collected from depths of zero to six inches below grade, four to eight feet below grade, and the six-inch interval above groundwater. The boring locations are shown on Figure 3. The results of the sample analyses are discussed by contaminant in the following sections (see Table 1 for results).

Antimony

Previous soil sampling events have identified antimony above the Residential Direct Contact Soil Cleanup Criteria (RDCSCC) and Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) in the historical fill in the south-central portion of the site. Based on previous sampling results, borings C-1 through C-9, were completed to delineate the horizontal and vertical extent of antimony. Fourteen samples were collected from these borings and analyzed for antimony. The boring locations are shown on Figure 3. Additionally, 84 baseline samples were used to determine the levels of antimony throughout the Celotex property. The sampling results are described below.

Results

The samples collected from borings C-1 through C-9 did not exceed RDCSSC or NRDCSSC concentrations of antimony. However, three baseline samples, collected in the area west of C-1, contain antimony above the RDCSCC of 14 ppm. Sample C-79-2, collected from the historical surface, contains 42.7 ppm of antimony; sample C-79-3, collected from the same boring from the six-inch interval above the water table, contains 52 ppm of antimony; and C-80-2, collected from the six-inch interval above the water table, contains 46.5 ppm of antimony (see Table 1 for results).

Arsenic

Previous soil sampling events have identified arsenic at concentrations above the RDCSCC and NRDCSCC throughout the historical fill in the south-central portion of the site. Borings C-1 through C-6 and C-10 through C-13, were completed to horizontally and vertically delineate the extent of arsenic contamination. A total of 17 samples were collected from these boring locations and analyzed for arsenic. The approximate boring locations are shown on Figure 3. Additionally, 84 baseline samples were used to determine the levels of arsenic throughout the Celotex property. The sampling results are described below.

Results

Based on the analytical results, arsenic is present in the historical fill at concentrations exceeding the RDCSCC and NRDCSCC of 20 ppm for this compound. Only one sample collected from the upper fill, at a depth of zero to six inches below grade, exceeds the RDCSSC and NRDCSSC for arsenic. This sample, C-86-1, contains 27.5 ppm of arsenic. All other samples collected from the upper fill contain levels of arsenic below the RDCSCC and NRDCSCC (see Table 1 and Figures 4 through 6 for results).

Four samples collected from the historical fill surface contain arsenic concentrations above the RDCSSC and NRDCSSC. A sample collected from boring C-1 contains 42.2 ppm of arsenic, and a sample collected from boring C-79 contains 2,900 ppm of arsenic. Both samples were collected from the southwest corner of the Celotex property. Sample C-96-2, collected north of former Building No. 56, and sample C-98-2, collected west of the concrete pier, contain 210 ppm and 33.9 ppm of arsenic, respectively. All other samples collected from the surface of the historical fill are below the RDCSCC and NRDCSCC.

A total of 20 samples collected from the six-inch interval above the groundwater table contain arsenic concentrations above the RDCSSC and NRDCSSC. Samples were obtained throughout the Celotex property. Concentrations of arsenic above the criteria ranged from 24.9 ppm (sample C-94-3, collected from the northern portion of the Celotex property) to 3,370 ppm (sample C-79-3, collected from the southwest portion of the Celotex property).

Base Neutrals

Based on the analytical results of the sampling performed on the entire property, it was found that the majority of BN compounds present in concentrations above the RDCSSC and/or NRDCSSC are PAHs. Specifically, the compounds that are found in

the most elevated concentrations are: benzo[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, dibenzo[a,h]anthracene, indeno[1,2,3-cd]pyrene, and chrysene. Therefore, it is this suite of PAH contaminants that will be referred to throughout this report.

Based on the findings of previous reports, BN compounds are present above the RDCSCC and NRDCSCC throughout the site. Borings C-1, C-2, C-4 through C-6, and C-10 through C-47 were completed to delineate the area in the south-central portion. Additionally, 79 samples collected from 27 baseline borings were analyzed for BNs (see Figure 3 for the boring locations). The sampling results are summarized below.

Results

Based on our investigation, PAH compounds above the RDCSCC and/or NRDCSCC are found throughout the Celotex property. Figures 7 through 9 show the boring locations with PAHs above the RDCSCC and above the NRDCSCC for individual PAH compounds. The highest individual PAH compound concentration that exceeds the RDCSCC or NRDCSCC is presented with each boring location. Although other PAH compounds may be higher in concentration, they do not exceed their compound specific soil cleanup criteria and therefore are not included on the map. As shown in the figures, PAHs above the RDCSCC and/or NRDCSCC are found throughout the upper fill and historical fill, extending at least to the groundwater table. In the upper fill, a total of 29 samples were collected from the Celotex property and analyzed for BNs. Twenty-seven of these contain PAHs above the RDCSCC and/or NRDCSCC, as shown in Figure 7. At the historical fill surface, 86 soil samples were obtained, and only 15 of these samples did not contain PAHs above the RDCSCC or NRDCSCC (see Figure 8 for results). At the six-inch interval above the water table, 69 soil samples were collected and analyzed for BNs. Fifty-four of these contain PAH compounds above the RDCSCC and NRDCSCC, as shown in Figure 9 (see Table 1 for results).

Cadmium

Previous soil sampling events have identified cadmium at concentrations above the RDCSCC and NRDCSCC in the historic fill. Borings C-1 through C-3, borings C-7 through C-9, and borings C-12 and C-13 were used to delineate cadmium contamination in the south-central portion. A total of 12 samples were collected from these boring locations and analyzed for cadmium. The boring locations are shown on Figure 3. In addition to these samples, the 84 baseline samples collected throughout the Celotex property were analyzed for cadmium. The sampling results are summarized below.

Results

Sample C-86-1, collected from the upper fill (zero to six inches below grade), contains cadmium concentrations above the RDCSSC and NRDCSSC. This sample, which was collected north of Building No. 1, contains 1.21 ppm of cadmium. This cadmium concentration slightly exceeds its RDCSCC of 1 ppm. All other samples collected at this depth contain levels below the RDCSCC or do not contain detectable levels of cadmium (see Table 1 and Figures 10 through 12 for results).

Five samples collected from the historical surface also contain elevated cadmium concentrations. The levels of cadmium in these samples ranges from 1.06 ppm at C-79-2 (collected from the southwest corner of the Celotex property) to 7.71 ppm at C-91 (collected north of Building No. 1). Boring C-86, which contains elevated cadmium in the upper fill, showed 1.69 ppm of cadmium in the historical fill sample (C-86-2). Although several cadmium levels exceed the RDCSCC of 1 ppm, none of the samples contain levels that exceed the NRDCSCC of 100 ppm.

Five samples collected from the six-inch interval above the water table contain levels of cadmium that exceed the RDCSCC. The cadmium concentrations range from 1.27 ppm at boring C-87 (located north of Building No. 1) to 2.82 ppm at C-77 (located east of River Road in the northwest portion of the Celotex property). Although these levels exceed the RDCSCC for cadmium, the sample concentrations did not exceed the NRDCSCC for this compound.

Chromium, Hexavalent

Because the site was previously owned by Allied Chemical Corporation and total chromium levels ranged from non-detect to 96.4 ppm in previous soil sampling events, 84 samples from 29 baseline borings were analyzed for hexavalent chromium (see Figure 3 for boring locations). The sampling results are summarized below.

Results

All samples analyzed for this parameter contained levels of hexavalent chromium that were below the detection limit. Therefore, the RDCSCC and NRDCSCC were not exceeded (see Table 1 for results).

Copper

Previous soil sampling events have indicated copper is present above the RDCSCC and NRDCSCC in two areas, the first near the center of the site and the second in the south-central part of the site. Four borings (C-24 through C-27) were completed

around the first area to delineate the extent of copper in the horizontal and vertical directions. A total of nine samples were collected from these borings and analyzed for copper.

Borings C-1 through C-3 were completed to delineate copper in the south-central part of the site. One sample was collected from each boring. The approximate boring locations are shown on Figure 3. In addition to these samples, 81 baseline samples collected throughout the Celotex property were analyzed for copper. The sampling results are summarized below.

Results

The samples collected from the upper fill (zero to six inches below grade) and from the historical surface contain levels of copper below the RDCSCC and NRDCSCC of 600 ppm. However, four soil samples collected from the six-inch interval above groundwater contain copper concentrations that exceed the RDCSSC and NRDCSSC. Three of the four samples are located in the southwest corner of the Celotex property: sample C-77-3 contains 655 ppm of copper; sample C-79-3 contains 1,240 ppm of copper; and C-80-3 contains 854 ppm of copper. The fourth sample, C-87-3, is located at the northern property boundary just south of Building No. 3. This sample contains 804 ppm of copper, which exceeds the RDCSCC and NRDCSCC (see Table 1 and Figures 13 through 15 for results).

Lead

Previous soil sampling events have identified lead above the RDCSCC and NRDCSCC throughout the fill in the central and south-central portion of the site. Borings C-1 through C-9 and C-16 through C-31 were completed to delineate lead. The boring locations are shown on Figure 3. A total of 48 samples were collected from these boring locations. Additionally, 81 baseline samples were used to determine the levels of lead throughout the Celotex property. The sampling results are described below.

Results

Sample C-98-1, collected from the upper fill (zero to six inches below grade) contains lead above the RDCSCC of 400 ppm for this compound. However, this lead concentration does not exceed the NRDCSCC of 600 ppm. All other samples collected from this depth interval contain lead below the RDCSCC and NRDCSCC (see Table 1 and Figures 16 through 18 for results).

Eleven samples collected from the historical surface contain elevated lead concentrations. The levels of lead in these samples ranged from 418 ppm (C-29-1) to

6,520 ppm (C-79-2). Two of the samples (C-29-1 and C-82-2) contain lead exceeding the RDCSCC only. The other nine samples exceed both the RDCSCC and NRDCSCC for lead. The majority of elevated lead samples are located in the southwest portion of the property.

Mercury

Previous soil sampling events have identified mercury concentrations above the RDCSCC and NRDCSCC from the historical fill surface to 12 feet below current grade in the south-central portion of the property. Borings C-1 through C-7 were completed to delineate the extent of mercury in the south-central portion of the site. A total of 11 samples were collected from these locations and analyzed for mercury. The boring locations are shown on Figure 3.

Twelve borings (C-20 through C-31) were completed to delineate the areas containing mercury levels above the RDCSCC and NRDCSCC. A total of 26 samples were obtained from these borings and analyzed for mercury. In addition to these samples, 81 baseline samples collected throughout the Celotex property were analyzed for mercury. The sampling results are summarized below.

Results

All of the samples collected from the upper fill (zero to six inches below grade) contain levels of mercury that were below the RDCSCC and NRDCSCC. One sample collected from the historical surface contains elevated concentrations of mercury. Sample C-79-2, located in the southwest corner of the property, contains lead at 43.7 ppm, which exceeds the RDCSCC of 14 ppm for this compound. Three samples, collected from the six-inch interval above the water table in borings C-79, C-80, and C-90, contain levels of mercury that exceed the RDCSCC. However, the concentrations do not exceed the NRDCSCC of 270 ppm. Sample C-79-3 contains 87.6 ppm (located in the southwest corner of the property), sample C-80-2 contains 33.3 ppm (located in the southwest corner of the property), and sample C-90-3 contains 34.7 ppm of mercury (located west of the pier building). All other samples are below the RDCSCC and NRDCSCC for mercury (see Table 1 for results).

PCBs

Previous soil sampling events identified PCB concentrations above the RDCSCC and NRDCSCC in the upper fill. Nine borings (C-36 and C-40 through C-47) were completed to vertically and horizontally delineate the extent of PCB contamination. A total of 15 samples were obtained from the borings (see Figure 3 for the boring locations).

Results

No PCBs were detected in the any of the samples collected from the upper fill or from the six-inch interval above the water table (see Table 1 and Figures 19 and 20 for results).

Selenium

Based on former investigations, selenium was present above the RDCSCC and NRDCSCC in the historical fill in the south-central portion of the site. Borings C-1, C-2, C-3, C-21, and C-22 were completed to delineate selenium. A total of seven samples were obtained from these boring locations and analyzed for selenium. The boring locations are shown on Figure 3. Additionally, 84 baseline samples were analyzed for selenium, and the results are summarized below.

Results

Two samples, both collected from the southwest corner of the property, contain selenium exceeding its RDCSCC of 63 ppm. Sample C-93-3, obtained from six inches above the water table, contains 103 ppm of selenium. The shallower samples collected from this boring, one from the upper fill and one from the historical surface, do not exceed RDCSSC or NRDCSSC for selenium. Sample C-80-2, collected just east of boring C-79, contains 88.3 ppm of selenium. This sample was collected from six inches above the water table. The shallower sample from this boring, collected from the upper fill, does not contain elevated selenium. Although both samples C-93-3 and C-80-2 exceed the RDCSCC, they do not exceed the NRDCSCC of 3,100 ppm for selenium (see Table 1 for results).

Thallium

Previous soil sampling events identified thallium above the RDCSCC and NRDCSCC in the historical fill in the south-central portion of the site. Borings C-1, C-2, C-3, C-21, and C-22 were completed to delineate thallium. The boring locations are shown on Figure 3. Additionally, 84 baseline samples were analyzed for thallium and the results are summarized below.

Results

None of the samples collected from the upper fill (zero to six inches below grade) contain levels of thallium exceeding the RDCSCC or NRDCSCC of 2 ppm. Elevated thallium is present in three samples collected at the historical surface: sample C-21-1,

located south of the aboveground storage tank in the southern portion of the property, contains 3.49 ppm of thallium; sample C-79-2, located at the southwest corner of the property, contains 15.6 ppm of thallium; and sample C-96-2, located just north of former Building No. 56 in the southern portion of the property, contains 6.46 ppm of thallium. All other samples are below the RDCSCC and NRDCSCC (see Table 1 and Figure 21 through 23 for results).

Thallium is also present above the RDCSSC and NRDCSSC in four samples collected from the six-inch interval above the water table. Concentrations range from 2.27 ppm (sample C-93-3) to 12.9 ppm (sample C-79-3). Two of the elevated samples were collected from borings in the southwest coroner of the Celotex property (C-79 and C-80), and the other two were collected along the southern wall of Building No. 1 (C-90 and C-93). All other samples are below the RDCSCC and NRDCSCC for thallium.

TPH

Previous investigations have identified TPH levels above the RDCSCC and NRDCSCC in two areas of the site. The first is located south of the west end of former Building No. 1. Four borings were completed (C-16 through C-19) to horizontally delineate the TPH contamination identified at the historical fill surface. A total of seven samples were collected from two depths: at the historical fill surface, and from five feet below the historical grade. Based on previous sampling results, the TPH contamination has been vertically delineated to five feet below historical grade.

The second area is located at the south end of the Celotex property. Four borings (C-32 through C-35) were completed to delineate any contamination present in the historical fill (see Figure 3 for the boring locations). A total of six samples were collected from these boring locations and analyzed for TPH. Additionally, four baseline samples were analyzed for TPH. The results are summarized below.

Results

One sample collected from the historical surface contained elevated TPH. Sample C-65-2, located west of the pier building, contained 15,000 ppm of TPH. The total organic cap is 10,000 ppm. TPH concentrations detected in the remaining samples were below the 10,000 ppm total organic cap for TPH (see Table 1 and Figures 24 through 26 for results).

Zinc

Previous soil sampling events identified zinc above the RDCSCC and NRDCSCC near the central portion of the site. Borings C-29 and C-32 through C-35 were completed

to delineate zinc horizontally. The locations of the borings are shown on Figure 3. A total of nine samples were obtained from these borings. In addition, the 84 baseline samples were analyzed for zinc, and the sampling results are summarized below.

Results

Only one sample contains elevated levels of zinc. Sample C-93-3, obtained from the six-inch interval above the water table, contains 1,650 ppm of zinc, which exceeds its RDCSCC and NRDCSCC of 1,500 ppm. A shallower sample collected from the historical surface of this boring (C-93), contains only 166 ppm of zinc, which is below the RDCSCC and NRDCSCC. This boring was completed between the Mill Building and Building No. 1. All other samples analyzed for zinc were below the RDCSCC and NRDCSCC (see Table 1 for results).

AOC 12 Stained Soil

Four borings (C-48 and C-50 through C-52) were completed by Enviro-Sciences in the stained area south and southwest of the ASTs, and six borings (borings C-56 through C-61) were advanced to investigate the stained area located in the southeastern section of the site. The boring locations are shown on Figure 3. A total of 22 samples were collected and analyzed for TPH and BN.

Results

All of the samples analyzed for TPH contained concentrations less than the total organic cap of 10,000 ppm (see Table 1 and Figures 24 through 26 for results). PAH compounds above their respective RDCSSC and/or NRDCSSC are present in 16 of the 20 samples collected from the Celotex portion. All of the samples collected from the four borings (C-48 and C-50 through C-52) completed in the stained area south and southwest of the ASTs have PAHs; all of the samples had four to eight PAH compounds above the RDCSSC and one to seven PAH compounds above the NRDCSSC (see Table 1 and Figures 7 through 9 for results).

Four of the fourteen samples (C-56-2, C-58-1, C-61-1, and C-61-2) collected from the stained area in the southeastern section of the site do not exceed the RDCSSC or NRDCSSC. Of the remaining samples, all ten had one to seven PAH compounds above the RDCSSC, nine samples had one to seven PAH compounds above the NRDCSSC (see Table 1 and Figures 7 through 9 for results).

AOC 13 Academy Film

Three borings (C-62 through C-64) were completed in the area Academy Film previously occupied. The boring locations are shown on Figure 3. Two samples were collected from each boring, which were obtained from the approximate depth of the former floor drains. All six samples were analyzed for PP+40.

Results

All samples analyzed were below their respective RDCSCC and NRDCSCC for pesticides, PCBs, volatile organic compounds (VOCs), and metals, with the exception of sample C-64-2. Sample C-64-2, collected at a depth of 6 to 6.5 feet below grade, contains 176 ppm of arsenic. The RDCSCC and NRDCSCC for this metal is 20 ppm (see Table 1 and Figures 5 and 6 for results). Sample C-64-2 also contains three PAH compounds above the RDCSSC, one of which also exceeds the NRDCSSC. Sample C-64-1, collected at a depth of 4 to 4.5 feet below grade, contains one PAH compound which exceeds both the RDCSSC and NRDCSSC (see Table 1 and Figures 8 and 9 for results).

AOC 14 J&T Leasing

Three borings (C-65 through C-67) were completed in the area outside J&T Leasing, immediately north of Building No. 1. The boring locations are shown on Figure 3. A total of seven samples were obtained and analyzed for TPH and BN.

Results

The samples obtained from this AOC did not contain elevated TPH. PAH compounds were present in six of the seven samples: sample C-65-1 has eight PAH compounds above the RDCSSC, one of which is also above the NRDCSSC; sample C-65-2 contains five PAH compounds above the RDCSSC, two of which also exceed the NRDCSCC; sample C-66-1 has three PAH compounds above the RDCSCC, one of which also exceeds the NRDCSCC; sample C-66-2 has seven PAH compounds which exceed the RDCSCC and NRDCSCC; sample C-67-2 has seven PAH compounds above the RDCSCC, four of which also exceed the NRDCSCC; and sample C-67-3 contains six PAH compounds above the RDCSCC, three of which also exceed the NRDCSCC (see Table 1 and Figures 7 through 9 for results).

AOC 15 All County Environmental

The area around the AST was investigated for evidence of a UST. Enviro-Sciences found no evidence of a UST. However, three borings were completed in the area to determine if any contamination associated with the UST may be present. The borings (C-69 through C-71) are shown in Figure 3. The samples were analyzed for TPH and BN.

Results

No TPH contamination was present in the samples. TPH concentrations ranged from 320 ppm to 1,200 ppm at the historical surface, and from 57.3 ppm to 4,510 ppm at the six-inch interval above groundwater. The total organic cap of 10,000 ppm for TPH was not exceeded. (see Table 1 and Figures 25 and 26 for results). Four of six samples have PAH compounds above the RDCSSC and NRDCSSC. Samples C-69-2, C-70-1 and do not contain PAH compounds above the RDCSSC or NRDCSSC. Sample C-69-1 has four PAH compounds above the RDCSSC, one of which also exceeds the NRDCSSC; sample C-70-1 has one PAH compound above the RDCSSC and NRDCSSC; sample C-71-1 has seven PAH compounds above the RDCSSC, five of which also exceed the NRDCSSC; and sample C-71-2 has five PAH compounds above the RDCSSC, one of which exceeds the NRDCSSC (see Table 1 and Figures 8 and 9 for results).

AOC 16 Havana Potato and Transport Company

One boring (C-68/C-16) was completed outside the Havana Potato and Transport Company trucking area (see Figure 3). One sample was obtained from this boring at the historical surface and analyzed for TPH and BN.

Results

A TPH concentration of 554 ppm was present in the sample obtained from C-68/C-16. The total organic cap for this compound is 10,000 ppm (see Table 1 and Figure 25 for results). The sample collected from C-68/C-16 did not contain PAH compounds above the RDCSSC or NRDCSSC (see Table 1 and Figure 8 for results).

6.2 Landfill Investigation

Based on conversations with the owner, and a 1987 Environmental Reconnaissance report prepared by PS&S, the landfill that is located on the southeastern portion of the site in the Hudson River contains waste gypsum board. The landfill was investigated by Enviro-Sciences to confirm the suspected absence of contaminants. Three test pits

(C-99, C-100, and C-100) were completed with a backhoe in order to visually evaluate the landfill material and obtain samples (see Figure 3 for the test pit locations). The gypsum board material is white, therefore observations will be made about any discoloration and odors. The nature of the material was based on field observations and a PID.

Results

Three test pits were advanced to depths ranging from 15 to 20 feet below grade. The gypsum material, which was white to blue-gray in color, exhibited no elevated PID readings, and appeared consist throughout the depth of the test pit. Based on these observations, no contaminants are suspected, and therefore no samples were analyzed.

7.0 GROUNDWATER INVESTIGATION

7.1 Monitoring Well Sampling Results

Monitoring wells MW-1 through MW-7 were purged of three well volumes and then sampled on April 29, 1997 (see Figure 3 for monitoring well locations). The monitoring wells installed on the Celotex property (MW-1 through MW-7) were analyzed for PP+40. The results show that the sample collected from MW-1 contains several VOCs above the Groundwater Quality Standards (GWQS) (see Table 2 for results). These VOCs are chloroform (752 parts per billion (ppb)), benzene (103 ppb), trichloroethene (5.32 ppb), tetrachloroethene (7.41 ppb), chlorobenzene (15.9 ppb), and total xylenes (458 ppb). The GWQS for chloroform is 6 ppb; the GWQS for benzene, trichloroethene, and tetrachloroethene is 1 ppb; the GWQS for chlorobenzene is 4 ppb; and the GWQS for total xylenes is 40 ppb. The sample from MW-1 also contains 11.7 ppb of arsenic. The GWQS for this compound is 8 ppb. Therefore, the arsenic concentration exceeds the GWQS.

The groundwater sample from MW-2 contains benzene and arsenic concentrations exceeding the GWQS. The benzene level is 1,370 ppb, and the GWQS for this VOC is 1 ppb. Arsenic has a GWQS of 8 ppb, and the concentration of arsenic in this sample is 15.4 ppb.

The benzene concentration in the groundwater sample collected from MW-3 is 1.73 ppb. The GWQS for this compound is 1 ppb. Therefore, benzene levels exceed the GWQS at this groundwater sampling location.

The groundwater sample from MW-4 contains arsenic (8.43 ppb) and benzene (1.14 ppb) concentrations that slightly exceed their GWQS of 8 ppb and 1 ppb, respectively.

The groundwater sample collected from MW-5 is below the GWQS for all parameters.

The arsenic, benzene, and total xylene concentrations are above the GWQS in the groundwater sample collected from MW-6. An arsenic concentration of 106 ppm exceeds the GWQS of 8 ppb; a benzene concentration of 206 ppb exceeds the GWQS of 1 ppb; and a total xylene concentration of 416 ppb exceeds the GWQS of 40 ppb in this groundwater sample.

The groundwater sample collected from MW-7 contains three VOCs, cyanide, and arsenic at concentrations above the GWQS. The VOC compounds are benzene (1,500 ppb), toluene (1,570 ppb), and total xylenes (2,970 ppb). The GWQS for these compounds are 1 ppb, 1,000 ppb, and 40 ppb, respectively. Cyanide concentrations of 920 ppb exceed the GWQS of 200 ppb. The sample from MW-7 has an arsenic level of 12.4 ppb, and the GWQS for this metal is 8 ppm.

Monitoring wells from the Lustrelon and Celotex portion of the site were used to construct a groundwater contour map (see Figure 27). Depth to groundwater measurements were obtained from all nine monitoring wells prior to sampling activities. The wells were surveyed by a licensed New Jersey Land Surveyor. Please refer to Appendix C for the analytical data reports.

8.0 PROPOSED REMEDIATION

8.1 Site Capping

Based on the random nature and extent of fill/contamination, the most cost-effective remedial solution is capping the site. The cap will be designed to prevent exposure to the contaminated fill material. Covering of the entire EA site with a capping system will ensure protection of human health and support site development. This concept will require NJDEP approval and an appropriately recorded Declaration of Environmental Restriction (DER).

8.2 Groundwater Remediation

Samples obtained from monitoring wells on the Celotex site indicate the presence of volatile organic compounds and metals. Enviro-Sciences proposed to monitor groundwater for decreasing trends for a period of two years after the capping system is installed. If at the end of that period the contamination remains, a treatment system will be proposed to treat groundwater. If the PCB contamination has abated the monitoring program will be discontinued. When the cap is installed it will prevent groundwater recharge at the site, preventing water from contacting any contaminants.

9.0 ADDITIONAL REMEDIAL INVESTIGATION ACTIVITIES

Approximately five additional monitoring wells are proposed to determine groundwater quality thought out the Celotex site. Samples will be analyzed for PP+40. Sample will also be analyzed for salinity in order to determine if the transmitting zone has been affected by salt water intrusion by tidal influences. Additionally, select monitoring wells will be evaluated for water level fluctuations due to tidal influences.

10.0 SCHEDULE

See Appendix D for the proposed remedial action schedule.

11.0 CONCLUSIONS

The site has been used as an industrial facility for over 100 years. During that time it was common practice for low lying areas along river to be filled. The elevation of the site has increased and decreased since the site was developed. This is in part due to the construction and demolition of buildings associated with new ownership. The historic fill contains metals, PAH, and TPH contamination typical of past chemical and petroleum related manufacturing operations. The distribution of contamination is not consistent with a single or multiple point sources.

FIGURES

FIGURE 1

Site Location Map

Source: USGS Topographic Map: Central Park, NY - NJ
Photorevised 1979

Celotex Park
One River Road
Edgewater, Bergen County
New Jersey 07632

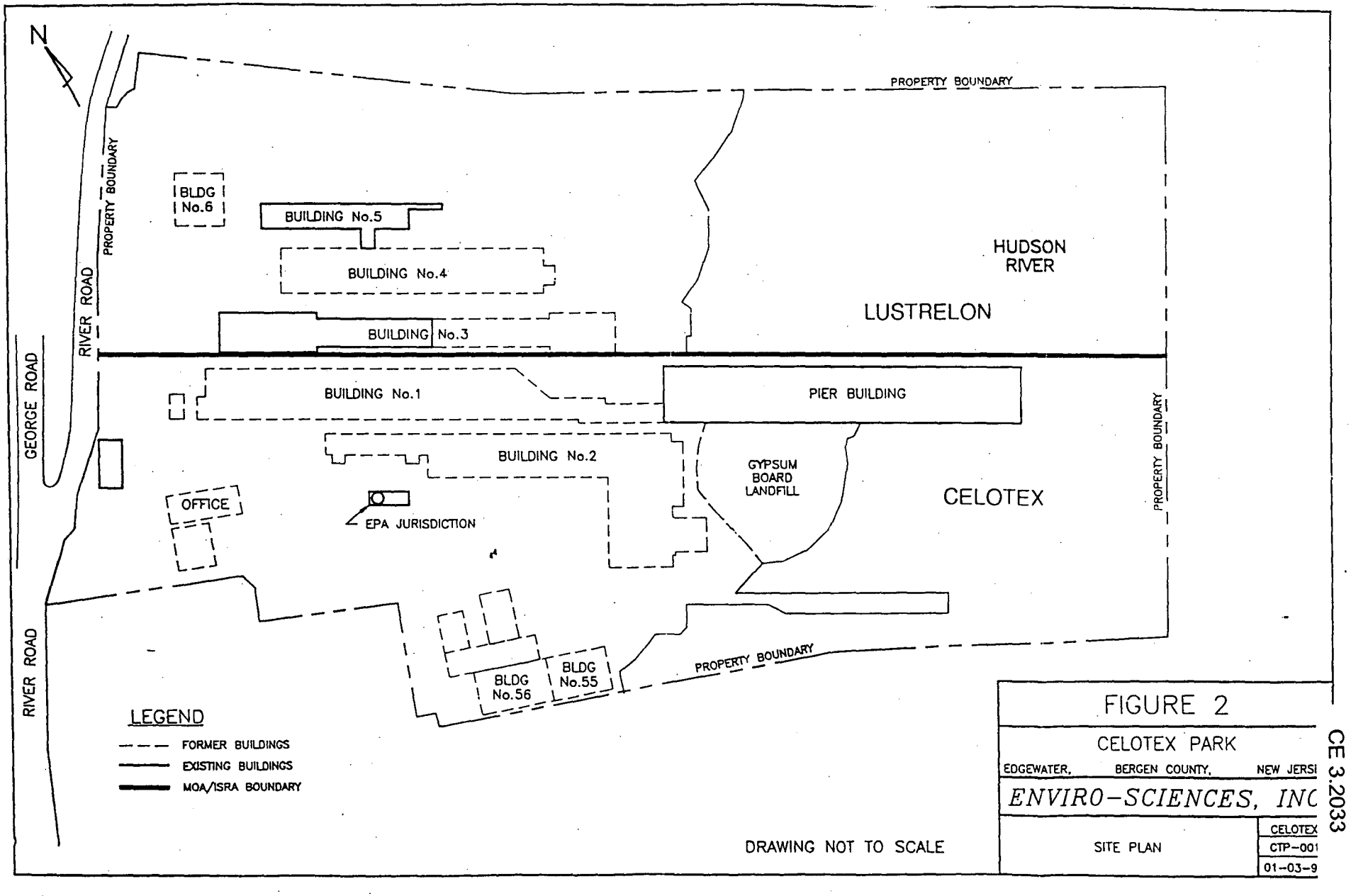


FIGURE 2

CELOTEX PARK

EDGEWATER, BERGEN COUNTY, NEW JERSI

ENVIRO-SCIENCES, INC

SITE PLAN

CELOTEX
CTP-001
01-03-9

CE 3.2033

Table 1

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1524-05	1524-06	1524-07	1430-05	1430-06	1408-13	1408-14	1408-09
Sample ID #				C-1-1	C-2-1	C-3-1	C-4-1	C-4-2	C-5-1	C-5-2	C-6-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	4.5 - 5.0	4.5 - 5.0	5.0 - 5.5	5.5 - 6.0	7.5 - 8.0	6.0 - 6.5	7.5 - 8.0	6.0 - 6.5
Sample Date				4/16/97	4/16/97	4/16/97	4/10/97	4/10/97	4/9/97	4/9/97	4/9/97
Criteria Last Revised: Feb. 3, 1994											
PPM (mg/kg)											
Priority Pollutant AE & BN											
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	0.089
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	620	10	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	0.164 J	0.161 J	ND	ND	0.516	ND	0.179 J	0.075
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	0.228	ND	ND	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	0.337	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	ND	0.130 J	ND	0.519	ND	0.417	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	ND	0.139 J	0.168 J	ND	2.070	ND	0.204 J	0.105
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	ND	ND	ND	0.627	ND	ND	ND
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	ND	0.214	0.140 J	ND	1.550	ND	0.166 J	0.102
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1524-05	1524-06	1524-07	1430-05	1430-06	1408-13	1408-14	1408-09
Sample ID #				C-1-1	C-2-1	C-3-1	C-4-1	C-4-2	C-5-1	C-5-2	C-6-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	4.5 - 5.0	4.5 - 5.0	5.0 - 5.5	5.5 - 6.0	7.5 - 8.0	6.0 - 6.5	7.5 - 8.0	6.0 - 6.5
Sample Date				4/16/97	4/16/97	4/16/97	4/10/97	4/10/97	4/9/97	4/9/97	4/9/97
Criteria Last Revised: Feb. 3, 1994											
N-Nitrosodiphenylamine	140	690	100	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	0.833	1.540	1.440	0.157	15.700	ND	2.880	0.546
Anthracene	10,000	10,000	100	0.201	0.333	0.363	ND	3.920	ND	0.551	0.122
Carbazole	NLE	NLE	NLE	ND	0.135 J	0.198	ND	2.660	ND	0.299	0.085
Di-n-butylphthalate	6,700	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	1.670	1.530	2.680	0.331	34.300	ND	6.050	0.670
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	1.630	1.600	2.990	0.356	33.600	ND	6.140	0.677
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	0.972	0.703	1.530	0.188	19.300	ND	3.080	0.308
Chrysene	9	40	500	0.930	0.667	0.177	0.216	20.700	ND	3.580	0.319
bis(2-Ethylexyl)phthalate	49	210	100	ND	ND	0.296	ND	1.420	ND	ND	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	1.150	0.828	2.200	0.280	33.800	ND	4.810	0.378
Benzo[k]fluoranthene	0.90	4	500	0.516	0.302	0.788	0.126 J	12.800	ND	2.060	0.167
Benzo[a]pyrene	0.66	0.66	100	1.020	0.666	1.660	0.227	19.300	ND	3.580	0.319
Ideno[1,2,3-cd]pyrene	0.90	4	500	0.804	0.200	1.030	0.087 J	6.060	ND	2.310	0.219
Dibenzo[a,h]anthracene	0.66	0.66	100	0.217	ND	0.285	ND	1.410	ND	0.604	ND
Benzo[g,h,i]perylene	NLE	NLE	NLE	0.841	0.171 J	0.932	0.076	4.430	ND	2.280	0.239
TOTAL BNs				10.948	9.179	17.027	2.043	214.247	ND	39.190	4.309
TOTAL TICs				ND	ND	4.62	ND	59.029	ND	4.000	0.883
TOTAL BNs & TICs				10.948	9.179	21.647	2.043	273.276	ND	43.190	5.192
Metals											
Antimony	14	340	NLE	4.730	ND	ND	ND	2.520	ND	3.960	ND
Arsenic	20	20	NLE	42.200	4.170	4.090	5.510	1010.000	1.260	85.400	2.730
Beryllium	1	1	NLE	NA	NA	NA	NA	NA	NA	NA	NA

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1524-05	1524-06	1524-07	1430-05	1430-06	1408-13	1408-14	1408-09
Sample ID #				C-1-1	C-2-1	C-3-1	C-4-1	C-4-2	C-5-1	C-5-2	C-6-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	4.5 - 5.0	4.5 - 5.0	5.0 - 5.5	5.5 - 6.0	7.5 - 8.0	6.0 - 6.5	7.5 - 8.0	6.0 - 6.5
Sample Date				4/16/97	4/16/97	4/16/97	4/10/97	4/10/97	4/9/97	4/9/97	4/9/97
Criteria Last Revised: Feb. 3, 1994											
Cadmium	1	100	NLE	ND	0.536	0.295	NA	NA	NA	NA	NA
Chromium	NLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Copper	600	600	NLE	137.000	39.200	38.700	NA	NA	NA	NA	NA
Lead	100	600	NLE	634.000	105.000	511.000	40.000	771.000	10.800	1.460	20.300
Mercury	14	270	NLE	ND	0.196	0.205	0.094	2.350	0.019	1.540	0.096
Nickel	250	2,400	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	63	3,100	NLE	13.400	ND	ND	NA	NA	NA	NA	NA
Silver	110	4,100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	NLE	0.816	0.103	0.137	NA	NA	NA	NA	NA
Zinc	1,500	1,500	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)				NA	NA	ND	NA	NA	NA	NA	NA

CE 3.2037

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #					1408-10	1408-11	1408-12	1534-14	1534-15	1408-07	1408-08
Sample ID #					C-6-2	C-7-1	C-7-2	C-8-1	C-8-2	C-10-1	C-10-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria		8.5 - 9.0	5.5 - 6.0	8.5 - 9.0	4.5 - 5.0	10.5 - 11.0	5.5 - 6.0	7.5 - 8.0
Sample Date					4/9/97	4/9/97	4/9/97	4/17/97	4/17/97	4/9/97	4/9/97
Criteria Last Revised: Feb. 3, 1994											
PPM (mg/kg)											
Priority Pollutant AE & BN											
N-Nitrosodimethylamine	140	600	100		ND	NA	NA	NA	NA	ND	ND
Aniline	NLE	NLE	NLE	J	ND	NA	NA	NA	NA	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10		ND	NA	NA	NA	NA	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100		ND	NA	NA	NA	NA	ND	ND
1,4-Dichlorobenzene	570	10,000	100		ND	NA	NA	NA	NA	ND	ND
Benzyl alcohol	NLE	NLE	NLE		ND	NA	NA	NA	NA	ND	ND
1,2-Dichlorobenzene	5,100	10,000	60		ND	NA	NA	NA	NA	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10		ND	NA	NA	NA	NA	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10		ND	NA	NA	NA	NA	ND	ND
Hexachloroethane	6	100	100		ND	NA	NA	NA	NA	ND	ND
Nitrobenzene	28	620	10		ND	NA	NA	NA	NA	ND	ND
Isophorone	1,100	10,000	60		ND	NA	NA	NA	NA	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE		ND	NA	NA	NA	NA	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100		ND	NA	NA	NA	NA	ND	ND
Naphthalene	230	4,200	100	J	0.046	NA	NA	NA	NA	0.197	2.630
4-Chloroaniline	NLE	NLE	NLE		ND	NA	NA	NA	NA	ND	ND
Hexachlorobutadiene	1	21	100		ND	NA	NA	NA	NA	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE		ND	NA	NA	NA	NA	0.074	0.964
Hexachlorocyclopentadiene	400	7,300	100		ND	NA	NA	NA	NA	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE		ND	NA	NA	NA	NA	ND	ND
2-Nitroaniline	NLE	NLE	NLE		ND	NA	NA	NA	NA	ND	ND
Dimethylphthalate	10,000	10,000	60		ND	NA	NA	NA	NA	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE		ND	NA	NA	NA	NA	ND	ND
Acenaphthylene	NLE	NLE	NLE		ND	NA	NA	NA	NA	0.032 J	ND
3-Nitroaniline	NLE	NLE	NLE		ND	NA	NA	NA	NA	ND	ND
Acenaphthene	3,400	10,000	100	J	0.093	NA	NA	NA	NA	0.231	4.120
2,4-Dinitrotoluene	1	4	10		ND	NA	NA	NA	NA	ND	ND
Dibenzofuran	NLE	NLE	NLE		0.045	NA	NA	NA	NA	0.122	1.930
Diethylphthalate	10,000	10,000	60		ND	NA	NA	NA	NA	ND	ND
Fluorene	2,300	10,000	100	J	0.077	NA	NA	NA	NA	0.190	3.620
4-Chlorophenyl-phenylether	NLE	NLE	NLE		ND	NA	NA	NA	NA	ND	ND
4-Nitroaniline	NLE	NLE	NLE		ND	NA	NA	NA	NA	ND	ND

CE 3.2038

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #					1408-10		1408-11	1408-12	1534-14	1534-15	1408-07	1408-08
Sample ID #					C-6-2		C-7-1	C-7-2	C-8-1	C-8-2	C-10-1	C-10-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria		8.5 - 9.0		5.5 - 6.0	8.5 - 9.0	4.5 - 5.0	10.5 - 11.0	5.5 - 6.0	7.5 - 8.0
Sample Date					4/9/97		4/9/97	4/9/97	4/17/97	4/17/97	4/9/97	4/9/97
Criteria Last Revised: Feb. 3, 1994												
N-Nitrosodiphenylamine	140	590	100		ND		NA	NA	NA	NA	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE		ND		NA	NA	NA	NA	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE		ND		NA	NA	NA	NA	ND	ND
Hexachlorobenzene	0.66	2	100		ND		NA	NA	NA	NA	ND	ND
Phenanthrene	NLE	NLE	NLE		0.363		NA	NA	NA	NA	1.470	27.500
Anthracene	10,000	10,000	100		0.088		NA	NA	NA	NA	0.440	8.210
Carbazole	NLE	NLE	NLE	J	0.047		NA	NA	NA	NA	0.179	4.680
Di-n-butylphthalate	5,700	10,000	100		ND		NA	NA	NA	NA	ND	ND
Fluoranthene	2,300	10,000	100		0.646		NA	NA	NA	NA	1.600	32.600
Benzidine	NLE	NLE	NLE		ND		NA	NA	NA	NA	ND	ND
Pyrene	1,700	10,000	100		0.619		NA	NA	NA	NA	1.670	27.800
3,3'-Dimethylbenzidine	NLE	NLE	NLE		ND		NA	NA	NA	NA	ND	ND
Butylbenzylphthalate	1,100	10,000	100		ND		NA	NA	NA	NA	ND	0.637
3,3'-Dichlorobenzidine	2	6	100		ND		NA	NA	NA	NA	ND	ND
Benzo(a)anthracene	0.90	4	500		0.348		NA	NA	NA	NA	0.712	13.800
Chrysene	9	40	500		0.354		NA	NA	NA	NA	0.714	13.200
bis(2-Ethylexyl)phthalate	49	210	100		0.036	J	NA	NA	NA	NA	0.025	J 0.555 J
Di-n-octylphthalate	1,100	10,000	100		ND		NA	NA	NA	NA	ND	ND
Benzo[b]fluoranthene	0.90	4	50		0.387		NA	NA	NA	NA	0.917	17.100
Benzo[k]fluoranthene	0.90	4	500		0.186		NA	NA	NA	NA	0.327	6.750
Benzo[a]pyrene	0.66	0.66	100		0.333		NA	NA	NA	NA	0.635	12.800
Ideno[1,2,3-cd]pyrene	0.90	4	500		0.225		NA	NA	NA	NA	0.184	4.130
Dibenzo[a,h]anthracene	0.66	0.66	100		0.065		NA	NA	NA	NA	0.058	1.290
Benzo[g,h,i]perylene	NLE	NLE	NLE		0.246		NA	NA	NA	NA	0.163	3.690
TOTAL BNs					4.204		NA	NA	NA	NA	9.939	188.006
TOTAL TICs					2.114		NA	NA	NA	NA	1.659	26.39
TOTAL BNs & TICs					6.318		NA	NA	NA	NA	11.598	214.396
Metals												
Antimony	14	340	NLE		ND		2.710	ND	ND	ND	NA	NA
Arsenic	20	20	NLE		4.190		NA	NA	NA	NA	3.740	33.100
Beryllium	1	1	NLE		NA		NA	NA	NA	NA	NA	NA

CE 3.2039

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1408-10	1408-11	1408-12	1534-14	1534-15	1408-07	1408-08
Sample ID #				C-6-2	C-7-1	C-7-2	C-8-1	C-8-2	C-10-1	C-10-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	8.5 - 9.0	5.5 - 6.0	8.5 - 9.0	4.5 - 5.0	10.5 - 11.0	5.5 - 6.0	7.5 - 8.0
Sample Date				4/9/97	4/9/97	4/9/97	4/17/97	4/17/97	4/9/97	4/9/97
Criteria Last Revised: Feb. 3, 1994										
Cadmium	1	100	NLE	NA	ND	ND	ND	1,670	NA	NA
Chromium	NLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA
Copper	600	600	NLE	NA	NA	NA	NA	NA	NA	NA
Lead	100	600	NLE	46,100	77,800	189,000	62,200	62,100	NA	NA
Mercury	14	270	NLE	0.129	0.086	0.310	NA	NA	NA	NA
Nickel	250	2,400	NLE	NA	NA	NA	NA	NA	NA	NA
Selenium	63	3,100	NLE	NA	NA	NA	NA	NA	NA	NA
Silver	110	4,100	NLE	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	NLE	NA	NA	NA	NA	NA	NA	NA
Zinc	1,500	1,500	NLE	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)				NA	NA	NA	NA	NA	NA	NA

CE 3.2040

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1408-5	1408-06	1408-01	1	1408-03	1408-04	1524-08	1564-01
Sample ID #				C-11-1	C-11-2	C-12-1	C-12-2	C-13-1	C-13-2	C-14-1	C-15-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0	8.5 - 9.0	6.5 - 7.0	10 - 10.5	6.5 - 7.0	7.5 - 8.0	4.5 - 5.0	1.5 - 2.0
Sample Date				4/9/97	4/9/97	4/9/97	4/9/97	4/9/97	4/9/97	4/16/97	4/19/97
Criteria Last Revised: Feb. 3, 1994											
PPM (mg/kg)											
Priority Pollutant AE & BN											
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	1.200	ND	0.129 J	ND	ND	1.900	0.163 J	1.300
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	0.426	ND	ND	ND	ND	2.700	ND	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	0.190	ND	ND	ND	ND	2.420	ND	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	1.650	ND	0.280	ND	ND	123.000	0.378	1.620
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	0.985	ND	0.143 J	ND	ND	49.700	ND	0.678 J
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	1.790	ND	0.283	ND	ND	77.900	0.298	1.260
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1408-5	1408-06	1408-01	1408-02	1408-03	1408-04	1524-08	1564-01
Sample ID #				C-11-1	C-11-2	C-12-1	C-12-2	C-13-1	C-13-2	C-14-1	C-15-1
Depth (feet) Sample Date	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0 4/9/97	8.5 - 9.0 4/9/97	6.5 - 7.0 4/9/97	10 - 10.5 4/9/97	6.5 - 7.0 4/9/97	7.5 - 8.0 4/9/97	4.5 - 5.0 4/16/97	1.5 - 2.0 4/19/97
Criteria Last Revised: Feb. 3, 1994											
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	NDND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	12.600	ND	2.290	0.152 J	0.659	423.000	2.570	10.200
Anthracene	10,000	10,000	100	3.540	ND	0.562	ND	0.135 J	60.400	0.502 J	2.110
Carbazole	NLE	NLE	NLE	1.810	ND	0.339	ND	ND	4.490	0.476 J	1.580
Di-n-butylphthalate	6,700	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	14.600	ND	2.710	0.264	1.040	316.000	4.370	16.300
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	14.200	ND	2.380	0.243	0.896	237.000	4.160	13.900
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	0.084 J	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	6.940	ND	1.220	ND	0.427	48.600	2.500	7.610
Chrysene	9	40	500	6.500	ND	1.270	ND	0.607	40.600	2.670	7.960
bis(2-Ethylexyl)phthalate	49	210	100	0.086 J	ND	0.241	ND	0.179 J	ND	0.176 J	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	8.530	ND	1.400	0.144 J	0.605	21.300	3.460	10.000
Benzo[k]fluoranthene	0.90	4	500	3.330	ND	0.516	ND	0.243	9.910	1.310	4.930
Benzo[a]pyrene	0.66	0.66	100	6.210	ND	1.120	ND	0.488	14.600	2.740	8.150
Ideno[1,2,3-cd]pyrene	0.90	4	500	1.770	ND	0.732	ND	0.345	5.840	2.100	4.060
Dibenzo[a,h]anthracene	0.66	0.66	100	0.585	ND	0.219	ND	ND	ND	0.583	1.140
Benzo[g,h,i]perylene	NLE	NLE	NLE	1.460	ND	0.818	ND	0.379	6.220	2.140	3.730
TOTAL BNs				88.637	ND	16.652	0.803 J	5.903	1434.580	30.616	95.428
TOTAL TICs				31.762	1.296	ND	ND	ND	549	1.88	5.35
TOTAL BNs & TICs				120.399	1.296	16.652	0.803	5.903	1983.580	32.496	100.778
Metals											
Antimony	14	340	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	20	20	NLE	12.600	346.000	5.140	19.400	15.100	8.990	NA	NA
Beryllium	1	1	NLE	NA	NA	NA	NA	NA	NA	NA	NA

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1408-5	1408-06	1408-01	1408-02	1408-03	1408-04	1524-08	1564-01
Sample ID #				C-11-1	C-11-2	C-12-1	C-12-2	C-13-1	C-13-2	C-14-1	C-15-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0	8.5 - 9.0	6.5 - 7.0	10 - 10.5	6.5 - 7.0	7.5 - 8.0	4.5 - 5.0	1.5 - 2.0
Sample Date				4/9/97	4/9/97	4/9/97	4/9/97	4/9/97	4/9/97	4/16/97	4/19/97
Criteria Last Revised: Feb. 3, 1994											
Cadmium	1	100	NLE	NA	NA	ND	0.453	0.576	ND	NA	NA
Chromium	NLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Copper	600	600	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Lead	100	600	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	14	270	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	250	2,400	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	63	3,100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Silver	110	4,100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	1,500	1,500	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)				NA	NA	NA	NA	NA	NA	NA	NA

CE 3.2043

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1564-02	1564-05	1564-07	1564-08	1564-09	1564-10	1564-11	1564-12
Sample ID #				C-15-2	C-16-1	C-17-1	C-17-2	C-18-1	C-18-2	C-19-1	C-19-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0	8.0 - 8.5	5.5 - 6.0	8.5 - 9.0	5.0 - 5.5	10.5 - 11.0	5.0 - 5.5	7.5 - 8.0
Sample Date				4/19/97	4/19/97	4/19/97	4/19/97	4/19/97	4/19/97	4/19/97	4/19/97
Criteria Last Revised: Feb. 3, 1994											
PPM (mg/kg)											
Priority Pollutant AE & BN											
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	ND	ND	ND	ND	0.465 J	ND	0.136 J	ND
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	ND	ND	ND	ND	0.386 J	ND	ND	ND
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1564-02	1564-05	1564-07	1564-08	1564-09	1564-10	1564-11	1564-12
Sample ID #				C-16-2	C-16-1	C-17-1	C-17-2	C-18-1	C-18-2	C-19-1	C-19-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0	8.0 - 8.5	5.5 - 6.0	8.5 - 9.0	5.0 - 5.5	10.5 - 11.0	5.0 - 5.5	7.5 - 8.0
Sample Date				4/19/97	4/19/97	4/19/97	4/19/97	4/19/97	4/19/97	4/19/97	4/19/97
Criteria Last Revised: Feb. 3, 1994											
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	0.313	0.619	1.550	ND	5.770	ND	1.160	0.669
Anthracene	10,000	10,000	100	ND	0.177	ND	ND	1.710	ND	0.332	0.204
Carbazole	NLE	NLE	NLE	ND	ND	ND	ND	0.431 J	ND	ND	ND
Di-n-butylphthalate	5,700	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	0.602	1.060	2.830	0.195	16.800	ND	1.890	1.420
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	0.608	1.140	3.840	0.210	18.800	ND	1.900	1.510
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	0.312	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	0.308	0.696	1.610	ND	12.700	ND	0.924	0.826
Chrysene	9	40	500	0.320	0.640	1.730	ND	12.000	ND	0.936	0.881
bis(2-Ethylexyl)phthalate	49	210	100	ND	0.831	ND	ND	ND	ND	0.152 J	0.140
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	0.406	0.798	1.630	0.146	18.400	ND	1.270	1.280
Benzo[k]fluoranthene	0.90	4	500	0.186 J	0.363	0.744 J	ND	6.770	ND	0.611	0.537
Benzo[a]pyrene	0.66	0.66	100	0.346	0.646	1.530	0.126	15.400	ND	0.967	0.935
Ideno[1,2,3-cd]pyrene	0.90	4	500	0.137 J	0.262	0.483 J	ND	5.430	ND	0.309	0.250
Dibenzo[a,h]anthracene	0.66	0.66	100	ND	ND	ND	ND	1.450	ND	ND	ND
Benzo[g,h,i]perylene	NLE	NLE	NLE	ND	0.249	0.507 J	ND	4.750	ND	0.269	0.206
TOTAL BNs				3.226	7.279	16.454	0.677	121.262	0.000	11.068	8.858
TOTAL TICs				ND	ND	ND	ND	13.12	ND	ND	ND
TOTAL BNs & TICs				3.226	7.279	16.454	0.677	134.382	0.000	11.068	8.858
Metals											
Antimony	14	340	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	20	20	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	1	NLE	NA	NA	NA	NA	NA	NA	NA	NA

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1564-02	1564-05	1564-07	1564-08	1564-09	1564-10	1564-11	1564-12
Sample ID #				C-15-2	C-16-1	C-17-1	C-17-2	C-18-1	C-18-2	C-19-1	C-19-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0	6.0 - 6.5	5.5 - 6.0	8.5 - 9.0	5.0 - 5.5	10.5 - 11.0	5.0 - 5.5	7.5 - 8.0
Sample Date				4/19/97	4/19/97	4/19/97	4/19/97	4/19/97	4/19/97	4/19/97	4/19/97
Criteria Last Revised: Feb. 3, 1994											
Cadmium	1	100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Copper	600	600	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Lead	100	600	NLE	NA	63,400	48,200	35,200	102,000	7,660	90,200	98,600
Mercury	14	270	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	250	2,400	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	63	3,100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Silver	110	4,100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	1,500	1,500	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				NA	554,000	446,000	395,000	503,000	83,400	367,000	1560,000
Polychlorinated Biphenyls (ppb)				NA	NA	NA	NA	NA	NA	NA	NA

CE 3.2046

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1408-15	1408-16	1430-02	1447-09	1430-03	1430-04	1430-07	1430-08
Sample ID #				C-20-1	C-20-2	C-21-1	C-21-2	C-22-1	C-22-2	C-23-1	C-23-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0	8.5 - 9.0	8.0 - 8.5	0.0 - 0.5	5.5 - 6.0	7.5 - 8.0	7.0 - 7.5	9.5 - 10.0
Sample Date				4/9/97	4/9/97	4/10/97	4/10/97	4/10/97	4/10/97	4/10/97	4/10/97
Criteria Last Revised: Feb. 3, 1994											
PPM (mg/kg)											
Priority Pollutant AE & BN											
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	620	10	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	ND	0.031 J	ND	ND	ND	0.411	0.180 J	0.238
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	0.197	0.302	0.199
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	0.041	0.108	ND	ND	0.086 J	0.711	0.131
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	ND	0.047	0.089 J	ND	ND	0.437	0.652	0.176
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	0.037 J	ND	ND	ND	0.279	0.418	0.121
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	ND	0.045	0.075 J	ND	ND	0.428	0.605	0.226
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1408-15	1408-16	1430-02	1447-09	1430-03	1430-04	1430-07	1430-08
Sample ID #				C-20-1	C-20-2	C-21-1	C-21-2	C-22-1	C-22-2	C-23-1	C-23-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0	8.5 - 9.0	6.0 - 6.5	0.0 - 0.5	5.5 - 6.0	7.5 - 8.0	7.0 - 7.5	9.5 - 10.0
Sample Date				4/9/97	4/9/97	4/10/97	4/10/97	4/10/97	4/10/97	4/10/97	4/10/97
Criteria Last Revised: Feb. 3, 1994											
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	2.420	0.822	1.100	ND	0.328	3.350	11.300	1.850
Anthracene	10,000	10,000	100	0.665 J	0.128	0.247	ND	0.082 J	0.806 J	2.230	0.446
Carbazole	NLE	NLE	NLE	ND	0.074	0.140	ND	ND	0.361	0.575	0.144
Di-n-butylphthalate	6,700	10,000	100	ND	ND	ND	ND	ND	0.650	ND	ND
Fluoranthene	2,300	10,000	100	4.740	1.250	2.190	ND	0.496	4.060	14.800	2.190
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	5.010	1.050	2.070	98.300 J	0.477	3.700	13.900	2.000
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	93.300 J	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	8	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	2.460	0.557	1.240	ND	0.225	1.860	6.920	0.995
Chrysene	9	40	500	2.730	0.659	1.510	ND	0.231	2.000	6.930	1.060
bis(2-Ethylexyl)phthalate	49	210	100	ND	ND	0.209	ND	ND	0.097 J	0.201 J	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	60	4.400	0.720	2.150	ND	0.258	2.310	10.400	1.500
Benzo[k]fluoranthene	0.90	4	500	1.690	0.296	0.738	ND	0.105 J	0.952	4.270	0.606
Benzo[a]pyrene	0.66	0.66	100	2.950	0.446	1.420	ND	0.229	1.850	6.730	0.964
Ideno[1,2,3-cd]pyrene	0.90	4	500	1.270	0.288	1.080	ND	0.153	1.110	2.380	0.392
Dibenzo[a,h]anthracene	0.66	0.66	100	ND	0.090	0.309	ND	ND	0.323	0.740	0.128
Benzo[g,h,i]perylene	NLE	NLE	NLE	J 1.120	0.264	1.030	ND	0.158	1.100	2.070 J	0.338
TOTAL BNs				29.445	6.845	15.705	191.600	2.742	26.367	86.314	13.601
TOTAL TICs				ND	0.421	3.104	ND	ND	2.675	26.021	2.161
TOTAL BNs & TICs				29.445	7.266	18.809	191.600	2.742	29.042	112.335	15.762
Metals											
Antimony	14	340	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	20	20	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	1	NLE			NA	NA	NA	NA	NA	NA

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1408-15	1408-16	1430-02	1447-09	1430-03	1430-04	1430-07	1430-08
Sample ID #				C-20-1	C-20-2	C-21-1	C-21-2	C-22-1	C-22-2	C-23-1	C-23-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0	8.5 - 9.0	6.0 - 6.5	0.0 - 0.5	5.5 - 6.0	7.5 - 8.0	7.0 - 7.5	9.5 - 10.0
Sample Date				4/9/97	4/9/97	4/10/97	4/10/97	4/10/97	4/10/97	4/10/97	4/10/97
Criteria Last Revised: Feb. 3, 1994											
Cadmium	1	100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NLE	NLE	NLE			NA	NA	NA	NA	NA	NA
Copper	600	600	NLE			NA	NA	NA	NA	NA	NA
Lead	100	600	NLE	162.000	646.000	2720.000	92.600	20.600	231.000	1520.000	325.000
Mercury	14	270	NLE	0.688	0.342	1.490	0.024	0.061	1.570	2.420	1.790
Nickel	250	2,400	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	63	3,100	NLE	NA	NA	9.980	ND	2.970	2.480	NA	NA
Silver	110	4,100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	NLE	NA	NA	3.490	ND	0.170	0.229	NA	NA
Zinc	1,500	1,500	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)				NA	NA	NA	NA	NA	NA	NA	NA

CE 3.2049

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1447-01	1447-02	1447-03	1447-04	1447-05	1447-06	1447-07	1447-08
Sample ID #				C-24-1	C-24-2	C-25-1	C-25-2	C-26-1	C-26-2	C-27-1	C-27-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0	8.5 - 9.0	7.0 - 7.5	9.0 - 9.5	7.0 - 7.5	9.0 - 9.5	0.0 - 0.5	5.5 - 6.0
Sample Date				4/11/97	4/11/97	4/11/97	4/11/97	4/11/97	4/11/97	4/11/97	4/11/97
Criteria Last Revised: Feb. 3, 1994											
PPM (mg/kg)											
Priority Pollutant AE & BN											
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	670	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	620	10	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	ND	0.471	7.000	2.270	ND	21.700	ND	ND
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	0.136	2.250	0.669	ND	34.300	ND	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	2.430	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	0.274	ND	ND	ND	3.480	ND	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	ND	0.999	23.400	6.940	0.296	21.400	ND	1.490
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	0.399	8.030	2.190	0.213	13.700	ND	ND
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100 J	ND	0.781	18.600	4.370	0.336	42.900	ND	1.140
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1447-01	1447-02	1447-03	1447-04	1447-05	1447-06	1447-07	1447-08
Sample ID #				C-24-1	C-24-2	C-25-1	C-25-2	C-26-1	C-26-2	C-27-1	C-27-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0	8.5 - 9.0	7.0 - 7.5	9.0 - 9.5	7.0 - 7.5	9.0 - 9.5	0.0 - 0.5	5.5 - 6.0
Sample Date				4/11/97	4/11/97	4/11/97	4/11/97	4/11/97	4/11/97	4/11/97	4/11/97
Criteria Last Revised: Feb. 3, 1994											
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	ND	5.250	132.000	32.100	2.460	179.000	0.283	9.860
Anthracene	10,000	10,000	100	ND	1.380	41.100	9.490	0.716	27.700	0.076 J	2.610
Carbazole	NLE	NLE	NLE	ND	0.820	14.800	5.140	0.135	5.740	ND	1.330
Di-n-butylphthalate	5,700	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	ND	5.620	160.000	36.800	2.540	94.200	0.469	14.500
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	ND	5.000	139.000	32.100	2.220	96.600	0.426	12.500
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	0.646	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	ND	2.510	69.300	15.900	1.100	37.400	0.227	6.480
Chrysene	9	40	500	ND	2.370	68.700	15.500	1.010	39.400	0.219	6.580
bis(2-Ethylexyl)phthalate	49	210	100	ND	ND	ND	ND	ND	ND	0.157	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	ND	2.530	70.300	17.000	1.240	26.800	0.257	7.060
Benzo[k]fluoranthene	0.90	4	500	ND	0.959	29.300	:7.190	0.418	8.750	0.118	3.630
Benzo[a]pyrene	0.66	0.66	100	ND	2.160	59.900	13.700	1.010	27.600	0.218	5.910
Ideno[1,2,3-cd]pyrene	0.90	4	500	ND	1.340	30.000	7.390	0.500	11.000	0.110	2.940
Dibenzo[a,h]anthracene	0.66	0.66	100	ND	0.383	8.400	2.220	0.151	4.110	ND	0.861
Benzo[g,h,i]perylene	NLE	NLE	NLE	ND	1.400	26.800	6.600	0.467	10.600	0.096 J	2.630
TOTAL BNs				0.000	34.782	906.880	216.569	15.458	708.810	2.656	79.421
TOTAL TICs				0.000	NA	NA	NA	NA	NA	NA	NA
TOTAL BNs & TICs				0.000	34.782	906.880	216.569	15.458	708.810	0.656	79.421
Metals											
Antimony	14	340	NLE	NA	NA	NA	NA	NA	NA	ND	ND
Arsenic	20	20	NLE	NA	NA	NA	NA	NA	NA	1.870	4.380
Beryllium	1	1	NLE	NA	NA	NA	NA	NA	NA	0.376	0.444

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1447-01	1447-02	1447-03	1447-04	1447-05	1447-06	1447-07	1447-08
Sample ID #				C-24-1	C-24-2	C-25-1	C-25-2	C-26-1	C-26-2	C-27-1	C-27-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0	8.5 - 9.0	7.0 - 7.5	9.0 - 9.5	7.0 - 7.5	9.0 - 9.5	0.0 - 0.5	5.5 - 6.0
Sample Date				4/11/97	4/11/97	4/11/97	4/11/97	4/11/97	4/11/97	4/11/97	4/11/97
Criteria Last Revised: Feb. 3, 1994											
Cadmium	1	100	NLE	NA	NA	NA	NA	NA	NA	ND	0.269
Chromium	NLE	NLE	NLE	NA	NA	NA	NA	NA	NA	24.800	34.800
Copper	600	600	NLE	29.300	30.800	52.500	83.800	41.600	129.000	37.600	55.000
Lead	100	600	NLE	20.300	23.900	67.600	77.000	46.400	524.000	23.400	46.500
Mercury	14	270	NLE	0.045	0.073	0.443	0.180	0.091	4.680	0.081	0.124
Nickel	250	2,400	NLE	NA	NA	NA	NA	NA	NA	22.000	22.000
Selenium	63	3,100	NLE	NA	NA	NA	NA	NA	NA	ND	ND
Silver	110	4,100	NLE	NA	NA	NA	NA	NA	NA	ND	ND
Thallium	2	2	NLE	NA	NA	NA	NA	NA	NA	0.275	0.176
Zinc	1,500	1,500	NLE	NA	NA	NA	NA	NA	NA	65.100	107.000
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)				NA	NA	NA	NA	NA	NA	NA	NA

CE 3.2052

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1447-10	1430-09	1430-10	1430-11	1534-04	1534-05	1430-13	1430-14
Sample ID #				C-27-3	C-28-1	C-29-1	C-29-2	C-29A-1	C-29A-2	C-30-1	C-30-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	7.5 - 8.0	5.0 - 5.5	3.0 - 3.5	6.5 - 7.0	5.0 - 5.5	7.0 - 7.5	4.5 - 5.0	6.5 - 7.0
Sample Date				4/11/97	4/10/97	4/10/97	4/10/97	4/17/97	4/17/97	4/10/97	4/10/97
Criteria Last Revised: Feb. 3, 1994											
PPM (mg/kg)											
Priority Pollutant AE & BN											
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	670	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	29	520	10	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	ND	ND	0.183	0.136	0.716	1.13	ND	ND
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	ND	0.081 J	ND	0.329	ND	ND	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	0.601	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	0.107 J	0.260	0.170	0.160 J	0.165 J	ND	0.180
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	ND	ND	0.449	0.116 J	0.838	2.400	ND	0.165
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	ND	0.267	0.125	0.685	1.330	ND	ND
Diethylphthalate	10,000	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	ND	ND	0.567	0.157	1.250	2.440	ND	0.166
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND

CE 3.2053

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1447-10	1430-09	1430-10	1430-11	1534-04	1534-05	1430-13	1430-14
Sample ID #				C-27-3	C-28-1	C-29-1	C-29-2	C-29A-1	C-29A-2	C-30-1	C-30-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	7.5 - 8.0	5.0 - 5.5	3.0 - 3.5	6.5 - 7.0	5.0 - 5.5	7.0 - 7.5	4.5 - 5.0	6.5 - 7.0
Sample Date				4/11/97	4/10/97	4/10/97	4/10/97	4/17/97	4/17/97	4/10/97	4/10/97
Criteria Last Revised: Feb. 3, 1994											
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	ND	0.729	7.680	2.850	9.720	19.100	ND	1.650
Anthracene	10,000	10,000	100	ND	0.211	1.500	0.481	2.660	5.020	ND	0.446
Carbazole	NLE	NLE	NLE	ND	ND	0.569	0.181	1.210	2.860	ND	ND
Di-n-butylphthalate	6,700	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	0.114	1.240	8.930	4.260	9.770	20.100	0.124	3.230
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	0.112	1.270	8.640	4.140	9.170	18.000	0.146	3.340
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	0.169
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	0.069 J	0.675	3.380	2.020	4.790	9.260	0.082 J	1.640
Chrysene	9	40	500	ND	0.685	3.580	2.280	4.400	8.630	0.083 J	1.520
bis(2-Ethylexyl)phthalate	49	210	100	ND	0.104 J	0.619	0.218	0.165 J	0.368	ND	0.179
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	0.080 J	0.905	4.420	3.070	5.400	10.500	0.119	2.260
Benzo[k]fluoranthene	0.90	4	500	ND	0.408	1.920	1.320	2.300	4.790	ND	0.917
Benzo[a]pyrene	0.66	0.66	100	ND	0.691	3.110	1.900	5.320	8.360	0.082 J	1.520
Ideno[1,2,3-cd]pyrene	0.90	4	500	ND	0.230	0.909	0.753	3.150	3.130	ND	0.455
Dibenzo[a,h]anthracene	0.66	0.66	100 J	ND	ND	0.280	0.224	0.695	0.993	ND	0.135
Benzo[g,h,i]perylene	NLE	NLE	NLE	ND	0.189	0.775	0.617	3.450	2.640	ND	ND
TOTAL BNs				0.376	7.444	48.019	26.018	66.158	121.817	0.635	18.150
TOTAL TICs				NA	3.47	16.326	3.906	8.204	26.515	0.719	1.14
TOTAL BNs & TICs				0.376	10.914	64.345	28.924	74.362	148.332	1.354	19.290
Metals											
Antimony	14	340	NLE	ND	NA	NA	NA	NA	NA	NA	NA
Arsenic	20	20	NLE	2.350	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	1	NLE	0.420	NA	NA	NA	NA	NA	NA	NA

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1447-10	1430-09	1430-10	1430-11	1534-04	1534-05	1430-13	1430-14
Sample ID #				C-27-3	C-28-1	C-29-1	C-29-2	C-29A-1	C-29A-2	C-30-1	C-30-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	7.5 - 8.0	5.0 - 5.5	3.0 - 3.5	6.5 - 7.0	5.0 - 5.5	7.0 - 7.5	4.5 - 5.0	6.5 - 7.0
Sample Date				4/11/97	4/10/97	4/10/97	4/10/97	4/17/97	4/17/97	4/10/97	4/10/97
Criteria Last Revised: Feb. 3, 1994											
Cadmium	1	100	NLE	ND	NA	NA	NA	NA	NA	NA	NA
Chromium	NLE	NLE	NLE	21,400	NA	NA	NA	NA	NA	NA	NA
Copper	600	600	NLE	25,500	NA	NA	NA	NA	NA	NA	NA
Lead	100	600	NLE	20,900	128,000	418,000	1360,000	44,300	338,000	40,400	356,000
Mercury	14	270	NLE	0.082	0.470	0.310	12.700	0.086	2.660	0.160	0.160
Nickel	250	2,400	NLE	20,500	NA	NA	NA	NA	NA	NA	NA
Selenium	63	3,100	NLE	ND	NA	NA	NA	NA	NA	NA	NA
Silver	110	4,100	NLE	ND	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	NLE	0.190	NA	NA	NA	NA	NA	NA	NA
Zinc	1,500	1,500	NLE	58,300	NA	179,000	82,000	NA	NA	NA	NA
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)				NA	NA	NA	NA	NA	NA	NA	NA

CE 3.2055

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #					1534-06	1534-07	1534
Sample ID #					C30A-1	C-30A-2	C-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria		0.0 - 0.5	5.5 - 6.0	
Sample Date					4/17/97	4/17/97	
Criteria Last Revised: Feb. 3, 1994							
PPM (mg/kg)							
Priority Pollutant AE & BN							
N-Nitrosodimethylamine	140	600	100		ND	ND	ND
Aniline	NLE	NLE	NLE		ND	ND	0.482
bis(2-Chloroethyl)Ether	0.66	3	10		ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100		ND	ND	ND
1,4-Dichlorobenzene	670	10,000	100		ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE		ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	50		ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10		ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10		ND	ND	ND
Hexachloroethane	6	100	100		ND	ND	ND
Nitrobenzene	28	620	10		ND	ND	ND
Isophorone	1,100	10,000	50		ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE		ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100		ND	ND	ND
Naphthalene	230	4,200	100		ND	ND	ND
4-Chloroaniline	NLE	NLE	NLE		ND	ND	ND
Hexachlorobutadiene	1	21	100		ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE		ND	ND	ND
Hexachlorocyclopentadiene	400	7,300	100		ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE		ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE		ND	ND	ND
Dimethylphthalate	10,000	10,000	50		ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE		ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	J	ND	ND	ND
3-Nitroaniline	NLE	NLE	NLE		ND	ND	ND
Acenaphthene	3,400	10,000	100	J	ND	ND	ND
2,4-Dinitrotoluene	1	4	10		ND	ND	ND
Dibenzofuran	NLE	NLE	NLE		ND	ND	ND
Diethylphthalate	10,000	10,000	50		ND	ND	ND
Fluorene	2,300	10,000	100	J	ND	ND	ND
4-Chlorophenyl-phenylether	NLE	NLE	NLE		ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE		ND	ND	ND

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1634-06		1634-07	1634-08
Sample ID #				C30A-1		C-30A-2	C-30A-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5		5.5 - 6.0	8.5 - 9.0
Sample Date				4/17/97		4/17/97	4/17/97
Criteria Last Revised: Feb. 3, 1994							
N-Nitrosodiphenylamine	140	690	100	ND		ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND		ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND		ND	ND
Hexachlorobenzene	0.66	2	100	ND		ND	ND
Phenanthrene	NLE	NLE	NLE	0.062	J	0.281	2.460
Anthracene	10,000	10,000	100	ND		ND	1.010
Carbazole	NLE	NLE	NLE	ND		ND	ND
Di-n-butylphthalate	6,700	10,000	100	ND		ND	ND
Fluoranthene	2,300	10,000	100	0.099		0.407	5.750
Benzidine	NLE	NLE	NLE	ND		ND	ND
Pyrene	1,700	10,000	100	0.096		0.399	7.670
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND		ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	J	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND		ND	ND
Benzo(a)anthracene	0.90	4	500	0.080	J	0.196	3.990
Chrysene	9	40	500	0.055	J	0.2	3.740
bis(2-Ethylexyl)phthalate	49	210	100	ND		0.131	ND
Di-n-octylphthalate	1,100	10,000	100	ND		ND	ND
Benzo[b]fluoranthene	0.90	4	50	0.094		0.217	3.430
Benzo[k]fluoranthene	0.90	4	500	ND		0.107	1.650
Benzo[a]pyrene	0.66	0.66	100	0.066		0.189	3.610
Ideno[1,2,3-cd]pyrene	0.90	4	500	ND		0.132	2.010
Dibenzo[a,h]anthracene	0.66	0.66	100	ND	J	ND	0.600 J
Benzo[g,h,i]perylene	NLE	NLE	NLE	ND		0.141	2.220
TOTAL BNs				0.632		2.400	38.622
TOTAL TICs				ND		ND	ND
TOTAL BNs & TICs				0.632		2.400	38.622
Metals							
Antimony	14	340	NLE	ND		ND	4.150
Arsenic	20	20	NLE	6.080		6.940	67.200
Beryllium	1	1	NLE	0.62		0.488	0.346

CE 3.2057

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1534-06	1534-07	
Sample ID #				C30A-1	C-30A-2	
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	5.5 - 6.0	- 9.0
Sample Date				4/17/97	4/17/97	4/17/97
Criteria Last Revised: Feb. 3, 1994						
Cadmium	1	100	NLE	ND	ND	0.315
Chromium	NLE	NLE	NLE	17.2	20.7	5.710
Copper	600	600	NLE	25.7	31.8	505.000
Lead	100	600	NLE	74.600	66.2	1180.000
Mercury	14	270	NLE	0.309	0.197	6.000
Nickel	250	2,400	NLE	NA	NA	NA
Selenium	63	3,100	NLE	NA	NA	NA
Silver	110	4,100	NLE	NA	NA	NA
Thallium	2	2	NLE	NA	NA	NA
Zinc	1,500	1,500	NLE	NA	NA	NA
Chromium, Hexavalent (ppm)				NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				NA	NA	NA
Polychlorinated Biphenyls (ppb)				NA	NA	NA

CE 3.2058

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1430-14	1524-06	1417-01	1417-02	1417-04	1417-03	1417-05	1417-06
Sample ID #				C-31-1	C-31-2	C-32-1	C-32-2	C-33-2	C-34-1	C-34-2	C-35-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	4.5 - 5.0	6.5 - 7.0	5.0 - 5.5	7.0 - 7.5	8.0 - 8.5	5.5 - 6.0	7.5 - 8.0	6.0 - 6.5
Sample Date				4/10/97	4/10/97	4/8/97	4/8/97	4/8/97	4/8/97	4/8/97	4/8/97
Criteria Last Revised: Feb. 3, 1994											
PPM (mg/kg)											
Priority Pollutant AE & BN											
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	1.290	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	620	10	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	ND	ND	30.900	37.100	3.000	ND	34.100	ND
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	ND	15.500	18.300	0.582	ND	24.600	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	ND	ND	2.220 J	ND	ND	6.520	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	ND	0.121	56.000	60.700	1.090	0.374	65.500	ND
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	ND	33.500	37.600	0.706	0.160 J	31.200	ND
Diethylphthalate	10,000	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	ND	0.157	56.200	62.200	1.490	0.388	63.400	ND
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1430-14	1524-06	1417-01	1417-02	1417-04	1417-03	1417-05	1417-06
Sample ID #				C-31-1	C-31-2	C-32-1	C-32-2	C-33-2	C-34-1	C-34-2	C-35-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	4.5 - 5.0	6.5 - 7.0	5.0 - 5.5	7.0 - 7.5	8.0 - 8.5	5.5 - 6.0	7.5 - 8.0	8.0 - 8.5
Sample Date				4/10/97	4/10/97	4/8/97	4/8/97	4/8/97	4/8/97	4/8/97	4/8/97
Criteria Last Revised: Feb. 3, 1994											
N-Nitrosodiphenylamine	140	690	100	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	0.146	1.380	328.000	339.000	11.500	3.240	386.000	0.431
Anthracene	10,000	10,000	100	ND	0.334	94.400	108.000	2.490	0.872	203.000	ND
Carbazole	NLE	NLE	NLE	ND	ND	49.500	62.400	1.590	0.336	73.300	ND
Di-n-butylphthalate	5,700	10,000	100	0.208	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	0.287	1.760	245.000	241.000	13.500	4.760	295.000	0.625
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	0.293	2.060	217.000	210.000	10.900	4.190	262.000	0.623
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	2.150	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	0.157	0.814	101.000	97.300	3.790	2.170	133.000	0.313
Chrysene	9	40	500	0.144	0.847	98.400	94.800	4.240	2.030	137.000	0.354
bis(2-Ethylexyl)phthalate	49	210	100	0.095 J	0.116	ND	ND	1.350	0.147 J	ND	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	0.206	0.961	98.100	98.000	4.760	2.610	185.000	0.377
Benzo[k]fluoranthene	0.90	4	500	0.098 J	0.423	37.300	40.200	1.790	1.130	62.100	0.175 J
Benzo[a]pyrene	0.66	0.66	100	0.158	0.732	84.300	83.700	3.290	2.070	153.000	0.316
Ideno[1,2,3-cd]pyrene	0.90	4	500	ND	0.190	35.800	33.100	1.430	0.936	57.600	ND
Dibenzo[a,h]anthracene	0.66	0.66	100	ND	ND	10.800	10.500	0.413 J	0.294	19.900	ND
Benzo[g,h,i]perylene	NLE	NLE	NLE	ND	0.170 J	33.300	30.200	1.270	0.875	52.700	ND
TOTAL BNs				1.792	10.065	1625.000	1656.320	72.621	28.472	2245.020	3.213
TOTAL TICs				ND	1.565	386.500	412.100	35.710	1.34	492.400	ND
TOTAL BNs & TICs				1.792	11.630	2011.500	2068.420	108.331	27.812	2737.420	3.213
Metals (ppm)											
Antimony	14	340	NLE	NA	NA	ND	ND	2.840	NA	NA	NA
Arsenic	20	20	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1,000	1,000	NLE	NA	NA	NA	NA	NA	NA	NA	NA

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1430-14	1524-06	1417-01	1417-02	1417-04	1417-03	1417-05	1417-06
Sample ID #				C-31-1	C-31-2	C-32-1	C-32-2	C-33-2	C-34-1	C-34-2	C-35-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	4.5 - 5.0	6.5 - 7.0	5.0 - 5.5	7.0 - 7.5	8.0 - 8.5	5.5 - 6.0	7.5 - 8.0	6.0 - 6.5
Sample Date				4/10/97	4/10/97	4/8/97	4/8/97	4/8/97	4/8/97	4/8/97	4/8/97
Criteria Last Revised: Feb. 3, 1994											
Cadmium	1	100	NLE	NA	NA	NA	NA	1,300	NA	NA	NA
Chromium	NLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Copper	600,000	600,000	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Lead	100	600	NLE	56,400	88,000	NA	NA	162,000	NA	NA	NA
Mercury	14	270	NLE	0.110	0.620	NA	NA	NA	NA	NA	NA
Nickel	250,000	2,400	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	63,000	3,100	NLE	NA	NA	ND	NA	NA	NA	NA	NA
Silver	110,000	4,100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2,000	2,000	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	1,500	1,500	NLE	NA	NA	44,600	44,500	141,000	161,000	117,000	67,400
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				NA	NA	704,000	402,000	4550,000	165,000	1030,000	179,000
Polychlorinated Biphenyls (ppb)				NA	NA	NA	NA	NA	NA	NA	NA

CE 3.2061

Table .
Edgewater Associates
Soil Analytical Results

Lab ID #				1417-07	1564-03	1564-04	1417-08	1417-09	1417-11	1417-10	1417-13
Sample ID #				C-35-2	C-36-1	C-36-2	C-40-1	C-40-2	C-40-3	C-41-1	C-42-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	7.5 - 8.0	0.0 - 0.5	8.5 - 9.0	6.5 - 7.0	8.5 - 9.0	9.5 - 10.0	6.0 - 6.5	9.5 - 10.0
Sample Date				4/8/97	4/19/97	4/19/97	4/8/97	4/8/97	4/8/97	4/8/97	4/8/97
Criteria Last Revised: Feb. 3, 1994											
PPM (mg/kg)											
Priority Pollutant AE & BN											
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	0.353	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	6,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	670	10,000	100	ND	ND	ND	0.263 J	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	6,100	10,000	60	ND	ND	ND	0.410	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	0.339	ND	ND	ND	ND
Naphthalene	230	4,200	100	16.200	ND	1.970	13.000	11.400	1.430	0.343	ND
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	4.580	ND	0.704	4.910	6.770	1.020	0.142 J	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	ND	0.542	ND	ND	ND	0.339	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	26.900	ND	2.460	5.880	8.740	3.080	0.289	ND
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	16.200	ND	1.230	2.960	4.710	1.900	0.197 J	ND
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	3.270	ND	2.390	3.760	6.420	2.920	0.442	ND
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND

CE 3.2062

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1417-07	1564-03	1564-04	1417-08	1417-09	1417-11	1417-10	1417-13
Sample ID #				C-35-2	C-36-1	C-36-2	C-40-1	C-40-2	C-40-3	C-41-1	C-42-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	7.5 - 8.0	0.0 - 0.5	8.5 - 9.0	6.5 - 7.0	8.5 - 9.0	9.5 - 10.0	6.0 - 6.5	9.5 - 10.0
Sample Date				4/8/97	4/19/97	4/19/97	4/8/97	4/8/97	4/8/97	4/8/97	4/8/97
Criteria Last Revised: Feb. 3, 1994											
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	276.000	1.080	14.100	9.910	16.600	16.500	3.760	1.040
Anthracene	10,000	10,000	100	87.700	0.212	3.210	1.300	4.340	4.290	1.280	0.210
Carbazole	NLE	NLE	NLE	42.700	ND	2.070	0.670	2.150	2.120	0.242	0.077 J
Di-n-butylphthalate	5,700	10,000	100	ND	ND	ND	0.320	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	370.000	1.850	17.700	4.680	7.340	14.200	5.670	1.490
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	310.000	1.760	15.800	3.740	5.600	12.100	5.770	1.500
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	0.664
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	4.070	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	114.000	0.823	8.630	0.970	1.240	5.080	2.620	0.788
Chrysene	9	40	500	114.000	0.921	8.390	1.120	1.130	5.080	2.560	0.897
bis(2-Ethylexyl)phthalate	49	210	100	ND	ND	ND	2.620	0.321 J	0.246	ND	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	142.000	1.120	12.800	0.950	0.788	6.620	3.350	0.933
Benzo[k]fluoranthene	0.90	4	500	54.300	0.492	4.760	0.318	0.357	2.770	1.280	0.335
Benzo[a]pyrene	0.66	0.66	100	101.000	0.902	9.480	0.875	0.607	4.730	2.450	0.620
Ideno[1,2,3-cd]pyrene	0.90	4	500	40.700	0.366	3.330	0.233 J	ND	1.650	0.680	0.364
Dibenzo[a,h]anthracene	0.66	0.66	100	10.400	ND	1.050	ND	ND	0.463	0.222	0.108 J
Benzo[g,h,i]perylene	NLE	NLE	NLE	35.800	0.304	2.950	0.246 J	ND	1.340	0.666	0.330
TOTAL BNs				1795.180	9.830	113.566	63.887	78.413	87.339	32.302	9.356
TOTAL TICs				276.100	ND	19.18	190.580	5.170	15.708	11.770	0.538
TOTAL BNs & TICs				2071.280	9.830	132.746	254.467	83.583	103.047	44.072	9.894
Metals (ppm)											
Antimony	14	340	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	20	20	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1.000	1.000	NLE	NA	NA	NA	NA	NA	NA	NA	NA

CE 3.2063

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1417-07	1564-03	1564-04	1417-08	1417-09	1417-11	1417-10	1417-13
Sample ID #				C-35-2	C-36-1	C-36-2	C-40-1	C-40-2	C-40-3	C-41-1	C-42-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	7.5 - 8.0	0.0 - 0.5	8.5 - 9.0	6.5 - 7.0	8.5 - 9.0	9.5 - 10.0	6.0 - 6.5	9.5 - 10.0
Sample Date				4/8/97	4/19/97	4/19/97	4/8/97	4/8/97	4/8/97	4/8/97	4/8/97
Criteria Last Revised: Feb. 3, 1994											
Cadmium	1	100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Copper	600.000	600.000	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Lead	100	600	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	14	270	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	250.000	2,400	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	63.000	3,100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Silver	110.000	4,100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2.000	2.000	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	1,500	1,500	NLE	170.000	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				100.000	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)				NA	ND	ND	ND	ND	ND	ND	ND

CE 3.2064

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1417-12	1417-14	1471-01	1471-02	1471-04	1471-05	1471-06	1471-07
Sample ID #				C-43-1	C-43-2	C-44-1	C-44-2	C-45-1	C-45-2	C-45-3	C-46-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0	9.5 - 10.0	5.5 - 6.0	8.5 - 9.0	0.0 - 0.5	5.5 - 6.0	8.5 - 9.0	6.5 - 7.0
Sample Date				4/8/97	4/8/97	4/14/97	4/14/97	4/14/97	4/14/97	4/14/97	4/14/97
Criteria Last Revised: Feb. 3, 1994											
PPM (mg/kg)											
Priority Pollutant AE & BN											
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	670	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	0.395	ND	0.169	ND	ND	15.300	215.000	292.000
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	0.316	ND	ND	ND	ND	4.560	63.200	89.300
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	122.000
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	1.630	ND	0.241	2.970	ND	24.500	356.000	442.000
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	0.480	ND	0.100 J	ND	ND	9.450	133.000	171.000
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	1.350	ND	0.168	ND	ND	19.500	270.000	340.000
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND

Table .
Edgewater Associates
Soil Analytical Results

Lab ID #				1417-12	1417-14	1471-01	1471-02	1471-04	1471-05	1471-06	1471-07
Sample ID #				C-43-1	C-43-2	C-44-1	C-44-2	C-45-1	C-45-2	C-45-3	C-46-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0	9.5 - 10.0	5.5 - 6.0	8.5 - 9.0	0.0 - 0.5	5.5 - 6.0	8.5 - 9.0	6.5 - 7.0
Sample Date				4/8/97	4/8/97	4/14/97	4/14/97	4/14/97	4/14/97	4/14/97	4/14/97
Criteria Last Revised: Feb. 3, 1994											
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	16.400	0.132	1.590	2.230	0.124	137.000	1950.000	2670.000
Anthracene	10,000	10,000	100	2.990	ND	0.323	0.725 J	ND	27.900	423.000	646.000
Carbazole	NLE	NLE	NLE	0.609	ND	0.171	ND	ND	32.900	437.000	681.000
Di-n-butylphthalate	5,700	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	11.200	0.204	1.800	4.330	0.261	192.000	2790.000	3830.000
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	16.300	0.138	1.690	4.820	0.253	168.000	2290.000	3160.000
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	6.410	0.077 J	0.873	4.160	0.138	102.000	1470.000	2060.000
Chrysene	9	40	500	6.640	0.083 J	0.838	4.260	0.150	108.000	1460.000	2060.000
bis(2-Ethylexyl)phthalate	49	210	100	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	5.790	0.088	1.010	7.640	0.194	163.000	2030.000	2790.000
Benzo[k]fluoranthene	0.90	4	500	2.260	ND	0.410	2.930	0.079 J	57.200	764.000	1040.000
Benzo[a]pyrene	0.66	0.66	100	4.920	ND	0.880	8.290	0.170	113.000	1590.000	2100.000
Ideno[1,2,3-cd]pyrene	0.90	4	500	1.330	ND	0.625	7.230	0.123	37.000	612.000	903.000
Dibenzo[a,h]anthracene	0.66	0.66	100	0.445	ND	0.177	2.150	ND	12.000	193.000	291.000
Benzo[g,h,i]perylene	NLE	NLE	NLE	1.270	ND	0.660	7.960	0.126	30.000	473.000	724.000
TOTAL BNs				80.635	0.721	11.725	59.695	1.618	1243.310	17519.200	24211.300
TOTAL TICs				34.86	ND	1.751	4.53	ND	232.600	4009.000	5019.000
TOTAL BNs & TICs				115.495	0.721	13.476	64.225	1.618	1475.910	21528.200	29230.300
Metals (ppm)						NA					
						NA					
Antimony	14	340	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	20	20	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1.000	1.000	NLE	NA	NA	NA	NA	NA	NA	NA	NA

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1417-12	1417-14	1471-01	1471-02	1471-04	1471-05	1471-06	1471-07
Sample ID #				C-43-1	C-43-2	C-44-1	C-44-2	C-45-1	C-45-2	C-45-3	C-46-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	6.5 - 7.0	9.5 - 10.0	5.5 - 6.0	8.5 - 9.0	0.0 - 0.5	5.5 - 6.0	8.5 - 9.0	6.5 - 7.0
Sample Date				4/8/97	4/8/97	4/14/97	4/14/97	4/14/97	4/14/97	4/14/97	4/14/97
Criteria Last Revised: Feb. 3, 1994											
Cadmium	1	100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Copper	600,000	600,000	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Lead	100	600	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	14	270	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	250,000	2,400	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	63,000	3,100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Silver	110,000	4,100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2,000	2,000	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	1,500	1,500	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				NA	NA	NA	NA	NA	NA	286,000	NA
Polychlorinated Biphenyls (ppb)				ND	ND	ND	ND	ND	ND	ND	ND

CE 3.2067

Table .
Edgewater Associates
Soil Analytical Results

Lab ID #				1471-08	1471-09	1338-01	1338-02	1359-01	1359-02	1359-03	1359-04
Sample ID #				C-47-1	C-47-2	C-48-1	C-48-2	C-50-1	C-50-2	C-51-1	C-51-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	5.5 - 6.0	8.5 - 9.0	7.0 - 7.5	8.0 - 8.5	6.5 - 7.0	8.5 - 9.0	6.0 - 6.5	8.5 - 9.0
Sample Date				4/14/97	4/14/97	4/4/97	4/4/97	4/7/97	4/7/97	4/7/97	4/7/97
Criteria Last Revised: Feb. 3, 1994											
PPM (mg/kg)											
Priority Pollutant AE & BN											
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	ND	85.900 J	300.000	606.000	0.164	174.000	0.126	7.040
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	ND	126.000	242.000	0.117	65.300	ND	3.420 J
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	4.410	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	ND	ND	ND	0.152	ND	0.118	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	ND	159.000	91.300	139.000	0.257	317.000	0.302	14.300
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	ND	42.800	64.900	0.108 J	124.000	0.117	5.560
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	ND	135.000	97.600	144.000	0.306	255.000	0.288	11.600
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1471-08	1471-09	1338-01	1338-02	1359-01	1359-02	1359-03	1359-04
Sample ID #				C-47-1	C-47-2	C-48-1	C-48-2	C-50-1	C-50-2	C-51-1	C-51-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	5.5 - 6.0	8.5 - 9.0	7.0 - 7.5	8.0 - 8.5	6.5 - 7.0	8.5 - 9.0	6.0 - 6.5	8.5 - 9.0
Sample Date				4/14/97	4/14/97	4/4/97	4/4/97	4/7/97	4/7/97	4/7/97	4/7/97
Criteria Last Revised: Feb. 3, 1994											
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	0.632	1440.000	324.000	545.000	2.870	1870.000	2.660	85.500
Anthracene	10,000	10,000	100	0.126 J	291.000	116.000	171.000	0.715	399.000	0.622	18.200
Carbazole	NLE	NLE	NLE	0.127 J	206.000	26.400	41.300	0.261	449.000	0.422	19.600
Di-n-butylphthalate	5,700	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	0.969	2220.000	237.000	377.000	6.480	2930.000	4.770	129.000
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	0.835	2160.000	242.000	379.000	5.650	2520.000	4.650	109.000
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	0.575	1290.000	114.000	189.000	2.460	1660.000	2.520	70.500
Chrysene	9	40	500	0.569	1650.000	111.000	174.000	2.630	1720.000	2.730	74.100
bis(2-Ethylexyl)phthalate	49	210	100	ND	ND	ND	ND	0.397	ND	0.304	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	0.757	1750.000	104.000	190.000	2.970	2480.000	3.660	103.000
Benzo[k]fluoranthene	0.90	4	500	0.319	784.000	45.000	81.500	1.240	985.000	1.610	46.500
Benzo[a]pyrene	0.66	0.66	100	0.615	1390.000	105.000	172.000	2.040	1820.000	2.650	81.200
Ideno[1,2,3-cd]pyrene	0.90	4	500	0.368	1000.000	44.400	81.500	0.642	710.000	0.913	35.500
Dibenzo[a,h]anthracene	0.66	0.66	100	ND	317.000	13.700	20.400	0.212	240.000	0.295	12.000
Benzo[g,h,i]perylene	NLE	NLE	NLE	0.326	1060.000	41.800	66.200	0.648	573.000	0.852	31.600
TOTAL BNs				6.218	15827.900	2186.410	3833.800	30.219	19281.300	29.608	857.520
TOTAL TICs				ND	1020.000	ND	ND	ND	ND	ND	ND
TOTAL BNs & TICs				6.218	16847.900	2186.410	3833.800	30.219	19281.300	29.608	857.520
Metals (ppm)											
Antimony	14	340	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	20	20	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1,000	1,000	NLE	NA	NA	NA	NA	NA	NA	NA	NA

CE 3.2069

Table .
Edgewater Associates
Soil Analytical Results

Lab ID #				1471-08	1471-09	1338-01	1338-02	1359-01	1359-02	1359-03	1359-04
Sample ID #				C-47-1	C-47-2	C-48-1	C-48-2	C-60-1	C-60-2	C-61-1	C-51-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	5.5 - 6.0	8.5 - 9.0	7.0 - 7.5	8.0 - 8.5	6.5 - 7.0	8.5 - 9.0	6.0 - 6.5	8.5 - 9.0
Sample Date				4/14/97	4/14/97	4/4/97	4/4/97	4/7/97	4/7/97	4/7/97	4/7/97
Criteria Last Revised: Feb. 3, 1994											
Cadmium	1	100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Copper	600.000	600.000	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Lead	100	600	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	14	270	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	250.000	2,400	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	63.000	3,100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Silver	110.000	4,100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2.000	2.000	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	1,500	1,500	NLE	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				NA	NA	468.000	2550.000	1470.000	368.000	873.000	8420.000
Polychlorinated Biphenyls (ppb)				NA	NA	NA	NA	NA	NA	NA	NA

CE 3.2070

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1359-05	1359-06	1624-01	1624-02	1624-03	1624-03	1624-10	1634-01
Sample ID #				C-52-1	C-52-2	C-56-1	C-56-2	C-57-1	C-57-2	C-57-3	C-58-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	5.5 - 6.0	8.5 - 9.0	6.0 - 6.5	12.0 - 12.5	7.0 - 7.5	11.5 - 12.0	0.0 - 0.5	5.5 - 6.0
Sample Date				4/7/97	4/7/97	4/16/97	4/16/97	4/16/97	4/16/97	4/16/97	4/17/97
Criteria Last Revised: Feb. 3, 1994											
PPM (mg/kg)											
Priority Pollutant AE & BN											
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	1.870	0.425 J	22.100	0.368	ND	2830.000	4.720	0.124
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	0.627	ND	6.790	ND	ND	552.000	1.690	0.178 J
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	0.682	2.900	ND	ND	44.900	0.903	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	3.500	1.070	19.100	ND	ND	104.000	15.200	0.564
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	1.310	0.732	10.400	ND	ND	223.000	10.300	0.261
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	2.860	1.010	19.600	ND	ND	170.000	14.100	0.609
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1359-05	1359-06	1524-01	1524-02	1524-03	1524-03	1524-10	1534-01
Sample ID #				C-52-1	C-52-2	C-56-1	C-56-2	C-57-1	C-57-2	C-57-3	C-58-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	5.5 - 6.0	8.5 - 9.0	6.0 - 6.5	12.0 - 12.5	7.0 - 7.5	11.5 - 12.0	0.0 - 0.5	5.5 - 6.0
Sample Date				4/7/97	4/7/97	4/16/97	4/16/97	4/16/97	4/16/97	4/16/97	4/17/97
Criteria Last Revised: Feb. 3, 1994											
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	21,100	11,200	144,000	ND	0.735	819,000	43,000	4,680
Anthracene	10,000	10,000	100	4,730	3,230	39,600	ND	0.179 J	180,000	5,140	1,520
Carbazole	NLE	NLE	NLE	5,090	0.956	18,800	ND	ND	80,000	0.878	0.653
Di-n-butylphthalate	6,700	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	32,700	34,600	146,000	ND	1,330	512,000	51,300	5,810
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	27,900	30,500	141,000	ND	1,300	465,000	39,200	5,330
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	19,300	20,200	70,400	ND	0.673	171,000	12,200	2,620
Chrysene	9	40	500	20,500	23,700	64,100	ND	0.787	154,000	11,100	2,530
bis(2-Ethylexyl)phthalate	49	210	100	0.239 J	ND	ND	ND	ND	ND	ND	0.658
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	27,700	29,800	83,000	ND	1,080	202,000	10,600	2,950
Benzo[k]fluoranthene	0.90	4	500	9,840	10,700	31,300	ND	0.472	71,900 J	4,350	1,330
Benzo[a]pyrene	0.66	0.66	100	21,000	16,900	61,000	ND	0.714	130,000	6,790	2,480
Ideno[1,2,3-cd]pyrene	0.90	4	500	12,500	12,300	21,500	ND	0.292	52,700	1,950	0.990
Dibenzo[a,h]anthracene	0.66	0.66	100	3,640	3,650	6,420	ND	ND	ND	0.580	0.287
Benzo[g,h,i]perylene	NLE	NLE	NLE	10,900	10,100	0.733 J	ND	0.264	45,000	1,620	0.797
TOTAL BNs				227,306	211,655	908,743	0.368	7,826	6806,500	235,521	34,171
TOTAL TICs				ND	ND	219,230	ND	ND	1088,600	54,110	4,423
TOTAL BNs & TICs				227,306	211,655	1127,973	0.368	7,826	7895,100	289,631	38,594
Metals (ppm)											
Antimony	14	340	NLE	NA	NA	NA	NA	NA	ND	NA	NA
Arsenic	20	20	NLE	NA	NA	NA	NA	5,180	122,000	NA	NA
Beryllium	1,000	1,000	NLE	NA	NA	NA	NA	NA	0.190	NA	NA

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1359-05	1359-06	1524-01	1524-02	1524-03	1524-03	1524-10	1634-01
Sample ID #				C-52-1	C-52-2	C-56-1	C-56-2	C-57-1	C-57-2	C-57-3	C-58-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	5.5 - 6.0	8.5 - 9.0	6.0 - 6.5	12.0 - 12.5	7.0 - 7.5	11.5 - 12.0	0.0 - 0.5	5.5 - 6.0
Sample Date				4/7/97	4/7/97	4/16/97	4/16/97	4/16/97	4/16/97	4/16/97	4/17/97
Criteria Last Revised: Feb. 3, 1994											
Cadmium	1	100	NLE	NA	NA	NA	NA	NA	0.399	NA	NA
Chromium	NLE	NLE	NLE	NA	NA	NA	NA	3.990	8.360	NA	NA
Copper	600.000	600.000	NLE	NA	NA	NA	NA	13.300	53.300	NA	NA
Lead	100	600	NLE	NA	NA	NA	NA	13.100	81.200	NA	NA
Mercury	14	270	NLE	NA	NA	NA	NA	0.304	0.479	NA	NA
Nickel	250.000	2,400	NLE	NA	NA	NA	NA	4.620	11.100	NA	NA
Selenium	63.000	3,100	NLE	NA	NA	NA	NA	NA		NA	NA
Silver	110.000	4,100	NLE	NA	NA	NA	NA	NA		NA	NA
Thallium	2.000	2.000	NLE	NA	NA	NA	NA	NA	0.291	NA	NA
Zinc	1,500	1,500	NLE	NA	NA	NA	NA	18.900	69.700	NA	NA
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	ND	ND	NA	NA
Total Petroleum Hydrocarbons (ppm)				103.000	572.000	1440.000	103.000	2480.000	2580.000	676.000	NA
Polychlorinated Biphenyls (ppb)				NA	NA	NA	NA	NA	NA	NA	NA

CE 3.2073

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1534-02	1687-07	1534-10	1534-11	1534-03	1534-12	1534-13	1687-08
Sample ID #				C-58-2	C-58-3	C-59-1	C-59-2	C-60-1	C-61-1	C-61-2	C-61-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	9.5 - 10.0	0.0 - 0.5	5.5 - 6.0	9.0 - 9.5	6.0 - 6.5	4.5 - 5.0	7.5 - 8.0	0.0 - 0.5
Sample Date				4/14/97	4/22/97	4/17/97	4/17/97	4/17/97	4/17/97	4/17/97	4/22/97
Criteria Last Revised: Feb. 3, 1994											
PPM (mg/kg)											
Priority Pollutant AE & BN											
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	670	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	620	10	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	0.880	0.987	0.629	1.560	1.310	ND	ND	ND
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	0.211 J	0.233	0.639	1.320	ND	ND	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	60	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	5.120	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	ND	0.188 J	0.772	0.849	ND	ND	ND	ND
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	0.200 J	0.421	0.639	ND	ND	ND	ND
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	0.623 J	0.209 J	0.777	1.060	0.175 J	ND	ND	ND
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1534-02	1587-07	1534-10	1534-11	1534-03	1534-12	1534-13	1587-08
Sample ID #				C-58-2	C-58-3	C-59-1	C-59-2	C-60-1	C-61-1	C-61-2	C-61-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	9.5 - 10.0	0.0 - 0.5	5.5 - 6.0	9.0 - 9.5	6.0 - 6.5	4.5 - 5.0	7.5 - 8.0	0.0 - 0.5
Sample Date				4/14/97	4/22/97	4/17/97	4/17/97	4/17/97	4/17/97	4/17/97	4/22/97
Criteria Last Revised: Feb. 3, 1994											
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	21.000	1.630	5.690	7.320	1.290	0.729	ND	ND
Anthracene	10,000	10,000	100	5.740	0.330	1.510	1.940	0.247	0.177 J	ND	ND
Carbazole	NLE	NLE	NLE	0.674 J	0.143 J	0.854	0.998	ND	ND	ND	ND
Di-n-butylphthalate	5,700	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	64.800	1.250	6.270	6.960	1.650	1.220	ND	ND
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	63.600	1.200	5.840	6.560	1.520	1.290	ND	ND
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	31.800	0.612	2.810	3.210	0.814	0.678	ND	ND
Chrysene	9	40	500	26.100	0.634	2.770	2.960	0.878	0.655	ND	ND
bis(2-Ethylexyl)phthalate	49	210	100	ND	ND	0.348	0.592	ND	ND	ND	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	34.500	0.615	3.490	3.250	0.939	0.713	ND	ND
Benzo[k]fluoranthene	0.90	4	500	12.800	0.242	1.430	1.220	0.423	0.307	ND	ND
Benzo[a]pyrene	0.66	0.66	100	31.000	0.480	2.660	2.780	0.564	0.675	ND	ND
Ideno[1,2,3-cd]pyrene	0.90	4	500	19.200	0.320	0.925	1.650	0.497	0.408	ND	ND
Dibenzo[a,h]anthracene	0.66	0.66	100	4.880	ND	0.295	0.487	0.134 J	ND	ND	ND
Benzo[g,h,i]perylene	NLE	NLE	NLE	18.900	0.359	0.865	1.730	0.469	0.419	ND	ND
TOTAL BNs				341.617	9.310	38.489	46.304	12.230	7.171	ND	ND
TOTAL TICs				86.940	ND	3.767	17.407	5.415	0.968	ND	ND
TOTAL BNs & TICs				428.457	9.310	42.256	63.711	17.645	8.139	ND	ND
Metals (ppm)											
Antimony	14	340	NLE	NA	ND	NA	NA	NA	ND	ND	ND
Arsenic	20	20	NLE	NA	8.700	NA	NA	NA	8.590	16.000	10.600
Beryllium	1.000	1.000	NLE	NA	0.347	NA	NA	NA	0.416	0.112	0.454

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1534-02	1687-07	1534-10	1534-11	1534-03	1534-12	1534-13	1687-08
Sample ID #				C-58-2	C-58-3	C-59-1	C-59-2	C-60-1	C-61-1	C-61-2	C-61-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	9.5 - 10.0	0.0 - 0.5	5.5 - 6.0	9.0 - 9.5	6.0 - 6.5	4.5 - 5.0	7.5 - 8.0	0.0 - 0.5
Sample Date				4/14/97	4/22/97	4/17/97	4/17/97	4/17/97	4/17/97	4/17/97	4/22/97
Criteria Last Revised: Feb. 3, 1994											
Cadmium	1	100	NLE	NA	ND	NA	NA	NA	ND	ND	ND
Chromium	NLE	NLE	NLE	NA	30,000	NA	NA	NA	29,600	11,800	22,200
Copper	600,000	600,000	NLE	NA	30,700	NA	NA	NA	57,900	55,900	32,500
Lead	100	600	NLE	NA	267,000	NA	NA	NA	120,000	0.269	51,300
Mercury	14	270	NLE	NA	0.378	NA	NA	NA	0.679	1.280	0.108
Nickel	250,000	2,400	NLE	NA	19,700	NA	NA	NA	NA	NA	20,200
Selenium	63,000	3,100	NLE	NA	ND	NA	NA	NA	NA	NA	ND
Silver	110,000	4,100	NLE	NA	ND	NA	NA	NA	NA	NA	ND
Thallium	2,000	2,000	NLE	NA	0.131	NA	NA	NA	NA	NA	0.118
Zinc	1,600	1,500	NLE	NA	138,000	NA	NA	NA	NA	NA	146,000
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)				NA	NA	NA	NA	NA	NA	NA	NA

CE 3.2076

Tab
Edgewater Associates
Soil Analytical Results

Lab ID #				1485-09	1485-10	1485-07	1485-08	1585-11	1585-12	1585-13
Sample ID #				C-62-1	C-62-2	C-63-1	C-63-2	C-64-1	C-64-2	C-65-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	2.0 - 2.5	5.5 - 6.0	3.0 - 3.5	6.0 - 6.5	4.0 - 4.5	6.0 - 6.5	2.0 - 2.5
Sample Date				4/15/97	4/15/97	4/15/97	4/15/97	4/15/97	4/15/97	4/15/97
Criteria Last Revised: Feb. 3, 1994										
PPM (mg/kg)										
Metals										
Antimony	14	340	NLE	ND	ND	ND	ND	ND	ND	NA
Arsenic	20	20	NLE	1,990	3,160	6,840	7,390	5,450	176,000	NA
Beryllium	1	1	NLE	0.600	0.479	0.081	0.129	0.082	0.228	NA
Cadmium	1	100	NLE	0.237	0.245	ND	ND	0.285	ND	NA
Chromium	NLE	NLE	NLE	15,000	15,400	6,660	9,230	12,200	9,810	NA
Copper	600	600	NLE	15,300	17,700	29,600	26,400	90,400	154,000	NA
Lead	100	600	NLE	44,400	40,000	23,800	15,900	55,400	120,000	NA
Mercury	14	270	NLE	ND	0.040	0.080	0.051	0.152	0.232	NA
Nickel	250	2,400	NLE	23,800	21,700	15,300	12,300	17,000	13,000	NA
Selenium	63	3,100	NLE	ND	ND	ND	ND	ND	ND	NA
Silver	110	4,100	NLE	ND	ND	ND	ND	ND	ND	NA
Thallium	2	2	NLE	0.098	ND	ND	ND	ND	0.287	NA
Zinc	1,500	1,500	NLE	60,600	66,000	37,600	27,900	86,800	147,000	NA
VO+15 (mg/kg)				NA	NA	NA	NA	NA	NA	NA
Priority Pollutant VO										
Chloromethane	620	1,000	10	ND	ND	ND	ND	ND	ND	NA
Bromomethane	79	1,000	1	ND	ND	ND	ND	ND	ND	NA
Vinyl Chloride	2	7	10	ND	ND	ND	ND	ND	ND	NA
Chloroethane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	NA
Methylene Chloride	49	210	1	ND	ND	ND	ND	ND	ND	NA
Trichlorofluoromethane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	NA
1,1-Dichloroethene	8	150	10	ND	ND	ND	ND	ND	ND	NA
1,1-Dichloroethane	570	1,000	10	ND	ND	ND	ND	ND	ND	NA
Trans-1,2-Dichloroethylene	960	10,000	50	ND	ND	ND	ND	ND	ND	NA
Chloroform	19	28	1	ND	ND	ND	ND	ND	ND	NA
1,2-Dichloroethane	6	24	1	ND	ND	ND	ND	ND	ND	NA
1,1,1-Trichloroethane	210	1,000	50	ND	ND	ND	ND	ND	ND	NA
Carbon Tetrachloride	2	4	1	ND	ND	ND	ND	ND	ND	NA
Bromodichloromethane	11	46	1	ND	ND	ND	ND	ND	ND	NA

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1485-09	1485-10	1485-07	1485-08	1585-11	1585-12	1585-13
Sample ID #				C-62-1	C-62-2	C-63-1	C-63-2	C-64-1	C-64-2	C-65-1
Depth (feet) **Sample Date**	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	2.0 - 2.5 4/15/97	5.5 - 6.0 4/15/97	3.0 - 3.5 4/15/97	6.0 - 6.5 4/15/97	4.0 - 4.5 4/15/97	6.0 - 6.5 4/15/97	2.0 - 2.5 4/15/97
Criteria Last Revised: Feb. 3, 1994										
1,2-Dichloropropane	10	43	NLE	ND	ND	ND	ND	ND	ND	NA
cis & trans-1,3-Dichloropropene	4	5	1	ND	ND	ND	ND	ND	ND	NA
2-Chloroethyl vinyl ether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	NA
Trichloroethylene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	NA
Dibromochloromethane	110	1,000	1	ND	ND	ND	ND	ND	ND	NA
1,1,2-Trichloroethane	22	420	1	ND	ND	ND	ND	ND	ND	NA
Benzene	3	13	1	ND	ND	ND	ND	ND	ND	NA
Bromoform	86	370	1	ND	ND	ND	ND	ND	ND	NA
Tetrachloroethylene	4	6	1	ND	ND	ND	ND	ND	ND	NA
1,1,2,2-Tetrachloroethane	34	70	1	ND	ND	ND	ND	ND	ND	NA
Toluene	1,000	1,000	500	ND	ND	ND	ND	ND	ND	NA
Chlorobenzene	37	680	1	ND	ND	ND	ND	ND	ND	NA
Ethylbenzene	1,000	1,000	100	ND	ND	ND	ND	ND	ND	NA
M,O,P-Xylene	410	1,000	10	ND	ND	ND	ND	ND	ND	NA
1,2-Dichlorobenzene	5,100	10,000	60	ND	ND	ND	ND	ND	ND	NA
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	NA
1,4-Dichlorobenzene	280	1,200	100	ND	ND	ND	ND	ND	ND	NA
TOTAL VOs		--	--	ND	ND	ND	ND	ND	ND	ND
TOTAL TICs				348,600	16,500	ND	17,540	33,000	ND	
TOTAL VOs & TICs				348,600	16,500	ND	17,540	33,000	ND	
AEBN+25 (mg/kg)										
Priority Pollutant AE & BN										
Phenol	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	280	5,200	10	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	1,100	10,000	10	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	170	3,100	10	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	10,000	10,000	100	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	62	270	10	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	110	2,100	10	ND	ND	ND	ND	ND	ND	ND

CE 3.2078

Tab

Edgewater Associates
Soil Analytical Results

Lab ID #				1485-09	1485-10	1485-07	1485-08	1585-11	1585-12	1585-13
Sample ID #				C-62-1	C-62-2	C-63-1	C-63-2	C-64-1	C-64-2	C-65-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	2.0 - 2.5	5.5 - 6.0	3.0 - 3.5	6.0 - 6.5	4.0 - 4.5	6.0 - 6.5	2.0 - 2.5
Sample Date				4/15/97	4/15/97	4/15/97	4/15/97	4/15/97	4/15/97	4/15/97
Criteria Last Revised: Feb. 3, 1994										
4-Nitrophenol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	6	24	100	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-Di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	1.690	1.210	1.510	ND	ND	ND	3.650
2-Methylnaphthalene	NLE	NLE	NLE	0.674	0.447 J	1.680	ND	ND	ND	2.050
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	7.750	4.830	1.080	ND	ND	ND	12.200
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2,4-2,6-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	2.660	1.540	ND	ND	ND	ND	5.880
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	6.040	3.470	1.180	ND	ND	ND	12.300
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	46.500	29.100	13.100	ND	ND	ND	83.000
Anthracene	10,000	10,000	100	13.300	7.930	3.310	ND	ND	ND	23.500
Carbazole	NLE	NLE	NLE	5.580	3.820	1.090	ND	ND	ND	11.100

CE 3.2079

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1485-09	1485-10	1485-07	1485-08	1585-11	1585-12	1585-13
Sample ID #				C-62-1	C-62-2	C-63-1	C-63-2	C-64-1	C-64-2	C-65-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	2.0 - 2.5	5.5 - 6.0	3.0 - 3.5	6.0 - 6.5	4.0 - 4.5	6.0 - 6.5	2.0 - 2.5
Sample Date				4/16/97	4/16/97	4/16/97	4/16/97	4/16/97	4/16/97	4/16/97
Criteria Last Revised: Feb. 3, 1994										
Di-n-butylphthalate	5,700	10,000	100	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	59,500	37,700	14,400	ND	0.732	1,210	99,300
Pyrene	1,700	10,000	100	56,600	34,200	15,000	ND	0.799	1,220	93,500
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	26,300	16,100	8,430	ND	0.464 J	0.904	41,300
Chrysene	9	40	500	25,900	15,700	8,230	ND	0.585	1,060	40,600
bis(2-Ethylhexyl)phthalate	49	210	100	ND	ND	ND	ND	ND	ND	167,000
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	30,100
Benzo(b)fluoranthene	0.90	4	50	27,500	17,700	8,100	ND	0.861	1,220	46,800
Benzo(k)fluoranthene	0.90	4	500	9,740	6,920	3,430	ND	0.492	0.594 J	19,900
Benzo(a)pyrene	0.66	0.66	100	23,400	14,100	6,920	ND	0.672	1,000	37,100
Indeno(1,2,3-cd)pyrene	0.90	4	500	9,700	6,190	2,890	ND	ND	0.872	13,500
Dibenzo(a,h)anthracene	0.66	0.66	100	2,640	1,810	0,967	ND	ND	ND	4,240
Benzo(g,h,i)perylene	NLE	NLE	NLE	8,750	5,330	2,350	ND	ND	0.980	12,500
TOTAL BNs	--	--	--	334,124	208,097	93,657	ND	4,595	9,060	759,420
TOTAL TICs				67.91	25.31	10.76	ND	ND	ND	144.6
TOTAL BNs & TICs				402,034	233,407	104,327	ND	4,595	9,060	903,920
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				NA	NA	ND	NA	NA	NA	15000,000
PCB (ppb)	0.49	2	50	ND	ND	ND	ND	ND	ND	ND
Total Cyanides (ppm)	1,100	21,000	NLE	ND	ND	ND	ND	ND	ND	ND
Phenols (ppm)	10,000	10,000	50	0.228	ND	ND	ND	ND	ND	ND
Pesticides/Herbicides (ppm)	CS	CS	CS	ND	ND	ND	ND	ND	ND	ND

CE 3.2080

Tab
Edgewater Associates
Soil Analytical Results

Lab ID #				1471-03	1471-13	1471-14	1471-11	1471-12	1471-15	1485-01
Sample ID #				C-65-2	C-66-1	C-66-2	C-67-1	C-67-2	C-67-3	C-69-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	3.5 - 4.0	3.5 - 4.0	13.0 - 13.5	0.0 - 0.5	4.0 - 4.5	12.0 - 12.5	3.5 - 4.0
Sample Date				4/14/97	4/14/97	4/14/97	4/14/97	4/14/97	4/14/97	4/15/97
Criteria Last Revised: Feb. 3, 1994										
PPM (mg/kg)										
Metals										
Antimony	14	340	NLE	NA	NA	NA	ND	NA	ND	NA
Arsenic	20	20	NLE	NA	NA	NA	2.670	NA	6.970	NA
Beryllium	1	1	NLE	NA	NA	NA	0.415	NA	0.141	NA
Cadmium	1	100	NLE	NA	NA	NA	ND	NA	0.333	NA
Chromium	NLE	NLE	NLE	NA	NA	NA	23.400	NA	14.300	NA
Copper	600	600	NLE	NA	NA	NA	36.800	NA	66.300	NA
Lead	100	600	NLE	NA	NA	NA	36.600	NA	88.400	NA
Mercury	14	270	NLE	NA	NA	NA	0.074	NA	0.205	NA
Nickel	250	2,400	NLE	NA	NA	NA	19.800	NA	13.700	NA
Selenium	63	3,100	NLE	NA	NA	NA	ND	NA	ND	NA
Silver	110	4,100	NLE	NA	NA	NA	ND	NA	ND	NA
Thallium	2	2	NLE	NA	NA	NA	0.218	NA	ND	NA
Zinc	1,500	1,500	NLE	NA	NA	NA	93.500	NA	57.200	NA
VO+15 (mg/kg)				NA	NA	NA	NA	NA	NA	NA
Priority Pollutant VO										
Chloromethane	520	1,000	10	NA	NA	NA	NA	NA	NA	NA
Bromomethane	79	1,000	1	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	2	7	10	NA	NA	NA	NA	NA	NA	NA
Chloroethane	NLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	49	210	1	NA	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	NLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	8	150	10	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	570	1,000	10	NA	NA	NA	NA	NA	NA	NA
Trans-1,2-Dichloroethylene	960	10,000	50	NA	NA	NA	NA	NA	NA	NA
Chloroform	19	28	1	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	6	24	1	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	210	1,000	50	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	2	4	1	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	11	46	1	NA	NA	NA	NA	NA	NA	NA

CE 3.2081

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1471-03	1471-13	1471-14	1471-11	1471-12	1471-15	1485-01
Sample ID #				C-65-2	C-66-1	C-66-2	C-67-1	C-67-2	C-67-3	C-69-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	3.5 - 4.0	3.5 - 4.0	13.0 - 13.5	0.0 - 0.5	4.0 - 4.5	12.0 - 12.5	3.5 - 4.0
Sample Date				4/14/97	4/14/97	4/14/97	4/14/97	4/14/97	4/14/97	4/15/97
Criteria Last Revised: Feb. 3, 1994										
1,2-Dichloropropane	10	43	NLE	NA	NA	NA	NA	NA	NA	NA
cis & trans-1,3-Dichloropropene	4	5	1	NA	NA	NA	NA	NA	NA	NA
2-Chloroethyl vinyl ether	NLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA
Trichloroethylene	NLE	NLE	NLE	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	110	1,000	1	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	22	420	1	NA	NA	NA	NA	NA	NA	NA
Benzene	3	13	1	NA	NA	NA	NA	NA	NA	NA
Bromoform	86	370	1	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethylene	4	6	1	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	34	70	1	NA	NA	NA	NA	NA	NA	NA
Toluene	1,000	1,000	600	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	37	680	1	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	1,000	1,000	100	NA	NA	NA	NA	NA	NA	NA
M,O,P-Xylene	410	1,000	10	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	6,100	10,000	50	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	6,100	10,000	100	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	280	1,200	100	NA	NA	NA	NA	NA	NA	NA
TOTAL VOs		--	--	NA	NA	NA	NA	NA	NA	NA
TOTAL TICs				NA	NA	NA	NA	NA	NA	NA
TOTAL VOs & TICs				NA	NA	NA	NA	NA	NA	NA
AEBN+25 (mg/kg)				NA	NA	NA	NA	NA	NA	
Priority Pollutant AE & BN										
Phenol	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	280	6,200	10	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	1,100	10,000	10	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	170	3,100	10	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	10,000	10,000	100	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	62	270	10	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	110	2,100	10	ND	ND	ND	ND	ND	ND	ND

CE 3.2082

Tab

Edgewater Associates
Soil Analytical Results

Lab ID #				1471-03	1471-13	1471-14	1471-11	1471-12	1471-15	1485-01
Sample ID #				C-65-2	C-66-1	C-66-2	C-67-1	C-67-2	C-67-3	C-69-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	3.5 - 4.0	3.5 - 4.0	13.0 - 13.5	0.0 - 0.5	4.0 - 4.5	12.0 - 12.5	3.5 - 4.0
Sample Date				4/14/97	4/14/97	4/14/97	4/14/97	4/14/97	4/14/97	4/15/97
Criteria Last Revised: Feb. 3, 1994										
4-Nitrophenol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	6	24	100	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	670	10,000	100	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	60	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-Di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	620	10	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	60	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	0.288	ND	18.400	ND	0.914	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	0.140 J	ND	8.670	ND	0.398 J	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	60	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	ND	16.300	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	1.080	0.313	ND	ND	2.700	ND	ND
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2,4-2,6-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	0.461	ND	10.200	ND	1.210	ND	ND
Diethylphthalate	10,000	10,000	60	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	1.010	0.296	18.500	ND	2.710	ND	0.207 J
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	7.740	3.360	84.800	0.099 J	19.500	7.460	0.736
Anthracene	10,000	10,000	100	2.230	0.634	30.800	ND	5.600	2.270	0.280
Carbazole	NLE	NLE	NLE	1.000	0.243	8.410	ND	2.690	ND	ND

CE 3.2083

Table .
Edgewater Associates
Soil Analytical Results

Lab ID #				1471-03	1471-13	1471-14	1471-11	1471-12	1471-15	1485-01
Sample ID #				C-65-2	C-66-1	C-66-2	C-67-1	C-67-2	C-67-3	C-69-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	3.5 - 4.0	3.5 - 4.0	13.0 - 13.5	0.0 - 0.5	4.0 - 4.5	12.0 - 12.5	3.5 - 4.0
Sample Date				4/14/97	4/14/97	4/14/97	4/14/97	4/14/97	4/14/97	4/15/97
Criteria Last Revised: Feb. 3, 1994										
Di-n-butylphthalate	5,700	10,000	100	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	11.300	3.490	66.600	ND	28.300	11.600	2.650
Pyrene	1,700	10,000	100	10.400	3.540	58.500	ND	22.500	10.100	3.170
Butylbenzylphthalate	1,100	10,000	100	ND	0.246	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	6.550	1.720	27.200	0.098 J	13.200	5.780	1.510
Chrysene	9	40	500	5.330	1.830	22.900	0.106	13.100	5.890	1.460
bis(2-Ethylhexyl)phthalate	49	210	100	ND	0.393	ND	ND	11.700	ND	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	3.060	ND	ND
Benzo(b)fluoranthene	0.90	4	50	7.050	1.990	27.500	0.138	17.100	8.000	1.670
Benzo(k)fluoranthene	0.90	4	500	3.330	0.760	12.800	0.062	7.830	3.290	0.725
Benzo(a)pyrene	0.66	0.66	100	5.390	1.610	22.800	0.123	13.100	6.260	1.340
Indeno(1,2,3-cd)pyrene	0.90	4	500	1.600	0.626	5.010	0.084	3.650	4.530	0.947
Dibenzo(a,h)anthracene	0.66	0.66	100	0.621 J	0.204 J	1.630	ND	1.160	1.200 J	0.281
Benzo(g,h,i)perylene	NLE	NLE	NLE	1.410	0.624	3.910	0.085	3.070	4.410	0.920
TOTAL BNs	--	--	--	65.830	21.879	444.930	1.186 J	176.392 J	70.790 J	15.896
TOTAL TICs				7.268	3.085	106.640	ND	88.140	ND	1.05
TOTAL BNs & TICs				64.225	24.964	551.570	1.186 J	264.532 J	70.790 J	16.946
Chromium, Hexavalent (ppm)				NA	NA	NA	ND	NA	ND	NA
Total Petroleum Hydrocarbons (ppm)				NA	187.000	696.000	NA	0.585	ND	1200.000
PCB (ppb)	0.49	2	50	NA	NA	NA	NA	NA	NA	NA
Total Cyanides (ppm)	1,100	21,000	NLE	NA	NA	NA	NA	NA	NA	NA
Phenols (ppm)	10,000	10,000	50	NA	NA	NA	NA	NA	NA	NA
Pesticides/Herbicides (ppm)	CS	CS	CS	NA	NA	NA	NA	NA	NA	NA

CE 3.2084

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1485-02	1485	1485-04	1485-05	1485-06
Sample ID #				C-69-2	C-	C-70A-2	C-71-1	C-71-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	5.0 - 5.5	1.0 - 1.5	5.0 - 5.5	0.5 - 1.0	5.0 - 5.5
Sample Date				4/15/97	4/15/97	4/15/97	4/15/97	4/15/97
Criteria Last Revised: Feb. 3, 1994								
PPM (mg/kg)								
Metals								
Antimony	14	340	NLE	NA	NA	NA	NA	NA
Arsenic	20	20	NLE	NA	NA	NA	NA	NA
Beryllium	1	1	NLE	NA	NA	NA	NA	NA
Cadmium	1	100	NLE	NA	NA	NA	NA	NA
Chromium	NLE	NLE	NLE	NA	NA	NA	NA	NA
Copper	600	600	NLE	NA	NA	NA	NA	NA
Lead	100	600	NLE	NA	NA	NA	NA	NA
Mercury	14	270	NLE	NA	NA	NA	NA	NA
Nickel	250	2,400	NLE	NA	NA	NA	NA	NA
Selenium	63	3,100	NLE	NA	NA	NA	NA	NA
Silver	110	4,100	NLE	NA	NA	NA	NA	NA
Thallium	2	2	NLE	NA	NA	NA	NA	NA
Zinc	1,500	1,500	NLE	NA	NA	NA	NA	NA
VO+15 (mg/kg)				NA	NA	NA	NA	NA
Priority Pollutant VO								
Chloromethane	520	1,000	10	NA	NA	NA	NA	NA
Bromomethane	79	1,000	1	NA	NA	NA	NA	NA
Vinyl Chloride	2	7	10	NA	NA	NA	NA	NA
Chloroethane	NLE	NLE	NLE	NA	NA	NA	NA	NA
Methylene Chloride	49	210	1	NA	NA	NA	NA	NA
Trichlorofluoromethane	NLE	NLE	NLE	NA	NA	NA	NA	NA
1,1-Dichloroethene	8	150	10	NA	NA	NA	NA	NA
1,1-Dichloroethane	570	1,000	10	NA	NA	NA	NA	NA
Trans-1,2-Dichloroethylene	960	10,000	60	NA	NA	NA	NA	NA
Chloroform	19	28	1	NA	NA	NA	NA	NA
1,2-Dichloroethane	6	24	1	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	210	1,000	50	NA	NA	NA	NA	NA
Carbon Tetrachloride	2	4	1	NA	NA	NA	NA	NA
Bromodichloromethane	11	46	1	NA	NA	NA	NA	NA

CE 3.2085

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1485-02	1485-03	1485-04		1485-06
Sample ID #				C-69-2	C-70-1	C-70A-2		C-71-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	5.0 - 5.5	1.0 - 1.5	6.0 - 6.5	1.0	5.0 - 5.5
Sample Date				4/15/97	4/15/97	4/15/97	4/15/97	4/15/97
Criteria Last Revised: Feb. 3, 1994								
1,2-Dichloropropane	10	43	NLE	NA	NA	NA	NA	NA
cis & trans-1,3-Dichloropropene	4	5	1	NA	NA	NA	NA	NA
2-Chloroethyl vinyl ether	NLE	NLE	NLE	NA	NA	NA	NA	NA
Trichloroethylene	NLE	NLE	NLE	NA	NA	NA	NA	NA
Dibromochloromethane	110	1,000	1	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	22	420	1	NA	NA	NA	NA	NA
Benzene	3	13	1	NA	NA	NA	NA	NA
Bromoform	86	370	1	NA	NA	NA	NA	NA
Tetrachloroethylene	4	6	1	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	34	70	1	NA	NA	NA	NA	NA
Toluene	1,000	1,000	600	NA	NA	NA	NA	NA
Chlorobenzene	37	680	1	NA	NA	NA	NA	NA
Ethylbenzene	1,000	1,000	100	NA	NA	NA	NA	NA
M,O,P-Xylene	410	1,000	10	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	5,100	10,000	60	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	5,100	10,000	100	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	280	1,200	100	NA	NA	NA	NA	NA
TOTAL VOs		--	--	NA	NA	NA	NA	NA
TOTAL TICs				NA	NA	NA	NA	NA
TOTAL VOs & TICs				NA	NA	NA	NA	NA
AEBN+25 (mg/kg)								
Priority Pollutant AE & BN								
Phenol	10,000	10,000	50	ND	ND	ND	ND	ND
2-Chlorophenol	280	5,200	10	ND	ND	ND	ND	ND
2-Nitrophenol	NLE	NLE	NLE	ND	ND	ND	ND	ND
2,4-Dimethylphenol	1,100	10,000	10	ND	ND	ND	ND	ND
2,4-Dichlorophenol	170	3,100	10	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	10,000	10,000	100	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	62	270	10	ND	ND	ND	ND	ND
2,4-Dinitrophenol	110	2,100	10	ND	ND	ND	ND	ND

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1485-02	1485-03	1485-04	1485-05	1485-06
Sample ID #				C-69-2	C-70-1	C-70A-2	C-71-1	C-71-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	5.0 - 5.5	1.0 - 1.5	6.0 - 6.5	0.5 - 1.0	5.0 - 5.5
Sample Date				4/16/97	4/16/97	4/16/97	4/16/97	4/16/97
Criteria Last Revised: Feb. 3, 1994								
4-Nitrophenol	NLE	NLE	NLE	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NLE	NLE	NLE	ND	ND	ND	ND	ND
Pentachlorophenol	6	24	100	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	60	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND
N-Nitroso-Di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND
Nitrobenzene	28	620	10	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	60	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	ND	ND	ND	41,900	1,330
2-Methylnaphthalene	NLE	NLE	NLE	ND	ND	ND	38,000	1,810
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	60	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	ND	0.083 J	ND	17,800	1,940
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND
2,4-2,6-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	ND	ND	11,800	0.611
Diethylphthalate	10,000	10,000	60	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	ND	0.079 J	ND	34,300	3,160
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	0.112	0.721	ND	149,000	11,100
Anthracene	10,000	10,000	100	ND	0.185	ND	24,500	2,120
Carbazole	NLE	NLE	NLE	ND	0.085 J	ND	6,650	ND

CE 3.2087

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1485-02	1485-03	1485-04	1485-05	1485-06
Sample ID #				C-69-2	C-70-1	C-70A-2	C-71-1	C-71-2
Depth (feet) Sample Date	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	5.0 - 5.5 4/15/97	1.0 - 1.5 4/15/97	6.0 - 6.5 4/15/97	0.5 - 1.0 4/15/97	5.0 - 5.5 4/15/97
Criteria Last Revised: Feb. 3, 1994								
Di-n-butylphthalate	5,700	10,000	100	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	0.355	1.370	ND	83.300	8.940
Pyrene	1,700	10,000	100	0.406	1.570	ND	93.800	9.750
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	2.190	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	0.215	0.859	ND	33.800	3.820
Chrysene	9	40	500	0.227	0.862	ND	36.000	3.720
bis(2-Ethylhexyl)phthalate	49	210	100	ND	ND	ND	25.800	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.90	4	50	0.251	1.210	ND	27.700	2.720
Benzo(k)fluoranthene	0.90	4	500	0.097	0.478	ND	10.500	1.190
Benzo(a)pyrene	0.66	0.66	100	0.206	0.843	ND	26.800	2.820
Indeno(1,2,3-cd)pyrene	0.90	4	500	0.154	0.274	ND	8.650	1.460
Dibenzo(a,h)anthracene	0.66	0.66	100	ND	0.088 J	ND	3.170	0.484
Benzo(g,h,i)perylene	NLE	NLE	NLE	0.156	0.220	ND	7.720	1.670
TOTAL BNs	--	--	--	2.179	8.927	0.000	683.280	68.845
TOTAL TICs				ND	0.626	ND	339.1	59.47
TOTAL BNs & TICs				2.179	9.553	0.000	1022.380	118.315
Chromium, Hexavalent (ppm)				NA	NA	NA	NA	NA
Total Petroleum Hydrocarbons (ppm)				111.000	320.000	57.300	916.000	4510.000
PCB (ppb)	0.49	2	50	NA	NA	NA	NA	NA
Total Cyanides (ppm)	1,100	21,000	NLE	NA	NA	NA	NA	NA
Phenols (ppm)	10,000	10,000	50	NA	NA	NA	NA	NA
Pesticides/Herbicides (ppm)	CS	CS	CS	NA	NA	NA	NA	NA

CE 3.2088

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1564-13	1564-14	1564-15	1564-16	1564-17
Sample ID #				C-74-1	C-74-2	C-75-1	C-75-2	C-75-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	5.0 - 5.5	0.0 - 0.5	3.5 - 4.0	13.5 - 14.0
Sample Date				4/19/97	4/19/97	4/19/97	4/19/97	4/19/97
Criteria Last Revised: Feb. 3, 1994								
PPM (mg/kg)								
Priority Pollutant AE & BN								
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	670	10,000	100	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	60	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	0.157 J	ND	0.328	2.080	ND
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	ND	0.177 J	1.030	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	0.236	ND	0.280	0.180 J	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	0.155 J	ND	0.454	2.400	ND
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	ND	0.245	1.260	ND
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	0.164 J	0.165 J	0.462	1.990	ND
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND

CE 3.2089

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1564-13	1564-14	1564-		1564-17
Sample ID #				C-74-1	C-74-2	C-75	-2	C-76-3
Depth (feet) Sample Date	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5 4/18/97	5.0 - 5.5 4/18/97	0.0 - 4/1	.5 - 4.0 4/18/97	13.5 - 14.0 4/18/97
Criteria Last Revised: Feb. 3, 1994								
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	1.530	1.630	3.400	11.600	ND
Anthracene	10,000	10,000	100	0.393	0.432	0.987	2.930	ND
Carbazole	NLE	NLE	NLE	0.157 J	0.250	0.317	1.660	ND
Di-n-butylphthalate	5,700	10,000	100	1.770	ND	ND	1.900	ND
Fluoranthene	2,300	10,000	100	2.630	2.550	5.400	12.800	ND
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	2.990	2.390	5.360	11.300	ND
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	29.900	0.367	ND	2.960	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	1.360	1.070	2.660	5.430	ND
Chrysene	9	40	500	1.480	1.110	2.870	4.910	ND
bis(2-Ethylexyl)phthalate	49	210	100	7.590	0.500	0.153 J	8.870	ND
Di-n-octylphthalate	1,100	10,000	100	0.135 J	ND	ND	0.955	ND
Benzo[b]fluoranthene	0.90	4	50	2.240	1.200	3.610	6.710	ND
Benzo[k]fluoranthene	0.90	4	500	0.965	0.659	1.850	2.850	ND
Benzo[a]pyrene	0.66	0.66	100	1.610	0.822	2.710	4.980	ND
Ideno[1,2,3-cd]pyrene	0.90	4	500	0.434	0.145 J	0.867	1.250	ND
Dibenzo[a,h]anthracene	0.66	0.66	100	0.142 J	ND	0.280	0.384	ND
Benzo[g,h,i]perylene	NLE	NLE	NLE	0.392	ND	0.784	1.020	ND
TOTAL BNs				56.430	13.290	33.194	91.449	0.00
TOTAL TICs				3.520	ND	3.893	39.120	0.00
TOTAL BNs & TICs				59.950	13.290	37.087	130.569	0.00
Metals								
Antimony	14	340	NLE	ND	ND	ND	ND	ND
Arsenic	20	20	NLE	5.950	2.180	8.920	4.540	7.140
Beryllium	1	1	NLE	0.496	0.473	0.362	0.409	0.118

CE 3.2090

Tab
Edgewater Associates
Soil Analytical Results

Lab ID #				1564-13	1564-14	1564-15		1564-17
Sample ID #				C-74-1	C-74-2	C-75-1	2	C-75-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	5.0 - 5.5	0.0 - 0.5	3.5 - 4.0	13.5 - 14.0
Sample Date				4/19/97	4/19/97	4/19/97	4/19/97	4/19/97
Criteria Last Revised: Feb. 3, 1994								
Cadmium	1	100	NLE	0.230	ND	0.271	0.812	ND
Chromium	NLE	NLE	NLE	20.500	22.100	20.200	23.700	2.810
Copper	600	600	NLE	129.000	30.100	50.200	31.400	26.700
Lead	100	600	NLE	112.000	74.300	114.000	361.000	ND
Mercury	14	270	NLE	0.345	0.510	0.462	2.330	0.033
Nickel	250	2,400	NLE	21.300	20.400	19.300	14.900	7.770
Selenium	63	3,100	NLE	ND	ND	ND	ND	ND
Silver	110	4,100	NLE	ND	ND	ND	0.660	ND
Thallium	2	2	NLE	0.164	0.244	ND	ND	ND
Zinc	1,500	1,500	NLE	239.000	73.000	177.000	314.000	11.500
Chromium, Hexavalent (ppm)				ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (ppm)				1430.000	204.000	NA	NA	NA
Polychlorinated Biphenyls (ppb)				NA	NA	NA	NA	NA

CE 3.2091

Table .
Edgewater Associates
Soil Analytical Results

Lab ID #				1563-01	1563-02	1563-03	1563-04	1563-05	1563-06	1563-07
Sample ID #				C-76-1	C-76-2	C-76-3	C-77-1	C-77-2	C-77-3	C-77-4
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.6	3.5 - 4.0	9.0 - 9.5	0.0 - 0.5	3.5 - 4.0	12.5 - 13.0	15.5 - 16.0
Sample Date				4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97
Criteria Last Revised: Feb. 3, 1994										
PPM (mg/kg)										
Priority Pollutant AE & BN										
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	60	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	620	10	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	60	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	0.149 J	4.040	0.979	0.239	ND	9.770	21.600
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	1.360	0.309	ND	ND	2.940	6.980
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	60	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	0.253	ND	0.246	0.286	ND	ND	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	0.341	2.670	1.240	0.612	ND	14.700	40.600
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	1.830	0.546	0.179 J	ND	5.710	15.400
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	0.302	2.960	1.010	0.316	ND	12.000	32.200
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND

CE 3.2092

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1563-01	1563-02	1563-03	1563-04	1563-05	1563-06	1563-07
Sample ID #				C-76-1	C-76-2	C-76-3	C-77-1	C-77-2	C-77-3	C-77-4
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	3.5 - 4.0	9.0 - 9.5	0.0 - 0.5	3.5 - 4.0	12.5 - 13.0	15.5 - 16.0
Sample Date				4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97
Criteria Last Revised: Feb. 3, 1994										
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	3.430	15.900	10.100	3.020	0.324	86.200	239.000
Anthracene	10,000	10,000	100	0.941	4.070	2.970	0.905	ND	17.000	47.200
Carbazole	NLE	NLE	NLE	0.211 J	3.020	1.120	0.331	ND	18.300	51.300
Di-n-butylphthalate	5,700	10,000	100	0.310	0.439	0.273	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	4.620	12.800	17.100	5.310	0.699	112.000	324.000
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	5.890	12.000	17.700	5.820	0.847	104.000	300.000
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	0.993	0.409	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	2.690	6.130	9.070	2.920	0.439	61.800	177.000
Chrysene	9	40	500	2.700	4.790	8.300	3.050	0.432	64.200	191.000
bis(2-Ethylexyl)phthalate	49	210	100	0.186 J	11.900	7.820	0.203 J	ND	ND	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	0.372	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	3.230	5.420	11.700	4.440	0.573	93.600	296.000
Benzo[k]fluoranthene	0.90	4	500	1.170	2.530	4.690	1.760	0.246	38.300	90.000
Benzo[a]pyrene	0.66	0.66	100	2.610	4.490	8.960	3.270	0.457	66.100	191.000
Ideno[1,2,3-cd]pyrene	0.90	4	500	1.140	1.630	2.660	1.230	0.147 J	26.500	69.800
Dibenzo[a,h]anthracene	0.66	0.66	100	0.351	0.465	0.755	0.351	ND	8.610	22.400
Benzo[g,h,i]perylene	NLE	NLE	NLE	1.160	1.380	2.640	1.110	0.132 J	26.500	68.800
TOTAL BNs				31.684	99.687	110.768	36.251	4.296	767.230	2174.080
TOTAL TICs				2.920	41.640	23.265	2.360	ND	120.720	473.700
TOTAL BNs & TICs				34.604	141.327	134.033	37.611	4.296	887.950	2647.780
Metals (ppm)										
Antimony	14	340	NLE	ND	ND	ND	ND	3.840	ND	5.210
Arsenic	20	20	NLE	5.470	6.600	4.100	11.700	5.040	91.900	108.000
Beryllium	1	1	NLE	0.453	0.429	0.417	0.473	0.400	0.278	0.299

CE 3.2093

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1563-01	1563-02	1563-03	1563-04	1563-05	1563-06	1563-07
Sample ID #				C-76-1	C-76-2	C-76-3	C-77-1	C-77-2	C-77-3	C-77-4
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	3.5 - 4.0	9.0 - 9.5	0.0 - 0.5	3.5 - 4.0	12.5 - 13.0	15.5 - 16.0
Sample Date				4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97
Criteria Last Revised: Feb. 3, 1994										
Cadmium	1	100	NLE	ND	0.657	0.578	0.563	ND	1.370	2.820
Chromium	NLE	NLE	NLE	24.600	17.800	26.800	24.700	157.000	14.300	24.000
Copper	600	600	NLE	40.400	31.700	38.000	56.700	88.800	480.000	655.000
Lead	100	600	NLE	154.000	238.000	270.000	139.000	65.900	858.000	1020.000
Mercury	14	270	NLE	0.214	0.922	1.380	0.348	0.098	1.390	2.090
Nickel	250	2,400	NLE	20.400	10.700	16.300	21.600	50.100	21.600	17.800
Selenium	63	3,100	NLE	ND	ND	ND	ND	2.590	5.010	6.740
Silver	110	4,100	NLE	ND	ND	ND	ND	ND	0.930	1.490
Thallium	2	2	NLE	ND	ND	ND	ND	0.106	1.540	1.980
Zinc	1,500	1,500	NLE	162.000	385.000	219.000	207.000	107.000	619.000	654.000
Chromium, Hexavalent (ppm)	--	--	--	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (ppm)	--	--	--	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)	--	--	--	NA	NA	NA	NA	NA	NA	NA

CE 3.2094

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1563-08	1563-09	1563-10	1563-11	1563-12	1563-13	1563-14
Sample ID #				C-78-1	C-78-2	C-78-3	C-79-1	C-79-2	C-79-3	C-80-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	3.5 - 4.0	11.5 - 12.0	0.0 - 0.5	4.5 - 5.0	6.5 - 7.0	0.0 - 0.5
Sample Date				4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97
Criteria Last Revised: Feb. 3, 1994										
PPM (mg/kg)										
Priority Pollutant AE & BN										
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	6,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	0.134 J	2.640	1.180	ND	6.360	20.100	ND
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	0.967	0.554 J	ND	0.429 J	8.840	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	0.176 J	0.180 J	ND	ND	ND	0.793	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	0.246	2.890	3.850	0.125	1.400	4.860	ND
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	1.690	1.620	ND	ND	3.310	ND
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	0.200 J	1.830	3.520	0.114 J	0.717	5.110	ND
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND

CE 3.2095

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1563-08	1563-09	1563-10	1563-11	1563-12	1563-13	1563-14
Sample ID #				C-78-1	C-78-2	C-78-3	C-79-1	C-79-2	C-79-3	C-80-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	3.5 - 4.0	11.5 - 12.0	0.0 - 0.5	4.5 - 5.0	6.5 - 7.0	0.0 - 0.5
Sample Date				4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97
Criteria Last Revised: Feb. 3, 1994										
N-Nitrosodiphenylamine	140	690	100	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	1.790	15.700	35.300	1.780	7.320	16.800	0.756
Anthracene	10,000	10,000	100	0.494	2.470	8.290	0.382	1.590	3.610	0.134 J
Carbazole	NLE	NLE	NLE	0.168 J	1.190	5.050	0.138	1.060	0.858	ND
Di-n-butylphthalate	5,700	10,000	100	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	3.070	13.900	48.600	3.060	11.700	10.600	1.310
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	3.600	14.800	49.400	3.290	14.300	10.500	1.560
3,3'-Dimethylbenzidine	NLE	NLE	NLE	1.410	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	1.740	5.940	25.000	1.440	7.440	3.710	0.640
Chrysene	9	40	500	1.880	5.630	25.100	1.430	8.850	4.240	0.747
bis(2-Ethylexyl)phthalate	49	210	100	0.125 J	0.172 J	ND	ND	ND	ND	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	60	2.610	7.630	42.000	2.260	14.200	5.080	1.010
Benzo[k]fluoranthene	0.90	4	500	1.100	2.660	16.500	0.912	6.900	2.430	0.476
Benzo[a]pyrene	0.66	0.66	100	1.890	5.190	27.000	1.390	9.510	3.310	0.673
Ideno[1,2,3-cd]pyrene	0.90	4	500	0.714	1.490	8.480	0.271	2.160	0.723	0.134 J
Dibenzo[a,h]anthracene	0.66	0.66	100	0.213	0.450	2.640	0.075 J	0.681	0.218 J	ND
Benzo[g,h,i]perylene	NLE	NLE	NLE	0.638	1.270	7.130	0.198	1.760	0.584	ND
TOTAL BNs				22.198	88.689	310.214	16.865	96.377	105.676	7.440
TOTAL TICs				2.560	16.747	56.27	0.986	7.2	21.72	ND
TOTAL BNs & TICs				24.758	105.436	366.484	17.851	103.577	127.396	7.440
Metals (ppm)										
Antimony	14	340	NLE	6.570	ND	ND	3.320	42.700	52.000	ND
Arsenic	20	20	NLE	5.680	4.080	17.800	4.330	2900.000	3370.000	3.540
Beryllium	1	1	NLE	0.451	0.316	0.509	0.376	ND	0.166	0.480

CE 3.2096

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1563-08	1563-09	1563-10	1563-11	1563-12	1563-13	1563-14
Sample ID #				C-78-1	C-78-2	C-78-3	C-79-1	C-79-2	C-79-3	C-80-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	3.5 - 4.0	11.5 - 12.0	0.0 - 0.5	4.5 - 5.0	6.5 - 7.0	0.0 - 0.5
Sample Date				4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97
Criteria Last Revised: Feb. 3, 1994										
Cadmium	1	100	NLE	ND	ND	0.508	ND	1.060	2.670	ND
Chromium	NLE	NLE	NLE	26.500	51.400	39.600	80.400	17.300	47.900	19.700
Copper	600	600	NLE	68.700	48.400	58.000	63.000	563.000	1240.000	26.500
Lead	100	600	NLE	110.000	89.800	324.000	80.300	6520.000	8210.000	81.000
Mercury	14	270	NLE	0.243	0.118	3.100	0.114	43.700	87.600	0.094
Nickel	250	2,400	NLE	23.900	26.000	37.200	32.100	15.300	44.900	20.100
Selenium	63	3,100	NLE	ND	ND	3.250	ND	34.600	103.000	ND
Silver	110	4,100	NLE	ND	ND	0.850	ND	19.800	7.100	ND
Thallium	2	2	NLE	ND	0.108	0.219	0.136	15.600	12.900	0.151
Zinc	1,500	1,500	NLE	141.000	114.000	137.000	86.100	316.000	1040.000	82.800
Chromium, Hexavalent (ppm)	--	--	--	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (ppm)	--	--	--	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)	--	--	--	NA	NA	NA	NA	NA	NA	NA

CE 3.2097

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1563-15	1563-16	1563-17	1563-21	1563-18	1563-19	1563-20
Sample ID #				C-80-2	C-81-1	C-81-2	C-81-3	C-82-1	C-82-2	C-82-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	4.5 - 5.0	0.0 - 0.5	3.5 - 4.0	8.5 - 9.0	0.0 - 0.5	3.0 - 3.5	14.5 - 15.0
Sample Date				4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97
Criteria Last Revised: Feb. 3, 1994										
PPM (mg/kg)										
Priority Pollutant AE & BN										
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	620	10	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	0.190 J	0.139 J	0.613	1.520	0.288	1.480	ND
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	ND	0.256	0.532	ND	0.620	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	1.280	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	0.265	ND	ND	0.421	ND	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	0.393	0.231	0.741	1.160	0.430	1.890	ND
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	ND	0.405	0.584	0.173 J	0.854	ND
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	0.230 J	0.201	0.779	1.090	0.335	1.960	ND
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND

CE 3.2098

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1563-15	1563-16	1563-17	1563-21	1563-18	1563-19	1563-20
Sample ID #				C-80-2	C-81-1	C-81-2	C-81-3	C-82-1	C-82-2	C-82-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	4.5 - 5.0	0.0 - 0.5	3.5 - 4.0	8.5 - 9.0	0.0 - 0.5	3.0 - 3.5	14.5 - 15.0
Sample Date				4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97
Criteria Last Revised: Feb. 3, 1994										
N-Nitrosodiphenylamine	140	690	100	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	2,270	1,960	5,310	6,980	3,140	12,200	3,530
Anthracene	10,000	10,000	100	0.479	0.534	1,220	1,620	1,060	2,960	0.773
Carbazole	NLE	NLE	NLE	0.329	0.220	0.772	1,050	0.392	1,910	ND
Di-n-butylphthalate	5,700	10,000	100	ND	ND	ND	0.475	0.212 J	ND	ND
Fluoranthene	2,300	10,000	100	4,160	3,480	5,760	7,160	6,120	14,600	3,770
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	4,520	4,820	5,620	6,400	6,450	12,700	3,850
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	0.867	0.750	ND	2,510	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	2,500	2,000	2,230	2,890	3,330	5,760	1,820
Chrysene	9	40	500	2,650	2,140	2,380	2,720	3,360	5,400	1,750
bis(2-Ethylexyl)phthalate	49	210	100	ND	0.160 J	4,290	5,880	0.262	9,160	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	0.338	1,840	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	4,600	3,600	3,320	3,500	6,060	7,080	2,570
Benzo[k]fluoranthene	0.90	4	500	2,170	1,340	1,670	1,700	1,970	3,190	1,160
Benzo[a]pyrene	0.66	0.66	100	2,900	2,100	2,250	2,820	3,600	5,210	1,750
Ideno[1,2,3-cd]pyrene	0.90	4	500	0.728	0.446	0.409	0.782	1,200	1,620	ND
Dibenzo[a,h]anthracene	0.66	0.66	100	0.220 J	0.126 J	ND	0.243 J	0.357	0.496 J	ND
Benzo[g,h,i]perylene	NLE	NLE	NLE	0.671	0.376	0.320	0.638	1,160	1,460	ND
TOTAL BNs				28,810	24,038	39,550	53,414	39,320	93,050	20,973
TOTAL TICs				2.2	1.63	22.04	52.21	3,584	53.46	ND
TOTAL BNs & TICs				31,010	26,668	61,590	105,624	42,904	146,510	20,973
Metals (ppm)										
Antimony	14	340	NLE	46,500	ND	3,330	ND	ND	2,710	ND
Arsenic	20	20	NLE	684,000	7,790	6,800	5,200	10,300	6,900	17,600
Beryllium	1	1	NLE	ND	0.377	0.441	0.385	0.367	0.509	ND

CE 3.2099

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1563-15	1563-16	1563-17	1563-21	1563-18	1563-19	1563-20
Sample ID #				C-80-2	C-81-1	C-81-2	C-81-3	C-82-1	C-82-2	C-82-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	4.5 - 5.0	0.0 - 0.5	3.5 - 4.0	8.5 - 9.0	0.0 - 0.5	3.0 - 3.5	14.5 - 15.0
Sample Date				4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97
Criteria Last Revised: Feb. 3, 1994										
Cadmium	1	100	NLE	ND	ND	ND	0.907	ND	0.957	ND
Chromium	NLE	NLE	NLE	69.900	24.500	19.9	18.6	26.5	24.3	12
Copper	600	600	NLE	854.000	53.000	29.9	42.6	61.1	50.9	71.5
Lead	100	600	NLE	5710.000	269.000	1130.000	361.000	127.000	575.000	146.000
Mercury	14	270	NLE	33.300	0.304	0.726	1.480	0.366	0.385	0.060
Nickel	250	2,400	NLE	57.500	23.200	21.400	14.400	23.400	12.700	14.900
Selenium	63	3,100	NLE	88.300	ND	ND	ND	ND	ND	ND
Silver	110	4,100	NLE	2.580	ND	ND	ND	ND	ND	ND
Thallium	2	2	NLE	2.330	0.126	0.204	ND	0.100	ND	0.552
Zinc	1,500	1,500	NLE	173.000	182.000	93.800	427.000	226.000	473.000	35.200
Chromium, Hexavalent (ppm)	--	--	--	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (ppm)	--	--	--	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)	--	--	--	NA	NA	NA	NA	NA	NA	NA

CE 3.2100

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1563-22	1563-23	1563-24	25	1563-26	1563-27	1578-01
Sample ID #				C-83-1	C-83-2	C-83-	4-1	C-84-2	C-84A-3	C-85-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	3.0 - 3.5	5.0 -	0.0 - 0.5	3.0 - 3.5	6.0 - 6.5	0.0 - 0.5
Sample Date				4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/21/97
Criteria Last Revised: Feb. 3, 1994										
PPM (mg/kg)										
Priority Pollutant AE & BN										
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	6,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	670	10,000	100	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	69	1,200	100	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	ND	0.242	2.240	ND	22.600	ND	ND
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	ND	0.742	ND	19.400	ND	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	6.940	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	0.388	ND	0.188 J	ND	0.136 J	0.174 J
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	ND	0.647	5.900	0.330	24.300	ND	0.383
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	0.361	2.020	0.129 J	15.700	ND	ND
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	ND	0.768	4.470	0.303	31.700	ND	0.336
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND

CE 3.2101

Table .
Edgewater Associates
Soil Analytical Results

Lab ID #				1563-22	1563-23	1563-24	1563-25	1563-26	1563-27	1578-01
Sample ID #				C-83-1	C-83-2	C-83-3	C-84-1	C-84-2	C-84A-3	C-85-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	3.0 - 3.5	5.0 - 5.5	0.0 - 0.5	3.0 - 3.5	6.0 - 6.5	0.0 - 0.5
Sample Date				4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/21/97
Criteria Last Revised: Feb. 3, 1994										
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	0.468	7.380	32.700	3.330	188.000	0.997	3.630
Anthracene	10,000	10,000	100	ND	2.020	9.270	0.960	62.600	0.299	1.010
Carbazole	NLE	NLE	NLE	ND	1.270	4.820	0.384	26.700	ND	0.453
Di-n-butylphthalate	6,700	10,000	100	ND	ND	ND	ND	4.950	ND	ND
Fluoranthene	2,300	10,000	100	0.801	12.500	38.400	5.960	164.000	1.440	6.480
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	0.904	11.600	33.000	6.110	145.000	1.810	5.820
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	0.131 J	4.220	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	0.446	6.640	16.900	3.320	76.100	0.742	3.430
Chrysene	9	40	500	0.467	5.180	18.200	3.520	67.500	0.775	3.430
bis(2-Ethylexyl)phthalate	49	210	100	ND	0.560	2.870	0.470	9.640	0.226	0.266
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	0.621	6.880	17.400	4.050	64.800	0.721	4.220
Benzo[k]fluoranthene	0.90	4	500	0.291	3.210	7.680	1.790	28.100	0.362	1.860
Benzo[a]pyrene	0.66	0.66	100	0.430	5.000	15.200	3.390	53.600	0.708	3.480
Ideno[1,2,3-cd]pyrene	0.90	4	500	ND	1.640	8.270	1.280	17.600	0.219	1.390
Dibenzo[a,h]anthracene	0.66	0.66	100	ND	0.488	2.430	0.409	6.360	ND	0.457
Benzo[g,h,i]perylene	NLE	NLE	NLE	ND	1.310	8.540	1.110	17.000	0.203 J	1.390
TOTAL BNs				4.418	67.084	235.992	37.164	1048.770	8.638	38.209
TOTAL TICs				ND	12.97	39.65	5.115	190.1	ND	5.938
TOTAL BNs & TICs				4.418	80.054	276.642	42.279	1238.870	8.638	44.147
Metals (ppm)										
Antimony	14	340	NLE	2.790	ND	ND	ND	3.680	ND	ND
Arsenic	20	20	NLE	2.500	5.060	14.100	6.950	8.100	5.730	4.680
Beryllium	1	1	NLE	0.297	0.334	0.408	0.406	0.767	0.545	0.428

CE 3.2102

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1563-22	1563-23	1563-24	1563-25	1563-26	1563-27	1578-01
Sample ID #				C-83-1	C-83-2	C-83-3	C-84-1	C-84-2	C-84A-3	C-85-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	3.0 - 3.5	5.0 - 5.5	0.0 - 0.5	3.0 - 3.5	6.0 - 6.5	0.0 - 0.5
Sample Date				4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/20/97	4/21/97
Criteria Last Revised: Feb. 3, 1994										
Cadmium	1	100	NLE	ND	0.676	0.755	0.734	0.956	ND	0.467
Chromium	NLE	NLE	NLE	37.9	19.1	25.5	28.4	34	24.6	20.200
Copper	600	600	NLE	29.9	563	69	70.1	84.4	22.4	41.100
Lead	100	600	NLE	64.700	295.000	243.000	232.000	376.000	39.500	141.000
Mercury	14	270	NLE	0.298	0.376	0.298	0.505	0.576	0.062	0.231
Nickel	250	2,400	NLE	28.200	19.300	26.500	35.800	34.000	25.400	17.100
Selenium	63	3,100	NLE	ND	ND	ND	ND	3.550	ND	ND
Silver	110	4,100	NLE	ND	ND	ND	ND	ND	ND	ND
Thallium	2	2	NLE	0.222	0.109	0.170	0.097	0.120	0.109	0.119
Zinc	1,500	1,500	NLE	124.000	397.000	370.000	330.000	588.000	83.200	214.000
Chromium, Hexavalent (ppm)	--	--	--	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (ppm)	--	--	--	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)	--	--	--	NA	NA	NA	NA	NA	NA	NA

CE 3.2103

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1578-02	1578-03	1578-04	1578-05	1578-06	1587-01	1587-02
Sample ID #				C-85-2	C-85-3	C-86-1	C-86-2	C-86-3	C-87-1	C-87-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	4.0 - 4.5	12.0 - 12.5	0.0 - 0.5	4.0 - 4.5	13.0 - 13.5	0.0 - 0.5	2.5 - 3.0
Sample Date				4/21/97	4/21/97	4/21/97	4/21/97	4/21/97	4/22/97	4/22/97
Criteria Last Revised: Feb. 3, 1994										
PPM (mg/kg)										
Priority Pollutant AE & BN										
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	60	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	60	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	14,100	ND	9,970	3,220	ND	ND	3,040
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	5,680	ND	3,880	1,370	ND	ND	1,420
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	60	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	ND	ND	ND	ND	0.330	0.302 J
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	16,600	0.322	22,100	4,900	ND	0.654	3,660
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	9,020	ND	10,400	2,210	ND	0.182 J	2,000
Diethylphthalate	10,000	10,000	60	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	17,200	0.321	23,700	4,650	ND	0.554	4,060
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND

CE 3.2104

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1578-02	1578-03	1578-04	1578-05	1578-06	1587-01	1587-02
Sample ID #				C-85-2	C-85-3	C-86-1	C-86-2	C-86-3	C-87-1	C-87-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	4.0 - 4.5	12.0 - 12.5	0.0 - 0.5	4.0 - 4.5	13.0 - 13.5	0.0 - 0.5	2.5 - 3.0
Sample Date				4/21/97	4/21/97	4/21/97	4/21/97	4/21/97	4/22/97	4/22/97
Criteria Last Revised: Feb. 3, 1994										
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	92,300	3,230	161,000	27,300	1,360	6,640	18,300
Anthracene	10,000	10,000	100	25,600	0,999	53,400	7,600	0,312	2,010	5,090
Carbazole	NLE	NLE	NLE	15,400	0,437	21,300	4,670	0,139 J	0,819	2,550
Di-n-butylphthalate	5,700	10,000	100	5,530	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	95,700	4,770	211,000	33,600	2,600	12,700	16,700
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	74,500	4,250	184,000	28,300	2,620	12,500	14,700
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	1,190	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	6,220	ND	ND	1,710	ND	0,184 J	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	40,300	2,300	98,300	14,100	1,350	7,190	7,180
Chrysene	9	40	500	38,600	2,180	93,300	13,500	1,250	6,910	7,060
bis(2-Ethylexyl)phthalate	49	210	100	4,360	0,188 J	ND	15,900	ND	0,470	16,800
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	0,491 J	ND	ND	0,301 J
Benzo[b]fluoranthene	0.90	4	50	43,000	2,510	108,000	16,500	1,680	11,000	8,030
Benzo[k]fluoranthene	0.90	4	500	17,000	1,230	46,400	7,910	0,834	4,280	3,820
Benzo[a]pyrene	0.66	0.66	100	33,200	2,160	86,500	13,200	1,310	7,750	6,880
Ideno[1,2,3-cd]pyrene	0.90	4	500	12,800	0,912	28,900	3,980	0,426	2,420	1,980
Dibenzo[a,h]anthracene	0.66	0.66	100	4,290	0,278 J	5,680	1,280	0,135 J	0,689	0,614
Benzo[g,h,i]perylene	NLE	NLE	NLE	12,000	0,829	22,400	3,620	0,368	2,200	1,690
TOTAL BNs				583,400	28,106	1193,230	210,011	14,384	79,382	124,957
TOTAL TICs				58,870	1,390	238,290	23,770	0,877	ND	ND
TOTAL BNs & TICs				642,270	29,496	1431,520	233,781	15,261	79,382	124,957
Antimony										
Arsenic										
Beryllium	14	340	NLE	ND	ND	ND	2,530	ND	ND	ND
		20	NLE	4,470	9,400	27,500	10,900	6,220	6,270	2,370
			NLE	0,340	0,537	0,394	0,317	0,420	0,558	0,304

File: edgetbl5.WQ2 16-Jun-97

CE 3.2105

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1678-02	1678-03	[illegible]-04	1678-05	1678-06	1587-01	1587-02
Sample ID #				C-85-2	C-85-3	[illegible]-1	C-86-2	C-86-3	C-87-1	C-87-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	4.0 - 4.5	12.0 - 12.5	0.0 - 0.5	4.0 - 4.5	13.0 - 13.5	0.0 - 0.5	2.5 - 3.0
Sample Date				4/21/97	4/21/97	4/21/97	4/21/97	4/21/97	4/22/97	4/22/97
Criteria Last Revised: Feb. 3, 1994										
Cadmium	1	100	NLE	0.979	0.875	1.210	1.690	0.412	0.649	ND
Chromium	NLE	NLE	NLE	21.600	18.700	27.800	42.800	16.700	27.700	12.800
Copper	600	600	NLE	45.100	431.000	88.500	70.700	128.000	74.500	512.000
Lead	100	600	NLE	236.000	528.000	339.000	300.000	617.000	231.000	97.500
Mercury	14	270	NLE	0.313	1.160	0.022	0.519	0.998	0.325	0.414
Nickel	250	2,400	NLE	20.700	24.900	24.800	36.900	20.300	28.100	13.800
Selenium	63	3,100	NLE	ND	ND	ND	ND	ND	ND	ND
Silver	110	4,100	NLE	ND	ND	ND	ND	ND	ND	ND
Thallium	2	2	NLE	ND	ND	ND	ND	0.153	0.100	ND
Zinc	1,500	1,500	NLE	332.000	321.000	400.000	534.000	277.000	359.000	91.900
Chromium, Hexavalent (ppm)	--	--	--	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (ppm)	--	--	--	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)	--	--	--	NA	NA	NA	NA	NA	NA	NA

CE 3.2106

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1587-03	1587-04	1587-05	1587-06	1587-09	1587-10	1587-10
Sample ID #				C-87-3	C-88-1	C-88-2	C-88-3	C-89-1	C-89-2	C-89-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	11.5 - 12.0	0.0 - 0.5	4.5 - 5.0	11.5 - 12.0	0.0 - 0.5	4.0 - 4.6	13.5 - 14.0
Sample Date				4/22/97	4/22/97	4/22/97	4/22/97	4/22/97	4/22/97	4/22/97
Criteria Last Revised: Feb. 3, 1994										
PPM (mg/kg)										
Priority Pollutant AE & BN										
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	6,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	6,100	10,000	60	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	1.070	ND	0.366 J	ND	ND	ND	1.030
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	0.638 J	ND	ND	ND	ND	ND	0.810
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	ND	0.445	ND	ND	0.598	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	2.420	0.307	1.270	ND	ND	ND	1.140
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	1.320	ND	0.453	ND	ND	ND	0.632
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	2.430	0.216 J	1.090	ND	ND	0.642	1.270
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND

CE 3.2107

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1587-03	1587-04	1587-05	1587-06	1587-09	1587-10	1587-10
Sample ID #				C-87-3	C-88-1	C-88-2	C-88-3	C-89-1	C-89-2	C-89-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	11.5 - 12.0	0.0 - 0.5	4.5 - 5.0	11.5 - 12.0	0.0 - 0.5	4.0 - 4.5	13.5 - 14.0
Sample Date				4/22/97	4/22/97	4/22/97	4/22/97	4/22/97	4/22/97	4/22/97
Criteria Last Revised: Feb. 3, 1994										
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	23.000	2.250	11.100	0.584	0.205	ND	9.730
Anthracene	10,000	10,000	100	5.460	0.678	3.400	0.157 J	ND	ND	2.450
Carbazole	NLE	NLE	NLE	3.130	0.292	1.320	ND	ND	ND	1.240
Di-n-butylphthalate	5,700	10,000	100	ND	ND	ND	ND	ND	ND	0.891
Fluoranthene	2,300	10,000	100	23.700	4.320	26.700	1.18	0.42	1.480	10.700
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	21.600	4.090	25.400	1.23	0.466	2.590	9.860
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	1.450
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	11.300 J	2.350	14.100	0.661	0.234	0.615	4.840
Chrysene	9	40	500	10.400	2.250	13.500	0.672	0.252	0.756	4.760
bis(2-Ethylexyl)phthalate	49	210	100	0.431 J	0.767	ND	ND	ND	ND	5.730
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	10.200	2.800	18.600	0.906	0.26	1.430	5.220
Benzo[k]fluoranthene	0.90	4	500	5.040	1.110 J	6.510	0.411	0.131	0.560	2.110
Benzo[a]pyrene	0.66	0.66	100	8.890	2.330	14.900	0.686	0.259	1.190	4.400
Ideno[1,2,3-cd]pyrene	0.90	4	500	6.280	1.040	6.970	0.209 J	0.114	0.530	1.960
Dibenzo[a,h]anthracene	0.66	0.66	100	1.900	0.316	2.050	ND	ND	ND	0.656
Benzo[g,h,i]perylene	NLE	NLE	NLE	6.120	0.929	6.110	0.194 J	0.111	0.445 J	1.800
TOTAL BNs				145.229	26.045	153.184	6.879	2.442	10.736	72.569
TOTAL TICs				ND	ND	ND	ND	ND	ND	ND
TOTAL BNs & TICs				145.229	26.045	153.184	6.879	2.442	10.736	72.569
Metals (ppm)										
Antimony	14	340	NLE	5.460	ND	ND	ND	ND	9.800	ND
Arsenic	20	20	NLE	86.800	2.250	18.100	25.700	5.770	1.760	3.090
Beryllium	1	1	NLE	ND	0.460	0.260	0.486	0.286	0.482	0.209

CE 3.2108

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1587-03	1587-04	1587-05	1587-06	1587-09	1587-10	1587-10
Sample ID #				C-87-3	C-88-1	C-88-2	C-88-3	C-89-1	C-89-2	C-89-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	11.5 - 12.0	0.0 - 0.5	4.5 - 5.0	11.5 - 12.0	0.0 - 0.5	4.0 - 4.5	13.5 - 14.0
Sample Date				4/22/97	4/22/97	4/22/97	4/22/97	4/22/97	4/22/97	4/22/97
Criteria Last Revised: Feb. 3, 1994										
Cadmium	1	100	NLE	1.270	0.387	5.250	ND	ND	26.700	ND
Chromium	NLE	NLE	NLE	27.500	26.800	14.200	11.100	17.800	105.000	9.150
Copper	600	600	NLE	804.000	52.100	130.000	138.000	19.300	105.000	34.600
Lead	100	600	NLE	1430.000	90.300	154.000	332.000	39.500	221.000	102.000
Mercury	14	270	NLE	1.810	0.179	0.716	1.050	0.242	0.504	0.679
Nickel	250	2,400	NLE	45.900	22.000	37.500	15.700	17.200	26.000	27.200
Selenium	63	3,100	NLE	11.300	ND	ND	ND	ND	ND	4.140
Silver	110	4,100	NLE	ND	ND	ND	ND	ND	ND	ND
Thallium	2	2	NLE	0.121	0.235	0.216	0.172	0.109	ND	0.560
Zinc	1,500	1,500	NLE	280.000	228.000	219.000	90.300	61.800	0.698	59.900
Chromium, Hexavalent (ppm)	--	--	--	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (ppm)	--	--	--	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)	--	--	--	NA	NA	NA	NA	NA	NA	NA

CE 3.2109

Table .
Edgewater Associates
Soil Analytical Results

Lab ID #				1610-01	1610-2	1610-3	1610-04	1610-05	1610-06	1610-07
Sample ID #				C-90-1	C-90-2	C-90-3	C-91-1	C-91-2	C-91-3	C-92-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	6.0 - 6.5	13.0 - 13.6	0.0 - 0.5	3.0 - 4.0	13.5 - 14.0	0.0 - 0.5
Sample Date				4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97
Criteria Last Revised: Feb. 3, 1994										
PPM (mg/kg)										
Priority Pollutant AE & BN										
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	670	10,000	100	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	ND	0.137 J	4.690	0.269 J	0.278	ND	1.130
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	ND	2.290	ND	0.150 J	ND	0.352 J
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	0.140 J	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	ND	ND	ND	0.171 J	0.315	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	ND	0.203	13.600	1.350	0.732	0.183 J	2.700
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	ND	5.770	0.409 J	0.303	ND	0.947
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	ND	0.237	9.880	1.030	0.676	0.160 J	1.770
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND

CE 3.2110

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1610-01	1610-2	1610-3	1610-04	1610-05	1610-06	1610-07
Sample ID #				C-90-1	C-90-2	C-90-3	C-91-1	C-91-2	C-91-3	C-92-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	6.0 - 6.5	13.0 - 13.5	0.0 - 0.5	3.0 - 4.0	13.5 - 14.0	0.0 - 0.5
Sample Date				4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97
Criteria Last Revised: Feb. 3, 1994										
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	ND	2.240	79.800	10.900	4.740	1.480	14.100
Anthracene	10,000	10,000	100	ND	0.629	19.900	3.990	1.310	0.690	4.400
Carbazole	NLE	NLE	NLE	ND	0.336	8.270	1.560	0.738	0.258	2.090
Di-n-butylphthalate	6,700	10,000	100	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	0.188 J	3.200	69.200	19.200	6.600	3.660	19.600
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	0.199 J	2.870	63.500	16.900	6.560	3.480	17.000
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	2.100	ND	0.232 J
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	0.142 J	1.500	26.900	11.100	3.000	2.050	10.400
Chrysene	9	40	500	ND	1.550	25.300	11.700	3.120	2.070	9.820
bis(2-Ethylexyl)phthalate	49	210	100	ND	ND	ND	0.396 J	4.200	ND	0.300 J
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	0.458	ND	ND
Benzo[b]fluoranthene	0.90	4	50	0.137 J	2.180	26.400	12.500	4.000	3.390	11.300
Benzo[k]fluoranthene	0.90	4	500	ND	0.747	10.600	6.440	1.790	1.220	5.330
Benzo[a]pyrene	0.66	0.66	100	0.131 J	0.143	24.800	12.400	3.070	2.370	10.000
Ideno[1,2,3-cd]pyrene	0.90	4	500	ND	0.569	15.600	7.020	0.967	0.964	4.800
Dibenzo[a,h]anthracene	0.66	0.66	100	ND	0.168 J	3.820	2.070	0.297	0.276	1.430
Benzo[g,h,i]perylene	NLE	NLE	NLE	ND	0.466	17.000	6.760	0.849	0.835	4.630
TOTAL BNs				0.797 J	18.362	427.240	125.994 J	46.249 J	23.401 J	122.331 J
TOTAL TICs				ND	5.834	23.800	12.570	9.577	1.560	16.350
TOTAL BNs & TICs				0.797 J	24.196 J	451.040	138.564 J	55.826 J	24.961 J	138.681 J
Metals (ppm)										
Antimony	14	340	NLE	2.870	ND	8.050	ND	ND	ND	ND
Arsenic	20	20	NLE	1.290	3.940	1560.000	3.960	7.020	29.400	3.820
Beryllium	1	1	NLE	0.431	0.365	0.267	0.769	0.417	565.000	0.718

CE 3.2111

Table .
Edgewater Associates
Soil Analytical Results

Lab ID #				1610-01	1610-2	1610-3	1610-04	1610-05	1610-06	1610-07
Sample ID #				C-90-1	C-90-2	C-90-3	C-91-1	C-91-2	C-91-3	C-92-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	6.0 - 6.5	13.0 - 13.5	0.0 - 0.5	3.0 - 4.0	13.5 - 14.0	0.0 - 0.5
Sample Date				4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97
Criteria Last Revised: Feb. 3, 1994										
Cadmium	1	100	NLE	ND	0.350	0.560	ND	7.710	0.320	0.430
Chromium	NLE	NLE	NLE	40.500	18.400	32.200	23.200	42.400	24.800	29.800
Copper	600	600	NLE	37.000	34.300	532.000	150.000	95.800	42.800	138.000
Lead	100	600	NLE	18.500	59.300	6300.000	206.000	327.000	116.000	195.000
Mercury	14	270	NLE	0.064	0.145	34.700	0.234	1.070	0.542	0.238
Nickel	250	2,400	NLE	27.700	18.400	22.000	37.800	57.800	36.000	34.400
Selenium	63	3,100	NLE	ND	ND	38.400	ND	ND	ND	ND
Silver	110	4,100	NLE	ND	ND	2.760	ND	ND	ND	ND
Thallium	2	2	NLE	0.322	ND	8.680	0.101	0.109	0.219	0.134
Zinc	1,500	1,500	NLE	102.000	60.600	304.000	897.000	609.000	120.000	816.000
Chromium, Hexavalent (ppm)	--	--	--	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (ppm)	--	--	--	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)	--	--	--	NA	NA	NA	NA	NA	NA	NA

CE 3.2112

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1610-08	1610-09	1610-10	1610-11	1610-12	1610-13	1610-14
Sample ID #				C-92-2	C-92-3	C-93-1	C-93-2	C-93-3	C-94-1	C-94-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	3.5 - 4.0	10.5 - 11.0	0.0 - 0.5	3.5 - 4.0	16.0 - 16.5	0.0 - 0.5	3.5 - 4.0
Sample Date				4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97
Criteria Last Revised: Feb. 3, 1994										
PPM (mg/kg)										
Priority Pollutant AE & BN										
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	0.161 J	ND	ND	0.327	ND	ND	1.930
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	0.167 J	ND	ND	0.213 J	ND	ND	1.320
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	0.135 J	ND	ND	0.156 J	ND	0.255	0.647
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	1.390	ND	ND	0.477	ND	0.309	3.170
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	0.701	ND	ND	0.249	ND	ND	1.920
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	0.173 J	ND
Fluorene	2,300	10,000	100	1.560	ND	ND	0.619	ND	0.274	3.340
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND

CE 3.2113

Table .
Edgewater Associates
Soil Analytical Results

Lab ID #				1610-08	1610-09	1610-10	1610-11	1610-12	1610-13	1610-14
Sample ID #				C-92-2	C-92-3	C-93-1	C-93-2	C-93-3	C-94-1	C-94-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	3.5 - 4.0	10.5 - 11.0	0.0 - 0.5	3.5 - 4.0	16.0 - 16.5	0.0 - 0.5	3.5 - 4.0
Sample Date				4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97
Criteria Last Revised: Feb. 3, 1994										
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	15.100	0.370	0.222	4.630	0.172 J	3.270	21.100
Anthracene	10,000	10,000	100	2.490	ND	ND	1.210	ND	1.030	4.420
Carbazole	NLE	NLE	NLE	1.630	ND	ND	0.635	ND	0.563	2.230
Di-n-butylphthalate	6,700	10,000	100	1.310	ND	ND	ND	ND	0.377	ND
Fluoranthene	2,300	10,000	100	20.100	0.615	0.447	6.580	0.227 J	7.430	22.500
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	18.300	0.582	0.432	6.420	0.217 J	6.920	21.800
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	0.677	ND	ND	ND	ND	0.210	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	6.740	0.318	0.270	3.030	ND	4.610	8.950
Chrysene	9	40	500	7.480	0.357	0.293	2.760	ND	4.590	9.420
bis(2-Ethylexyl)phthalate	49	210	100	3.670	12.100	ND	0.457	ND	0.472	3.100
Di-n-octylphthalate	1,100	10,000	100	0.821	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	10.900	0.383	0.299	3.850	ND	5.350	12.100
Benzo[k]fluoranthene	0.90	4	500	3.910	0.169 J	0.169 J	1.690	ND	2.120	4.900
Benzo[a]pyrene	0.66	0.66	100	6.860	0.311	0.277	2.750	ND	4.450	8.600
Ideno[1,2,3-cd]pyrene	0.90	4	500	2.100	0.193 J	0.185 J	0.832	ND	1.820	2.410
Dibenzo[a,h]anthracene	0.66	0.66	100	0.563	ND	ND	0.224	ND	0.558	0.758
Benzo[g,h,i]perylene	NLE	NLE	NLE	1.810	0.207 J	0.206 J	0.671	ND	1.560	2.050
TOTAL BNs				108.555 J	15.595 J	2.790 J	37.580 J	0.616 J	46.341 J	136.685
TOTAL TICs				19.336	0.916	ND	5.704	ND	6.934	71.020
TOTAL BNs & TICs				127.891 J	16.511 J	2.790 J	43.284 J	0.616 J	53.275	207.685
Metals (ppm)										
Antimony	14	340	NLE	ND	2.780	ND	ND	3.340	ND	ND
Arsenic	20	20	NLE	4.100	27.600	3.740	5.050	881.000	4.490	6.720
Beryllium	1	1	NLE	0.265	0.657	0.401	0.332	0.498	0.444	0.676

CE 3.2114

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1610-08	1610-09	1610-10	1610-11	1610-12	1610-13	1610-14
Sample ID #				C-92-2	C-92-3	C-93-1	C-93-2	C-93-3	C-94-1	C-94-2
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	3.5 - 4.0	10.5 - 11.0	0.0 - 0.5	3.5 - 4.0	16.0 - 16.5	0.0 - 0.5	3.5 - 4.0
Sample Date				4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97
Criteria Last Revised: Feb. 3, 1994										
Cadmium	1	100	NLE	0.680	0.710	ND	0.440	3.530	0.340	2.500
Chromium	NLE	NLE	NLE	19.800	202.000	21.000	26.000	85.800	21.000	32.300
Copper	600	600	NLE	47.200	41.600	25.600	46.100	326.000	36.800	89.200
Lead	100	600	NLE	438.000	1130.000	41.500	139.000	724.000	96.500	382.000
Mercury	14	270	NLE	0.322	0.406	0.171	0.390	2.900	0.224	0.423
Nickel	250	2,400	NLE	28.500	22.700	21.100	26.200	183.000	20.000	40.800
Selenium	63	3,100	NLE	ND	ND	ND	ND	4.510	ND	ND
Silver	110	4,100	NLE	ND	ND	ND	ND	0.890	ND	ND
Thallium	2	2	NLE	ND	0.129	0.219	0.129	2.270	0.160	ND
Zinc	1,500	1,500	NLE	288.000	227.000	66.500	166.000	1650.000	172.000	382.000
Chromium, Hexavalent (ppm)	--	--	--	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (ppm)	--	--	--	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)	--	--	--	NA	NA	NA	NA	NA	NA	NA

CE 3.2115

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1610-15	1611-01		1611-03	1611-04	1611-05	16-11-06
Sample ID #				C-94-3	C-95-1	2	C-96-3	C-96-1	C-96-2	C-96-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	15.0 - 15.5	0.0	4.5 - 5.0	11.5 - 12.0	0.0 - 0.5	3.5 - 4.0	13.0 - 13.5
Sample Date				4/23/97	4/2	4/24/97	4/24/97	4/24/97	4/24/97	4/24/97
Criteria Last Revised: Feb. 3, 1994										
PPM (mg/kg)										
Priority Pollutant AE & BN										
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	6,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	6,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	50	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	ND	ND	1.260	ND	0.139 J	0.606	ND
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	ND	0.327	0.313 J	ND	0.388 J	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	ND	0.159 J	ND	ND	0.510	ND
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	ND	ND	1.340	3.330	0.446	1.770	ND
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	ND	0.614	1.350	0.204	0.781	ND
Diethylphthalate	10,000	10,000	50	ND	0.160 J	0.167 J	ND	0.152 J	ND	ND
Fluorene	2,300	10,000	100	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND

CE 3.2116

Tabl
Edgewater Associates
Soil Analytical Results

Lab ID #				1610-15	1611-01	1611-02	1611-03	1611-04	1611-05	16-11-06
Sample ID #				C-94-3	C-95-1	C-95-2	C-95-3	C-96-1	C-96-2	C-96-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	15.0 - 15.5	0.0 - 0.5	4.5 - 5.0	11.5 - 12.0	0.0 - 0.5	3.5 - 4.0	13.0 - 13.5
Sample Date				4/23/97	4/24/97	4/24/97	4/24/97	4/24/97	4/24/97	4/24/97
Criteria Last Revised: Feb. 3, 1994										
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	ND	ND	6.170	17.100	2.540	15.800	0.613
Anthracene	10,000	10,000	100	ND	ND	1.450	4.990	0.661	3.730 J	0.141 J
Carbazole	NLE	NLE	NLE	ND	ND	1.160	2.150	0.320	1.300	ND
Di-n-butylphthalate	6,700	10,000	100	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	0.239	0.149 J	7.940	19.200	2.500	20.600	0.845
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	0.233	0.150 J	7.060	14.600	2.210	20.400	0.787
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	1.41
Butylbenzylphthalate	1,100	10,000	100	ND	ND	0.164 J	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	NA	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	0.160 J	ND	3.910	7.300	1.110	7.890	0.416
Chrysene	9	40	500	0.149 J	ND	4.000	6.520	1.150	7.550	0.459
bis(2-Ethylexyl)phthalate	49	210	100	ND	ND	0.177 J	ND	0.148 J	ND	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	0.168 J	ND	4.740	8.050	1.170	10.300	0.561
Benzo[k]fluoranthene	0.90	4	500	ND	ND	1.870 J	3.720	0.491	3.660	0.246
Benzo[a]pyrene	0.66	0.66	100	0.156 J	ND	3.970	5.430	1.040	6.810	0.433
Ideno[1,2,3-cd]pyrene	0.90	4	500	0.125 J	ND	2.620	1.700	0.712	1.970	0.357
Dibenzo[a,h]anthracene	0.66	0.66	100	ND	ND	0.768	0.613	0.187 J	0.631	ND
Benzo[g,h,i]perylene	NLE	NLE	NLE	0.122 J	ND	2.880	1.210	0.739	1.650	0.369
TOTAL BNs				1.352 J	0.459	52.726	97.476	15.919	106.576	6.637
TOTAL TICs				ND	ND	7.260	9.540	2.443	19.970	ND
TOTAL BNs & TICs				1.352 J	0.459	60.346	107.016	18.362	126.546	6.637
Metals (ppm)										
Antimony	14	340	NLE	ND	ND	ND	ND	ND	4.900	ND
Arsenic	20	20	NLE	24.900	3.800	5.020	6.400	6.470	210.000	173
Beryllium	1	1	NLE	0.642	0.430	0.392	0.130	0.461	0.228	0.096

CE 3.2117

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1610-15	1611-01	1611-02	1611-03	1611-04	1611-05	16-11-06
Sample ID #				C-94-3	C-95-1	C-95-2	C-95-3	C-96-1	C-96-2	C-96-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	15.0 - 15.5	0.0 - 0.5	4.5 - 5.0	11.5 - 12.0	0.0 - 0.5	3.5 - 4.0	13.0 - 13.5
Sample Date				4/23/97	4/24/97	4/24/97	4/24/97	4/24/97	4/24/97	4/24/97
Criteria Last Revised: Feb. 3, 1994										
Cadmium	1	100	NLE	0.320	ND	0.450	0.250	ND	0.260	ND
Chromium	NLE	NLE	NLE	23.000	34.800	34.100	8.640	47.200	37.400	8.800
Copper	600	600	NLE	21.700	30.700	70.000	49.100	41.200	171.000	87.000
Lead	100	600	NLE	57.600	35.100	93.200	86.800	134.000	1.660	381.000
Mercury	14	270	NLE	0.104	0.069	0.264	0.180	0.169	4.140	1.760
Nickel	250	2,400	NLE	64.100	30.400	23.800	5.740	45.900	17.500	4.320
Selenium	63	3,100	NLE	ND	ND	ND	ND	ND	3.560	ND
Silver	110	4,100	NLE	ND	ND	ND	ND	ND	2.910	ND
Thallium	2	2	NLE	0.133	0.262	0.215	0.200	0.317	6.460	1.630
Zinc	1,500	1,500	NLE	99.300	77.800	143.000	84.600	118.000	174.000	35.000
										ND.
Chromium, Hexavalent (ppm)	--	--	--	ND	ND	ND	ND	ND	ND	NA
Total Petroleum Hydrocarbons (ppm)	--	--	--	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls (ppb)	--	--	--	NA	NA	NA	NA	NA	NA	ND

CE 3.2118

Table 1
Edgewater Associates
Soil Analytical Results

Lab ID #				1611-07	1611-08	1623-01	1623-02	1623-03
Sample ID #				C-97-1	C-97-2	C-98-1	C-98-2	C-98-3
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	6.0 - 6.5	0.0 - 0.5	3.5 - 4.0	7.5 - 8.0
Sample Date				4/24/97	4/24/97	4/24/97	4/24/97	4/24/97
Criteria Last Revised: Feb. 3, 1994								
PPM (mg/kg)								
Priority Pollutant AE & BN								
N-Nitrosodimethylamine	140	600	100	ND	ND	ND	ND	ND
Aniline	NLE	NLE	NLE	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.66	3	10	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5,100	10,000	100	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	570	10,000	100	ND	ND	ND	ND	ND
Benzyl alcohol	NLE	NLE	NLE	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5,100	10,000	60	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	2,300	10,000	10	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	0.66	0.66	10	ND	ND	ND	ND	ND
Hexachloroethane	6	100	100	ND	ND	ND	ND	ND
Nitrobenzene	28	520	10	ND	ND	ND	ND	ND
Isophorone	1,100	10,000	60	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68	1,200	100	ND	ND	ND	ND	ND
Naphthalene	230	4,200	100	ND	0.554	ND	1.620	124.000
4-Chloroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	21	100	ND	0.215	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	ND	ND	ND	0.712	133.000
Hexachlorocyclopentadiene	400	7,300	100	ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND	ND	ND	ND
2-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND
Dimethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	NLE	NLE	ND	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	0.253	ND	ND	208.000
3-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND
Acenaphthene	3,400	10,000	100	ND	1.22	0.560	5.110	632.000
2,4-Dinitrotoluene	1	4	10	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	ND	0.565	ND	2.250	410.000
Diethylphthalate	10,000	10,000	50	ND	ND	ND	ND	ND
Fluorene	2,300	10,000	100	ND	ND	0.365 J	4.430	807.000
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND
4-Nitroaniline	NLE	NLE	NLE	ND	ND	ND	ND	ND

CE 3.2119

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1611-07	1611-08	1623-01	1623-02	1623-03
Sample ID #				C-97-1	C-97-2	C-98-1	C-98-2	C-98-3
Depth (feet) Sample Date	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5 4/24/97	6.0 - 6.5 4/24/97	0.0 - 0.5 4/24/97	3.5 - 4.0 4/24/97	7.5 - 8.0 4/24/97
Criteria Last Revised: Feb. 3, 1994								
N-Nitrosodiphenylamine	140	590	100	ND	ND	ND	ND	21,700 J
1,2-Diphenylhydrazine/Azobenzene	NLE	NLE	NLE	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND	ND	ND	ND
Hexachlorobenzene	0.66	2	100	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	0.423	10.300	4.330	34.800	3680.000
Anthracene	10,000	10,000	100	ND	2.550	1.060	11.900	1260.000
Carbazole	NLE	NLE	NLE	ND	0.976	0.656	5.620	43.100
Di-n-butylphthalate	5,700	10,000	100	ND	ND	ND	ND	ND
Fluoranthene	2,300	10,000	100	0.823	12.200	6.980	47.900	3110.000
Benzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND
Pyrene	1,700	10,000	100	0.831	11.500	6.330	43.300	2600.000
3,3'-Dimethylbenzidine	NLE	NLE	NLE	ND	ND	ND	ND	ND
Butylbenzylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	2	6	100	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.90	4	500	0.437	4.740	3.320	21.400	1090.000
Chrysene	9	40	500	0.434	4.840	3.630	21.700	1020.000
bis(2-Ethylexyl)phthalate	49	210	100	ND	0.135 J	ND	1.040	ND
Di-n-octylphthalate	1,100	10,000	100	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.90	4	50	0.634	6.480	4.620	27.200	971.000
Benzo[k]fluoranthene	0.90	4	500	0.264	2.650	1.960	9.250	419.000
Benzo[a]pyrene	0.66	0.66	100	0.453	4.430	3.380	19.100	819.000
Ideno[1,2,3-cd]pyrene	0.90	4	500	0.140 J	1.320	1.330	6.480	223.000
Dibenzo[a,h]anthracene	0.66	0.66	100	ND	0.414	0.392 J	1.940	74.900
Benzo[g,h,i]perylene	NLE	NLE	NLE	ND	1.140	1.160	5.630	210.000
TOTAL BNs				4.439	66.482	39.973	271.282	17855.700
TOTAL TICs				2.386	14.882	2.682	43.100	5382.000
TOTAL BNs & TICs				6.825	81.364	42.493	314.382	23237.700
Metals (ppm)								
Antimony	14	340	NLE	ND	ND	ND	ND	ND
Arsenic	20	20	NLE	6.200	16.600	5.640	33.900	111.000
Beryllium	1	1	NLE	0.492	0.285	0.467	0.230	ND

CE 3.2120

Table
Edgewater Associates
Soil Analytical Results

Lab ID #				1611-07	1611-08	1623-01	1623-02	1623-03	
Sample ID #				C-97-1	C-97-2	C-98-1	C-98-2	C-98-3	
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non-Residential Direct Contact Soil Cleanup Criteria	Impact to Ground Water Soil Cleanup Criteria	0.0 - 0.5	6.0 - 6.5	0.0 - 0.5	3.5 - 4.0	7.5 - 8.0	
Sample Date				4/24/97	4/24/97	4/24/97	4/24/97	4/24/97	
Criteria Last Revised: Feb. 3, 1994									
Cadmium	1	100	NLE	ND	0.270	ND	0.695	1.910	
Chromium	NLE	NLE	NLE	23.300	21.400	26.500	16.900	28.500	
Copper	600	600	NLE	36.900	42.800	51.200	77.200	383.000	
Lead	100	600	NLE	82.700	76.100	408.000	279.000	1120.000	
Mercury	14	270	NLE	0.190	0.291	0.278	1.740	2.640	
Nickel	250	2,400	NLE	33.600	15.500	21.600	15.600	34.700	
Selenium	63	3,100	NLE	ND	ND	ND	ND	4.810	
Silver	110	4,100	NLE	ND	ND	ND	ND	0.880	J
Thallium	2	2	NLE	0.117	0.136	ND	0.196	0.705	
Zinc	1,500	1,500	NLE	83.700	107.000	157.000	167.000	433.000	
Chromium, Hexavalent (ppm)	--	--	--	ND	ND	ND	ND	ND	
Total Petroleum Hydrocarbons (ppm)	--	--	--	NA	NA	NA	NA	NA	
Polychlorinated Biphenyls (ppb)	--	--	--	NA	NA	NA	NA	NA	

CE 3.2121

Table 2

Table 2
Edgewater Associates
Groundwater Analytical Results

Lab ID #				1701-03	1701-04	1701-05	1701-06	1701-07	1701-08	1701-09
Sample ID #				MW1-1	MW2-1	MW3-1	MW4-1	MW5-1	MW6-1	MW7-1
Sample Location	Ground Water Quality Criteria for Class II-A Aquifers	Practical Quantitation Levels (PQLs)	Higher of PQLs and GW Quality Criteria	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
Sample Date				4/29/97	4/29/97	4/29/97	4/29/97	4/29/97	4/29/97	4/29/97
PP METALS (ug/l)										
Analysis Date	--	--	--	5/1/97	5/1/97	5/1/97	5/1/97	5/1/97	5/1/97	5/1/97
Antimony	2	20	20	ND	ND	ND	ND	ND	0.0143	ND
Arsenic (Total)	0.02	8	8	0.0117	0.0154	ND	0.0843	ND	106	0.0124
Beryllium	0.008	20	20	ND	ND	ND	ND	ND	ND	ND
Cadmium	4	2	4	ND	ND	ND	ND	ND	ND	ND
Chromium (Total)	100	10	100	ND	ND	ND	ND	ND	ND	ND
Copper	1,000	1,000	1,000	ND	ND	ND	ND	ND	ND	ND
Lead (Total)	5	10	10	0.0077	ND	ND	ND	ND	ND	ND
Mercury (Total)	2	0.5	2	ND	ND	ND	ND	ND	ND	ND
Nickel (Soluble salts)	100	10	100	ND	ND	ND	ND	ND	ND	ND
Selenium (Total)	50	10	50	ND	ND	ND	ND	ND	ND	ND
Silver	20	2	20	ND	ND	ND	ND	ND	ND	ND
Thallium	0.5	10	10	ND	ND	ND	ND	ND	ND	ND
Zinc	5,000	30	5,000	0.060	0.048	ND	ND	ND	1.06	ND
VOC + 15 (ug/l)										
Analysis Date	--	--	--	5/5/97	5/5/97	5/2/97	5/2/97	5/2/97	5/5/97	5/5/97
Priority Pollutant VO Detected										
Chloromethane	30	2	30	ND	ND	ND	ND	ND	ND	ND
Bromomethane	10	2	10	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.08	5	5	ND	ND	ND	ND	ND	ND	ND
Chloroethane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	2	2	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	70	NLE	70	35.60	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethylene	100	2	100	ND	ND	ND	ND	ND	ND	ND
Chloroform	6	1	6	7.52	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.3	2	2	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	30	1	30	16.40	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.4	2	2	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	0.3	1	1	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.5	1	1	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropene (cis & trans)	0.2	NLE	0.2	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	1	1	1	5.32	ND	ND	ND	ND	ND	ND
Dibromochloromethane	10	1	10	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	3	2	3	ND	ND	ND	ND	ND	ND	ND
Benzene	0.2	1	1	103	1370	1.73	1.14	ND	206	1500
Bromoform	4	0.8	4	ND	ND	ND	ND	ND	ND	ND

CE 3.2123

Table 2
Edgewater Associates
Groundwater Analytical Results

Lab ID #				1701-03	1701-04	1701-05	1701-06	1701-07	1701-08	1701-09
Sample ID #				MW1-1	MW2-1	MW3-1	MW4-1	MW5-1	MW6-1	MW7-1
Sample Location	Ground Water Quality Criteria for Class II-A Aquifers	Practical Quantitation Levels (PQLs)	Higher of PQLs and GW Quality Criteria	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
Sample Date				4/29/97	4/29/97	4/29/97	4/29/97	4/29/97	4/29/97	4/29/97
Tetrachloroethylene	0.4	1	1	7.41	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	2	1	2	ND	ND	ND	ND	ND	ND	ND
Toluene	1,000	5	1,000	437	833	2.47	1.27	ND	114	1570
Chlorobenzene	4	2	4	15.90	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	5	700	92.40	299	1.08	ND	ND	83.50	473
M,O,P-Xylenes	NLE	3	NLE	458	1830	10.50	3.36	ND	416	2970
1,2-Dichlorobenzene	600	5	600	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	5	600	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	5	75	ND	ND	ND	ND	ND	ND	ND
TOTAL VOCs	--	--	--	1178.55	4332	15.78	5.77	ND	819.50	6513
TOTAL TICs	--	--	--	4425.50	10352	243.40	100.60	6.40	11440	14215
TOTAL VOCs & TICs	--	--	--	5604.05	14684	259.18	106.37	6.40	12259.50	20728
AEBN+25 (ug/l)										
Extraction Date	--	--	--	5/1/97	5/1/97	5/1/97	5/1/97	5/1/97	5/1/97	5/1/97
Priority Pollutant AE & BN Detected										
Phenol	4,000	10	4,000	ND	540	ND	ND	ND	ND	107
Aniline	NLE	NLE	NLE	91.2	ND	ND	ND	ND	ND	ND
2-Chlorophenol	40	20	40	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	100	20	100	ND	319	ND	ND	ND	ND	200
2,4-Dichlorophenol	20	10	20	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	10	40	40	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NLE	NLE	NLE	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	0.3	1	1	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)Ether	0.03	10	10	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	5	600	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	5	75	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	0.0007	20	20	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600	5	600	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NLE	NLE	NLE	ND	452	ND	ND	ND	ND	140
bis(2-Chloroisopropyl)ether	300	10	300	ND	ND	ND	ND	ND	ND	NA
4-Methylphenol	NLE	NLE	NLE	ND	843	ND	ND	ND	ND	160
N-Nitroso-Di-n-propylamine	0.005	20	20	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	0.7	10	10	ND	ND	ND	ND	ND	ND	ND

CE 3.2124

Table 2
Edgewater Associates
Groundwater Analytical Results

Lab ID #				1701-03	1701-04		1701-05	1701-06	1701-07	1701-08	1701-09
Sample ID #				MW1-1	MW2-1		MW3-1	MW4-1	MW5-1	MW6-1	MW7-1
Sample Location	Ground Water Quality Criteria for Class II-A Aquifers	Practical Quantitation Levels (PQLs)	Higher of PQLs and GW Quality Criteria	MW-1	MW-2		MW-3	MW-4	MW-5	MW-6	MW-7
Sample Date				4/29/97	4/29/97		4/29/97	4/29/97	4/29/97	4/29/97	4/29/97
Nitrobenzene	3	10	10	ND	ND		ND	ND	ND	ND	ND
Isophorone	100	10	100	ND	ND		ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NLE	NLE	NLE	ND	ND		ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	9	1	9	ND	ND		ND	ND	ND	ND	ND
Naphthalene	NLE	NLE	NLE	693	4040		101	56.30	ND	7580	3790
Hexachlorobutadiene	1	1	1	ND	ND		ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	NLE	150	177		5.98	4.18	ND	456	442
Hexachlorocyclopentadiene	50	10	50	ND	ND		ND	ND	ND	ND	ND
2-Chloronaphthalene	NLE	NLE	NLE	ND	ND		ND	ND	ND	ND	ND
Dimethylphthalate	7,000	10	7,000	ND	ND		ND	ND	ND	ND	ND
Acenaphthylene	NLE	10	NLE	ND	ND		ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NLE	10	NLE	ND	ND		ND	ND	ND	ND	ND
Acenaphthene	400	10	400	98.50	65.50		2.57	2.05	ND	171	96.60
Benzidine	0.0002	50	50	ND	ND		ND	ND	ND	ND	ND
2,4-Dinitrotoluene	0.05	10	10	ND	ND		ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	NLE	48.3	49.3		2	1.67	ND	98.2	65.2
Diethylphthalate	5,000	10	5,000	ND	ND		ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	NLE	NLE	NLE	ND	ND		ND	ND	ND	ND	ND
Fluorene	300	10	300	59.60	39.50	J	2.13	1.90	ND	107	51.60
N-Nitrosodiphenylamine	7	20	20	ND	ND		ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NLE	NLE	NLE	ND	ND		ND	ND	ND	ND	ND
Hexachlorobenzene	0.02	10	10	ND	ND		ND	ND	ND	ND	ND
Phenanthrene	NLE	10	NLE	55.80	76.40		4.88	4.34	ND	97.70	56
Anthracene	2,000	10	2,000	ND	ND		ND	0.85	J ND	ND	ND
Carbazole	NLE	NLE	NLE	ND	153		2.55	2.31	ND	138	112
Di-n-butylphthalate	900	20	900	ND	ND		ND	ND	ND	ND	ND
Fluoranthene	300	10	300	ND	ND		ND	1.06	ND	ND	ND
Pyrene	200	20	200	ND	ND		ND	0.74	J ND	ND	ND
Butylbenzylphthalate	100	20	100	ND	ND		ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	0.08	60	60	ND	ND		ND	ND	ND	ND	ND
Benzo(a)anthracene	0.03	10	10	ND	ND		ND	ND	ND	ND	ND
Chrysene	0.03	20	20	ND	ND		ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	3	30	30	ND	ND		ND	ND	ND	ND	ND
Di-n-octylphthalate	100	NLE	100	ND	ND		ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.03	10	10	ND	ND		ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.03	2	2	ND	ND		ND	ND	ND	ND	ND
Benzo(a)pyrene	0.003	20	20	ND	ND		ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.03	20	20	ND	ND		ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	0.003	20	20	ND	ND		ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	NLE	20	NLE	ND	ND		ND	ND	ND	ND	ND

CE 3.2125

Table 2
Edgewater Associates
Groundwater Analytical Results

Lab ID #				1701-03		1701-04		1701-05		1701-06		1701-07	1701-08	1701-09
Sample ID #				MW1-1		MW2-1		MW3-1		MW4-1		MW5-1	MW6-1	MW7-1
Sample Location	**Ground Water Quality Criteria for Class II-A Aquifers**	**Practical Quantitation Levels (PQLs)**	**Higher of PQLs and GW Quality Criteria**	MW-1		MW-2		MW-3		MW-4		MW-5	MW-6	MW-7
Sample Date				4/29/97		4/29/97		4/29/97		4/29/97		4/29/97	4/29/97	4/29/97
TOTAL AEBN	--	--	--	1196.40		6754.70	J	121.11		75.40	J	ND	8647.90	5220.40
TOTAL TICs	--	--	--	516		1184		118.40		4.40		ND	1088	1272
TOTAL AEBN & TICs	--	--	--	1712.40		7938.70	J	239.51		79.80	J	ND	9735.90	6492.40
PCB (ug/l)	0.02	0.5	0.5	ND		ND		ND		ND		ND	ND	ND
Extraction Date	--	--	--	5/1/97		5/1/97		5/1/97		5/1/97		5/1/97	5/1/97	5/1/97
PESTICIDES (ug/l)	CS	CS	CS	ND		ND		ND		ND		ND	ND	ND
Extraction Date	--	--	--	5/1/97		5/1/97		5/1/97		5/1/97		5/1/97	5/1/97	5/1/97
TOTAL CYANIDES (ug/l)	200	40	200	ND		ND		ND		ND		ND	0.20	0.92
Analysis Date	--	--	--	4/30/97		4/30/97		4/30/97		4/30/97		4/30/97	4/30/97	4/30/97
PHENOLS (ug/l)	4,000	10	4,000	ND		ND		ND		ND		ND	0.23	1.11
Analysis Date	--	--	--	4/30/97		4/30/97		4/30/97		4/30/97		4/30/97	5/1/97	5/1/97

CE 3.2126

N

GORGE ROAD

RIVER ROAD

RIVER ROAD

NEW LOCATION OF RIVER ROAD

APPROX.

BUILDING No.6

BUILDING No.5

BUILDING No.4

BUILDING No.3

MOA/ISRA BOUNDARY

BUILDING No.1

BOULDER

BUILDING No.56

BUILDING No.55

FORMER LL BUILDING

PIER BUILDING

CONCRETE PIER

PROPERTY BOUNDARY

PROPERTY BOUNDARY

SHORE LINE

SHORE LINE

SHORE LINE

HUDSON RIVER

HUDSON RIVER

MW-1 MW-2 MW-3 MW-4 MW-5 MW-6 MW-7

C-1 C-2 C-3/C-38 C-4 C-5 C-6 C-7 C-8 C-9 C-10 C-11 C-12 C-13 C-14/C-37 C-15/C-39 C-16/C-68 C-17 C-18 C-19 C-20 C-21 C-22 C-23 C-24 C-25 C-26 C-27 C-28 C-29 C-29A C-30 C-30A C-31 C-33/ C-34 C-35 C-36 C-40 C-41 C-42 C-43 C-44 C-45 C-46 C-47 C-48 C-49 C-50 C-51 C-52 C-56 C-57 C-59 C-60 C-61 C-62 C-63 C-64 C-65 C-66 C-67 C-69 C-70 C-70A C-71 C-72 C-74 C-75 C-76 C-77 C-78 C-79 C-80 C-81 C-82 C-83 C-84 C-85 C-86 C-87 C-88 C-89 C-90 C-91 C-92 C-93 C-94 C-95 C-96 C-97 C-98 C-99 C-100 C-101 C-470

LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- MONITORING WELL LOCATIONS
- SOIL BORING LOCATIONS

0 130' 260'

SCALE: 1" = 130'

CE 3.2127

FIGURE 3

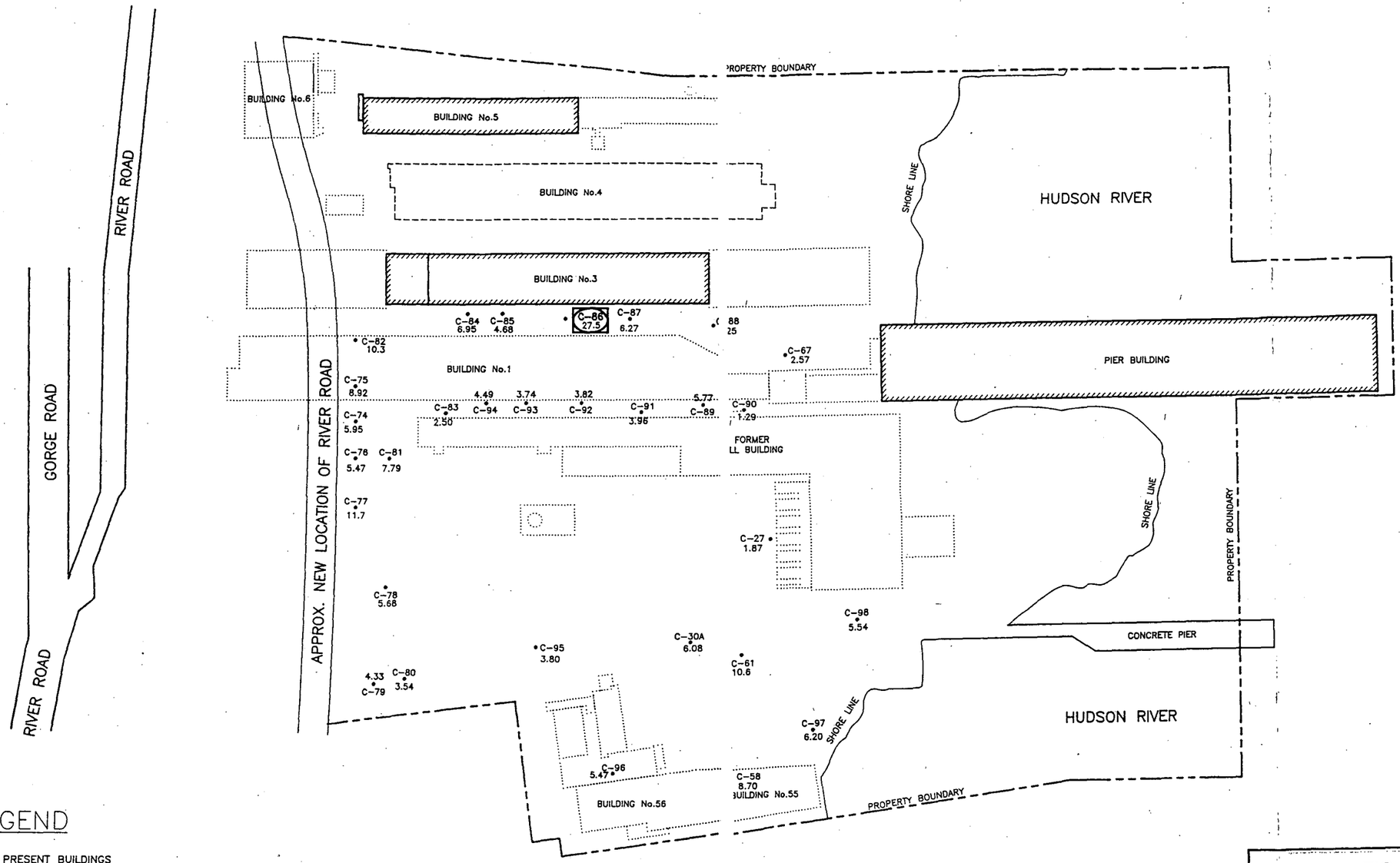
EDGEWATER ASSOCIATES PROPERTY

EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

SOIL BORING AND MONITORING WELL LOCATIONS

CELOTEX
CTP-008
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-89] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPORT ED IN PARTS PER MILLION (PPM).
2. ARSENIC:
   RESIDENTIAL DIRECT (ONTACT SOIL CLEANUP CRITERIA = 20 ppm
   NON-RESIDENTIAL DIF ECT CONTACT SOIL CLEANUP CRITERIA = 20 ppm
3. ND = NOT DETECTED

CE 3.2128

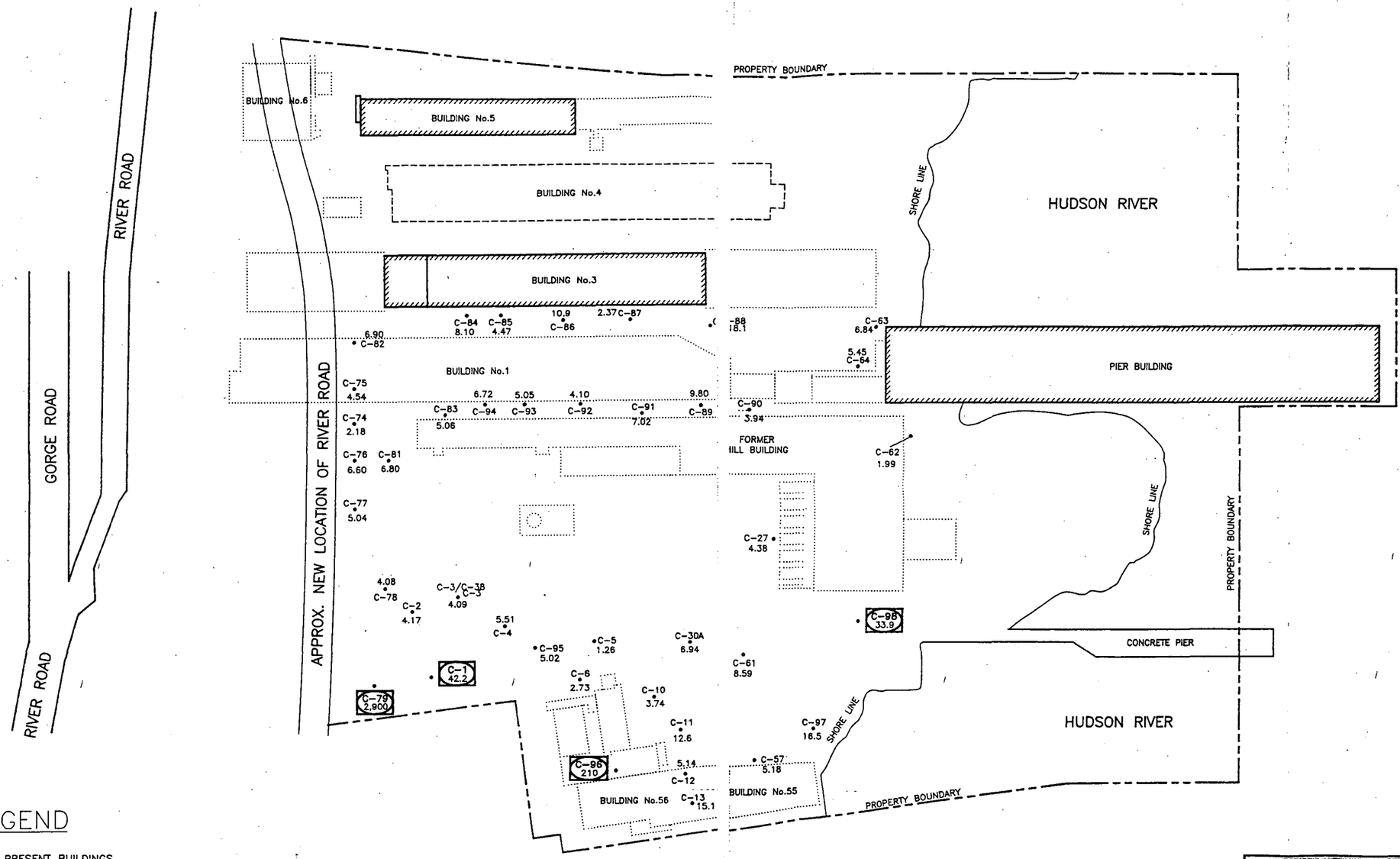
FIGURE 4

EDGEWATER ASSOCIATES PROPERTY
EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

UPPER FILL SURFACE
ARSENIC CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-89] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPOR ED IN PARTS PER MILLION (PPM).
2. ARSENIC:
   RESIDENTIAL DIRECT ONTACT SOIL CLEANUP CRITERIA = 20 ppm
   NON-RESIDENTIAL Dli ECT CONTACT SOIL CLEANUP CRITERIA = 20 ppm
3. ND = NOT DETECTEI

0 130' 260'

SCALE: 1"=130'

CE 3.2129

FIGURE 5

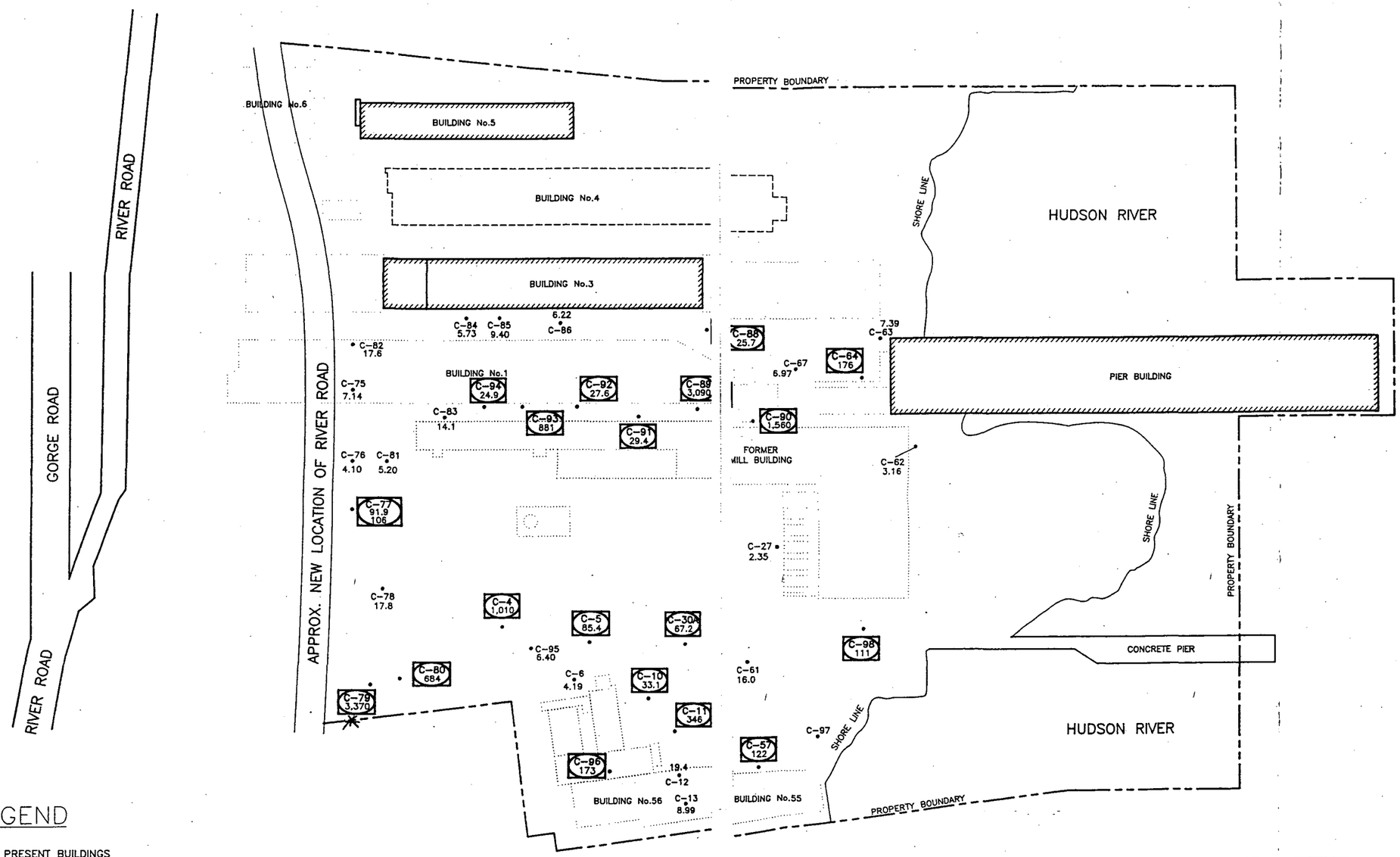
EDGEWATER ASSOCIATES PROPERTY
EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

HISTORICAL FILL SURFACE
ARSENIC CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97

3,370 ppm
AT DEPTH



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- C-20 — EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-89 — EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 — BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPORT
2. ARSENIC:
   RESIDENTIAL DIRECT (
   NON-RESIDENTIAL DIR
3. ND = NOT DETECTED

ED IN PARTS PER MILLION (PPM).

ONTACT SOIL CLEANUP CRITERIA = 20 ppm
ECT CONTACT SOIL CLEANUP CRITERIA = 20 ppm

0 130' 260'

SCALE: 1"=130'

CE 3.2130

FIGURE 6

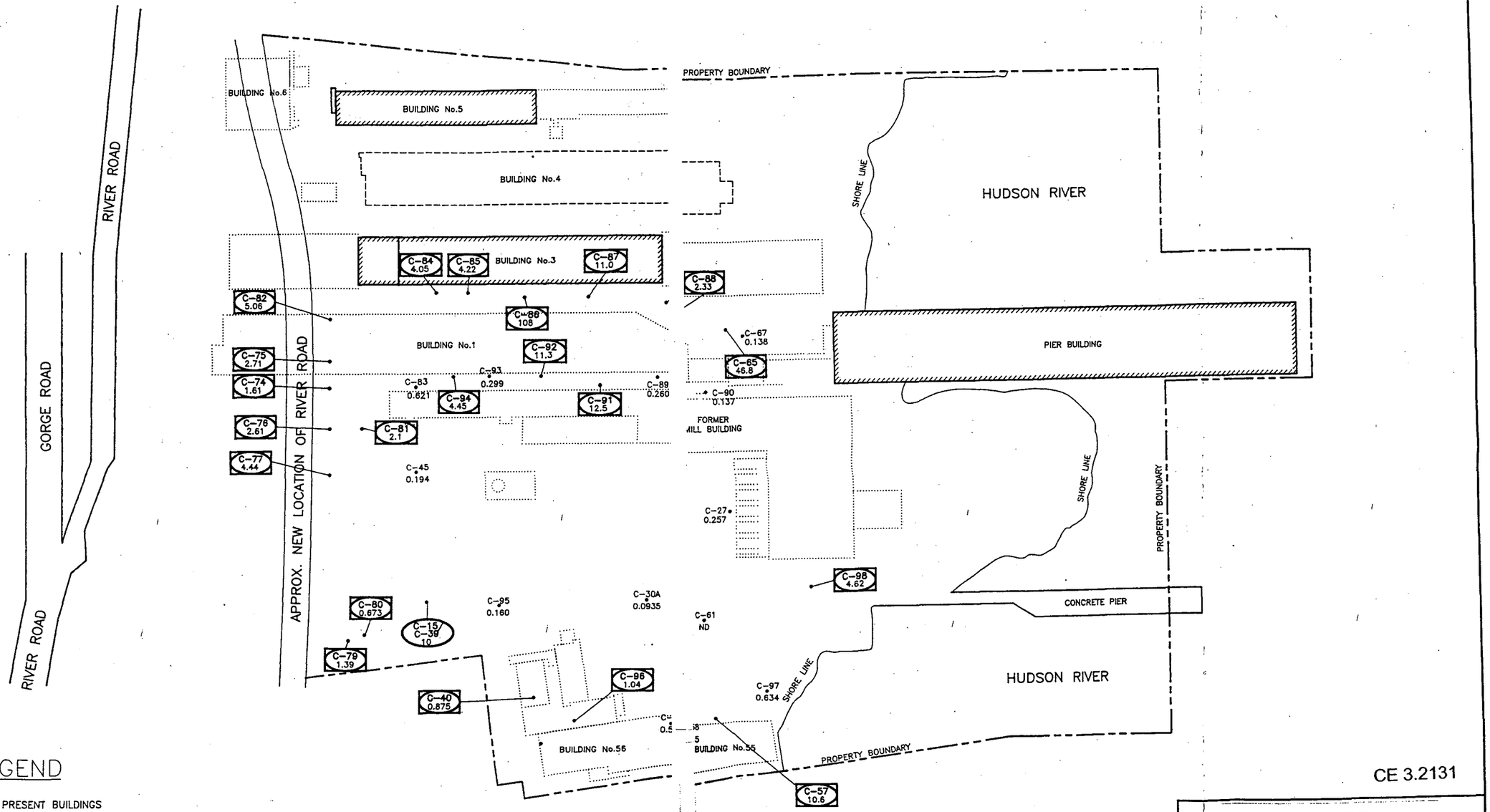
EDGEWATER ASSOCIATES PROPERTY

EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

SIX-INCH INTERVAL ABOVE THE GROUNDWATER ARSENIC CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) REPRESENTS THE HIGHEST INDIVIDUAL BN/PAH COMPOUND CONCENTRATION THAT EXCEEDS THE RESIDENTIAL DIRECT CONTACT CLEANUP CRITERIA. (OTHER BN-PAH COMPOUNDS MAY BE HIGHER, BUT DO NOT EXCEED THEIR COMPOUND SPECIFIC SOIL CLEANUP CRITERIA).
- [C-69] REPRESENTS THE HIGHEST INDIVIDUAL BN/PAH COMPOUND CONCENTRATION THAT EXCEEDS THE NON-RESIDENTIAL DIRECT CONTACT CLEANUP CRITERIA. (OTHER BN-PAH COMPOUNDS MAY BE HIGHER, BUT DO NOT EXCEED THEIR COMPOUND SPECIFIC SOIL CLEANUP CRITERIA).

NOTES

1. ALL RESULTS REPOR
2. ND = NOT DETECTEI
3. SAMPLES WERE OBTA
4. PAH = POLYNUCLEA
   BN = BASE NEUTRA

ED IN PARTS PER MILLION (PPM).

NED FROM 0" TO 6" BELOW GRADE.

AROMATIC HYDROCARBONS.

S

0 130' 260'

SCALE: 1"=130'

CE 3.2131

FIGURE 7

EDGEWATER ASSOCIATES PROPERTY

EDGEWATER, BERGEN COUNTY, NEW JERSEY

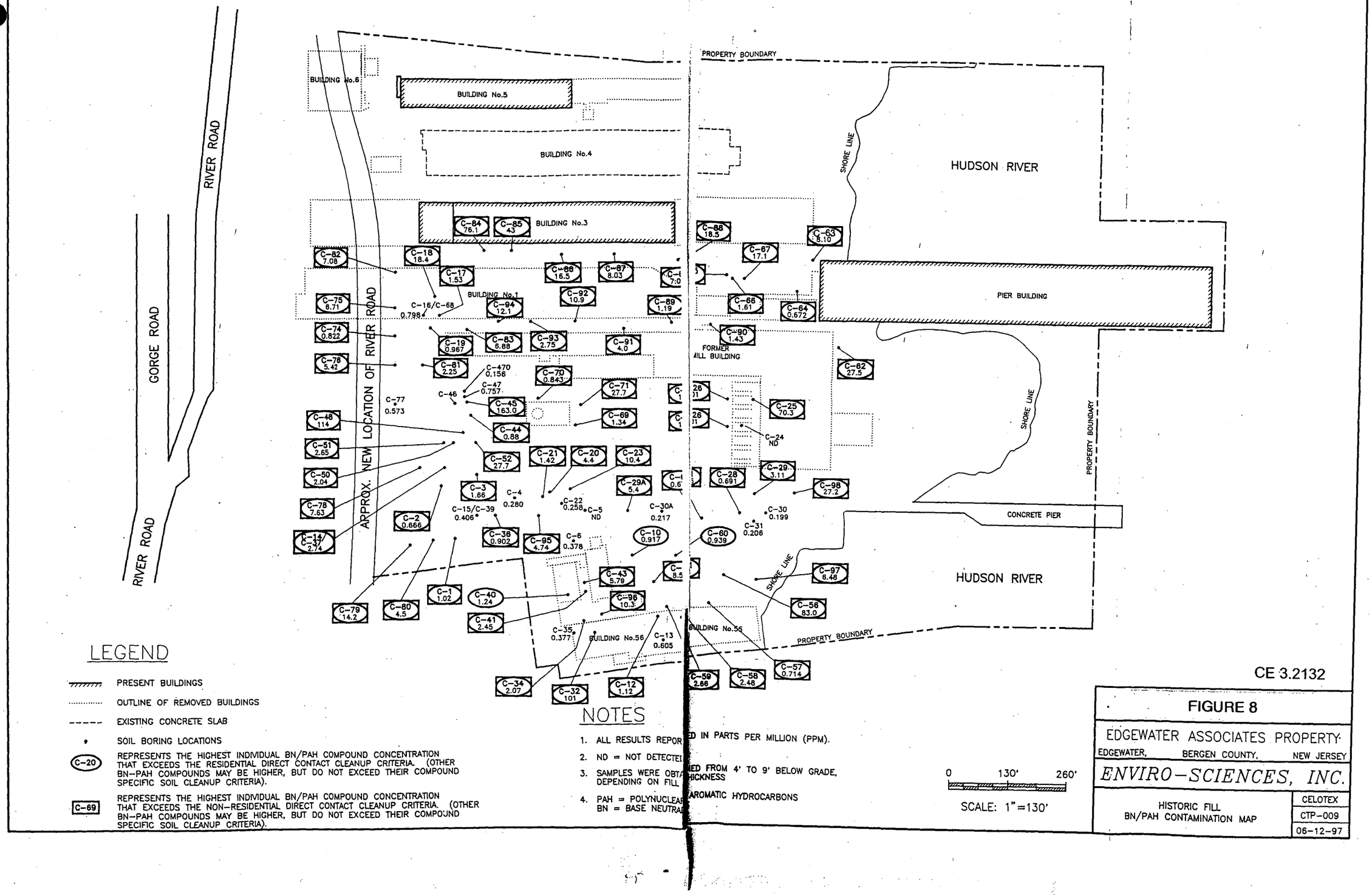
ENVIRO-SCIENCES, INC.

UPPER FILL SURFACE BN/PAH CONTAMINATION MAP

CELOTEX

CTP-009

06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) REPRESENTS THE HIGHEST INDIVIDUAL BN/PAH COMPOUND CONCENTRATION THAT EXCEEDS THE RESIDENTIAL DIRECT CONTACT CLEANUP CRITERIA. (OTHER BN-PAH COMPOUNDS MAY BE HIGHER, BUT DO NOT EXCEED THEIR COMPOUND SPECIFIC SOIL CLEANUP CRITERIA).
- [C-69] REPRESENTS THE HIGHEST INDIVIDUAL BN/PAH COMPOUND CONCENTRATION THAT EXCEEDS THE NON-RESIDENTIAL DIRECT CONTACT CLEANUP CRITERIA. (OTHER BN-PAH COMPOUNDS MAY BE HIGHER, BUT DO NOT EXCEED THEIR COMPOUND SPECIFIC SOIL CLEANUP CRITERIA).

NOTES

1. ALL RESULTS REPOR ED IN PARTS PER MILLION (PPM).
2. ND = NOT DETECTE
3. SAMPLES WERE OBT ED FROM 4' TO 9' BELOW GRADE, DEPENDING ON FILL HICKNESS
4. PAH = POLYNUCLEA AROMATIC HYDROCARBONS
   BN = BASE NEUTRA

CE 3.2132

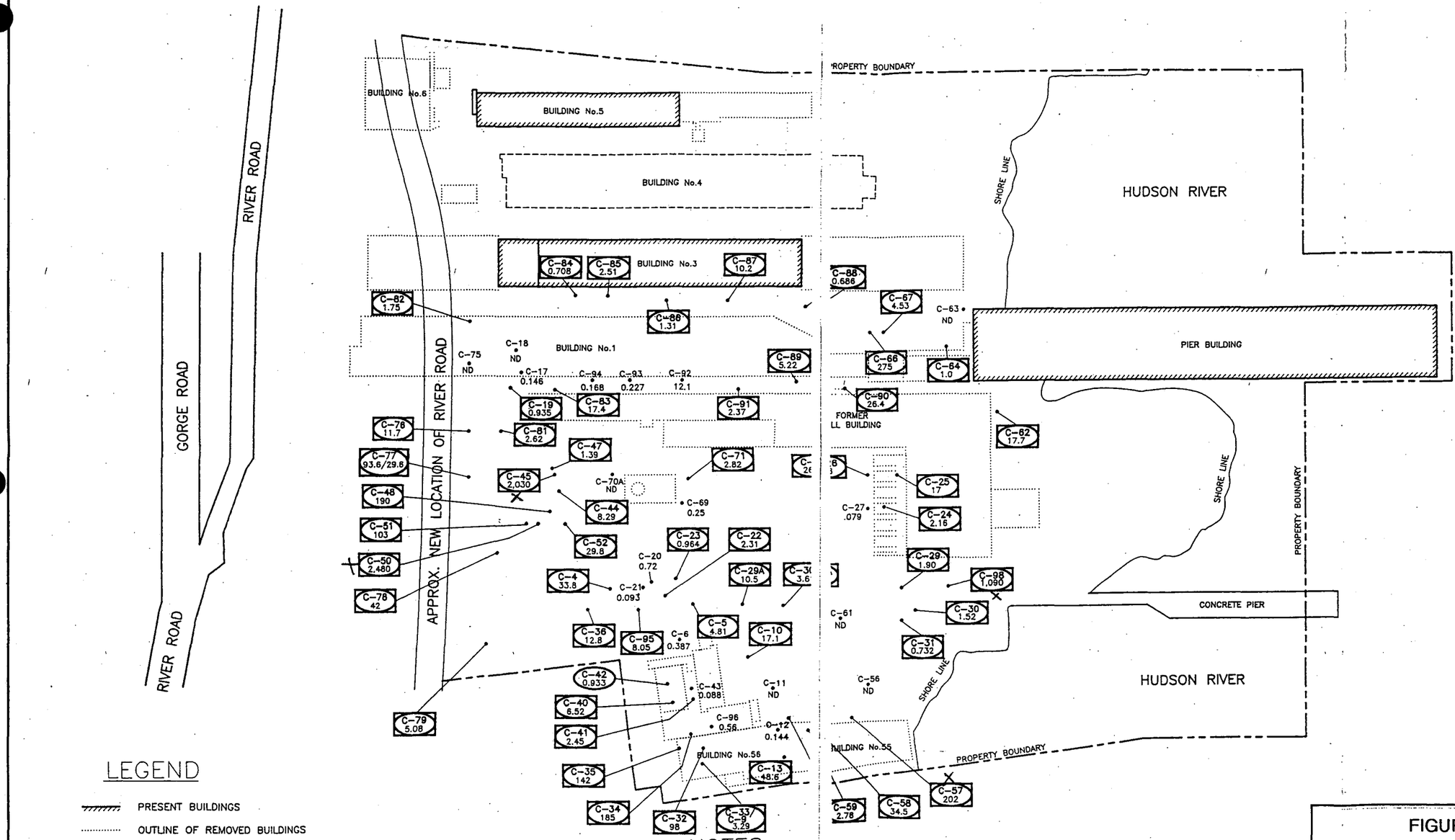
FIGURE 8

EDGEWATER ASSOCIATES PROPERTY
EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

HISTORIC FILL
BN/PAH CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) REPRESENTS THE HIGHEST INDIVIDUAL BN/PAH COMPOUND CONCENTRATION THAT EXCEEDS THE RESIDENTIAL DIRECT CONTACT CLEANUP CRITERIA. (OTHER BN–PAH COMPOUNDS MAY BE HIGHER, BUT DO NOT EXCEED THEIR COMPOUND SPECIFIC SOIL CLEANUP CRITERIA).
- [C-69] REPRESENTS THE HIGHEST INDIVIDUAL BN/PAH COMPOUND CONCENTRATION THAT EXCEEDS THE NON–RESIDENTIAL DIRECT CONTACT CLEANUP CRITERIA. (OTHER BN–PAH COMPOUNDS MAY BE HIGHER, BUT DO NOT EXCEED THEIR COMPOUND SPECIFIC SOIL CLEANUP CRITERIA).

NOTES

1. ALL RESULTS REPOR
2. ND = NOT DETECTE
3. SAMPLES WERE OBTA
4. PAH = POLYNUCLEAR
   BN = BASE NEUTRAL

D IN PARTS PER MILLION (PPM).

ED FROM 6" INTERVAL ABOVE GROUNDWATER.

AROMATIC HYDROCARBONS

CE 3.2133

FIGURE 9

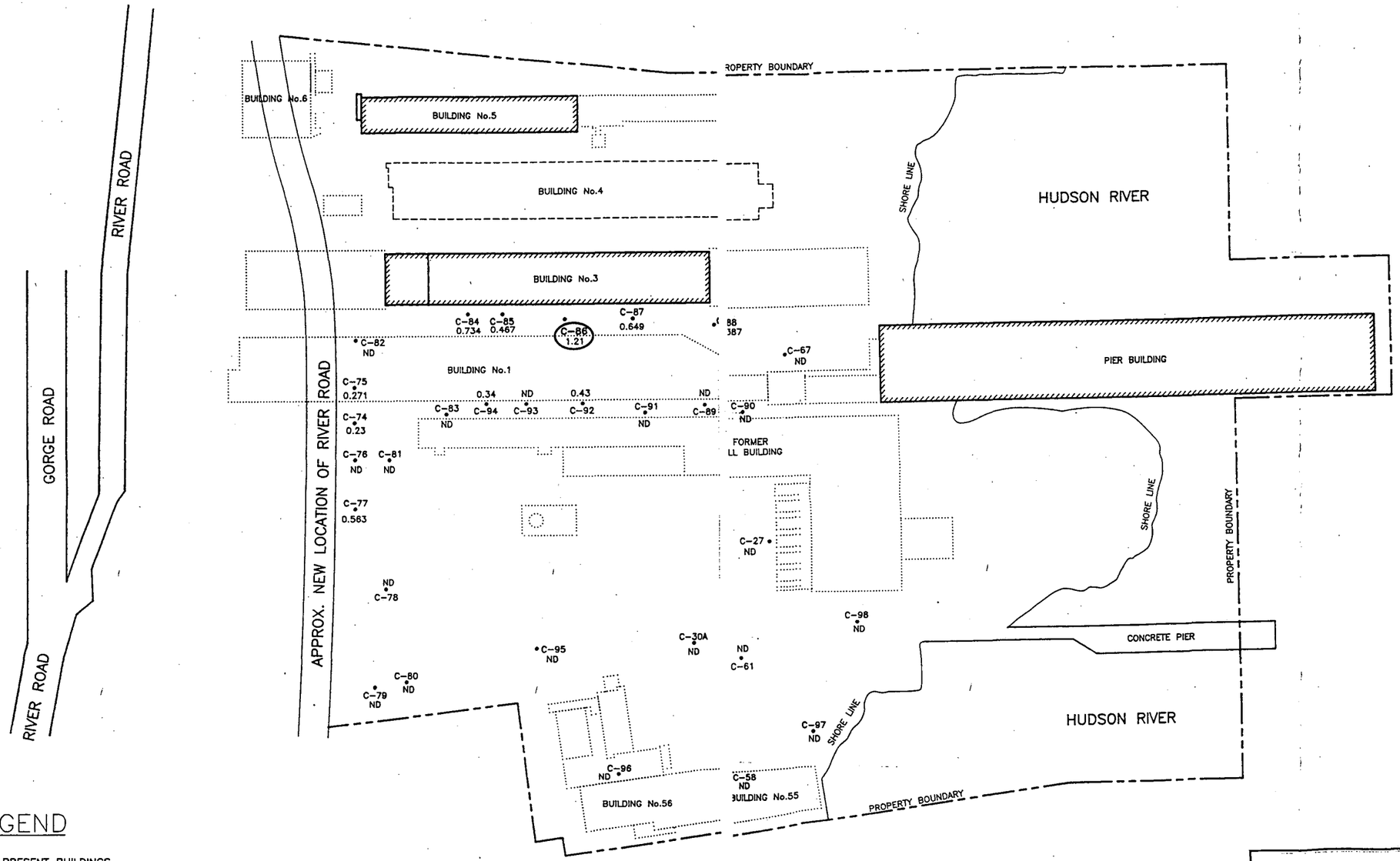
EDGEWATER ASSOCIATES PROPERTY

EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO–SCIENCES, INC.

SIX–INCH INTERVAL ABOVE THE GROUNDWATER BN/PAH CONTAMINATION MAP

CELOTEX
CTP–009
06–12–97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- • SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-69] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPOR ED IN PARTS PER MILLION (PPM).
2. CADMIUM:
   RESIDENTIAL DIRECT ONTACT SOIL CLEANUP CRITERIA = 1 ppm
   NON-RESIDENTIAL DI ECT CONTACT SOIL CLEANUP CRITERIA = 100 ppm
3. ND = NOT DETECTE

0 130' 260'

SCALE: 1"=130'

CE 3.2134

FIGURE 10

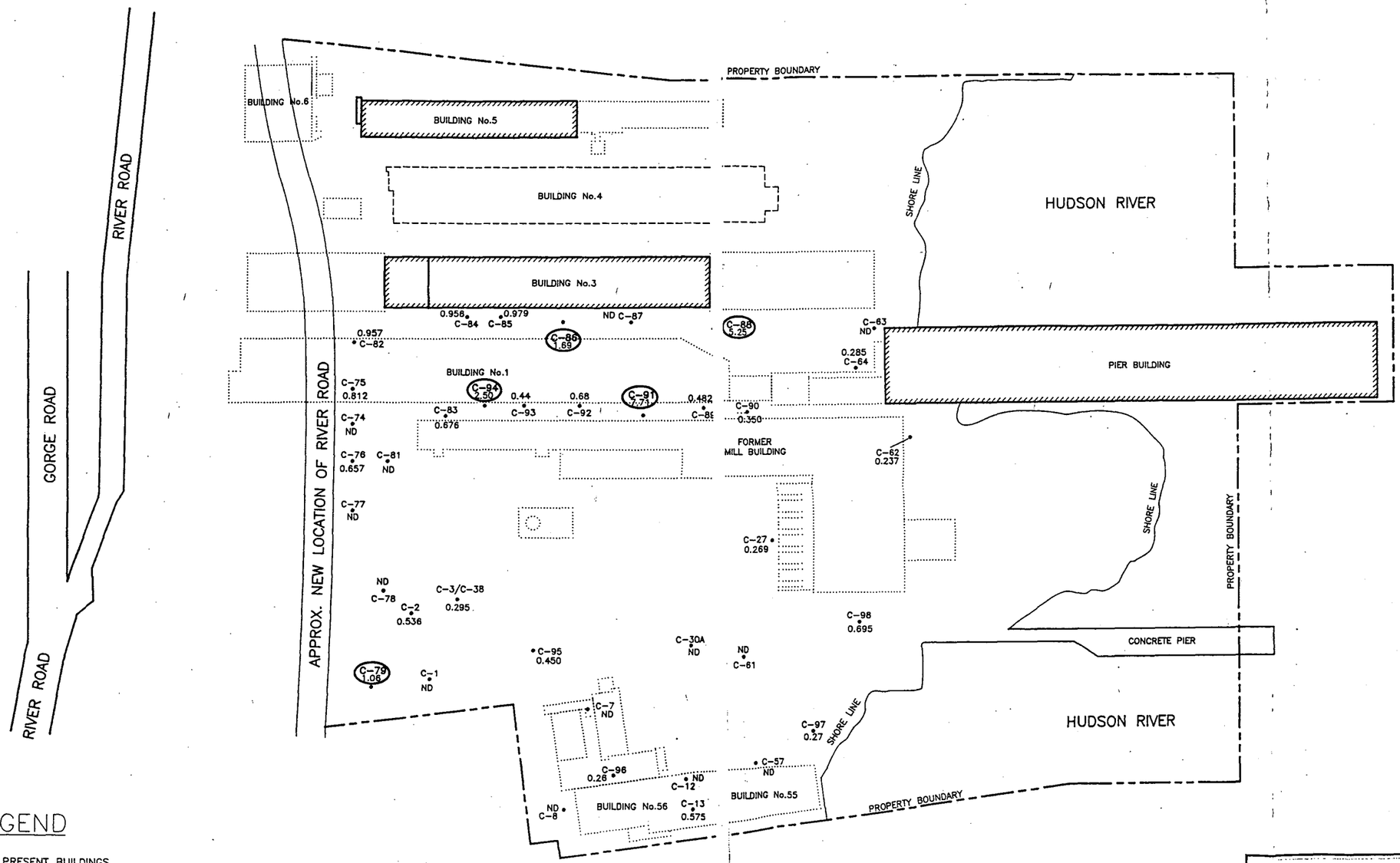
EDGEWATER ASSOCIATES PROPERTY

EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

UPPER FILL SURFACE
CADMIUM CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- • SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-69] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPOR ED IN PARTS PER MILLION (PPM).
2. CADMIUM:
   RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA = 1 ppm
   NON-RESIDENTIAL DI ECT CONTACT SOIL CLEANUP CRITERIA = 100 ppm
3. ND = NOT DETECTE

0 130' 260'

SCALE: 1"=130'

CE 3.2135

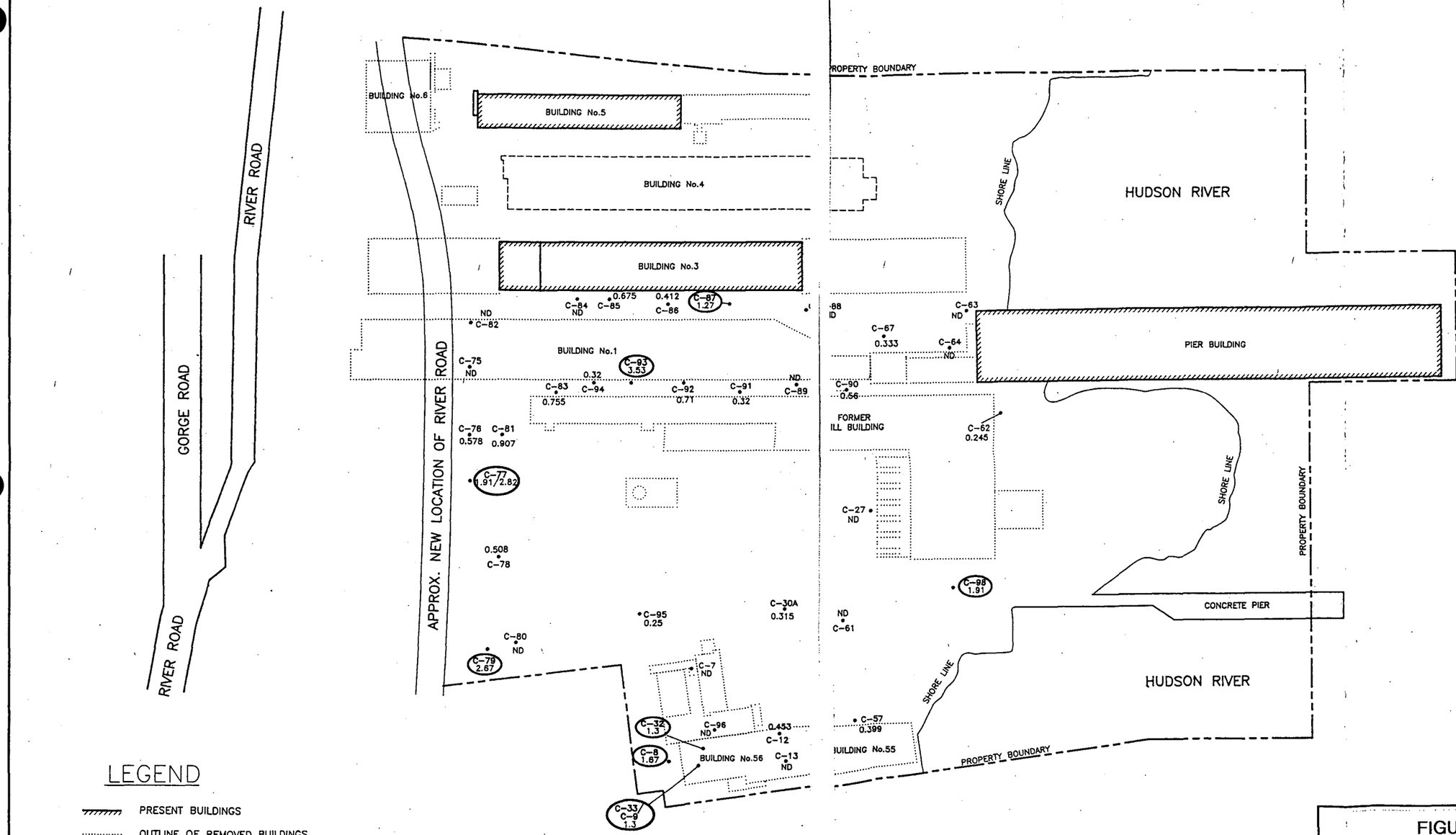
FIGURE 11

EDGEWATER ASSOCIATES PROPERTY
EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

HISTORICAL FILL SURFACE CADMIUM CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-69] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPOR
2. CADMIUM:
   RESIDENTIAL DIRECT
   NON-RESIDENTIAL DI
3. ND = NOT DETECTEI

D IN PARTS PER MILLION (PPM).

ONTACT SOIL CLEANUP CRITERIA = 1 ppm
CT CONTACT SOIL CLEANUP CRITERIA = 100 ppm

0 130' 260'

SCALE: 1" = 130'

CE 3.2136

FIGURE 12

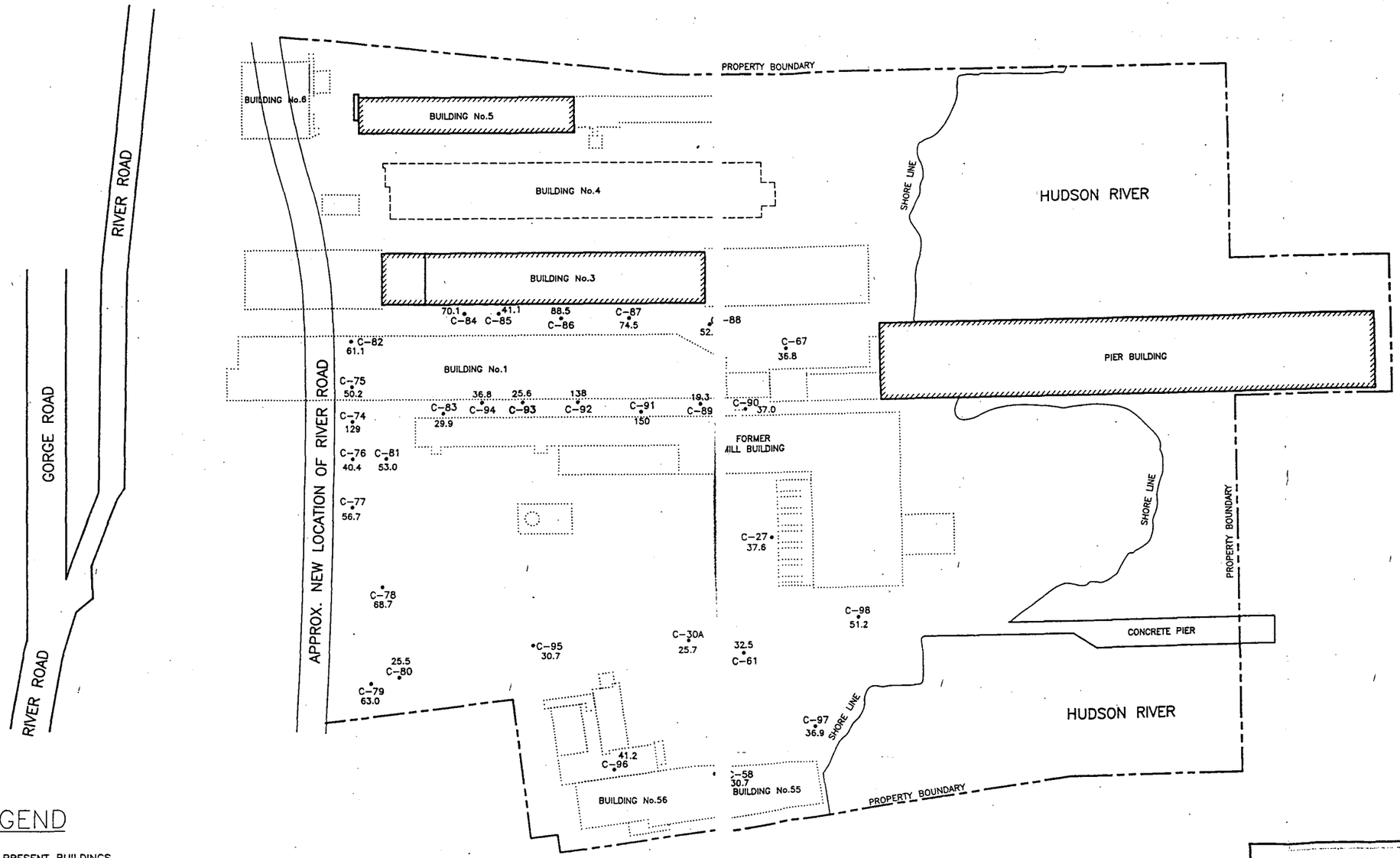
EDGEWATER ASSOCIATES PROPERTY

EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

SIX-INCH INTERVAL ABOVE THE GROUNDWATER CADMIUM CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-69] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPOR ED IN PARTS PER MILLION (PPM).
2. COPPER:
   RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA = 600 ppm
   NON-RESIDENTIAL DI ECT CONTACT SOIL CLEANUP CRITERIA = 600 ppm
3. ND = NOT DETECTE

CE 3.2137

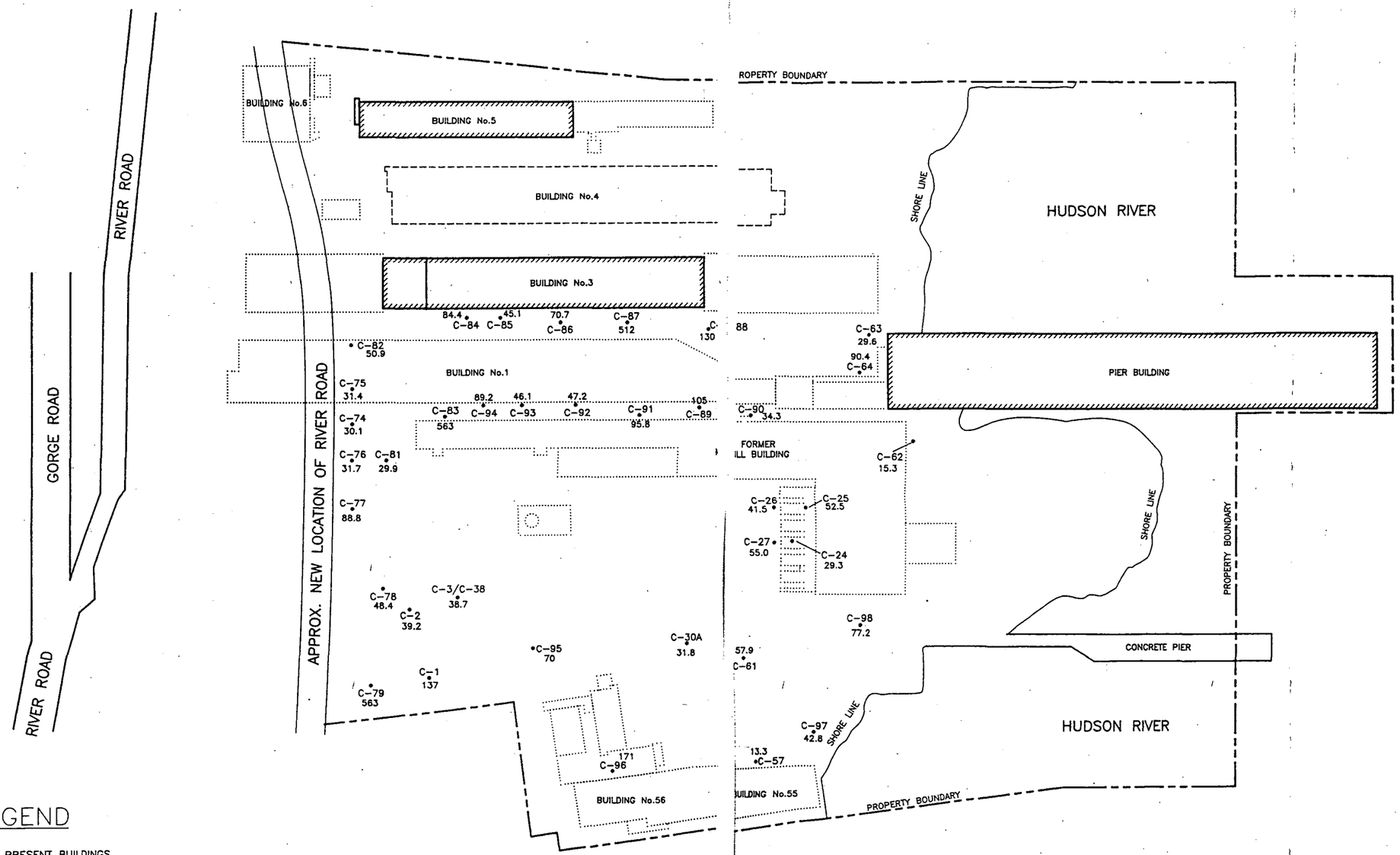
FIGURE 13

EDGEWATER ASSOCIATES PROPERTY
EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

UPPER FILL SURFACE
COPPER CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-69] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPORT
2. COPPER:
   RESIDENTIAL DIRECT
   NON-RESIDENTIAL DIF
3. ND = NOT DETECTED

D IN PARTS PER MILLION (PPM).

ONTACT SOIL CLEANUP CRITERIA = 600 ppm
ECT CONTACT SOIL CLEANUP CRITERIA = 600 ppm

CE 3.2138

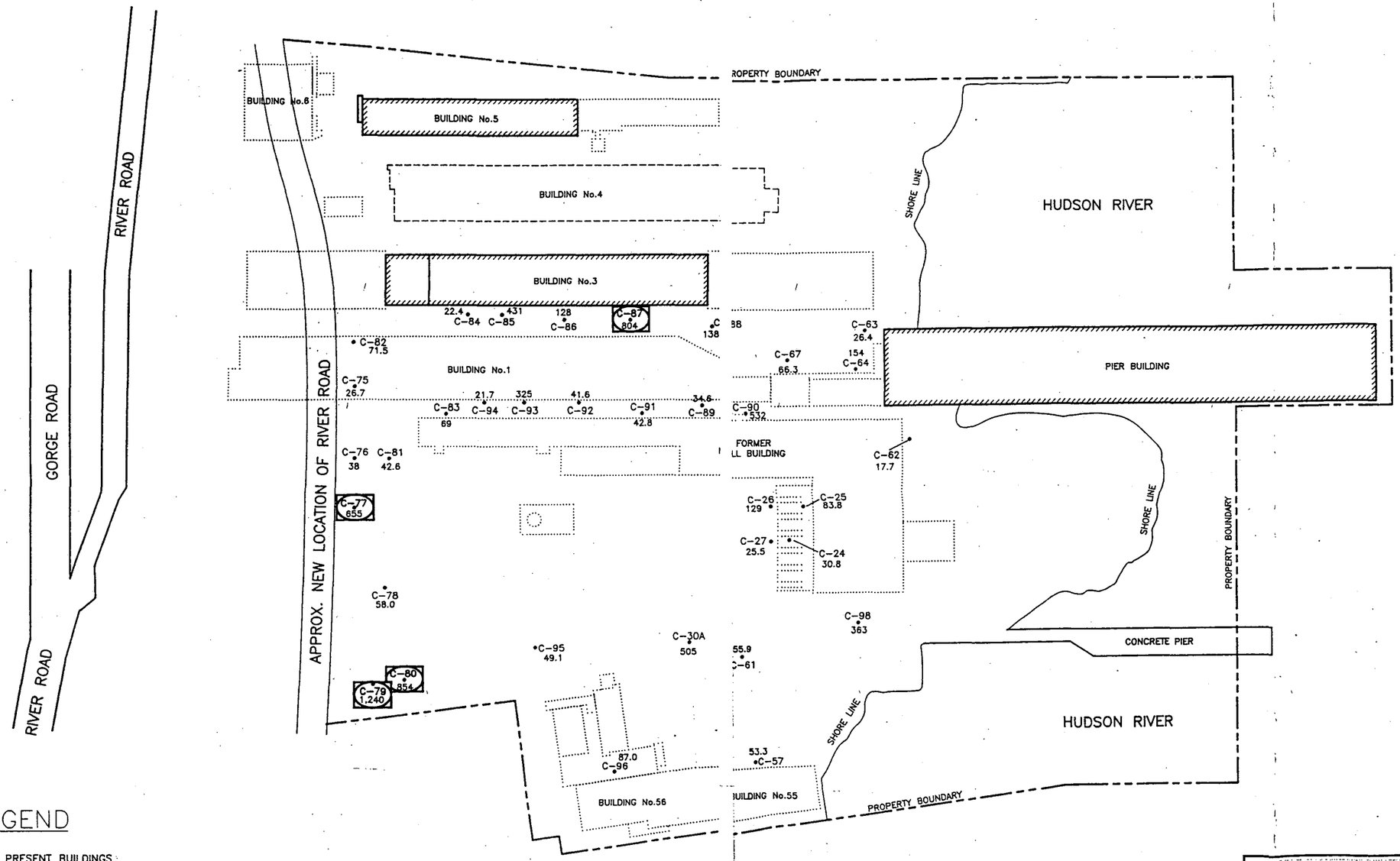
FIGURE 14

EDGEWATER ASSOCIATES PROPERTY
EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

HISTORICAL FILL SURFACE COPPER CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-69] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPOR ED IN PARTS PER MILLION (PPM).
2. COPPER:
   RESIDENTIAL DIRECT ONTACT SOIL CLEANUP CRITERIA = 600 ppm
   NON-RESIDENTIAL DI ECT CONTACT SOIL CLEANUP CRITERIA = 600 ppm
3. ND = NOT DETECTED

CE 3.2139

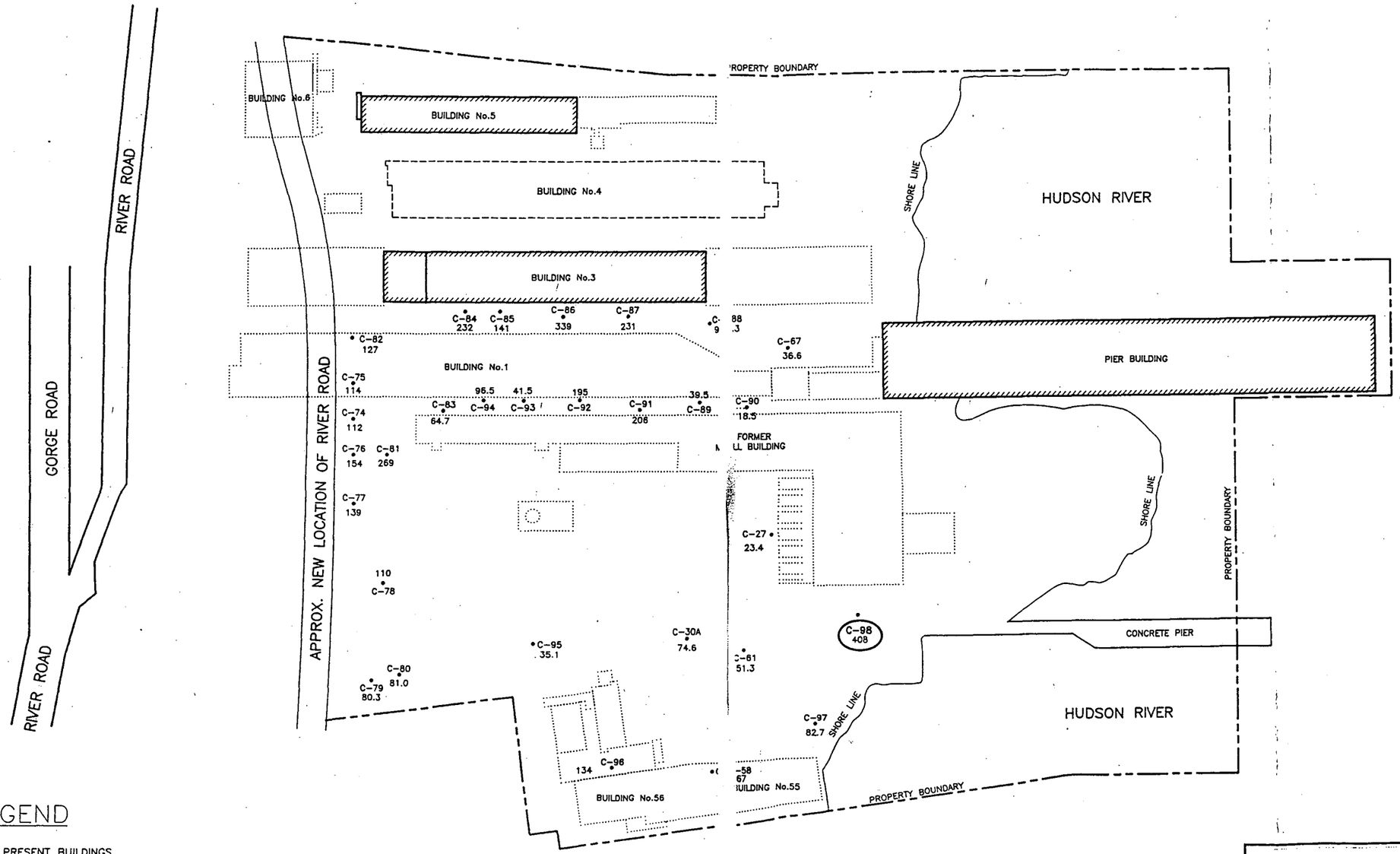
FIGURE 15

EDGEWATER ASSOCIATES PROPERTY

EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

SIX-INCH INTERVAL ABOVE THE GROUNDWATER COPPER CONTAMINATION MAP	CELOTEX
	CTP-009
	06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-69] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPORT ED IN PARTS PER MILLION (PPM).
2. LEAD:
   RESIDENTIAL DIRECT C ONTACT SOIL CLEANUP CRITERIA = 400 ppm
   NON-RESIDENTIAL DIR ECT CONTACT SOIL CLEANUP CRITERIA = 600 ppm
3. ND = NOT DETECTED

0 130' 260'

SCALE: 1"=130'

CE 3.2140

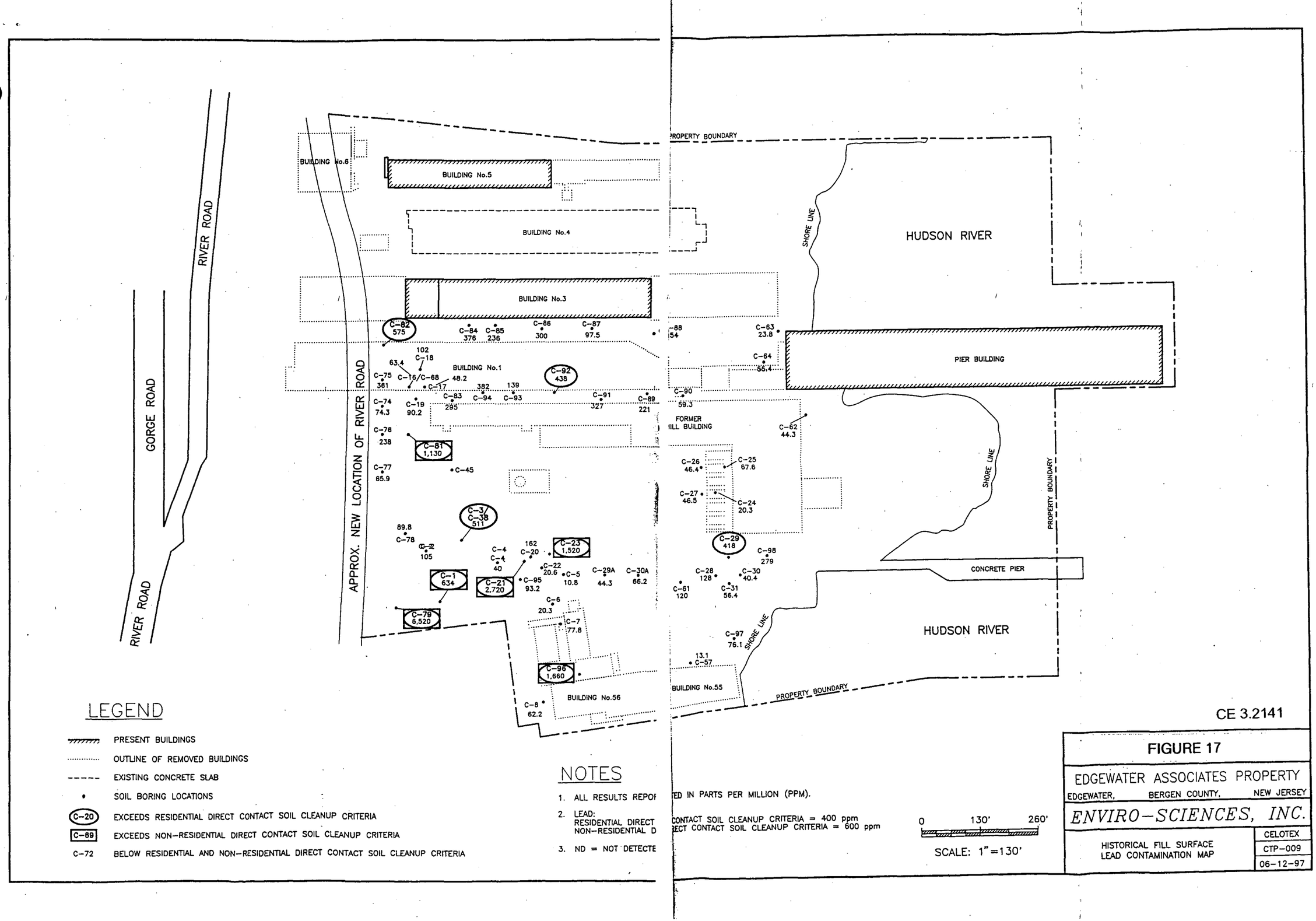
FIGURE 16

EDGEWATER ASSOCIATES PROPERTY
EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

UPPER FILL SURFACE
LEAD CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- • SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-69] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPOI
2. LEAD:
   RESIDENTIAL DIRECT
   NON-RESIDENTIAL D
3. ND = NOT DETECTE

ED IN PARTS PER MILLION (PPM).

CONTACT SOIL CLEANUP CRITERIA = 400 ppm
ECT CONTACT SOIL CLEANUP CRITERIA = 600 ppm

0 130' 260'

SCALE: 1"=130'

CE 3.2141

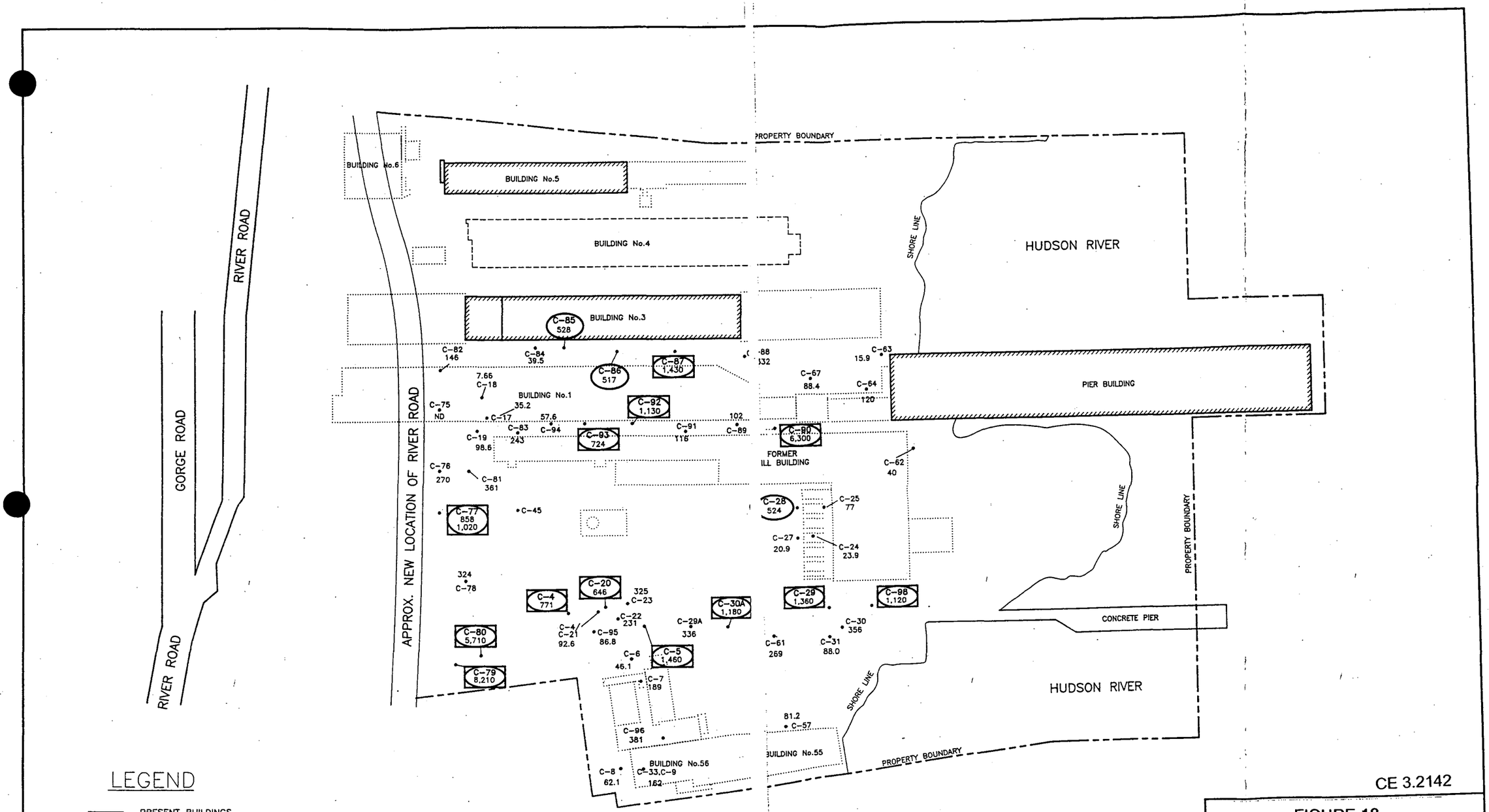
FIGURE 17

EDGEWATER ASSOCIATES PROPERTY
EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

HISTORICAL FILL SURFACE LEAD CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- • SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-69] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPOR
2. LEAD:
   RESIDENTIAL DIRECT
   NON-RESIDENTIAL DI
3. ND = NOT DETECTEI

ED IN PARTS PER MILLION (PPM).

ONTACT SOIL CLEANUP CRITERIA = 400 ppm
ECT CONTACT SOIL CLEANUP CRITERIA = 600 ppm

0 130' 260'

SCALE: 1"=130'

CE 3.2142

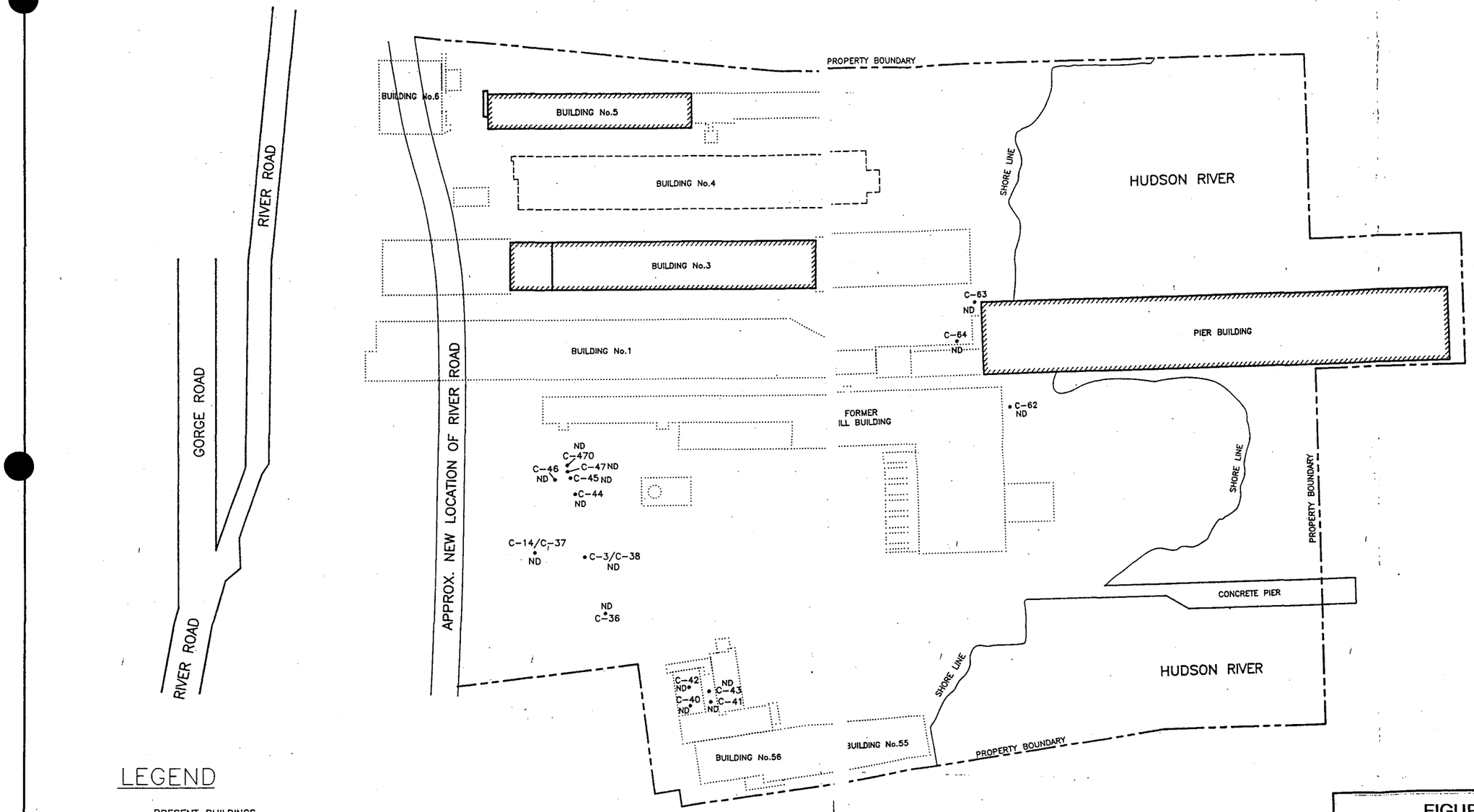
FIGURE 18

EDGEWATER ASSOCIATES PROPERTY
EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

SIX-INCH INTERVAL ABOVE THE GROUNDWATER LEAD CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-69] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPORTED IN PARTS PER BILLION (PPB).
2. PCBs
   RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA = 490 ppb
   NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA = 2,000 ppb
3. ND = NOT DETECTED

0 130' 260'

SCALE: 1"=130'

CE 3.2143

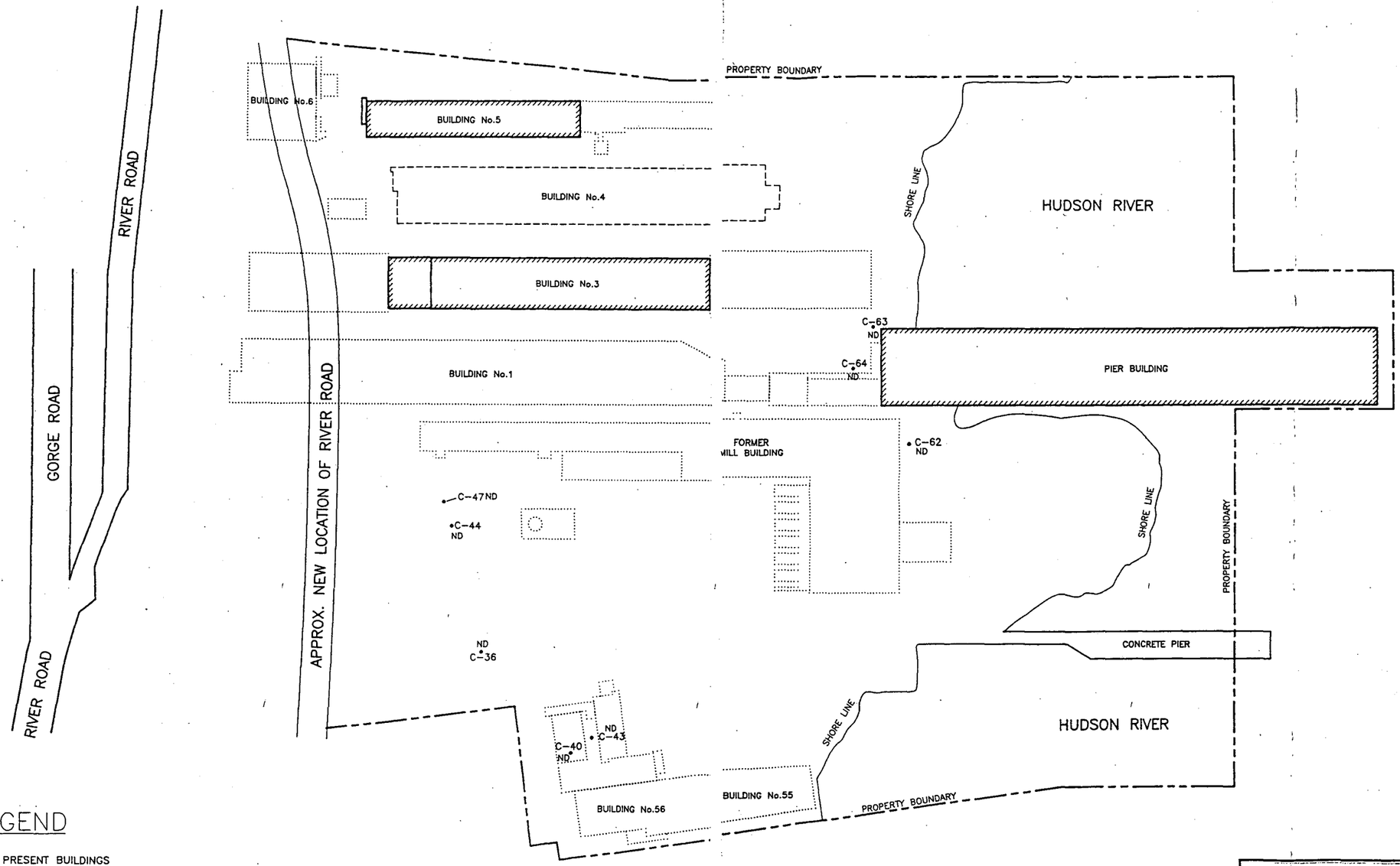
FIGURE 19

EDGEWATER ASSOCIATES PROPERTY
EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

HISTORICAL FILL SURFACE PCBs CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-69] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPOI ED IN PARTS PER BILLION (PPB).
2. PCBs
   RESIDENTIAL DIRECT :ONTACT SOIL CLEANUP CRITERIA = 490 ppb
   NON-RESIDENTIAL D :ECT CONTACT SOIL CLEANUP CRITERIA = 2,000 ppb
3. ND = NOT DETECTE

0 130' 260'

SCALE: 1"=130'

CE 3.2144

FIGURE 20

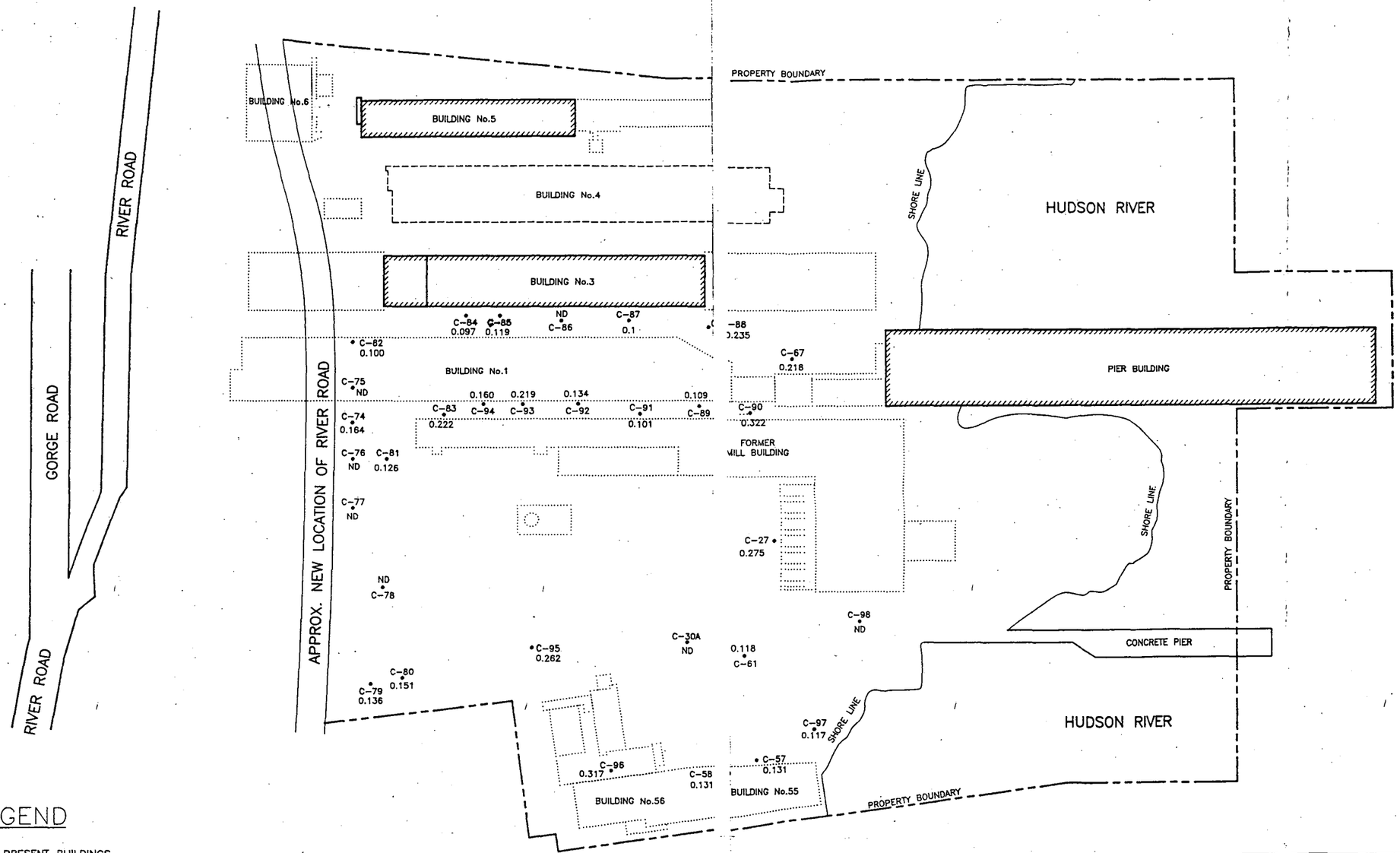
EDGEWATER ASSOCIATES PROPERTY

EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

SIX-INCH INTERVAL ABOVE THE GROUNDWATER PCBs CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- • SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-89] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPOR ED IN PARTS PER MILLION (PPM).
2. THALLIUM:
   RESIDENTIAL DIRECT ONTACT SOIL CLEANUP CRITERIA = 2 ppm
   NON-RESIDENTIAL DI ECT CONTACT SOIL CLEANUP CRITERIA = 2 ppm
3. ND = NOT DETECTED

0 130' 260'

SCALE: 1"=130'

CE 3.2145

FIGURE 21

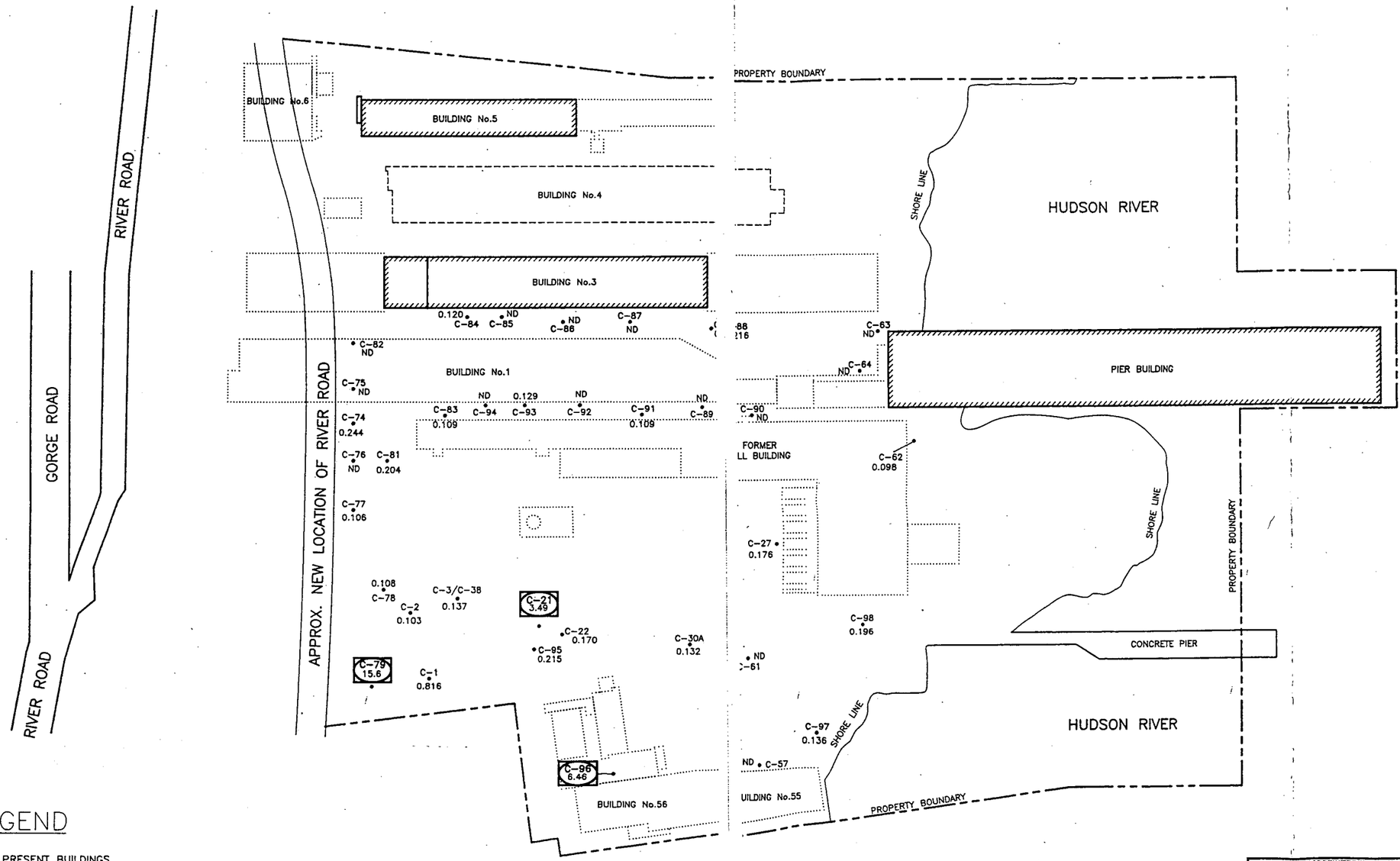
EDGEWATER ASSOCIATES PROPERTY

EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

UPPER FILL SURFACE THALLIUM CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- C-20 EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-69 EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPORT) IN PARTS PER MILLION (PPM).
2. THALLIUM:
   RESIDENTIAL DIRECT (NTACT SOIL CLEANUP CRITERIA = 2 ppm
   NON-RESIDENTIAL DIR CT CONTACT SOIL CLEANUP CRITERIA = 2 ppm
3. ND = NOT DETECTED

0 130' 260'

SCALE: 1"=130'

CE 3.2146

FIGURE 22

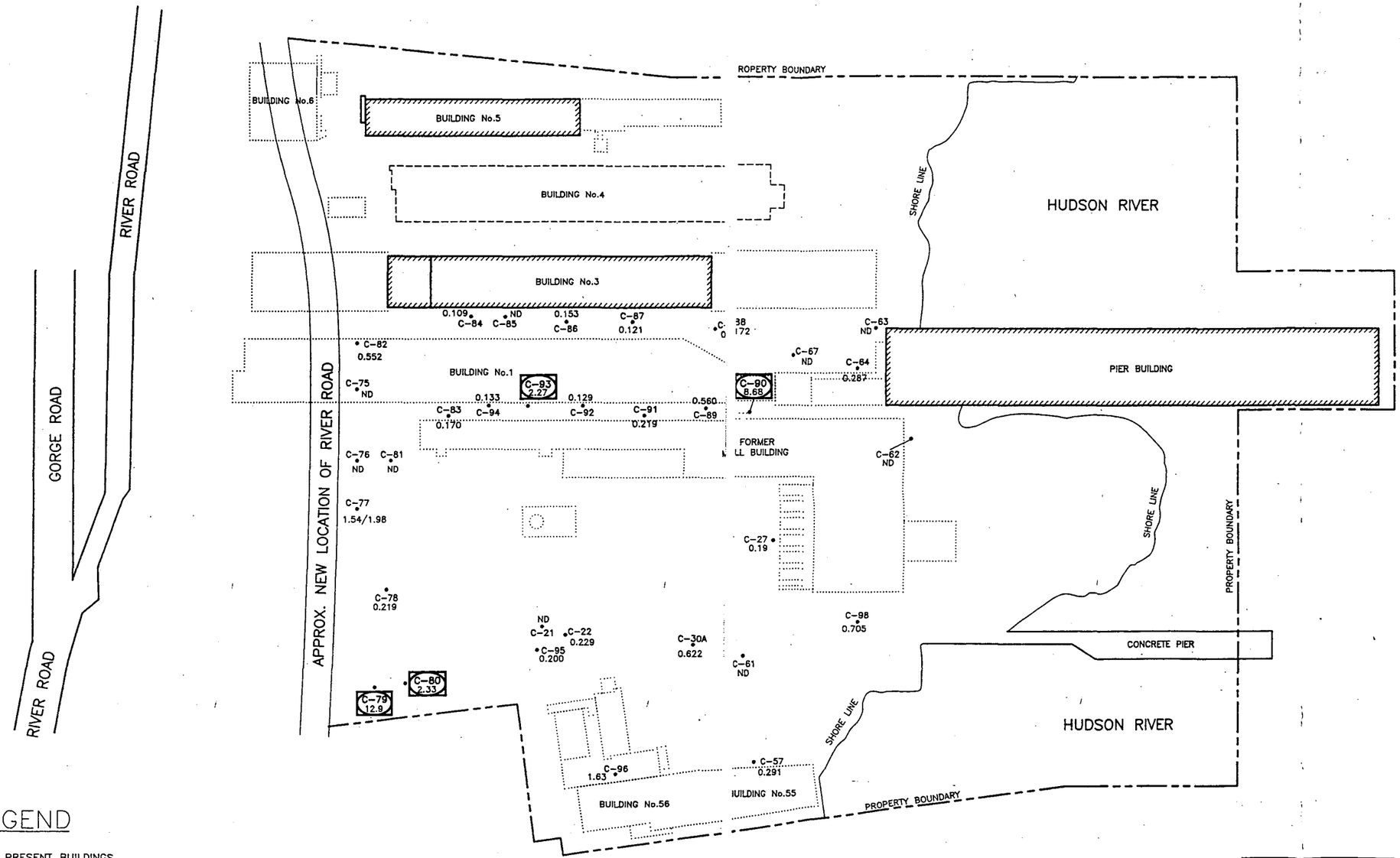
EDGEWATER ASSOCIATES PROPERTY

EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

HISTORICAL FILL SURFACE THALLIUM CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) EXCEEDS RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- [C-89] EXCEEDS NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
- C-72 BELOW RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA

NOTES

1. ALL RESULTS REPOR :D IN PARTS PER MILLION (PPM).
2. THALLIUM:
   RESIDENTIAL DIRECT ONTACT SOIL CLEANUP CRITERIA = 2 ppm
   NON-RESIDENTIAL DII :CT CONTACT SOIL CLEANUP CRITERIA = 2 ppm
3. ND = NOT DETECTEI

0 130' 260'

SCALE: 1"=130'

CE 3.2147

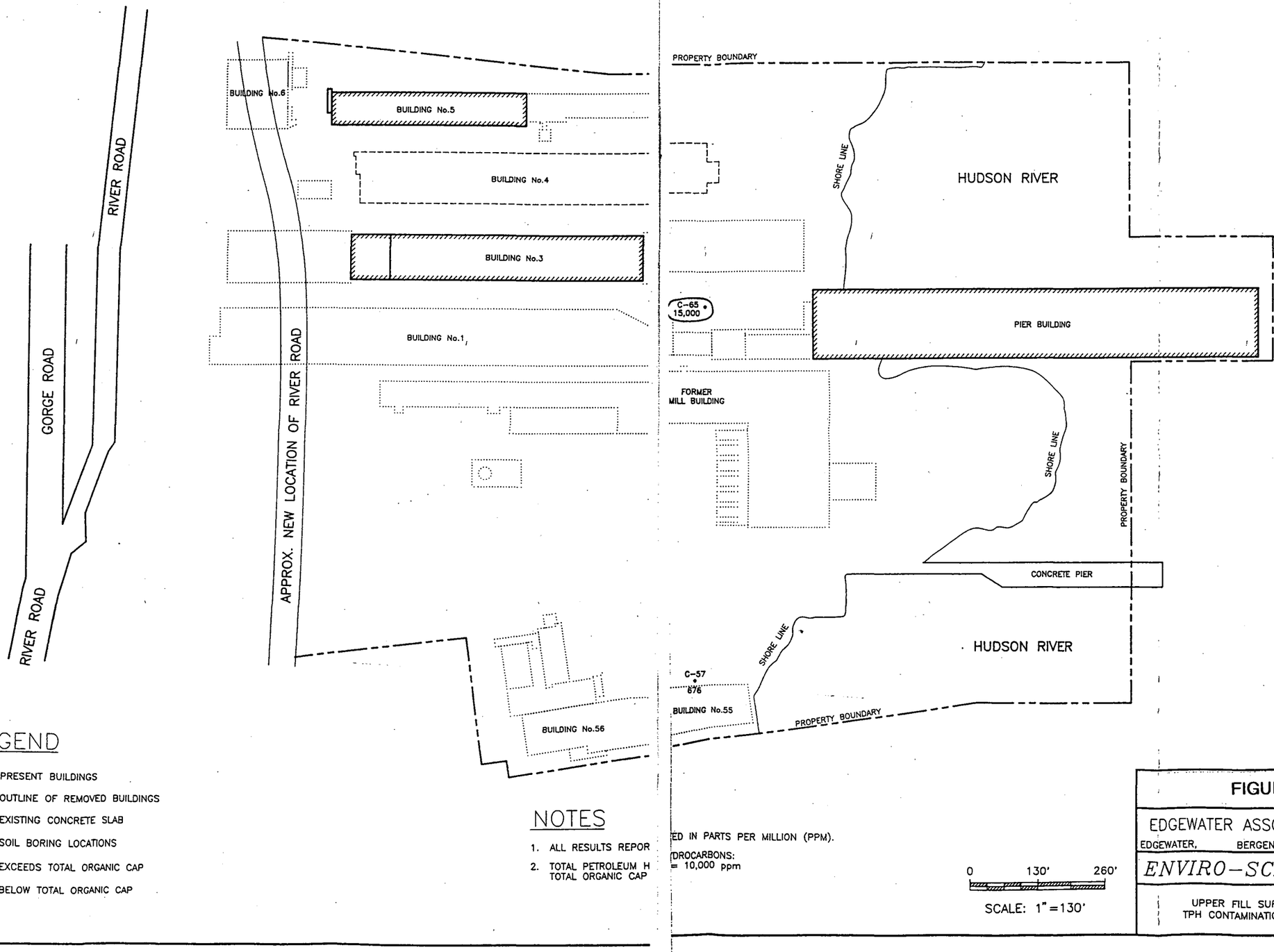
FIGURE 23

EDGEWATER ASSOCIATES PROPERTY
EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

SIX-INCH INTERVAL ABOVE THE GROUNDWATER THALLIUM CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- C-20 EXCEEDS TOTAL ORGANIC CAP
- C-20 BELOW TOTAL ORGANIC CAP

NOTES

1. ALL RESULTS REPOR
2. TOTAL PETROLEUM H
   TOTAL ORGANIC CAP

ED IN PARTS PER MILLION (PPM).

DROCARBONS:
= 10,000 ppm

0 130' 260'

SCALE: 1"=130'

CE 3.2148

FIGURE 24

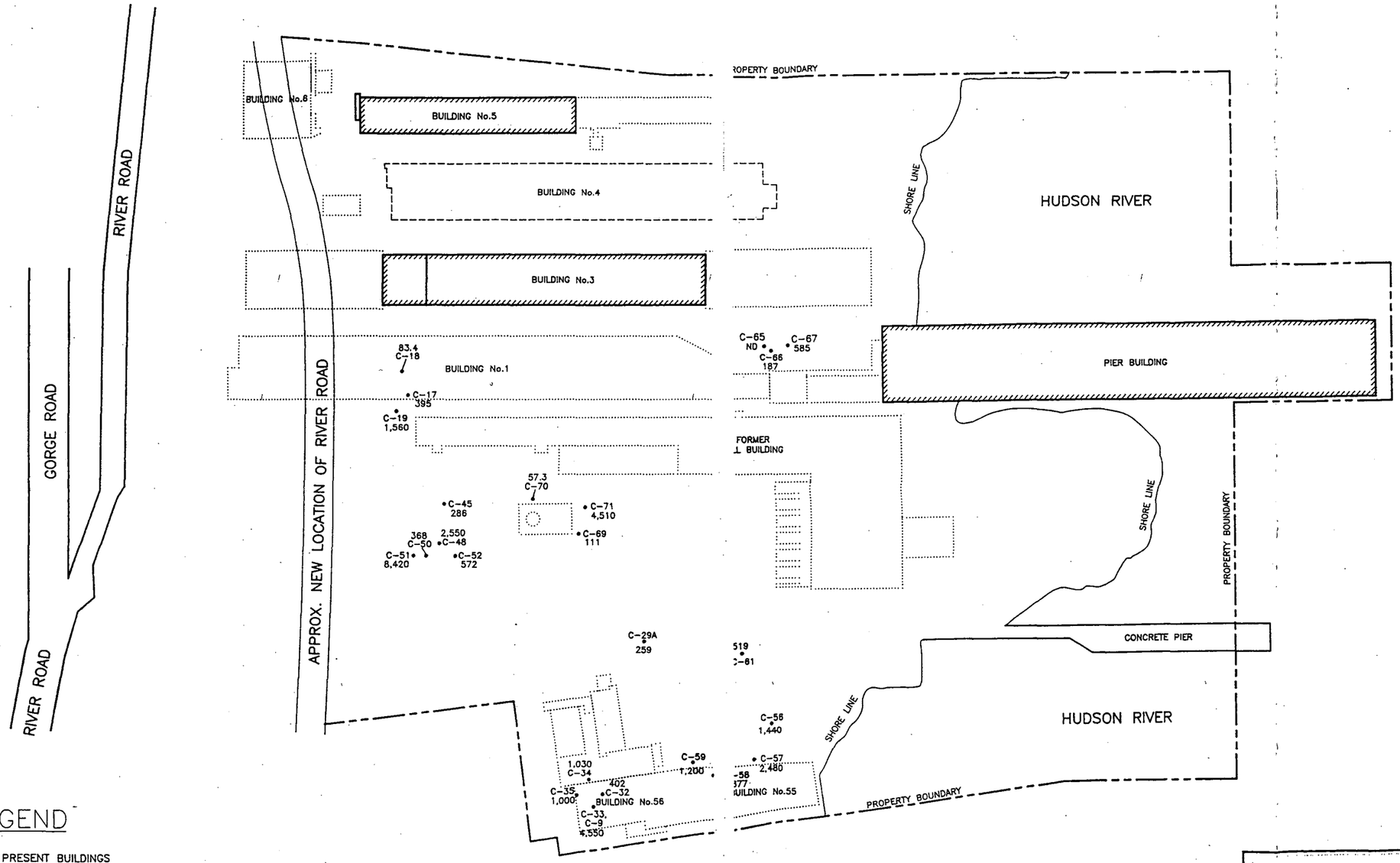
EDGEWATER ASSOCIATES PROPERTY

EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

UPPER FILL SURFACE
TPH CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) EXCEEDS TOTAL ORGANIC CAP
- C-20 BELOW TOTAL ORGANIC CAP

NOTES

1. ALL RESULTS REPOR D IN PARTS PER MILLION (PPM).
2. TOTAL PETROLEUM H OROCARBONS:
   TOTAL ORGANIC CAP : 10,000 ppm

0 130' 260'

SCALE: 1"=130'

CE 3.2149

FIGURE 25

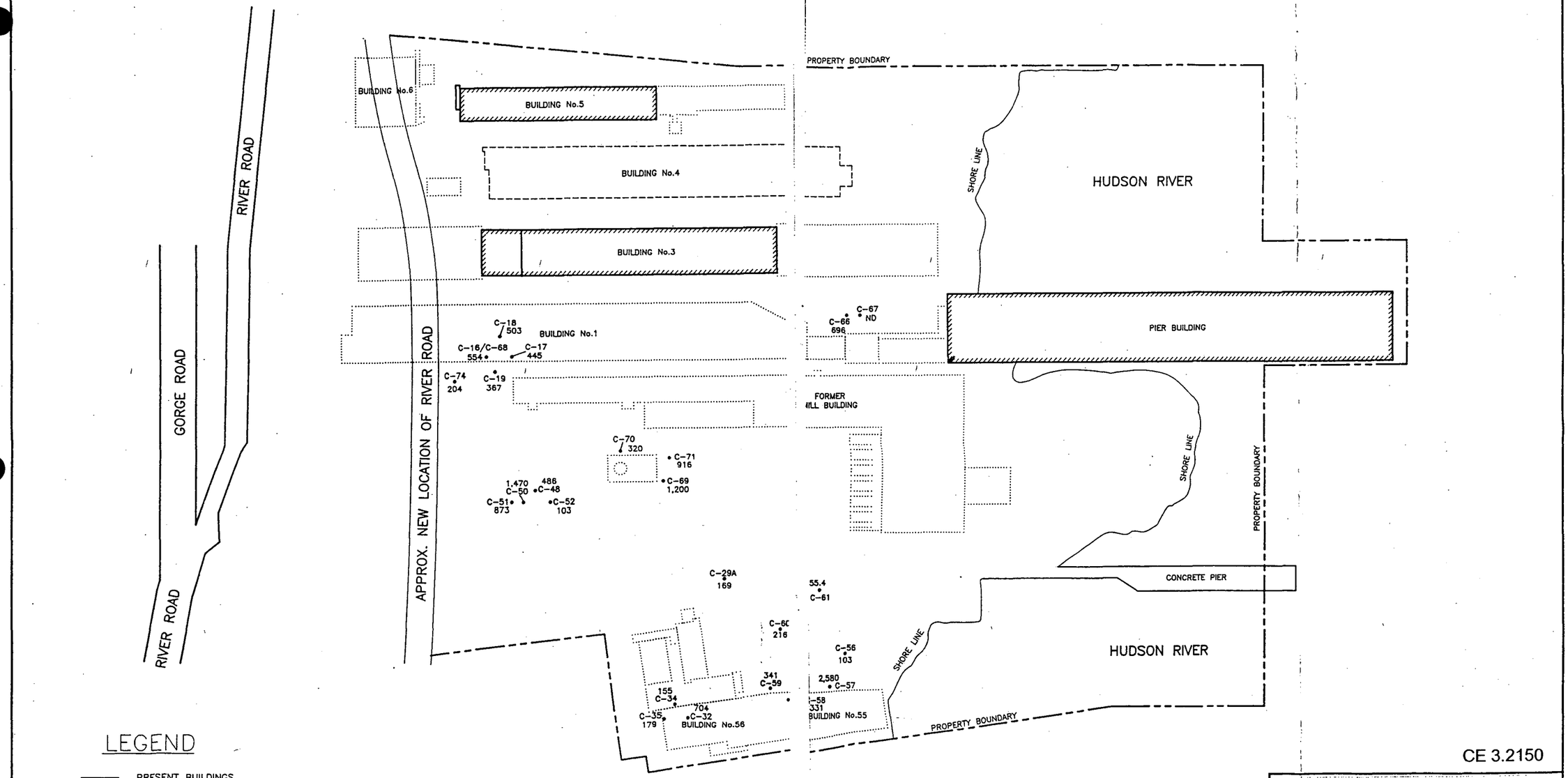
EDGEWATER ASSOCIATES PROPERTY

EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

HISTORICAL FILL SURFACE TPH CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97



LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- SOIL BORING LOCATIONS
- (C-20) EXCEEDS TOTAL ORGANIC CAP
- C-20 BELOW TOTAL ORGANIC CAP

NOTES

1. ALL RESULTS REPOR
2. TOTAL PETROLEUM H TOTAL ORGANIC CAP

ED IN PARTS PER MILLION (PPM).

DROCARBONS:
= 10,000 ppm

0 130' 260'

SCALE: 1"=130'

CE 3.2150

FIGURE 26

EDGEWATER ASSOCIATES PROPERTY

EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

SIX-INCH INTERVAL ABOVE THE GROUNDWATER TPH CONTAMINATION MAP

CELOTEX
CTP-009
06-12-97

N

RIVER ROAD

GORGE ROAD

RIVER ROAD

APPROX. NEW LOCATION OF RIVER ROAD

BUILDING No.6

BUILDING No.5

BUILDING No.4

BUILDING No.3

BUILDING No.1

BUILDING No.56

BUILDING No.55

4.0

4.5

5.0

5.5

6.0

6.5

MW-5
5.78

MW-4
6.27

MW-6
6.81

MW-1
6.25

MW-9
2.49

MW-8
3.68

MW-3
.62

MW-2
-4.5?

MW-7
2.86

PROPERTY BOUNDARY

SHORE LINE

HUDSON RIVER

PIER BUILDING

FORMER
L BUILDING

CONCRETE PIER

LEGEND

- PRESENT BUILDINGS
- OUTLINE OF REMOVED BUILDINGS
- EXISTING CONCRETE SLAB
- MONITORING WELL LOCATIONS

0 130' 260'

SCALE: 1"=130'

CE 3.2151

FIGURE 27

EDGEWATER ASSOCIATES PROPERTY

EDGEWATER, BERGEN COUNTY, NEW JERSEY

ENVIRO-SCIENCES, INC.

MONITORING WELL LOCATIONS AND WATER TABLE CONTOUR MAP

CELOTEX
CTP-008
06-12-97

CE 3.2152

State of New Jersey

Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

CERTIFIED MAIL RETURN RECEIPT REQUESTED
P145 064 256

Mr. James Demetrakis
PO Box 379
Fort Lee, New Jersey 07024-379

April 7, 1998

Re: Celotex Remedial Investigation
MOA Case # 96-05-1722-24

Dear Mr. Demetrakis:

On March 25, 1998 your consultant, Enviro-Sciences Inc. excavated a series of test pits on your property for the purposes of determining if buried and/or floating product existed to the north of the Quanta/Edgewater Associates (Celotex) property line. As you know EPA contends that seeps of contaminated material are entering the Hudson River, significantly affecting sediment and water quality in the area. The nature and location of the seeps seem to indicate that the source of the contaminated material, which is suspected to be, but is not limited to coal tar residues, extends beyond the Quanta Resources property line. The results of the test pitting indicates that coal tar materials are present on the Celotex property and that this material extends at least 200 feet to the north of the Quanta/Celotex property line. This material was observed several feet above ground water and extended to below the ground water level.

My discussions with John Gear of Enviro-Sciences at the time of the test pitting included future remedial investigatory actions on part of Edgewater Associates for the Celotex site. Specifically Enviro-Sciences suggested placing five more ground water monitoring wells on the property to further delineate contamination. The Department has reviewed and approves the following approximate proposed locations of these wells: at bore hole C-98, C-50, C-29A, midway between MW10 and C-26 and a deep well between MW-7 and MW-2. In addition to these wells the Department believes that additional test pitting needs to be conducted to further delineate product/source material deposition. A series of test pits should be excavated farther north and west of the previous test pits to see where this source material ends. Borings should be added to supplement the test pitting procedure. The information from this additional work will be necessary to properly plan remedial actions and will also be valuable for planning the ecological study.

If you have any questions or would like to discuss this issue in further detail, please call me at (609) 633-0744.

Sincerely,

Robert Hayton, Case Manager
Bureau of Federal Case Management

c. Bob Montgomery, USEPA
Sharon Bruder, NJDEP
Chris Lacy, NJDEP
Anne Pavelka, NJDEP

CE 3.2154

REMEDIAL INVESTIGATION REPORT ADDENDUM

GROUNDWATER INVESTIGATION

For

EDEGEWATER ASSOCIATES: THE FORMER CELOTEX SITE EDGEWATER, NEW JERSEY

November 1998

Prepared by:

ENVIRO-SCIENCES, INC.
111 HOWARD BOULEVARD, SUITE 108
MT. ARLINGTON, NEW JERSEY 07856
(973)398-8183 • (973)398-8037 - Fax

REMEDIAL INVESTIGATION WORKPLAN ADDENDUM

GROUNDWATER INVESTAIGATION

For

EDEGEWATER ASSOCIATES: THE FORMER CELOTEX SITE
EDGEWATER, NEW JERSEY
NOVEMBER 1998

Table of Contents

Page #

1.0 INTRODUCTION 1

2.0 GROUNDWATER SAMPLING PROCEDURES 1

3.0 JULY 1998 GROUNDWATER ANALYTICAL RESULTS 2

4.0 SEPTEMBER 1998 GROUNDWATER ANALYTICAL RESULTS 3

5.0 CONCLUSIONS 4

FIGURES

Figure 1 - Monitoring Well Location Map

TABLES

Table 1 - Groundwater Analytical Results – July 1998
Table 2 - Groundwater Analytical Results - September 1998

APPENDICES

Appendix A - Well Logs
Appendix B - Laboratory Analytical Report

REMEDIAL INVESTIGATION WORKPLAN ADDENDUM

GROUNDWATER INVESTAIGATION

For

EDEGEWATER ASSOCIATES: THE FORMER CELOTEX SITE
EDGEWATER, NEW JERSEY
NOVEMBER 1998

1.0 INTRODUCTION

During June and July 1998, eight additional monitoring wells (MW-19, MW-20, MW-21, MW-22, MW-31, MW-34, MW-35 and MW-36) were installed in accordance with the New Jersey Department of Environmental Protection (NJDEP) letter dated December 15, 1997. Monitoring wells MW-19 and MW-22 were installed at locations where previous soil sampling results indicated high concentrations of contamination. Monitoring wells MW-20 and MW-21 were installed to horizontally delineate contamination associated with the Ferola/Quanta superfund site along the southern property boundary. Monitoring well MW-31 was installed to vertically delineate contamination associated with the Ferola/Quanta superfund site along the southern property boundary. Monitoring wells MW-34, MW-35 and MW-36 were installed to assess groundwater quality associated with a former aboveground storage tank.

On July 2 and 3, 1998, Enviro-Sciences, Inc. (Enviro-Sciences) obtained groundwater samples at the former Celotex Site in Edgewater, New Jersey from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-10, MW-11, MW-12A, MW-19, MW-20, MW-21 and MW-22. Samples could not be obtained from MW-13 and MW-14 because they were inadvertently damaged during the demolition of Building No.3. The wells have been replaced and are now designated MW-13A and MW-14A.

On September 15 and 16, 1998, monitoring wells MW-13A, MW-14A, MW-31, MW-34, MW-35, and MW-36 were sampled. Monitoring well locations can be seen on Figure 1. Well logs for the additional wells have been constructed and are included as Appendix A.

2.0 GROUNDWATER SAMPLING PROCEDURES

A low flow purging and sampling technique was used to sample each monitoring well. This technique employs low flow rates for purging and sampling in order to minimize chemical and physical disturbances in the immediate well area. Pumping rates are adjusted to cause minimal drawdown and typically range from 0.1 to 1.0 liters per minute. Groundwater is pumped through a flow-through cell where parameters such as pH, dissolved oxygen, conductivity and temperature are measured. Upon the stabilization of these parameters, samples were obtained from the discharge end of pump for metals and PCB analysis. All other sample parameters were obtained by using a Teflon® bailer.

Samples obtained from MW-1, MW-2, MW-3, MW-4, MW-5, MW-6 and MW-7 were analyzed for volatile organics plus a library search (VO+10), arsenic, total dissolved solids (TDS) and chloride. Samples obtained from MW-10, MW-11 and MW-12A were analyzed for VO+10, TDS and chloride. Samples obtained from MW-13A, MW-14A, MW-31, MW-34, MW-35 and MW-36 were analyzed for priority pollutants plus forty (PP+40), TDS, and chloride. Monitoring wells MW-19, MW-20, MW-21 and MW-22 were analyzed for PP+40. All samples were taken to New Jersey certified laboratory for analysis. The results of the analysis are presented in Tables 1 and 2, and the complete laboratory report has been included as Appendix B.

Depth to water measurements were taken from all wells prior to purging the wells. Data from the tidal study is currently being evaluated and, upon completion (of the tidal study), a groundwater contour map will be provided. Based on preliminary review, the tidal data may affect the interpretation of groundwater gauging data. All previously submitted groundwater contour maps should be viewed as preliminary until the tidal affects on the site are determined. The contour map will be provided with the tidal study results by December 31, 1998.

3.0 JULY 1998 GROUNDWATER ANALYTICAL RESULTS

Sample analysis indicated the presence of the following compounds that exceeded NJDEP groundwater cleanup criteria:

- 1,1-Dichloroethane was detected above the groundwater criterion of 50 ppb in MW-1 at 63.3 ppb and MW-10 at 59.4 ppb respectively.
- 1,1-Dichloroethene was detected above the groundwater criterion of 2 ppb in MW-10 at 2.16 ppb.
- Benzene was detected above the groundwater criterion of 1 ppb in MW-1 at 160 ppb, MW-2 at 55ppb, MW-4 at 131 ppb, MW-6 at 73.7 ppb, MW-7 at 656 ppb, MW-10 at 1.05 ppb, MW-12A at 2.03 ppb, MW-19 at 1.71 ppb, MW-20 at 2.51 ppb, MW-21 at 300 ppb and MW-22 at 1.07 ppb.
- Toluene was detected above the groundwater criterion of 1,000 ppb in MW-21 at 1,390 ppb.
- Ethylbenzene was detected above the groundwater criterion of 700 ppb in MW-21 at 1,820 ppb.
- Total xylenes were detected above the groundwater criterion of 1,000 ppb in MW-4 at 1,050 ppb and MW-21 at 6,240.
- Napthalene was detected above the groundwater criterion of 300 ppb in MW-21 at 4,340 ppb.

- 2,4-Dinitrotoluene was detected above the groundwater criterion of 10 ppb in MW-20 at 28.9 ppb.

- Arsenic was detected above the groundwater criterion of 8 ppb in MW-1 at 6,500 ppb, MW-4 at 94 ppb, MW-6 at 21.4 ppb, MW-7 at 11 ppb, MW-19 at 229 ppb, MW-20 at 2,390 ppb, MW-21 at 733 ppb and MW-22 at 592 ppb.

- Cadmium was detected above the groundwater criterion of 4 ppb in MW-20 at 12 ppb.

- Lead was detected above the groundwater criterion of 10 ppb in MW-19 at 283 ppb, MW-20 at 138 ppb, MW-21 at 11 ppb and MW-22 at 75 ppb.

- Silver was detected above the groundwater criterion of 20 ppb in MW-20 at 490 ppb and MW-21 at 513 ppb.

- Thallium was detected above the groundwater criterion of 10 ppb in MW-20 at 24 ppb.

4.0 SEPTEMBER 1998 GROUNDWATER ANALYTICAL RESULTS

Sample analysis indicated the presence of the following compounds that exceeded NJDEP groundwater cleanup criteria:

- Benzene was detected above the groundwater criterion of 1 ppb in MW-31 at 7.76 ppb.

- Napthalene was detected above the groundwater criterion of 300 ppb in MW-31 at 502 ppb.

- Arsenic was detected above the groundwater criterion of 8 ppb in MW-13A at 9.34 ppb, MW-14A at 8.98 ppb, MW-31 at 348 ppb, MW-34 at 49 ppb, MW-35 at 51 ppb.

- Cadmium was detected above the groundwater standard of 4 ppb in MW-13A at 8.96 ppb, MW-31 at 7.15 ppb, and MW-35 at 7.4 ppb.

- Copper was detected above the groundwater standard of 1,000 ppb in MW-35 at 1,120 ppb.

- Lead was detected above the groundwater standard of 10 ppb in MW-13A at 257 ppb, MW-14A at 204 ppb, MW-31 at 27 ppb, MW-34 at 149 ppb, and MW-35 at 1,009 ppb and MW-36 at 701 ppb.

- Nickel was detected above the groundwater standard of 100 ppb in MW-31 at 123 ppb.

The electronic data deliverables for the above data will be submitted by December 15, 1998.

5.0 CONCLUSIONS

The United States Environmental Protection Agency (USEPA) is currently conducting a remedial investigation of the Ferola/Quanta Superfund site that includes activities on the Celotex site. Enviro-Sciences will also continue the investigation of the former Celotex site and has requested access to the data generated by the USEPA investigation. The data gathered during the USEPA investigation will be considered when evaluating remedial options. Enviro-Sciences will continue to work with the USEPA and NJDEP in all aspects of this case with the goal of closing the case in timely manner.

REMEDIAL INVESTIGATION WORKPLAN ADDENDUM

GROUNDWATER INVESTIGATION

For

EDEGEWATER ASSOCIATES: THE FORMER CELOTEX SITE
EDGEWATER, NEW JERSEY
NOVEMBER 1998

FIGURE

CE 3.2161

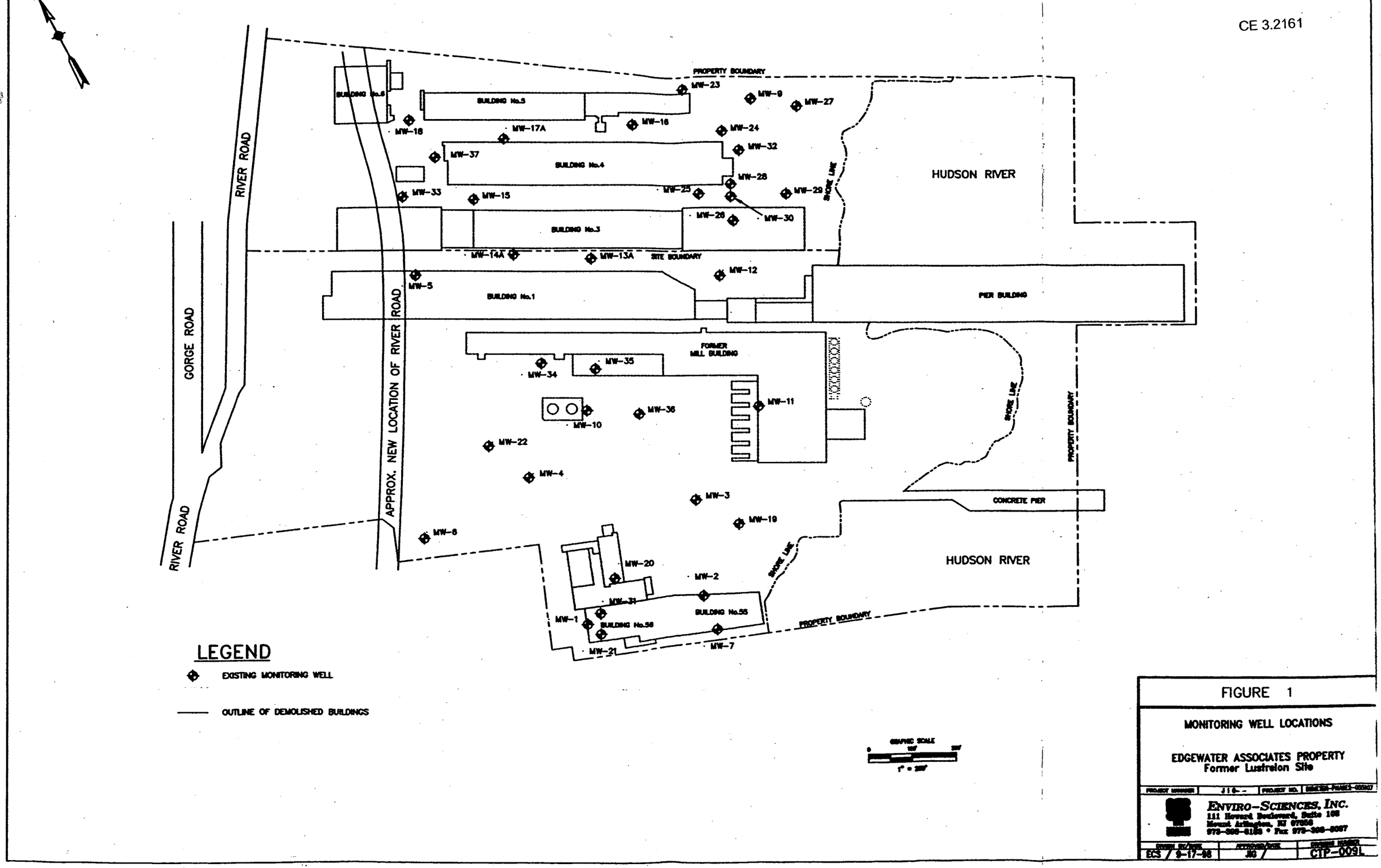


FIGURE 1

MONITORING WELL LOCATIONS

EDGEWATER ASSOCIATES PROPERTY
Former Lustreion Site

PROJECT MANAGER | J I G - - | PROJECT NO. | DIMENSION-PHASE3-055107

ENVIRO-SCIENCES, INC.
111 Howard Boulevard, Suite 105
Mount Arlington, NJ 07856
973-398-8188 • Fax 973-398-8087

DRAWN BY/DATE	APPROVED/DATE	DRAWING NUMBER
ECS / 9-17-98	JIG /	CTP-009L

REMEDIAL INVESTIGATION WORKPLAN ADDENDUM

GROUNDWATER INVESTIGATION

For

EDEGEWATER ASSOCIATES: THE FORMER CELOTEX SITE
EDGEWATER, NEW JERSEY
NOVEMBER 1998

TABLES

TABLE 1
Edgewater Associates, Inc.
Former Celotex Site
Groundwater analytical Results - July 1998

Sample ID #		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Lab Sample ID#		3676-007	3676-009	3676-010	3676-005	3676-001	3675-001
Sample Date	NJDEP Groundwater Quality Criteria	7/2/98	7/2/98	7/2/98	7/2/98	7/2/98	7/3/98
PP METALS (mg/l)							
Antimony	0.020	NA	NA	NA	NA	NA	NA
Arsenic	0.008	6.5	0.005	ND	0.094	ND	21.4
Beryllium	0.020	NA	NA	NA	NA	NA	NA
Cadmium	0.004	NA	NA	NA	NA	NA	NA
Chromium	0.100	NA	NA	NA	NA	NA	NA
Copper	1.000	NA	NA	NA	NA	NA	NA
Lead	0.010	NA	NA	NA	NA	NA	NA
Mercury	0.002	NA	NA	NA	NA	NA	NA
Nickel	0.100	NA	NA	NA	NA	NA	NA
Selenium	0.050	NA	NA	NA	NA	NA	NA
Silver	0.020	NA	NA	NA	NA	NA	NA
Thallium	0.010	NA	NA	NA	NA	NA	NA
Zinc	5.000	NA	NA	NA	NA	NA	NA
VO+15 (ug/l)							
1,1-Dichloroethene	2	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	50	63.3	ND	ND	ND	ND	ND
Chloroform	6	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	30	ND	ND	ND	ND	ND	ND
Benzene	1	160	55	ND	131	ND	73.7
Toluene	1,000	52.7	1.48	ND	164	ND	28.9
Ethylbenzene	700	165	7.54	ND	264	ND	45.2
M,O,P-Xylenes	1,000	168	3.49	ND	1,050	ND	107
Chlorobenzene	50	31.2	ND	ND	ND	ND	ND
TOTAL TARGET VO		640.20	67.51	ND	1,609.00	ND	254.80
TOTAL TIC VO		2,957.00	79.00	ND	12,455.00	ND	6,444.00

J = Concentration was detected below MDL
NLE = No level established
ND = Not detected
NA = Not analyzed for

7&998GWQUAL.xls
11/24/98

CE 3.2163

TABLE 1
Edgewater Associates, Inc.
Former Celotex Site
Groundwater analytical Results - July 1998

Sample ID #		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Lab Sample ID#		3676-007	3676-009	3676-010	3676-005	3676-001	3676-001
Sample Date	NJDEP Groundwater Quality Criteria	7/2/98	7/2/98	7/2/98	7/2/98	7/2/98	7/3/98
AEBN+25 (ug/l)							
1,3-Dichlorobenzene	600	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	600	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	9	NA	NA	NA	NA	NA	NA
Naphthalene	300	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NLE	NA	NA	NA	NA	NA	NA
Acenaphthene	400	NA	NA	NA	NA	NA	NA
Dibenzofuran	NLE	NA	NA	NA	NA	NA	NA
Fluorene	300	NA	NA	NA	NA	NA	NA
Phenanthrene	NLE	NA	NA	NA	NA	NA	NA
Carbazole	NLE	NA	NA	NA	NA	NA	NA
Fluoranthene	300	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	10	NA	NA	NA	NA	NA	NA
TOTAL TARGET AE/BN		NA	NA	NA	NA	NA	NA
TOTAL TIC AE/BN		NA	NA	NA	NA	NA	NA
TOTAL CYANIDES (ug/l)	200	NA	NA	NA	NA	NA	NA
PHENOL (ug/l)	4,000	NA	NA	NA	NA	NA	NA
TDS (mg/l)	500	1,840	2,470	1,850	911	628	2,790
CHLORIDE (mg/l)	250	140	520	180	34	180	50
pH	6.5 - 8.5	6.1	6.8	6.8	7.0	6.7	5.9
DISSOLVED OXYGEN (mg/l)	-	13.7	10.2	13.2	13.2	13.4	11.8
CONDUCTIVITY (ms/cm)	-	3.6	3.6	3.6	1.2	1.0	2.9
TEMPERATURE (^{0}C)	-	16	22	16	19	17	16

CE 3.2164

J = Concentration was detected below MDL
NLE = No level established
ND = Not detected
NA = [redacted]nalyzed for

TABLE 1
Edgewater Associates, Inc.
Former Celotex Site
Groundwater analytical Results - July 1998

Sample ID #		MW-7	MW-10	MW-11	MW-12A	MW-19	MW-20	MW-21	MW-22
Lab Sample ID#		3676-008	3676-008	3676-003	3676-002	3676-004	3676-006	3676-005	3676-007
Sample Date	NJDEP Groundwater Quality Criteria	7/2/98	7/2/98	7/3/98	7/3/98	7/4/98	7/3/98	7/3/98	7/3/98
PP METALS (mg/l)									
Antimony	0.020	NA	NA	NA	NA	ND	ND	ND	ND
Arsenic	0.008	**0.011**	NA	NA	NA	**0.229**	**2.39**	**0.773**	**0.592**
Beryllium	0.020	NA	NA	NA	NA	ND	0.009	ND	ND
Cadmium	0.004	NA	NA	NA	NA	ND	**0.012**	ND	ND
Chromium	0.100	NA	NA	NA	NA	ND	0.026	ND	ND
Copper	1.000	NA	NA	NA	NA	0.056	0.775	ND	ND
Lead	0.010	NA	NA	NA	NA	**0.283**	**0.138**	**0.011**	**0.075**
Mercury	0.002	NA	NA	NA	NA	**0.002**	ND	ND	ND
Nickel	0.100	NA	NA	NA	NA	ND	0.13	ND	ND
Selenium	0.050	NA	NA	NA	NA	ND	ND	ND	ND
Silver	0.020	NA	NA	NA	NA	ND	**0.490**	**0.513**	ND
Thallium	0.010	NA	NA	NA	NA	ND	**0.024**	ND	ND
Zinc	5.000	NA	NA	NA	NA	0.124	0.052	0.048	0.052
VO+15 (ug/l)									
1,1-Dichloroethene	2	ND	**2.16**	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	50	ND	**59.4**	ND	1.1	ND	ND	ND	ND
Chloroform	6	ND	ND	ND	ND	0.936	1.92	ND	ND
1,1,1-Trichloroethane	30	ND	**153**	ND	ND	ND	ND	ND	ND
Benzene	1	**656**	**1.05**	0.971	**2.03**	**1.71**	**2.51**	**300**	**1.07**
Toluene	1,000	254	ND	ND	1.7	1.62	14.8	**1,390**	7.84
Ethylbenzene	700	64.4	ND	1.28	2.1	1.9	24.1	**1,820**	15.5
M,O,P-Xylenes	1,000	221	ND	1.65	4.23	4.18	80.6	**6,240**	48.6
Chlorobenzene	50	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL TARGET VO		1,195.40	213.45	3.90	11.16	10.35	123.93	9,750.00	73.01
TOTAL TIC VO		690.00	6.00	34.00	68.60	77.70	258.20	17,320.00	133.10

CE 3.2165

J = Concentration was detected below MDL
NLE = No level established
ND = Not detected
NA = Not analyzed for

TABLE 1
Edgewater Associates, Inc.
Former Celotex Site
Groundwater analytical Results - July 1998

Sample ID #		MW-7	MW-10	MW-11	MW-12A	MW-19	MW-20	MW-21	MW-22
Lab Sample ID#		3676-008	3676-008	3675-003	3675-002	3675-004	3675-006	3675-005	3675-007
Sample Date	NJDEP Groundwater Quality Criteria	7/2/98	7/2/98	7/3/98	7/3/98	7/4/98	7/3/98	7/3/98	7/3/98
AEBN+25 (ug/l)									
1,3-Dichlorobenzene	600	NA	NA	NA	NA	ND	ND	ND	ND
1,4-Dichlorobenzene	75	NA	NA	NA	NA	ND	ND	ND	ND
1,2-Dichlorobenzene	600	NA	NA	NA	NA	ND	ND	ND	ND
1,2,4-Trichlorobenzene	9	NA	NA	NA	NA	ND	ND	ND	ND
Naphthalene	300	NA	NA	NA	NA	8.57	62.6	4,340	32.2
2-Methylnaphthalene	NLE	NA	NA	NA	NA	1.27	4.02	375	1.33 J
Acenaphthene	400	NA	NA	NA	NA	1.82	2.26	73.3	ND
Dibenzofuran	NLE	NA	NA	NA	NA	ND	ND	50.7	ND
Fluorene	300	NA	NA	NA	NA	ND	1.27	44.2	ND
Phenanthrene	NLE	NA	NA	NA	NA	ND	ND	59.3	ND
Carbazole	NLE	NA	NA	NA	NA	ND	2.8	42.2	ND
Fluoranthene	300	NA	NA	NA	NA	ND	ND	ND	ND
2,4-Dinitrotoluene	10	NA	NA	NA	NA	ND	28.9	ND	ND
TOTAL TARGET AE/BN		NA	NA	NA	NA	11.66	101.85	4,984.70	33.53
TOTAL TIC AE/BN		NA	NA	NA	NA	ND	96.2	7,788.00	33.2
TOTAL CYANIDES (ug/l)	200	ND	ND	NA	NA	ND	ND	0.18	ND
PHENOL (ug/l)	4,000	ND	ND	NA	NA	ND	ND	ND	ND
TDS (mg/l)	500	1970	803	1,850	1,950	NA	NA	NA	NA
CHLORIDE (mg/l)	250	410	58	340	340	NA	NA	NA	NA
pH	6.5 - 8.5	6.9	5.8	7.0	6.5	7.0	5.9	7.1	6.8
DISSOLVED OXYGEN (mg/l)	-	12.7	12.4	13.2	12.7	12.7	13.8	10.7	12.9
CONDUCTIVITY (ms/cm)	-	2.9	1.3	2.9	2.8	2.3	3.8	0.62	3.3
TEMPERATURE (^{0}C)	-	18	19	15	16	16	16	22	19

J = Concentration was detected below MDL
NLE = No level established
ND = Not detected
NA = [illegible]alyzed for

CE 3.2166

TABLE 2
Edgewater Associates, Inc.
Former Celotex Site
Groundwater analytical Results - September 1998

Sample ID #		MW-13a	MW-14a	MW-31	MW-34	MW-35	MW-36
Lab Sample ID#		5516-002	5516-001	5516-003	5449-001	5449-002	5449-003
Sample Date	NJDEP Groundwater Quality Criteria	9/17/98	9/17/98	9/17/98	9/15/98	9/15/98	9/15/98
PP METALS (mg/l)							
Antimony	0.020	ND	ND	ND	ND	ND	ND
Arsenic	0.008	**0.00934**	**0.00898**	**0.348**	**0.049**	**0.051**	ND
Beryllium	0.020	ND	ND	ND	ND	ND	ND
Cadmium	0.004	**0.00896**	ND	**0.00714**	0.00086	**0.0074**	0.00157
Chromium	0.100	0.021	ND	0.103	ND	ND	ND
Copper	1.000	0.091	0.09	0.743	0.048	**1.12**	0.049
Lead	0.010	**0.257**	**0.204**	**0.027**	**0.149**	**1.09**	**0.701**
Mercury	0.002	ND	ND	ND	ND	ND	0.00073
Nickel	0.100	0.097	0.026	**0.123**	ND	0.031	0.023
Selenium	0.050	ND	ND	ND	ND	ND	ND
Silver	0.020	ND	ND	0.00045	ND	ND	ND
Thallium	0.010	ND	ND	ND	ND	ND	ND
Zinc	5.000	1.64	0.251	2.85	0.222	0.85	0.556
VO+15 (ug/l)							
1,1-Dichloroethane	50	1.1	2.37	ND	ND	ND	ND
Chloroform	6	ND	ND	4.16	ND	ND	ND
Benzene	1	ND	ND	**7.76**	ND	ND	ND
Toluene	1,000	ND	ND	13.7	ND	ND	ND
Ethylbenzene	700	ND	ND	27.4	ND	ND	ND
M,O,P-Xylenes	1,000	ND	ND	67.4	ND	2.27	ND
TOTAL TARGET VO		1.10	2.37	120.42	ND	2.27	ND
TOTAL TIC VO		8.6	5.2	1237.2	ND	128.1	8

J = Detected below MDL
NLE = No level established
CS = Compound specific
NA = Not analyzed for
ND = Not detected

CE 3.2167

11/24/98
7&998GWQUAL.xls

TABLE 2
Edgewater Associates, Inc.
Former Celotex Site
Groundwater analytical Results - September 1998

Sample ID #		MW-13a	MW-14a	MW-31	MW-34	MW-35	MW-36
Lab Sample ID#		5516-002	5516-001	5516-003	5449-001	5449-002	5449-003
Sample Date	NJDEP Groundwater Quality Criteria	9/17/98	9/17/98	9/17/98	9/15/98	9/15/98	9/15/98
AEBN+25 (ug/l)							
Naphthalene	300	ND	ND	**502**	ND	ND	ND
Acenaphthylene	NLE	ND	ND	8.09 J	ND	ND	ND
2-Methylnaphthalene	NLE	ND	ND	120	ND	ND	ND
Acenaphthene	400	ND	ND	27.7	ND	ND	ND
Dibenzofuran	NLE	ND	ND	14.9	ND	ND	ND
Fluorene	300	ND	ND	21.7	ND	ND	1.24 J
Phenanthrene	NLE	ND	ND	25.8	ND	ND	2.05
Carbazole	NLE	ND	ND	7.9 J	ND	ND	ND
Fluoranthene	300	ND	ND	ND	ND	ND	2.46
Pyrene	200	ND	ND	ND	ND	ND	2.37
TOTAL TARGET AE/BN		ND	ND	728.09	ND	ND	8
TOTAL TIC AE/BN		ND	ND	184	10.2	476.6	ND
PCB (ug/l)	0.500	ND	ND	ND	**3.49**	ND	ND
Pesticides (ug/l)	CS	ND	ND	ND	ND	ND	ND
Total Cyanides (mg/kg)	200	ND	ND	ND	ND	ND	ND
Phenol (ug/l)	4,000	ND	ND	ND	ND	ND	ND
TDS (mg/l)	500	**1,740**	**2,110**	**4,400**	**3240**	**2370**	**1960**
Chloride (mg/l)	250	240	250	230	180	60	90
pH (6.5 - 8.5)		**6.1**	**8.4**	7.0	**6.1**	6.6	7.6
DISSOLVED OXYGEN (mg/l)		9.8	9.8	9.1	11.7	10.0	9.5
CONDUCTIVITY (ms/cm)		0	0	0	2.7	2.9	0.3
TEMPERATURE (^{0}C)		20	20	24	20	21	20

J = Detected below MDL
NLE = No level established
CS = Compound specific
NA = Not analyzed for
ND = Not detected

CE 3.2168

REMEDIAL INVESTIGATION WORKPLAN ADDENDUM

GROUNDWATER INVESTIGATION

For

EDEGEWATER ASSOCIATES: THE FORMER CELOTEX SITE
EDGEWATER, NEW JERSEY
NOVEMBER 1998

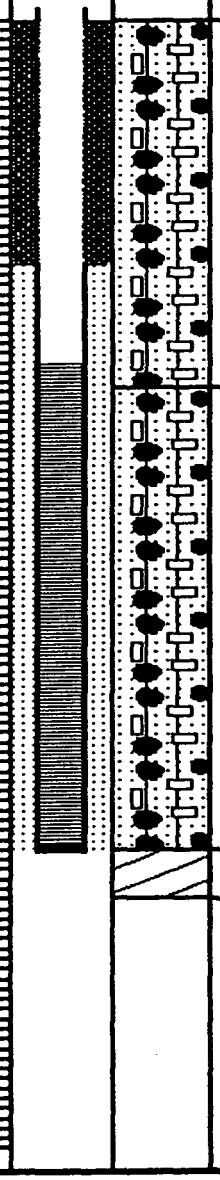
APPENDIX A

Well Logs

Log of Monitoring Well: MW-19

Client: Demetr
Project: Celotex
Site Location: Edgewater, NJ
Casing Diameter: 4"
Screen Type/Range: .01/7-17'
Flush/Stick-up: Stick-up
Packing Type: #0
Drilling Method: Air Rotary/Hollow Stem

WELL CONSTRUCTION AND LITHOLOGY



Description	USC	Blow count	OVA PPM	Remarks
Ground Surface				
Fill Construction material consisting of Concrete and Wood with large Boulders				
Fill Bricks, Brick fragments, Cinder with some Sand and Silt				
Clay Black Organic				
End of Borehole				

Logged By: D.Neumann
Drilled By: Horizon Drilling
Date: 6/10/98

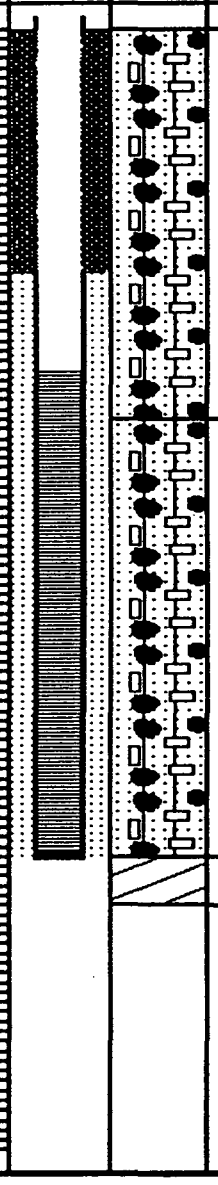
Permit Number: 2648396
Page: 1 of 1

Enviro-Sciences, Inc.
111 Howard Blvd., Ste 108
Mount Arlington, NJ, 07856
(973) 398-8183

Log of Monitoring Well: MW-20

Client: Demetr
Project: Celotex
Site Location: Edgewater, NJ
Casing Diameter: 4"
Screen Type/Range: .01/7-17'
Flush/Stick-up: Stick-up
Packing Type: #0
Drilling Method: Air Rotary/Hollow Stem Auger

WELL CONSTRUCTION AND LITHOLOGY



Description	USC	Blow count	OVA PPM	Remarks
Ground Surface				
Fill Construction material consisting of Concrete and Wood with large Boulders				
Fill Bricks, brick fragments, Cinder with some Silt and Sand				
Clay Black and Organic				
End of Borehole				

Logged By: D.Neumann
Drilled By: Horizon Drilling
Date: 6/10/98

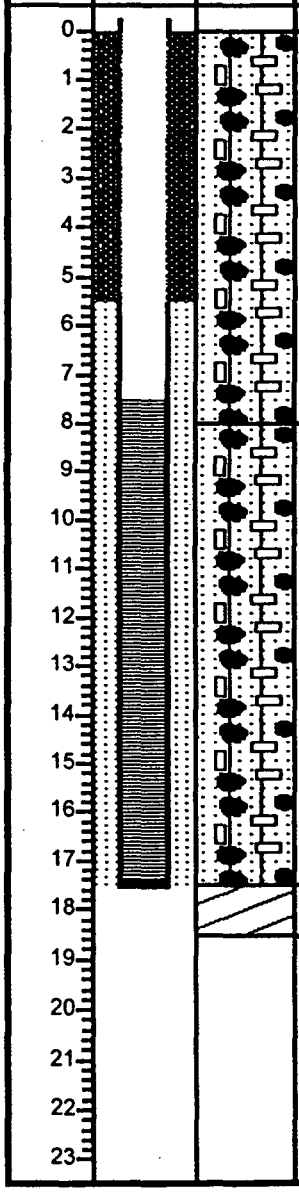
Permit Number: 2648397
Page: 1 of 1

Enviro-Sciences, Inc.
111 Howard Blvd., Ste 108
Mount Arlington, NJ, 07856
(973) 398-8183

Log of Monitoring Well: MW-21

Client: Demetr
Project: Celotex
Site Location: Edgewater, NJ
Casing Diameter: 4"
Screen Type/Range: .01/7.5-17.5'
Flush/Stick-up: Stick-up
Packing Type: #0
Drilling Method: Air Rotary/Hollow Stem Auger

WELL CONSTRUCTION AND LITHOLOGY



Description	USC	Blow count	OVA PPM	Remarks
Ground Surface				
Fill Construction material consisting of Concrete and Wood with large Boulders				
Fill Bricks, brick fragments, Cinder with some Sand and Silt				
Clay Black and Organic				
End of Borehole				

Logged By: D.Neumann
Drilled By: Horizon Drilling
Date: 6/11/98

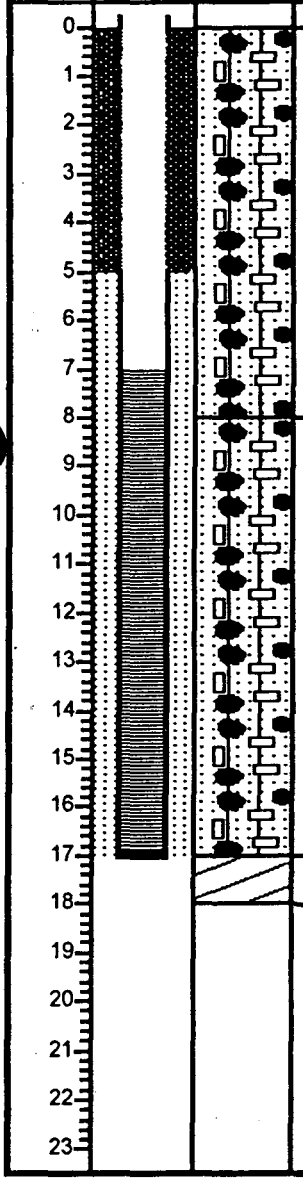
Permit Number: 2648398
Page: 1 of 1

Enviro-Sciences, Inc.
111 Howard Blvd., Ste 108
Mount Arlington, NJ, 07856
(973) 398-8183

Log of Monitoring Well: MW-22

Client: Demetr
Project: Celotex
Site Location: Edgewater, NJ
Casing Diameter: 4"
Screen Type/Range: .01/7-17'
Flush/Stick-up: Stick-up
Packing Type: #0
Drilling Method: Air Rotary/Hollow Stem Auger

WELL CONSTRUCTION AND LITHOLOGY



Description	USC	Blow count	OVA PPM	Remarks
Ground Surface				
Fill Construction material consisting of Concrete and Wood with large Boulders				
Fill Bricks, brick fragments, Cinder with some Sand and Silt				
Clay Black and Organic				
End of Borehole				

Logged By: D.Neumann
Drilled By: Horizon Drilling
Date: 6/11/98

Permit Number: 2648399
Page: 1 of 1

Enviro-Sciences, Inc.
111 Howard Blvd., Ste 108
Mount Arlington, NJ, 07856
(973) 398-8183

Log of Monitoring Well: MW-31

Client: Demetr
Project: Celotex
Site Location: Edgewater, NJ
Casing Diameter: 2"
Screen Type/Range: .01/
Flush/Stick-up: Stick-up
Packing Type: #0
Drilling Method: Air Rotary/Hollow Stem Auger

WELL CONSTRUCTION AND LITHOLOGY

Depth	Construction	Symbol	Description	USC	Blow count	OVA PPM	Remarks
0			Ground Surface				
0–7			***Fill*** Construction material consisting of Concrete and Wood with large Boulders				
7–13			***Fill*** Bricks, brick fragments, Cinder with some Sand and Silt				
13–23			***Sand*** Brown, grey				

Logged By: D.Neumann
Drilled By: Horizon Drilling
Date: 7/10/98

Permit Number: 2651207
Page: 1 of 2

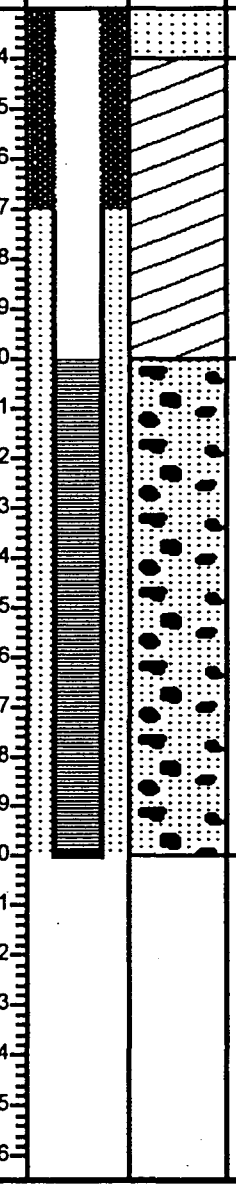
Enviro-Sciences, Inc.
111 Howard Blvd., Ste 108
Mount Arlington, NJ, 07856
(973) 398-8183

Log of Monitoring Well: MW-31

Client: Demetr
Project: Celotex
Site Location: Edgewater, NJ
Casing Diameter: 2"
Screen Type/Range: .01/
Flush/Stick-up: Stick-up
Packing Type: #0
Drilling Method: Air Rotary/Hollow Stem Auger

WELL CONSTRUCTION AND LITHOLOGY

Depth	Construction	Symbol	Description	USC	Blow count	OVA PPM	Remarks
24–30			*Clay* Organic				
30–40			*Sand* Brown, grey with little gravel				
40			End of Borehole				



Logged By: D.Neumann
Drilled By: Horizon Drilling
Date: 7/10/98

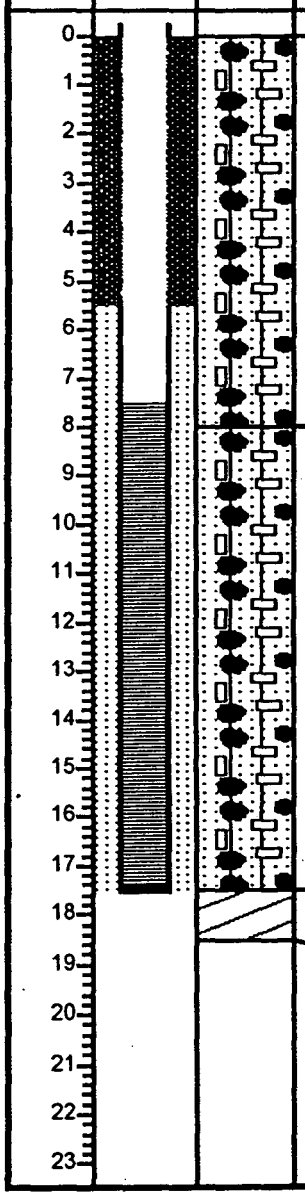
Permit Number: 2651207
Page: 1 of 2

Enviro-Sciences, Inc.
111 Howard Blvd., Ste 108
Mount Arlington, NJ, 07856
(973) 398-8183

Log of Monitoring Well: MW-34

Client: Demetr
Project: Celotex
Site Location: Edgewater, NJ
Casing Diameter: 4"
Screen Type/Range: .01/7.5-17.5'
Flush/Stick-up: Stick-up
Packing Type: #0
Drilling Method: Air Rotary/Hollow Stem Auger

WELL CONSTRUCTION AND LITHOLOGY



Description	USC	Blow count	OVA PPM	Remarks
Ground Surface				
Fill Construction material consisting of Concrete and Wood with large Boulders				
Fill Brick, brick fragments, Cinder with some Sand and Silt				
Clay Black and Organic				
End of Borehole				

Logged By: D.Neumann
Drilled By: Horizon Drilling
Date: 7/15/98

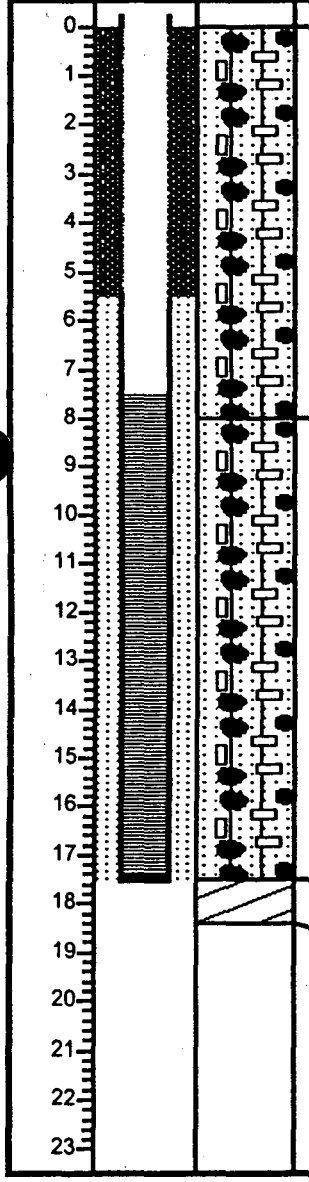
Permit Number: 2651337
Page: 1 of 1

Enviro-Sciences, Inc.
111 Howard Blvd., Ste 108
Mount Arlington, NJ, 07856
(973) 398-8183

Log of Monitoring Well: MW-35

Client: Demetr
Project: Celotex
Site Location: Edgewater, NJ
Casing Diameter: 4"
Screen Type/Range: .01/7.5-17.5'
Flush/Stick-up: Stick-up
Packing Type: #0
Drilling Method: Air Rotary/Hollow Stem Auger

WELL CONSTRUCTION AND LITHOLOGY



Description	USC	Blow count	OVA PPM	Remarks
Ground Surface				
Fill Construction material consisting of Concrete and Wood with large Boulders				
Fill Brick, brick fragments, Cinder with some Sand and Silt				
Clay Black and Organic				
End of Borehole				

Logged By: D.Neumann
Drilled By: Horizon Drilling
Date: 7/19/98

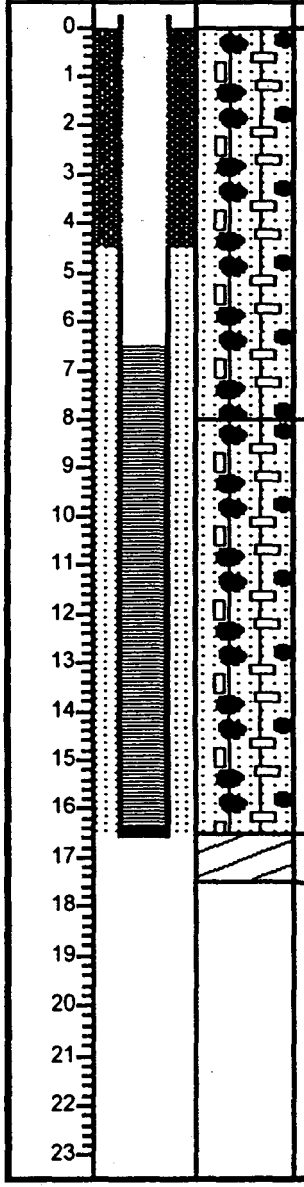
Permit Number: 2651338
Page: 1 of 1

Enviro-Sciences, Inc.
111 Howard Blvd., Ste 108
Mount Arlington, NJ, 07856
(973) 398-8183

Log of Monitoring Well: MW-36

Client: Demetr
Project: Celotex
Site Location: Edgewater, NJ
Casing Diameter: 4"
Screen Type/Range: .01/6.5-16.5'
Flush/Stick-up: Stick-up
Packing Type: #0
Drilling Method: Air Rotary/Hollow Stem Auger

WELL CONSTRUCTION AND LITHOLOGY



Description	USC	Blow count	OVA PPM	Remarks
Ground Surface				
Fill Construction material consisting of Concrete and Wood with large Boulders				
Fill Brick, brcik fragments, Cinder with some Sand and Silt				
Clay Black and Organic				
End of Borehole				

Logged By: D.Neumann
Drilled By: Horizon Drilling
Date: 7/15/98

Permit Number: 2651339
Page: 1 of 1

Enviro-Sciences, Inc.
111 Howard Blvd., Ste 108
Mount Arlington, NJ, 07856
(973) 398-8183

THIS PAGE INTENTIONALLY LEFT BLANK

CE 3.2179

ENVIRO-SCIENCES, INC.
HEADQUARTERS
111 HOWARD BOULEVARD, SUITE 108
MOUNT ARLINGTON, NJ 07856
(973) 398-8183 • FAX (973) 398-8037

November 19, 1998

Mr. Robert Hayton
NJDEP/BFCM
P.O. Box 028
Trenton, NJ 08625

Re: Remedial Investigation Report
MOA Case #96-05-02-1722-24
Edgewater Associates - Former Celotex Property
One River Road
Edgewater, New Jersey

Dear Mr. Hayton:

Enclosed are three copies of the Remedial Investigation Report for soil delineation activities associated with the seep area at the above site. If you have any questions please contact me at (973) 398-8183 extension 1222 or *Jgear@Enviro-Sciences.com.*

Yours truly,

ENVIRO-SCIENCES, INC.

John Gear, P.G.
Manager, Hydrogeology

JG/ah

cc: I. Cohen
S. Heller
J. Demetrakis
F. Daibes
R. Montgomery, USEPA

CE 3.2180

REMEDIAL INVESTIGATION REPORT

Former Celotex Property
Edgewater, New Jersey

November 1998

Prepared by:

ENVIRO-SCIENCES, INC.
111 HOWARD BOULEVARD, SUITE 108
MT. ARLINGTON, NEW JERSEY 07856
(973)398-8183 • (973)398-8037 - Fax

REMEDIAL INVESTIGATION REPORT

Former Celotex Property
Edgewater, New Jersey

Table of Contents

Page #

1.0 INTRODUCTION 1

2.0 HUDSON RIVER SAMPLING EVENT 1

3.0 MARCH 25, 1998 SAMPLING EVENT 2

3.1 Introduction 2
3.2 Investigation Results 2
3.3 Conclusions 3

4.0 JUNE 1998 SUBSURFACE INVESTIGATION 4

4.1 Lithology 4
4.2 Sampling Methodologies 4
4.3 Investigation Results 4
4.4 Conclusions 8

FIGURES

1 Known extent of coal tar contamination

TABLES

1 Analytical result summary

APPENDICES

A Laboratory Reports

REMEDIAL INVESTIGATION REPORT

Former Celotex Property
Edgewater, New Jersey

1.0 INTRODUCTION

On October 15, 1997, the United States Environmental Protection Agency (USEPA) issued a discharge notice to Edgewater Associates (EA) for an apparent discharge of a dark brown Light Non Aqueous Phase Liquid (LNAPL) into the Hudson River. LNAPL was observed seeping into the Hudson River (by the United States Coast Guard) through the river wall shared by the former Celotex property and the adjacent Ferola/Quanta Superfund site to the south. The USEPA also installed a containment boom in the Hudson River around the discharge area. In response to the USEPA discharge notice, EA initiated an investigation to determine the nature of the discharge and identify the source of the discharge to the Hudson River. The initial investigation focused on sediment and surface water quality from the Hudson River. The second investigation was conducted on the southeast portion of the Celotex site and focused on subsurface conditions and transport mechanisms. The third investigation was conduced on the Celotex site to determine the areal extent of subsurface LNAPL contamination along the southern property boundary of the Celotex site.

Based on the results of the above investigations and the fact that a tar manufacturing operation took place on the Forola/Quanta Superfund site, and had operated for decades, it is apparent that contamination from the Ferola Superfund site has impacted the Hudson River and the Celotex site. A Remedial Investigation Report (RIR) was submitted in June 1997, and documented the historical use of the Celotex property. Included in that RIR were Sanborn insurance maps, property titles, areal photos, topography maps and local historical documents that identify past property owners and the associated operations of what is now the Ferola/Quanta Superfund site.

2.0 HUDSON RIVER SAMPLING EVENT

On December 10, 1997, Enviro-Sciences, Inc. (Enviro-Sciences) obtained sediment and surface water samples from the Hudson River near the location of the suspected discharge (see Figure 1 for sample locations). The samples were analyzed for volatile organic (VO) compounds, base neutral (BN) compounds, metals (using Target Analyte List and Target Compound List compounds), polychlorinated biphenyls (PCB), pesticides, cyanide and total petroleum hydrocarbons (TPH). The USEPA obtained split samples of the sediment and surface water. The discharge was reported to be located east of the concrete dock on the southeast corner of the Celotex property by USEPA officials. During the sampling event, it was observed that a pipe was located under the dock. It appeared to originate from the Ferola/Quanta Superfund site and ended on the Celotex property. The pipe is approximately 18 inches in diameter and may be the source of the discharge to the Hudson River. No contamination was observed discharging from the pipe during this sampling event.

The analytical results indicated the presence of VO, BN, cyanide and TPH (see Table 1 for analytical results summary and Appendix A for laboratory reports). The primary compounds identified in BN analysis were Polynuclear Aromatic Hydrocarbons (PAH), which are the main constituents in coal tar. Observations made by contractors hired by the USEPA during the discharge event indicated that the material discharged to the Hudson River was a brown to black liquid with a density less than water and exhibited a translucent sheen. The USEPA contractor also indicated that the discharge events are intermittent. It is unknown what controls the frequency and duration of the discharge.

3.0 MARCH 25, 1998 SAMPLING EVENT

3.1 Introduction

A second sampling event was conducted on March 25, 1998 to determine the source of the discharge. Four test pits were used to investigate the subsurface soil conditions on the Celotex property. The test pits were located west of the cement dock (see Figure 1 for sample locations). Samples were obtained from the test pits and analyzed for PP+40. A track hoe was utilized to excavate the test pits and obtain the samples. Each test pit was examined for evidence of staining, odors and LNAPL. Soil samples were biased toward zones with the highest Photo Ionization Detector (PID) readings, or heavy staining.

3.2 Investigation Results

Test pit TR1 was located 62 feet west of the concrete dock and five feet north of the southern property boundary and was approximately four feet deep. LNAPL was observed in test pit TR1. The LNAPL exhibited two viscosities, one was mobile with a low viscosity and the other was significantly less mobile with a higher viscosity. The LNAPL was dark brown to black. The high viscosity tar-like LNAPL was present in a layer approximately two feet thick. The less abundant low viscosity LNAPL accumulated in small patches that floated on water in the test pit. Water was present in the excavation because an old water pipe was broken and water accumulated in the excavation. PID reading of the LNAPL yielded 30 to 40 ppm concentrations. A four-foot section of broken pipe was present in the test pit and the pipe was filled with LNAPL. Sample TR1-1 was obtained from the stained horizon approximately two feet below grade and sample TR1-PIPE was obtained from LNAPL inside the pipe. Groundwater was not encountered. The analytical results indicated the presence of VO, PAH compounds and cadmium above NJDEP soil cleanup criteria (see Table 1 for analytical results summary and Appendix A for laboratory reports). Based on the presence of elevated concentration of PAH compounds and VO compounds in the soil samples and the presence of LNAPL in the subsurface; the area immediately surrounding TR1 is interpreted as lying within the LNAPL plume.

Test pit TR2 was located 10 feet east of TR1. LNAPL with the same thickness and characteristics as TR1 was observed in TR2. Sample TR2-1 was obtained from the

stained horizon approximately two feet below grade. Groundwater was not encountered. A concrete pipe chase with a man-way on top was located immediately west of the excavation. The analytical results indicated the presence of VO and PAH compounds above NJDEP soil cleanup criteria. Based on the presence of elevated concentration of PAH compounds and VO compounds in the soil samples and the presence of LNAPL in the subsurface; the area immediately surrounding TR2 is interpreted as lying within the LNAPL plume.

Test pit TR3 was located approximately 90 feet north of TR2, which is elevated approximately eight feet above the local grade of TR1 and TR2. Typical construction material (fill) was encountered from the ground surface to eleven feet below grade. Soil staining and LNAPL were present from approximately 7 to 11 feet below grade. Sample TR3-1 was obtained from the stained horizon. A wall-like wooden structure was present on the west side of the excavation and paralleled the Hudson River. The wooden structure may have been associated with a previous bulkhead. The analytical results indicated the presence of metals, VO and PAH compounds above NJDEP soil cleanup criteria. Based on the presence of elevated concentration of PAH compounds and VO compounds in the soil samples and the presence of LNAPL in the subsurface; the area immediately surrounding TR3 is interpreted as lying within the LNAPL plume.

TR4 was located approximately 100 feet north of TR3. Construction fill was encountered from the ground surface to approximately eleven feet below grade. No soil staining, LNAPL, or odors were observed and no samples were obtained. Based on the absence of LNAPL in the subsurface; the area immediately surrounding TR5 is interpreted as lying outside the LNAPL plume.

3.3 Conclusions

The analytical results indicated that the soil samples obtained during the March 25, 1998 sampling have similar chemical characteristics as the sediment and surface water samples collected in the previous sampling event. The primary compounds identified in BN analysis are PAHs. Typical PAH compounds include naphthalene, fluorene, pyrene, and benzo (a) anthracene and benzo (a) pyrene. The primary VO compounds identified in samples are benzene, toluene, ethylbenzene and xylene (BTEX). The LNAPL discharged to the Hudson River and that present in test pits was a brown fluid with an odor similar to coal tar. The LNAPL discharged to the Hudson River is most likely associated with the LNAPL present in the subsurface.

4.0 JUNE 1998 SUBSURFACE INVESTIGATION

On June 3, 4, and 5, 1998, Enviro-Sciences conducted a subsurface investigation adjacent to the southern property boundary on the Celotex site. The purpose of the investigation was to determine the areal extent of an LNAPL plume suspected to exist on this portion of the property.

4.1 Lithology

The typical lithology of the southern portion of the site consists of approximately eight feet of fill material comprised of construction debris (i.e. bricks, wood, concrete, and undifferentiated sediments), underlain by concrete floor slab of the former building that existed on this portion of the site, underlain by an earlier layer of fill material.

The historic fill was deposited to extend the shoreline of the Hudson River approximately 500 feet eastward from its former location. The water table is present at a depth of approximately ten feet below present grade, corresponding to one to two feet beneath the intact concrete former building slabs. The LNAPL, where present, is located one to two feet below the concrete building slabs.

4.2 Sampling Methodology

A track hoe was utilized to excavate test pits extending from the surface to just below the water table (which exists at a depth of approximately ten feet below grade). Test pits were first made in areas strongly suspected of containing the LNAPL to confirm its presence and to determine whether its character varied from location to location. With this information, additional excavations were made in the areas surrounding the locations known to contain the LNAPL in an effort to determine the horizontal extent of the plume.

Each test pit was examined for evidence of staining, odors, and LNAPL, as well as likely transport mechanisms or indicator horizons, such as the water table or building structures, in order to aid in the positioning of future excavation locations. Soil samples were biased toward zones with the highest Photo Ionization Detector (PID) readings, or heavy staining, for laboratory analysis to confirm the field observations. All samples were obtained to characterize or delineate the plume and were analyzed by a New Jersey certified laboratory for PP+ 40.

4.3 Investigation Results

Test pit TR5 was located immediately to the west of samples obtained during the March 25, 1998, sampling event. The presence of a zone of heavy soil staining, three to four inches thick, at a depth of 8.5 feet below local grade was observed. This depth corresponds to the soil horizon immediately below an intact concrete building pad. The test pit was advanced to total depth of approximately 11 feet below local grade, at which time groundwater entered and began to accumulate in the bottom of the excavation. The groundwater entered the excavation through seeps located just below the concrete pad. A

small amount of LNAPL also entered the excavation, and formed a discontinuous green-brown layer on the water.

A soil sample was obtained from the heavily stained soil horizon immediately below the concrete pad, representing the most heavily stained soil horizon and the source of the LNAPL on the water. The laboratory analytical results (see Table 1) indicate the presence of PAH and VO compounds in concentrations that exceed soil cleanup criteria. Based on the presence of elevated concentration of PAH compounds (particularly naphthalene) and VO compounds in the soil samples and the presence of LNAPL in the subsurface; the area immediately surrounding TR5 is interpreted as lying within the LNAPL plume.

Test pit TR6 was located north of TR5. The presence of a zone of heavy soil staining immediately beneath the concrete pad was observed at a depth of ten feet below grade. The test pit was advanced to a total depth of 14 feet below grade, at which point groundwater began to infiltrate the excavation. The soil beneath the concrete pad had a strong weathered gasoline odor. No LNAPL was present, although sheen was present on the water entering the excavation.

A soil sample was obtained from the heavily stained soil horizon immediately below the concrete pad that represented the most heavily stained soil. The laboratory analytical results indicate the presence of PAH and VO compounds particularly BTEX exhibiting concentrations in the low ppm range. However, naphthalene was not detected. Based on the lack of naphthalene in the sample, and elevated concentrations BTEX, as well as the absence of LNAPL, this test pit is interpreted as being located outside of the LNAPL plume. However, this area is suspected of being contaminated due to discharges associated with a gasoline storage tank formerly located adjacent to TR6. An investigation of the gasoline-related contamination will be performed.

Test pit TR7 was located approximately 100 feet west of TR5. The presence of a zone of soil staining, ten feet below grade immediately below a layer of brick rubble was observed. The test pit was advanced to total depth of approximately 16 feet below local grade. No LNAPL entered the excavation, and the stained soil did not exhibit a coal tar odor. The groundwater that did enter the excavation did, however, have small patches of sheen.

A soil sample was obtained from the heavily stained soil horizon immediately below the brick rubble, representing the most heavily stained soil horizon. The laboratory analytical results indicate the presence of PAH and VO compounds above NJDEP soil cleanup criteria. Based on the soil staining, the presence of a sheen and the analytical results; the area immediately surrounding TR7 is interpreted as lying inside the limits of a residual LNAPL plume.

Test pit TR8 was located along the southwest corner of the property. The presence of a zone of heavy soil staining and free product immediately below the concrete slab was observed at a depth of ten feet below grade. The test pit was advanced to a total depth of

approximately 12 feet below local grade, with groundwater entering at 10.5 feet below grade.

A soil sample was obtained from the heavily stained soil horizon immediately below the concrete pad, representing the most heavily stained soil horizon and the source of the LNAPL on the water. The laboratory analytical results indicate the presence of PAH and VO compounds, particularly anthracene, fluoranthene, naphthalene, and xylene above NJDEP soil cleanup criteria. Based on the presence of elevated concentrations of PAH and VO compounds in the soil samples and the presence of LNAPL in the subsurface, the area immediately surrounding TR8 is interpreted as lying within the LNAPL plume.

Test pit TR9 was located north of TR5 and west of TR6. A dark gray zone of heavy soil staining immediately beneath the concrete pad, which was encountered at a depth of eight feet below grade, was observed. The test pit was advanced to a total depth of approximately 12 feet below grade, at which point groundwater began to infiltrate the excavation. The soil beneath the concrete pad had a strong weathered gasoline odor. No LNAPL was present, although sheen was present, on the water entering the excavation.

A soil sample was obtained from the heavily stained soil horizon immediately below the concrete pad, representing the most heavily stained soil horizon. The laboratory analytical results indicate the presence of PAH and VO compounds that exceeded NJDEP soil cleanup criteria. Based on the absence of naphthalene and relatively low concentrations of PAH compounds, this test pit is interpreted as being located outside of the coal tar LNAPL plume but within the zone of soil contamination noted in test pit TR6.

Test pit TR10 was located north of TR7. No signs of any soil contamination, including the soil horizon immediately beneath the concrete pad, at a depth of eight feet below grade were observed. The test pit was advanced to a total depth of approximately 12 feet below grade, at which point groundwater began to infiltrate the excavation. No LNAPL or sheen was present on the water entering the excavation.

A soil sample was obtained from the soil horizon immediately below the concrete pad. The laboratory analytical results indicate that VO and PAH compounds are below NJDEP soil cleanup criteria. Based on the lack of soil staining, the absence of VO compounds, and the very low concentration of PAH compounds, this test pit is interpreted as being located outside of the LNAPL plume.

Test pit TR11, the western most test pit, was located in a low portion of the property and was excavated to a depth of approximately five feet. The soil encountered did not contain any LNAPL or coal tar odor, although a reddish soil horizon was encountered. This soil was sampled and analyzed only for Priority Pollutant Metals (PPM). Analytical results indicate the presence of elevated concentrations of antimony, arsenic, cadmium, copper, lead, thallium and zinc that exceed the NJDEP soil cleanup criteria. Based on the lack of LNAPL and soil staining this test pit is interpreted as being located outside the LNAPL plume.

Test pit TR12 was aborted due to the presence of a thick concrete pad.

Test pit TR13 was aborted due to the presence of red and yellow colored soil immediately beneath a layer of asphalt pavement. This material was similar in nature to the material present in test pit TR11. The analytical results from TR11 are most likely indicative of the soil quality in the area of TR13. The analytical results indicate high concentrations of metals.

Test pit TR14 was located along the southern portion of the property. The presence of a zone of heavy soil staining and LNAPL, immediately below the concrete slab that was present at a depth of eight feet below grade, was observed. The test pit was advanced to total depth of approximately 12 feet below local grade, with groundwater entering at nine feet below grade.

A soil sample was obtained from the heavily stained soil horizon immediately below the concrete pad, representing the most heavily stained soil horizon and the source of the LNAPL on the water. The laboratory analytical results indicate the presence of elevated concentrations of PAH compounds above NJDEP soil cleanup criteria. Based on the presence of elevated concentrations of PAH compounds in the soil samples and the presence of LNAPL in the subsurface; the area immediately surrounding TR14 is interpreted as lying within the LNAPL plume.

Test pit TR15 was located between TR7 and TR8. The presence of a zone of heavy soil staining and LNAPL, immediately below the concrete slab, at a depth of ten feet below grade was observed. The test pit was advanced to total depth of approximately 12 feet below local grade, with groundwater entering at nine feet below grade. The excavation had a very strong odor similar to gasoline and a strong coal tar odor.

A soil sample was obtained from the heavily stained soil horizon immediately below the concrete pad, representing the most heavily stained soil horizon and the source of the LNAPL on the water. The laboratory analytical results indicate the presence of elevated concentrations of VO and PAH compounds above NJDEP soil cleanup criteria. Based on the presence of elevated concentrations of VO and PAH compounds in the soil samples and the presence of LNAPL in the subsurface; the area immediately surrounding TR14 is interpreted as lying within the LNAPL plume.

Test pit TR16 was located north of TR15 and was free of any signs of contamination, including the soil horizon immediately beneath the concrete pad, which was encountered at a depth of nine feet below grade. The test pit was advanced to a total depth of approximately 12 feet below grade, at which point groundwater began to infiltrate the excavation. No LNAPL was present on the water entering the excavation.

A soil sample was obtained from the soil horizon immediately below the concrete pad. The laboratory analytical results indicate the presence of VO and PAH compounds below

NJDEP soil cleanup criteria. Based on the lack of soil staining and low concentrations of VO and PAH compounds, this test pit is located outside of the LNAPL plume.

Test pit TR17 was located between test pits TR5 and TR9. The presence of a zone of heavy soil staining immediately below the concrete slab at a depth of nine feet below grade was observed. The test pit was advanced to a total depth of approximately 11 feet below local grade. The laboratory analytical results indicate the presence of elevated concentrations of VO and PAH compounds.

Based on the presence of elevated concentrations of VO and PAH compounds, the area immediately surrounding TR17 is interpreted as lying within the residual LNAPL plume.

4.4 Conclusions

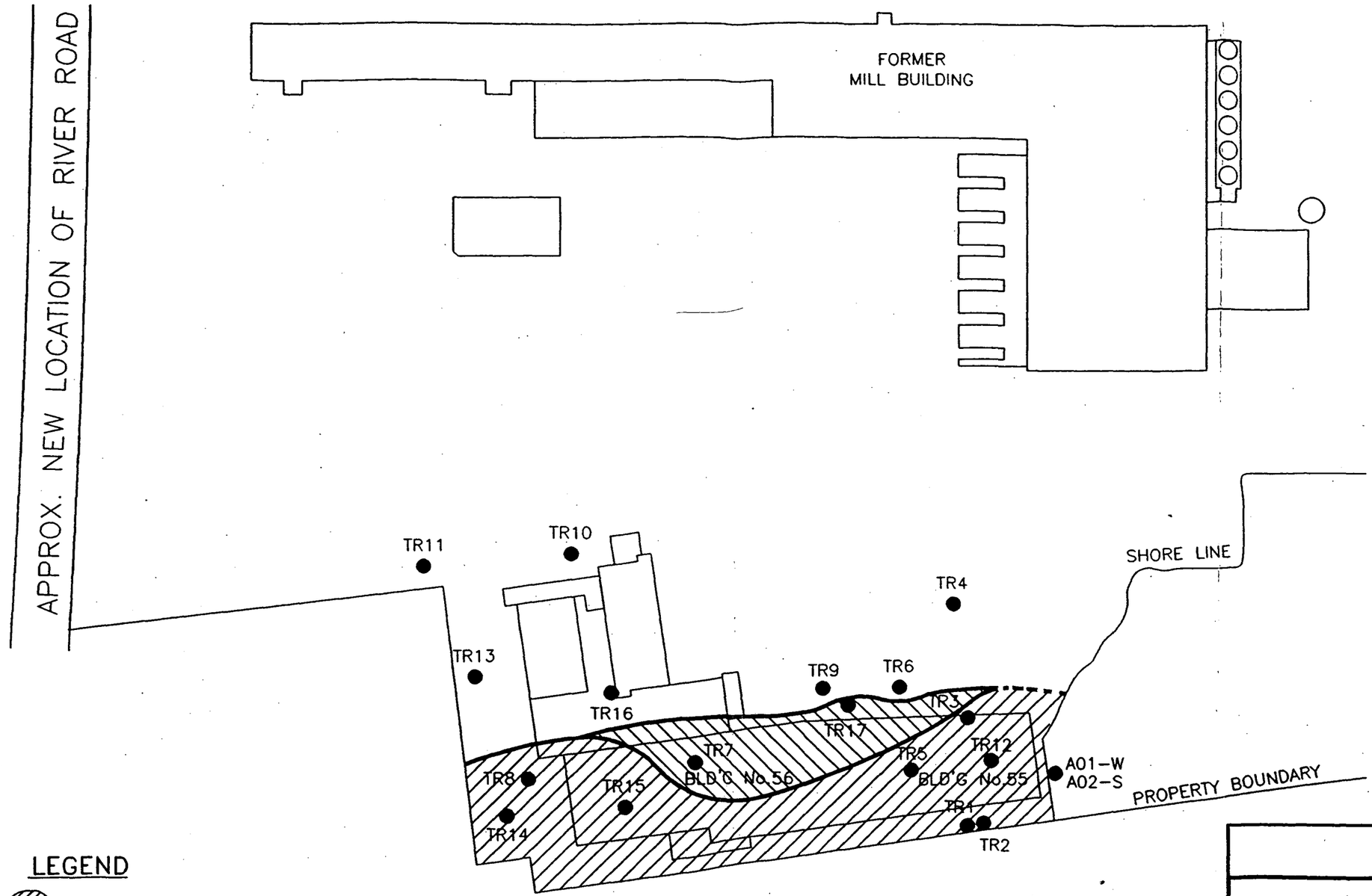
Based on field observations and laboratory analyses, the extent of the known coal tar related LNAPL plume is as shown on Figure 1. The LNAPL plume extends over approximately three acres of the southern portion of the site.

FIGURES

Figure 1

Known Extent of Coal Tar Contamination

CE 3.2192



LEGEND

- EXTENT OF LNAPL ON CELOTEX (DASHED WERE INFERED)
- TEST PITS
- OUTLINE OF DEMOLISHED BUILDINGS
- NON-MOBILE RESIDUAL CONTAMINATION

GRAPHIC SCALE
0 50' 100'
1"=100'

FIGURE 1

KNOWN EXTENT OF COAL-TAR CONTAMINATION

EDGEWATER ASSOCIATES PROPERTY
Former Celotex Site

PROJECT MANAGER	J I G	PROJECT NO.	DEMETER-PHASE2-G55107

ENVIRO-SCIENCES, INC.
111 Howard Boulevard, Suite 108
Mount Arlington, NJ 07856
973-398-8183 • Fax 973-398-8037

DRAWN BY/DATE	APPROVED/DATE	DRAWING NUMBER
ECS 10/15/98	JIG /	CTP-009P

TABLES

Table 1

Analytical Result Summary

TABLE 1

EDGEWATER ASSOCIATES
Former Celotex Site
Analytical Sample Results

Lab ID	5278-001	5278-002
Sample ID	A01-W	A02-S
Sample Date	12/11/97	12/10/97
TAL Metals (mg/kg)		
Aluminum	1.7	15700
Antimony	ND	ND
Arsenic	0.032	17
Barium	0.047	58.3
Beryllium	ND	0.724
Cadmium	ND	1.25
Calcium	163	3740
Chromium	ND	75.7
Cobalt	ND	9.26
Copper	ND	94.6
Iron	6.37	33600
Lead	0.101	94.9
Magnesium	375	7000
Manganese	0.946	460
Mercury	ND	1.22
Nickel	ND	30.1
Potassium	118	3320
Selenium	ND	4.79
Silver	0.0005	3.4
Sodium	3230	8110
Thallium	ND	ND
Vanadium	ND	33.2
Zinc	0.16	187

Notes:
ND = Not detected
B= Compound found in method blank
J= Estimated Value
D= Secondary dilution factor

TABLE 1
EDGEWATER ASSOCIATES
Former Celotex Site
Analytical Sample Results

Lab ID	5278-001	5278-002
Sample ID	A01-W	A02-S
Sample Date	12/11/97	12/10/97
TCL Volatiles (ug/kg)		
Benzene	257	ND
Toluene	59	ND
Ethylbenzene	111	3,830
Total Xylenes	233	8,370
Total TCL Target VO	660	12,200
Total TCL TIC VO	2,080	362,600
TCL AE/BN (ug/kg)		
Naphthalene	1,450	134,000
2-Methylnaphthalene	163	63,600
Acenphthalene	56.80	35,000
Acenaphthylene	ND	3,420
Dibenzofuran	37.50	30,700
Fluorene	31.50	38,500
Phenanthrene	37.90	118,000
Anthracene	ND	25,800

Notes:
ND = Not detected
B= Compound found in method blank
J= Estimated Value
D= Secondary dilution factor

TABLE 1
EDGEWATER ASSOCIATES
Former Celotex Site
Analytical Sample Results

Lab ID	5278-001	5278-002
Sample ID	A01-W	A02-S
Sample Date	12/11/97	12/10/97
TCL AE/BN's (ug/kg)		
Carbazole	35	4,320
Fluoranthene	ND	88,700
Pyrene	ND	79,400
Benzo[a]anthracene	ND	28,400
Chrysene	ND	22,000
Benzo[b]fluoranthene	ND	21,000
Benzo[k]fluoranthene	ND	8,110
Benzo[a]pyrene	ND	19,500
Indeno[1,2,3-cd]pyrene	ND	10,600
Dibenz[a,h]anthracene	ND	3,670
Benzo[g,h,i]perylene	ND	12,500
Total TCL Target AE/BN	1,811.70	747,220
Total TCL TIC AE/BN	ND	254,570
PCB's (mg/kg)	ND	ND
TCL Pesticides (ug/kg)	ND	ND
TPH (mg/kg)	1.78	1,870
Cyanide, Total (mg/kg)	ND	3.18

Notes:
ND = Not detected
B= Compound found in method blank
J= Estimated Value
D= Secondary dilution factor

TABLE 1
EDGEWATER ASSOCIATES
Former Celotex Site
Analytical Sample Results

Lab ID				1483-001	1483-002	1483-003	1483-004
Sample ID				TR1-1	TR1-PIPE	TR2-1	TR3-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non- Residential Direct Contact Soil Cleanup Criteria	Impact to Groundwater Soil Cleanup Criteria	2.5 - 3.0	3.0 - 3.5	2.5 - 3.0	8.5 - 9.0
Sample Date				3/25/98	3/25/98	3/25/98	3/25/98
PP Metals (mg/kg)							
Antimony	14	340	NLE	ND	ND	ND	ND
Arsenic	20	20	NLE	11.7	13.5	7.23	**652**
Beryllium	1	1	NLE	0.343	ND	0.298	0.441
Cadmium	1	100	NLE	**2.07**	**2.07**	ND	**1.72**
Chromium	NLE	500	NLE	7.14	7.14	14.8	38.6
Copper	600	600	NLE	65.8	114	23.2	480
Lead	400	600	NLE	130	122	56.3	**523**
Mercury	14	270	NLE	0.64	0.199	8.33	34
Nickel	250	2,400	NLE	6.56	13.2	17.1	26.7
Selenium	63	3,100	NLE	ND	ND	6.89	ND
Silver	110	4,100	NLE	ND	ND	ND	ND
Thallium	2	2	NLE	0.692	**2**	0.166	**10.3**
Zinc	1,500	1,500	NLE	55.7	213	63.6	282
Volatiles (ug/kg)							
Benzene	3,000	13,000	1,000	**136,000**	**252,000**	**23,900** J	80,300 J
Toluene	1,000,000	1,000,000	500,000	371,000	229,000	ND	142,000 J
Ethylbenzene	1,000,000	1,000,000	100,000	**157,000**	45,600 J	**150,000**	**286,000**
Total Xylenes	410,000	1,000,000	100,000	**262,000**	**320,000**	**386,000**	**1,040,000**
Total VO				926,000	846,600 J	559,900 J	1,548,300 J
Total VO TIC's				9,359,300	20,385,000	11,778,000	30,809,000

Notes:
ND = Not detected
B= Com[redacted] found in method blank
J= Esti[redacted]alue
D= Secondary dilution factor

CE 3.2198

TABLE 1
EDGEWATER ASSOCIATES
Former Celotex Site
Sampling Results

Lab ID				1483-001	1483-002	1483-003	1483-004
Sample ID				TR1-1	TR1-PIPE	TR2-1	TR3-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non- Residential Direct Contact Soil Cleanup Criteria	Impact to Groundwater Soil Cleanup Criteria	2.5 - 3.0	3.0 - 3.5	2.5 - 3.0	8.5 - 9.0
Sample Date				3/25/98	3/25/98	3/25/98	3/25/98
AE/BN's (ug/kg)							
Phenol	10,000,000	10,000,000	50,000	ND	**110,000**	ND	ND
Benzyl alcohol	10,000,000	10,000,000	50,000	ND	**96,600**	ND	ND
2-Methylphenol	2,800,000	10,000,000	NLE	17,600	59,900	ND	ND
4-Methylphenol	2,800,000	10,000,000	NLE	22,800	146,000	ND	ND
2,4-Dimethylphenol	1,100,000	10,000,000	10,000	28,000	55,600	ND	ND
Naphthalene	230,000	4,200,000	100,000	**4,810,000**	**19,200,000** D	**2,150,000** D	**19,800,000** D
2-Methylnaphthalene	NLE	NLE	NLE	1,630,000	4,700,000 D	710,000 D	523,000
Acenaphthylene	NLE	NLE	NLE	113,000	1,310,000	19,000 D	42,400
Acenaphthene	3,400,000	10,000,000	100,000	**885,000**	**2,520,000** D	**522,000** D	**616,000** D
Dibenzofuran	NLE	NLE	NLE	653,000	3,690,000 D	343,000 D	390,000
Fluorene	2,300,000	10,000,000	100,000	**862,000**	**4,130,000** D	**387,000** D	**606,000**
Phenanthrene	NLE	NLE	NLE	3,600,000	18,300,000 D	1,760,000 D	1,880,000 D
Anthracene	10,000,000	10,000,000	100,000	**987,000**	**8,740,000** D	**468,000** D	**669,000**
Carbazole	NLE	NLE	NLE	524,000	5,420,000 D	156,000	41,300
Fluoranthene	2,300,000	10,000,000	100,000	**1,750,000**	**8,620,000** D	**603,000** D	**692,000** D
Pyrene	1,700,000	10,000,000	100,000	**2,060,000**	**10,800,000** D	**603,000** D	**740,000** D
Benzo[a]anthracene	900	4,000	50,000	**851,000**	**3,490,000** D	**195,000**	**241,000**
Chrysene	9,000	40,000	500,000	**767,000**	**3,410,000** D	**170,000**	**237,000**
Benzo[b]fluoranthene	900	4,000	50,000	**763,000**	**3,600,000** D	**160,000**	**229,000**
Benzo[k]fluoranthene	900	4,000	500,000	**276,000**	**1,020,000**	**58,800**	**82,800**
Benzo[a]pyrene	660	660	100,000	**675,000**	**3,230,000** D	**138,000**	**205,000**
Indeno[1,2,3-cd]pyrene	900	400	500,000	**278,000**	**1,290,000**	**56,700**	**103,000**

CE 3.2199

Notes:
ND = Not detected
B= Compound found in method blank
J= Estimated value
D= Secondary dilution factor
CS = Compound specific

TABLE 1
EDGEWATER ASSOCIATES
Former Celotex Site
Sampling Results

Lab ID				1483-001	1483-002	1483-003	1483-004
Sample ID				TR1-1	TR1-PIPE	TR2-1	TR3-1
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non- Residential Direct Contact Soil Cleanup Criteria	Impact to Groundwater Soil Cleanup Criteria	2.5 - 3.0	3.0 - 3.5	2.5 - 3.0	8.5 - 9.0
Sample Date				3/25/98	3/25/98	3/25/98	3/25/98
Dibenz[a,h]anthracene	660	660	100,000	83,000	**344,000**	**14,800**	**26,600**
Benzo[g,h,i]perylene	NLE	NLE	NLE	211,000	1,140,000	51,000	90,600
Total AE/BN				21,846,400	105,422,100	8,565,300	27,214,700
Total AE/BN TIC				2,765,200	5,196,500	1,497,400	4,694,300
PCB's (ug/kg)	490	2,000	50,000	ND	ND	ND	ND
Pesticides (ug/kg)	CS	CS	CS	ND	ND	ND	ND
Cyanide, Total (mg/kg)	1,100	21,000	NLE	4.56	ND	7.84	8.65
Phenol (mg/kg)	10,000	10,000	50	11.1	72.7	0.761	1.17

Notes:
ND = Not detected
B= Compound found in method blank
J= Estimated value
D= Secondary dilution factor

CE 3.2200

TABLE 1
EDGEWATER ASSOCIATES
Former Celotex Site
Analytical Sample Results

Lab ID Sample ID #				46849 TR-5	46850 TR-6	46851 TR-7	46852 TR-8	46853 TR-9
Depth (feet) Sample Date	Residential Direct Contact Soil Cleanup Criteria	Non- Residential Direct Contact Soil Cleanup Criteria	Impact to Groundwater Soil Cleanup Criteria	8.5 - 9.0 6/3/98	10.5 - 11.0 6/3/98	11.5 12.0 6/3/98	10.5 - 11.0 6/3/98	8.5 - 9.0 6/4/98
PP Metals (mg/kg)								
Antimony	14	340	NLE	ND	11.2	ND	**16.7**	1.1 B
Arsenic	20	20	NLE	14	**941**	14.7	**433**	**442**
Beryllium	1	1	NLE	0.32 B	0.94	0.39 B	0.23 B	ND
Cadmium	1	100	NLE	ND	ND	ND	**4.3**	ND
Chromium	NLE	500	NLE	10.4	11.3	14.6	55.7	15.3
Copper	600	600	NLE	17.2	151	13	**1,320**	130
Lead	400	600	NLE	38.9	**3,430**	8.4	**2,830**	**676**
Mercury	14	270	NLE	ND	3.3	ND	2.6	2.6
Nickel	250	2400	NLE	10.8	6.9	15.1	30.2	4.5 B
Selenium	63	3100	NLE	1.8	5.7	ND	2.9	3.5
Silver	110	4100	NLE	ND	0.56 B	ND	6.7	0.37 B
Thallium	2	2	NLE	ND	**2.1**	ND	**8.3**	**3.3**
Zinc	1500	1500	NLE	46.6	81.1	273	703	62.5
Volatiles Organic Compounds (ug/kg)								
Aroclein	NLE	NLE	NLE	ND	173,530 D	ND	ND	6,400
Acetone	1,000,000	1,000,000	100,000	800 JB	1,900 B	1,000 B	6,500 B	ND
Carbon Disulfide	NLE	NLE	NLE	ND	ND	ND	ND	ND
Vinyl Acetate	NLE	NLE	NLE	ND	31,800	ND	ND	ND
Methylene Chloride	49,000	210,000	1,000	ND	ND	ND	**7,900**	ND
cis- 1,2-Dichloroethene	79,000	1,000,000	1,000	ND	ND	ND	**3,300**	ND
2-Butanone (MEK)	1,000,000	1,000,000	50,000	ND	ND	ND	18,900	730
Chloroform	19,000	28,000	1,000	ND	ND	ND	7,400	ND
1,1,1-Trichloroethane	210,000	1,000,000	50,000	ND	ND	ND	43,300 D	ND
Carbon Tetrachloride	2,000	4,000	1,000	ND	ND	ND	**4,500**	ND
1,2-Dichloroethane (EDC)	6,000	24,000	1,000	ND	ND	ND	830	ND
Benzene	3,000	13,000	1,000	**8,300**	**18,000**	ND	**67,100** D	ND
Trichloroethene	23,000	54,000	1,000	**2,400**	ND	ND	**12,900**	ND
4-Methyl-2-pentanone (MIBK)	1,000,000	1,000,000	50,000	ND	ND	13,200	29,600	9,600
Toluene	1,000,000	1,000,000	500,000	14,400	16,600	480 J	674,000 D	1,600
1,1,2-Trichloroethane	22,000	420,000	1,000	ND	**17,600**	ND	ND	ND

Notes:
ND = Not detected
B = Compound found in method blank (organics)
B = Concentration is less than the CRDL, but greater than or equal to the IDL (inorganic)
J = Estimated Value
D = Secondary dilution factor

CE 3.2201

TABLE 1
EDGEWATER ASSOCIATES
Former Celotex Site
Analytical Sample Results

Lab ID Sample ID #				46849 TR-5		46850 TR-6		46851 TR-7		46852 TR-8		46853 TR-9	
Depth (feet) Sample Date	Residential Direct Contact Soil Cleanup Criteria	Non- Residential Direct Contact Soil Cleanup Criteria	Impact to Groundwater Soil Cleanup Criteria	8.5 - 9.0 6/3/98		10.5 - 11.0 6/3/98		11.5 12.0 6/3/98		10.5 - 11.0 6/3/98		8.5 - 9.0 6/4/98	
Volatiles Organic Compounds (ug/kg)													
Tetrachloroethene	4,000	6,000	1,000	860	J	ND		ND		**39,100**	D	ND	
Chlorobenzene	37,000	680,000	1,000	ND		ND		ND		**27,700**		ND	
Ethylbenzene	1,000,000	1,000,000	100,000	7,200		56,300	D	10,100		**175,600**	D	2,500	
Total Xylenes	410,000	1,000,000	10,000	**36,300**		**52,300**	D	8,100		**882,500**	D	3,340	
Styrene	23,000	97,000	100,000	ND		ND		ND		ND		ND	
Isopropylbenzene	NLE	NLE	NLE	22,600		32,500		15,200		114,600	D	2,300	
n-Propylbenzene	NLE	NLE	NLE	100	J	27,400		5,800		24,600		1,800	
Bromobenzene	NLE	NLE	NLE	ND		ND		ND		2,300		ND	
1,3,5-Trimethylbenzene	NLE	NLE	NLE	4,600		2,300		2,900		50,600	D	550	J
1,2,4-Trimethylbenzene	NLE	NLE	NLE	2,700		7,700		3,900		11,600		730	
4-Isopropyltoluene	NLE	NLE	NLE	1,700		3,900		ND		5,200		ND	
1,4-Dichlorobenzene	570,000	10,000,000	100,000	ND		ND		ND		2,500		ND	
Total Target VO				76,060		182,400		46,000		1,336,300		11,220	
Total TIC VO				885,800		333,400		397,500		249,700		1,100	
Acid Extractables/Base Neutrals (ug/kg)													
Isophorone	1,100,000	10,000,000	50,000	ND		ND		ND		7,200		ND	
1,2,4-Trichlorobenzene	68,000	1,200,000	100,000	ND		ND		ND		410	J	ND	
Naphthalene	230,000	4,200,000	100,000	**5,618,800**	D	ND		43,300	D	9,300		200	J
4-Chloro-3-methylphenol	10,000,000	10,000,000	100,000	ND		1,100		ND		ND		ND	
Acenaphthylene	NLE	NLE	NLE	7,600		270	J	50,500	D	3,200		94	J
Acenaphthene	3,400,000	10,000,000	100,000	166,400	JD	850		42,400	D	6,600		200	J
Diethylphthalate	10,000,000	10,000,000	50,000	ND		ND		ND		ND		45	J
Fluorene	2,300,000	10,000,000	100,000	ND		900		59,200	D	5,500		170	J
1,2-Diphenylhydrazine	NLE	NLE	NLE	ND		ND		360	J	ND		ND	
Phenanthrene	NLE	NLE	NLE	438,700	JD	2,500		97,800	D	17,000		700	
Anthracene	10,000,000	10,000,000	100,000	ND		740		46,500	D	9,600		240	J
Fluoranthene	2,300,000	10,000,000	100,000	204,500	JD	2,500		76,400	D	16,900		760	
Pyrene	1,700,000	10,000,000	100,000	152,300	JD	2,200		65,700	D	28,000	D	830	
Butylbenzylphthalate	1,100,000	10,000,000	100,000	ND		ND		ND		8,500		ND	

Notes:
ND = Not detected
B = Compound found in method blank (organics)
B = Concentration is less than the CRDL, but greater than or equal to the IDL (inorganic)
J = Estimated Value
D = Secondary dilution factor

CE 3.2202

TABLE 1
EDGEWATER ASSOCIATES
Former Celotex Site
Analytical Sample Results

Lab ID				46849	46850	46851	46852	46853
Sample ID #				TR-5	TR-6	TR-7	TR-8	TR-9
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non- Residential Direct Contact Soil Cleanup Criteria	Impact to Groundwater Soil Cleanup Criteria	8.5 - 9.0	10.5 - 11.0	11.5 12.0	10.5 - 11.0	8.5 - 9.0
Sample Date				6/3/98	6/3/98	6/3/98	6/3/98	6/4/98
Acid Extractables/Base Neutrals (ug/kg)								
Benzo[a]anthracene	900	4,000	500,000	ND	2,100	46,400 D	12,300	630
Chrysene	9,000	40,000	500,000	ND	2,000	38,600 D	11,200	680
bis(2-Ethylhexyl)phthalate	49,000	210,000	100,000	ND	ND	ND	4,600	130 J
Benzo[b]fluoranthene	900	4,000	50,000	ND	2,300	35,900 D	15,400	730
Benzo[k]fluoranthene	900	4,000	500,000	11,000	1,900	19,500 D	8,600	400 J
Benzo[a]pyrene	660	660	100,000	ND	2,400	37,000 D	10,600	530
Indeno[1,2,3-cd]pyrene	900	4,000	500,000	8,700	1,300 J	9,800	5,000	380 J
Dibenz[a,h]anthracene	660	660	100,000	1,200 J	170	1,900 J	490 J	ND
Benzo[g,h,i]perylene	NLE	NLE	NLE	7,900	1,100	10,300	4,000	350 J
Total Target AE/BN				6,617,100	24,330	681,560	184,400	7,069
Total TIC EA/BN				2,270,390	30,894	181,572	202,400	7,725
PCB (ug/kg)	490	2,000	50,000	ND	ND	ND	ND	ND
PESTICIDES (ug/kg)								
delta-BHC	NLE	NLE	NLE	ND	ND	ND	ND	ND
gamma-BHC (Lindane)	520	2,200	50,000	ND	0.21 JP	1.70 JP	1.40 JP	ND
Heptachlor	150	650	50,000	ND	ND	ND	ND	ND
Endosulfan II	NLE	NLE	NLE	ND	ND	ND	ND	ND
Endosulfan sulfate	NLE	NLE	NLE	4.30 JP	ND	3.90 JP	7.50 P	ND
Endrin ketone	NLE	NLE	NLE	ND	ND	19.00 P	ND	ND
Cyanide (mg/kg)	1,100	21,000	NLE	ND	ND	ND	ND	ND
Phenol (ug/kg)	10,000,000	10,000,000	50,000	6,225	ND	1,697	5,383	ND

Notes:
ND = Not detected
B = Compound found in method blank (organics)
B = Concentration is less than the CRDL, but greater than or equal to the IDL (inorganic)
J = Estimated Value
D = Secondary dilution factor

TABLE 1
EDGEWATER ASSOCIATES
Former Celotex Site
Analytical Sample Results

Lab ID				46854	46857	46855	46856	46916	46917
Sample ID #				TR-10	TR-11	TR-14	TR-15	TR-16	TR-17
Depth (feet)	Residential Direct Contact Soil Cleanup Criteria	Non- Residential Direct Contact Soil Cleanup Criteria	Impact to Groundwater Soil Cleanup Criteria	8.5 - 9.0	5.0 - 5.5	8.5 -9.0	10.5 - 11.0	10.5 - 11.0	10. - 10.5
Sample Date				6/4/98	6/4/98	6/4/98	6/4/98	6/5/98	6/5/98
PP Metals (mg/kg)									
Antimony	14	340	NLE	2.1 B	**98.8**	ND	ND	0.7 B	3.4 B
Arsenic	20	20	NLE	**34.3**	**2650**	**21.8**	18.5	**63.2**	**382**
Beryllium	1	1	NLE	ND	ND	0.5 B	0.3 B	0.18 B	ND
Cadmium	1	100	NLE	0.17 B	**3.6**	0.26 B	ND	ND	ND
Chromium	NLE	500	NLE	4.7	6.5	17.8	6.2	13.3	17.3
Copper	600	600	NLE	65.3	**3460**	351	16.6	25.1	115
Lead	400	600	NLE	366	**10100**	20.5	111	20.8	**524**
Mercury	14	270	NLE	0.57	3.4	ND	ND	0.19	3.6
Nickel	250	2400	NLE	3.5 B	6.8	22.7	8.3	9.18	7.1
Selenium	63	3100	NLE	ND	4.1	1.1	2.4	0.91	4.6
Silver	110	4100	NLE	0.35 B	22.2	ND	ND	ND	ND
Thallium	2	2	NLE	0.94 B	**57**	0.9 B	ND	ND	1.7
Zinc	1500	1500	NLE	64.5	**1610**	89.2	75.2	30.6	69
Volatiles Organic Compounds (ug/kg)									
Aroclein	NLE	NLE	NLE	310 J	NA	ND	140 J	ND	ND
Acetone	1000000	1000000	100000	ND	NA	ND	170 JB	ND	390 B
Carbon Disulfide	NLE	NLE	NLE	ND	NA	ND	ND	ND	3000
Vinyl Acetate	NLE	NLE	NLE	ND	NA	ND	ND	ND	ND
Methylene Chloride	49000	210000	1000	ND	NA	ND	ND	ND	ND
cis- 1,2-Dichloroethene	79000	1000000	1000	ND	NA	ND	ND	ND	ND
2-Butanone (MEK)	1000000	1000000	50000	ND	NA	ND	ND	ND	ND
Chloroform	19000	28000	1000	ND	NA	ND	ND	ND	ND
1,1,1-Trichloroethane	210000	1000000	50000	ND	NA	ND	ND	ND	ND
Carbon Tetrachloride	2000	4000	1000	ND	NA	ND	ND	ND	ND
1,2-Dichloroethane (EDC)	6000	24000	1000	ND	NA	ND	430 J	ND	ND
Benzene	3000	13000	1000	ND	NA	ND	**31500** D	ND	**5500**
Trichloroethene	23000	54000	1000	ND	NA	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	1000000	1000000	50000	ND	NA	ND	ND	ND	ND
Toluene	1000000	1000000	500000	ND	NA	ND	**133300** JD	ND	472000 D
1,1,2-Trichloroethane	22000	420000	1000	ND	NA	ND	ND	ND	ND

Notes:
ND = Not detected
B = Compound found in method blank (organics)
B = Concentration is less than the CRDL, but greater than or equal to the IDL (inorganic)
J = Estimated Value
D = Sec[redacted] dilution factor

CE 3.2204

TABLE 1
EDGEWATER ASSOCIATES
Former Celotex Site
Analytical Sample Results

Lab ID				46854	46857	46855	46856	46916	46917
Sample ID #				TR-10	TR-11	TR-14	TR-15	TR-16	TR-17
Depth (feet) Sample Date	Residential Direct Contact Soil Cleanup Criteria	Non- Residential Direct Contact Soil Cleanup Criteria	Impact to Groundwater Soil Cleanup Criteria	8.5 - 9.0 6/4/98	5.0 - 5.5 6/4/98	8.5 -9.0 6/4/98	10.5 - 11.0 6/4/98	10.5 - 11.0 6/5/98	10. - 10.5 6/5/98
Volatiles Organic Compounds (ug/kg)									
Tetrachloroethene	4,000	6,000	1,000	580 J	NA	ND	ND	ND	ND
Chlorobenzene	37,000	680,000	1,000	ND	NA	ND	ND	ND	ND
Ethylbenzene	1,000,000	1,000,000	100,000	ND	NA	5,900	ND	ND	**150,000 D**
Total Xylenes	410,000	1,000,000	10,000	ND	NA	13,200	**311,100 D**	ND	**775,100 D**
Styrene	23,000	97,000	100,000	ND	NA	ND	10,500	ND	ND
Isopropylbenzene	NLE	NLE	NLE	ND	NA	19,600	306 JD	ND	11,000
n-Propylbenzene	NLE	NLE	NLE	ND	NA	ND	9,000	ND	3,500
Bromobenzene	NLE	NLE	NLE	ND	NA	ND	ND	ND	ND
1,3,5-Trimethylbenzene	NLE	NLE	NLE	ND	NA	7,300	ND	ND	282,100 D
1,2,4-Trimethylbenzene	NLE	NLE	NLE	ND	NA	ND	19,300 D	ND	7,800
4-Isopropyltoluene	NLE	NLE	NLE	ND	NA	ND	ND	ND	4,100
1,4-Dichlorobenzene	570,000	10,000,000	100,000	ND	NA	ND	ND	ND	ND
Total Target VO				580	NA	46,000	350,206	ND	1,233,600
Total TIC VO				1,900	NA	1,510,400	2,673,900	500 J	7,908,900
Acid Extractables/Base Neutrals (ug/kg)									
Isophorone	1100000	10000000	50000	ND	NA	ND	ND	ND	ND
1,2,4-Trichlorobenzene	68000	1200000	100000	ND	NA	ND	ND	ND	ND
Naphthalene	230000	4200000	100000	53 J	NA	**284300 D**	**536300 D**	ND	**3851800 D**
4-Chloro-3-methylphenol	10000000	10000000	100000	ND	NA	ND	ND	ND	ND
Acenaphthylene	NLE	NLE	NLE	ND	NA	10600	63800 JD	ND	139400
Acenaphthene	3400000	10000000	100000	42 J	NA	**195800 D**	**116200 D**	ND	**998300 D**
Diethylphthalate	10000000	10000000	50000	ND	NA	ND	ND	ND	ND
Fluorene	2300000	10000000	100000	ND	NA	**155600 D**	**127600 D**	ND	**1816800 D**
1,2-Diphenylhydrazine	NLE	NLE	NLE	ND	NA	ND	ND	ND	ND
Phenanthrene	NLE	NLE	NLE	260 J	NA	255800 D	232500 D	ND	3812400 D
Anthracene	10000000	10000000	100000	79 J	NA	98900 D	85000 JD	ND	**1481700 D**
Fluoranthene	2300000	10000000	100000	270 J	NA	**161400 D**	**105100 D**	ND	**2783300 D**
Pyrene	1700000	10000000	100000	220 J	NA	**131900 D**	88500 JD	ND	**2483400 D**
Butylbenzylphthalate	1100000	10000000	100000	ND	NA	ND	ND	ND	ND

CE 3.2205

Notes:
ND = Not detected
B = Compound found in method blank (organics)
B = Concentration is less than the CRDL, but greater than or equal to the IDL (inorganic)
J = Estimated Value
D = Secondary dilution factor

TABLE 1
EDGEWATER ASSOCIATES
Former Celotex Site
Analytical Sample Results

Lab ID				46854		46857	46855		46856		46916	46917	
Sample ID #				TR-10		TR-11	TR-14		TR-15		TR-16	TR-17	
Depth (feet)	Residential	Non- Residential	Impact to	8.5 - 9.0		5.0 - 5.5	8.5 -9.0		10.5 - 11.0		10.5 - 11.0	10. - 10.5	
Sample Date	Direct Contact Soil Cleanup Criteria	Direct Contact Soil Cleanup Criteria	Groundwater Soil Cleanup Criteria	6/4/98		6/4/98	6/4/98		6/4/98		6/5/98	6/5/98	
Acid Extractables/Base Neutrals (ug/kg)													
Benzo[a]anthracene	900	4000	500000	120	J	NA	**76800**	D	ND		ND	**1720900**	D
Chrysene	9000	40000	500000	130	J	NA	**69700**	D	ND		ND	**1497700**	D
bis(2-Ethylhexyl)phthalate	49000	210000	100000	ND		NA	ND		ND		ND	ND	
Benzo[b]fluoranthene	900	4000	50000	81	J	NA	**45900**	D	**12800**		ND	**1247600**	D
Benzo[k]fluoranthene	900	4000	500000	78	J	NA	**32400**	D	**6200**		ND	**1207300**	D
Benzo[a]pyrene	660	660	100000	94	J	NA	**48500**	D	**12000**		ND	**1379100**	D
Indeno[1,2,3-cd]pyrene	900	4000	500000	51	J	NA	**10200**		**3400**		ND	**436000**	
Dibenz[a,h]anthracene	660	660	100000	ND		NA	**1300**	J	660	J	ND	**66900**	
Benzo[g,h,i]perylene	NLE	NLE	NLE	56	J	NA	9600		3200		ND	381100	
Total Target AE/BN				1,534		NA	1,588,700		1,392,260		ND	25,303,700	
Total TIC AE/BN				3,336		NA	318,500		151,300		2,600	4,118,300	
PCB (ug/kg)	490	2000	50000	ND		NA	ND		ND		ND	ND	
Pesticides (ug/kg)													
delta-BHC	NLE	NLE	NLE	ND		NA	ND		ND		ND	2.10	P
gamma-BHC (Lindane)	520	2,200	50,000	ND		NA	ND		ND		ND	ND	
Heptachlor	150	650	50,000	ND		NA	ND		ND		ND	0.39	P
Endosulfan II	NLE	NLE	NLE	ND		NA	ND		ND		ND	2.80	P
Endosulfan sulfate	NLE	NLE	NLE	ND		NA	11	P	8.80	P	ND	7.10	P
Endrin ketone	NLE	NLE	NLE	ND		NA	ND		ND		ND	5.50	P
Cyanide (mg/kg)	1100	21,000	NLE	ND		NA	ND		ND		2.70	2.90	
Phenols (ug/kg)	10000000	10,000,000	50,000	ND		NA	3,310		6,991		ND	3,740	

CE 3.2206

Notes:
ND = Not detected
B = Compound found in method blank (organics)
B = Concentration is less than the CRDL, but greater than or equal to the IDL (inorganic)
J = Estimated Value
D = Secondary dilution factor

AlliedSignal

AlliedSignal Inc.
P.O. Box 1057
Morristown, NJ 07962-1057

CE 3.2207

February 18, 1998 1999

U.S. Environmental Protection Agency
2890 Woodbridge Avenue
Bldg. 209 (MS-211)
Edison, NJ 08837

Attn: Robert J. Montgomery, OSC

Re: Quanta Edgewater Site
Analytical Data Package

Attached please find the full analytical report for the TCL VOA, TCL BN, and TAL Metals analysis on four soil samples that you collected on the Celotex property on December 18, 1998.

As you requested, I have provided two copies so that you may forward one to Robert Hayden, NJDEP.

If you need any further information from the laboratory regarding these analyses, please feel free to contact me at 973-455-4102.

Sincerely,

Dawn M. Neville

Dawn M. Neville
Project Engineer

STL Envirotech
a division of Severn Trent Laboratories, Inc.

STL Envirotech
777 New Durham Road
Edison, NJ 08817
Tel: (732) 549-3900
Fax: (732) 549-3679
www.stl-inc.com

January 18, 1999

Allied Signal, Inc.
101 Columbia Road
Morristown, NJ 07962

Attention: Ms. Dawn Neville

Re: Job No. K149 - Celotex

Dear Ms. Neville:

Enclosed are the results you requested for the following sample(s) received at our laboratory on December 18, 1998:

Lab No.	Client ID	Analysis Required
103824	Soil_Pile-1	TCL VOA, TCL BN, TAL Metals
103825	Excavation-2	TCL VOA, TCL BN, TAL Metals
103826	Excavation-3	TCL VOA, TCL BN, TAL Metals
103827	Excavation-4	TCL VOA, TCL BN, TAL Metals

An invoice for our services is also enclosed. If you have any questions please contact your Project Manager, Kevin Hoogerhyde, at (732) 549-3900.

Very truly yours,

Michael J. Urban
Laboratory Manager

TABLE OF CONTENTS

	Section	Page
Analytical Results Summary	1	1
General Information	2	
Chain of Custody		17
Laboratory Chronicles		18
Methodology Review		24
Data Reporting Qualifiers		27
Non-Conformance Summary		28
GC/MS Forms and Data	3	
Results Summary and Chromatograms		30
Tuning Results Summary		203
Method Blank Results Summary		259
Calibration Summary		283
Surrogate Compound Recovery Summary		328
Spike Recovery Summary		330
Internal Standard Area Summary		333
Metals Forms and Data	4	
Analytical Results Summary		346
Blank Results Summary		350
Calibration Summary		354
ICP Interference Check Results Summary		360
Spike Sample Recovery Summary		363
Sample and MS Duplicate Results Summary		366
Laboratory Control Sample Results Summary		369
Serial Dilution Summary		370
Analysis Run Log		371

Client ID: **Soil_Pile-1**
Site: Celotex

Lab Sample No: **103824**
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98
Date Analyzed: 12/29/98
GC Column: DB624
Instrument ID: VOAMS1.i
Lab File ID: a7813.d

Matrix: SOIL
Level: LOW
Sample Weight: 5.2 g
Purge Volume: 5.0 ml
% Moisture: 16

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	5.7
Bromomethane	ND	5.7
Vinyl Chloride	ND	5.7
Chloroethane	ND	5.7
Methylene Chloride	1.5JB	3.4
Acetone	200	5.7
Carbon Disulfide	10	5.7
1,1-Dichloroethene	ND	2.3
1,1-Dichloroethane	ND	5.7
trans-1,2-Dichloroethene	ND	5.7
cis-1,2-Dichloroethene	ND	5.7
Chloroform	ND	5.7
1,2-Dichloroethane	ND	2.3
2-Butanone	35	5.7
1,1,1-Trichloroethane	ND	5.7
Carbon Tetrachloride	ND	2.3
Bromodichloromethane	ND	1.1
1,2-Dichloropropane	ND	1.1
cis-1,3-Dichloropropene	ND	5.7
Trichloroethene	0.6J	1.1
Dibromochloromethane	ND	5.7
1,1,2-Trichloroethane	ND	3.4
Benzene	1.6	1.1
trans-1,3-Dichloropropene	ND	5.7
Bromoform	ND	4.6
4-Methyl-2-Pentanone	ND	5.7
2-Hexanone	ND	5.7
Tetrachloroethene	ND	1.1
1,1,2,2-Tetrachloroethane	ND	1.1
Toluene	3.8J	5.7
Chlorobenzene	ND	5.7
Ethylbenzene	8.1	4.6
Styrene	ND	5.7
Xylene (Total)	18	5.7

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: Soil_Pile-1
Site: Celotex

Lab Sample No: 103824
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98
Date Extracted: 12/24/98
Date Analyzed: 01/06/99
GC Column: DB-5
Instrument ID: BNAMS4.i
Lab File ID: u6111.d

Matrix: SOIL
Level: LOW
Sample Weight: 15.0 g
Extract Final Volume: 1.0 ml
Dilution Factor: 20.0
% Moisture: 16

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Carbazole	2200 J	7900
Di-n-butylphthalate	ND	7900
Fluoranthene	21000	7900
Pyrene	16000	7900
Butylbenzylphthalate	7200 J	7900
3,3'-Dichlorobenzidine	ND	16000
Benzo(a)anthracene	8200	790
Chrysene	8300	7900
bis(2-Ethylhexyl)phthalate	190000	7900
Di-n-octylphthalate	150000	7900
Benzo(b)fluoranthene	8800	790
Benzo(k)fluoranthene	3600	790
Benzo(a)pyrene	7200	790
Indeno(1,2,3-cd)pyrene	3400	790
Dibenz(a,h)anthracene	1100	790
Benzo(g,h,i)perylene	3500 J	7900

Client ID: **Soil_Pile-1**
Site: Celotex

Lab Sample No: **103824**
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98
Date Extracted: 12/24/98
Date Analyzed: 01/06/99
GC Column: DB-5
Instrument ID: BNAMS4.i
Lab File ID: u6111.d

Matrix: SOIL
Level: LOW
Sample Weight: 15.0 g
Extract Final Volume: 1.0 ml
Dilution Factor: 20.0
% Moisture: 16

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
bis(2-Chloroethyl)ether	ND	790
1,3-Dichlorobenzene	ND	7900
1,4-Dichlorobenzene	ND	7900
1,2-Dichlorobenzene	ND	7900
bis(2-chloroisopropyl)ether	ND	7900
N-Nitroso-di-n-propylamine	ND	790
Hexachloroethane	ND	790
Nitrobenzene	ND	790
Isophorone	ND	7900
bis(2-Chloroethoxy)methane	ND	7900
1,2,4-Trichlorobenzene	ND	790
Naphthalene	2600 J	7900
4-Chloroaniline	ND	7900
Hexachlorobutadiene	ND	1600
2-Methylnaphthalene	1200 J	7900
Hexachlorocyclopentadiene	ND	7900
2-Chloronaphthalene	ND	7900
2-Nitroaniline	ND	16000
Dimethylphthalate	ND	7900
Acenaphthylene	350 J	7900
2,6-Dinitrotoluene	ND	1600
3-Nitroaniline	ND	16000
Acenaphthene	2300 J	7900
Dibenzofuran	1200 J	7900
2,4-Dinitrotoluene	ND	1600
Diethylphthalate	ND	7900
4-Chlorophenyl-phenylether	ND	7900
Fluorene	2700 J	7900
4-Nitroaniline	ND	16000
N-Nitrosodiphenylamine	ND	7900
4-Bromophenyl-phenylether	ND	7900
Hexachlorobenzene	ND	790
Phenanthrene	15000	7900
Anthracene	4600 J	7900

Client ID: Soil Pile-1
Site: Celotex

Lab Sample No: 103824
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98

Matrix: SOLID
Level: LOW
% Moisture: 15.7

METALS ANALYSIS

Analyte	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	Qual	M
Aluminum	4640	13.8		P
Antimony	1.3	1.1	BN	P
Arsenic	4.5	0.90		P
Barium	111	0.33		P
Beryllium	0.18	0.047	B	P
Cadmium	6.0	0.095		P
Calcium	40700	10.0	N	P
Chromium	19.6	0.24		P
Cobalt	5.1	0.28	B	P
Copper	51.8	0.83		P
Iron	15500	9.8		P
Lead	180	0.59		P
Magnesium	2410	9.6		P
Manganese	247	0.26		P
Mercury	0.95	0.020	N*	CV
Nickel	21.5	0.50		P
Potassium	533	71.2	B	P
Selenium	ND	1.1		P
Silver	0.34	0.33	B	P
Sodium	370	101	B	P
Thallium	ND	1.1		P
Vanadium	27.2	0.45		P
Zinc	511	1.1		P

Qual Column - Data Reporting Qualifiers (See Sec 2 of Report)
M Column - Method Code (See Section 2 of Report)

Client ID: **Excavation-2**
Site: Celotex

Lab Sample No: **103825**
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98
Date Analyzed: 12/29/98
GC Column: DB624
Instrument ID: VOAMS1.i
Lab File ID: a7814.d

Matrix: SOIL
Level: LOW
Sample Weight: 5.4 g
Purge Volume: 5.0 ml
% Moisture: 16

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	5.5
Bromomethane	ND	5.5
Vinyl Chloride	ND	5.5
Chloroethane	ND	5.5
Methylene Chloride	2.9JB	3.3
Acetone	160	5.5
Carbon Disulfide	32	5.5
1,1-Dichloroethene	ND	2.2
1,1-Dichloroethane	0.6J	5.5
trans-1,2-Dichloroethene	ND	5.5
cis-1,2-Dichloroethene	ND	5.5
Chloroform	ND	5.5
1,2-Dichloroethane	ND	2.2
2-Butanone	25	5.5
1,1,1-Trichloroethane	ND	5.5
Carbon Tetrachloride	ND	2.2
Bromodichloromethane	ND	1.1
1,2-Dichloropropane	ND	1.1
cis-1,3-Dichloropropene	ND	5.5
Trichloroethene	2.5	1.1
Dibromochloromethane	ND	5.5
1,1,2-Trichloroethane	ND	3.3
Benzene	2.3	1.1
trans-1,3-Dichloropropene	ND	5.5
Bromoform	ND	4.4
4-Methyl-2-Pentanone	ND	5.5
2-Hexanone	ND	5.5
Tetrachloroethene	3.3	1.1
1,1,2,2-Tetrachloroethane	ND	1.1
Toluene	5.5J	5.5
Chlorobenzene	ND	5.5
Ethylbenzene	17	4.4
Styrene	ND	5.5
Xylene (Total)	19	5.5

Envirotech
a division of Severn Trent Laboratories, Inc.

[redacted]ent ID: **Excavation-2**
Site: Celotex

Lab Sample No: **103825**
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98
Date Extracted: 12/24/98
Date Analyzed: 01/07/99
GC Column: DB-5
Instrument ID: BNAMS4.i
Lab File ID: u6125.d

Matrix: SOIL
Level: LOW
Sample Weight: 15.0 g
Extract Final Volume: 1.0 ml
Dilution Factor: 10.0
% Moisture: 16

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
bis(2-Chloroethyl)ether	ND	400
1,3-Dichlorobenzene	ND	4000
1,4-Dichlorobenzene	ND	4000
1,2-Dichlorobenzene	ND	4000
bis(2-chloroisopropyl)ether	ND	4000
N-Nitroso-di-n-propylamine	ND	400
Hexachloroethane	ND	400
[redacted]robenzene	ND	400
[redacted]phorone	ND	4000
bis(2-Chloroethoxy)methane	ND	4000
1,2,4-Trichlorobenzene	ND	400
Naphthalene	6200	4000
4-Chloroaniline	ND	4000
Hexachlorobutadiene	ND	800
2-Methylnaphthalene	2100 J	4000
Hexachlorocyclopentadiene	ND	4000
2-Chloronaphthalene	ND	4000
2-Nitroaniline	ND	8000
Dimethylphthalate	ND	4000
Acenaphthylene	790 J	4000
2,6-Dinitrotoluene	ND	800
3-Nitroaniline	ND	8000
Acenaphthene	4100	4000
Dibenzofuran	2600 J	4000
2,4-Dinitrotoluene	ND	800
Diethylphthalate	ND	4000
4-Chlorophenyl-phenylether	ND	4000
Fluorene	5100	4000
4-Nitroaniline	ND	8000
N-Nitrosodiphenylamine	ND	4000
4-Bromophenyl-phenylether	ND	4000
Hexachlorobenzene	ND	400
Phenanthrene	28000	4000
Anthracene	7800	4000

Client ID: **Excavation-2**
Site: Celotex

Lab Sample No: **103825**
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98
Date Extracted: 12/24/98
Date Analyzed: 01/07/99
GC Column: DB-5
Instrument ID: BNAMS4.i
Lab File ID: u6125.d

Matrix: SOIL
Level: LOW
Sample Weight: 15.0 g
Extract Final Volume: 1.0 ml
Dilution Factor: 10.0
% Moisture: 16

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Carbazole	3800 J	4000
Di-n-butylphthalate	ND	4000
Fluoranthene	33000	4000
Pyrene	27000	4000
Butylbenzylphthalate	1300 J	4000
3,3'-Dichlorobenzidine	ND	8000
Benzo(a)anthracene	13000	400
Chrysene	14000	4000
bis(2-Ethylhexyl)phthalate	58000	4000
Di-n-octylphthalate	70000	4000
Benzo(b)fluoranthene	15000	400
Benzo(k)fluoranthene	6400	400
Benzo(a)pyrene	11000	400
Indeno(1,2,3-cd)pyrene	4400	400
Dibenz(a,h)anthracene	1300	400
Benzo(g,h,i)perylene	4000	4000

CE 3.2217

Client ID: **Excavation-2**
Site: **Celotex**

Lab Sample No: 103825
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98

Matrix: SOLID
Level: LOW
% Moisture: 16.2

METALS ANALYSIS

Analyte	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	Qual	M
Aluminum	7220	13.9		P
Antimony	1.6	1.1	BN	P
Arsenic	15.5	0.91		P
Barium	315	0.33		P
Beryllium	0.64	0.048		P
Cadmium	0.70	0.095	B	P
Calcium	42200	10.1	N	P
Chromium	40.6	0.24		P
Cobalt	7.5	0.29	B	P
Copper	76.6	0.84		P
Iron	21400	9.9		P
Lead	421	0.60		P
Magnesium	6160	9.6		P
Manganese	325	0.26		P
Mercury	0.58	0.020	N*	CV
Nickel	29.0	0.50		P
Potassium	1150	71.7	B	P
Selenium	ND	1.1		P
Silver	0.43	0.33	B	P
Sodium	374	102	B	P
Thallium	ND	1.1		P
Vanadium	26.8	0.45		P
Zinc	402	1.1		P

Qual Column - Data Reporting Qualifiers (See Sec 2 of Report)
M Column - Method Code (See Section 2 of Report)

Client ID: **Excavation-3**
Site: Celotex

Lab Sample No: **103826**
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98
Date Analyzed: 12/29/98
GC Column: DB624
Instrument ID: VOAMS1.i
Lab File ID: a7819.d

Matrix: SOIL
Level: LOW
Sample Weight: 5.6 g
Purge Volume: 5.0 ml
% Moisture: 14

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	5.2
Bromomethane	ND	5.2
Vinyl Chloride	ND	5.2
Chloroethane	ND	5.2
Methylene Chloride	1.8JB	3.1
Acetone	96	5.2
Carbon Disulfide	19	5.2
1,1-Dichloroethene	ND	2.1
1,1-Dichloroethane	ND	5.2
trans-1,2-Dichloroethene	ND	5.2
cis-1,2-Dichloroethene	ND	5.2
Chloroform	ND	5.2
1,2-Dichloroethane	ND	2.1
2-Butanone	13	5.2
1,1,1-Trichloroethane	ND	5.2
Carbon Tetrachloride	ND	2.1
Bromodichloromethane	ND	1.0
1,2-Dichloropropane	ND	1.0
cis-1,3-Dichloropropene	ND	5.2
Trichloroethene	ND	1.0
Dibromochloromethane	ND	5.2
1,1,2-Trichloroethane	ND	3.1
Benzene	2.4	1.0
trans-1,3-Dichloropropene	ND	5.2
Bromoform	ND	4.2
4-Methyl-2-Pentanone	ND	5.2
2-Hexanone	ND	5.2
Tetrachloroethene	0.8J	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
Toluene	2.1J	5.2
Chlorobenzene	ND	5.2
Ethylbenzene	3.2J	4.2
Styrene	ND	5.2
Xylene (Total)	5.1J	5.2

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **Excavation-3RE**
Site: Celotex

Lab Sample No: **103826RE**
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98
Date Extracted: 01/14/99
Date Analyzed: 01/15/99
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t2214.d

Matrix: SOIL
Level: LOW
Sample Weight: 15.0 g
Extract Final Volume: 1.0 ml
Dilution Factor: 5.0
% Moisture: 14

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
bis(2-Chloroethyl)ether	ND	190
1,3-Dichlorobenzene	ND	1900
1,4-Dichlorobenzene	ND	1900
1,2-Dichlorobenzene	ND	1900
bis(2-chloroisopropyl)ether	ND	1900
N-Nitroso-di-n-propylamine	ND	190
Hexachloroethane	ND	190
Nitrobenzene	ND	190
Isophorone	ND	1900
bis(2-Chloroethoxy)methane	ND	1900
1,2,4-Trichlorobenzene	ND	190
Naphthalene	760 J	1900
4-Chloroaniline	ND	1900
Hexachlorobutadiene	ND	390
2-Methylnaphthalene	540 J	1900
Hexachlorocyclopentadiene	ND	1900
2-Chloronaphthalene	ND	1900
2-Nitroaniline	ND	3900
Dimethylphthalate	ND	1900
Acenaphthylene	330 J	1900
2,6-Dinitrotoluene	ND	390
3-Nitroaniline	ND	3900
Acenaphthene	2100	1900
Dibenzofuran	1200 J	1900
2,4-Dinitrotoluene	ND	390
Diethylphthalate	ND	1900
4-Chlorophenyl-phenylether	ND	1900
Fluorene	2400	1900
4-Nitroaniline	ND	3900
N-Nitrosodiphenylamine	ND	1900
4-Bromophenyl-phenylether	ND	1900
Hexachlorobenzene	ND	190
Phenanthrene	16000	1900
Anthracene	4700	1900

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **Excavation-3RE**
Site: Celotex

Lab Sample No: **103826RE**
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98
Date Extracted: 01/14/99
Date Analyzed: 01/15/99
GC Column: DB-5
Instrument ID: BNAMS3.i
Lab File ID: t2214.d

Matrix: SOIL
Level: LOW
Sample Weight: 15.0 g
Extract Final Volume: 1.0 ml
Dilution Factor: 5.0
% Moisture: 14

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Carbazole	2400	1900
Di-n-butylphthalate	ND	1900
Fluoranthene	20000	1900
Pyrene	19000	1900
Butylbenzylphthalate	1600 J	1900
3,3'-Dichlorobenzidine	ND	3900
Benzo(a)anthracene	9500	190
Chrysene	10000	1900
bis(2-Ethylhexyl)phthalate	3900	1900
Di-n-octylphthalate	ND	1900
Benzo(b)fluoranthene	10000	190
Benzo(k)fluoranthene	4600	190
Benzo(a)pyrene	8700	190
Indeno(1,2,3-cd)pyrene	4200	190
Dibenz(a,h)anthracene	1300	190
Benzo(g,h,i)perylene	4300	1900

Client ID: **Excavation-3**
Site: **Celotex**

Lab Sample No: 103826
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98

Matrix: SOLID
Level: LOW
% Moisture: 13.9

METALS ANALYSIS

Analyte	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	Qual	M
Aluminum	7350	13.5		P
Antimony	ND	1.1	N	P
Arsenic	8.4	0.88		P
Barium	191	0.33		P
Beryllium	0.37	0.046	B	P
Cadmium	0.38	0.093	B	P
Calcium	21600	9.8	N	P
Chromium	20.0	0.23		P
Cobalt	6.9	0.28	B	P
Copper	43.1	0.81		P
Iron	16700	9.6		P
Lead	183	0.58		P
Magnesium	5040	9.4		P
Manganese	256	0.26		P
Mercury	0.49	0.019	N*	CV
Nickel	21.5	0.49		P
Potassium	1120	69.8	B	P
Selenium	ND	1.1		P
Silver	0.39	0.33	B	P
Sodium	377	99.0	B	P
Thallium	ND	1.1		P
Vanadium	27.2	0.44		P
Zinc	247	1.0		P

Qual Column - Data Reporting Qualifiers (See Sec 2 of Report)
M Column - Method Code (See Section 2 of Report)

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **Excavation-4**
Site: Celotex

Lab Sample No: **103827**
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98
Date Analyzed: 12/29/98
GC Column: DB624
Instrument ID: VOAMS1.i
Lab File ID: a7818.d

Matrix: SOIL
Level: LOW
Sample Weight: 5.1 g
Purge Volume: 5.0 ml
% Moisture: 12

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	5.5
Bromomethane	ND	5.5
Vinyl Chloride	ND	5.5
Chloroethane	ND	5.5
Methylene Chloride	2.8JB	3.3
Acetone	210	5.5
Carbon Disulfide	14	5.5
1,1-Dichloroethene	ND	2.2
1,1-Dichloroethane	ND	5.5
trans-1,2-Dichloroethene	ND	5.5
cis-1,2-Dichloroethene	0.7J	5.5
Chloroform	ND	5.5
1,2-Dichloroethane	ND	2.2
2-Butanone	33	5.5
1,1,1-Trichloroethane	ND	5.5
Carbon Tetrachloride	ND	2.2
Bromodichloromethane	ND	1.1
1,2-Dichloropropane	ND	1.1
cis-1,3-Dichloropropene	ND	5.5
Trichloroethene	1.0J	1.1
Dibromochloromethane	ND	5.5
1,1,2-Trichloroethane	ND	3.3
Benzene	4.7	1.1
trans-1,3-Dichloropropene	ND	5.5
Bromoform	ND	4.4
4-Methyl-2-Pentanone	ND	5.5
2-Hexanone	ND	5.5
Tetrachloroethene	2.3	1.1
1,1,2,2-Tetrachloroethane	ND	1.1
Toluene	9.3	5.5
Chlorobenzene	ND	5.5
Ethylbenzene	15	4.4
Styrene	4.7J	5.5
Xylene (Total)	31	5.5

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **Excavation-4**
Site: Celotex

Lab Sample No: **103827**
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98
Date Extracted: 12/24/98
Date Analyzed: 01/07/99
GC Column: DB-5
Instrument ID: BNAMS4.i
Lab File ID: u6126.d

Matrix: SOIL
Level: LOW
Sample Weight: 15.0 g
Extract Final Volume: 1.0 ml
Dilution Factor: 5.0
% Moisture: 12

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
bis(2-Chloroethyl)ether	ND	190
1,3-Dichlorobenzene	ND	1900
1,4-Dichlorobenzene	ND	1900
1,2-Dichlorobenzene	ND	1900
bis(2-chloroisopropyl)ether	ND	1900
N-Nitroso-di-n-propylamine	ND	190
Hexachloroethane	ND	190
[illegible]robenzene	ND	190
[illegible]phorone	ND	1900
bis(2-Chloroethoxy)methane	ND	1900
1,2,4-Trichlorobenzene	ND	190
Naphthalene	980 J	1900
4-Chloroaniline	ND	1900
Hexachlorobutadiene	ND	380
2-Methylnaphthalene	740 J	1900
Hexachlorocyclopentadiene	ND	1900
2-Chloronaphthalene	ND	1900
2-Nitroaniline	ND	3800
Dimethylphthalate	ND	1900
Acenaphthylene	570 J	1900
2,6-Dinitrotoluene	ND	380
3-Nitroaniline	ND	3800
Acenaphthene	1500 J	1900
Dibenzofuran	760 J	1900
2,4-Dinitrotoluene	ND	380
Diethylphthalate	ND	1900
4-Chlorophenyl-phenylether	ND	1900
Fluorene	1800 J	1900
4-Nitroaniline	ND	3800
N-Nitrosodiphenylamine	ND	1900
4-Bromophenyl-phenylether	ND	1900
Hexachlorobenzene	ND	190
Phenanthrene	11000	1900
Anthracene	3100	1900

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **Excavation-4**
Site: Celotex

Lab Sample No: **103827**
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98
Date Extracted: 12/24/98
Date Analyzed: 01/07/99
GC Column: DB-5
Instrument ID: BNAMS4.i
Lab File ID: u6126.d

Matrix: SOIL
Level: LOW
Sample Weight: 15.0 g
Extract Final Volume: 1.0 ml
Dilution Factor: 5.0
% Moisture: 12

SEMI-VOLATILE ORGANICS - GC/MS
METHOD 8270C

Parameter	Analytical Results Units: ug/kg (Dry Weight)		Quantitation Limit Units: ug/kg
Carbazole	1300	J	1900
Di-n-butylphthalate	460	J	1900
Fluoranthene	18000		1900
Pyrene	16000		1900
Butylbenzylphthalate	4500		1900
3,3'-Dichlorobenzidine	ND		3800
Benzo(a)anthracene	7400		190
Chrysene	8300		1900
bis(2-Ethylhexyl)phthalate	19000		1900
Di-n-octylphthalate	1600	J	1900
Benzo(b)fluoranthene	11000		190
Benzo(k)fluoranthene	3600		190
Benzo(a)pyrene	8000		190
Indeno(1,2,3-cd)pyrene	2900		190
Dibenz(a,h)anthracene	770		190
Benzo(g,h,i)perylene	2400		1900

Envirotech
a division of Severn Trent Laboratories, Inc

Client ID: **Excavation-4**
Site: **Celotex**

Lab Sample No: 103827
Lab Job No: K149

Date Sampled: 12/18/98
Date Received: 12/18/98

Matrix: SOLID
Level: LOW
% Moisture: 11.9

METALS ANALYSIS

Analyte	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	Qual	M
Aluminum	6390	13.2		P
Antimony	1.1	1.0	BN	P
Arsenic	8.3	0.86		P
Barium	178	0.32		P
Beryllium	0.37	0.045	B	P
Cadmium	1.2	0.091		P
Calcium	29500	9.6	N	P
Chromium	45.3	0.23		P
Cobalt	7.8	0.27	B	P
Copper	85.0	0.79		P
Iron	17500	9.4		P
Lead	328	0.57		P
Magnesium	4550	9.1		P
Manganese	311	0.25		P
Mercury	0.78	0.019	N*	CV
Nickel	38.4	0.48		P
Potassium	928	68.2	B	P
Selenium	ND	1.1		P
Silver	0.40	0.32	B	P
Sodium	439	96.7	B	P
Thallium	ND	1.1		P
Vanadium	30.6	0.43		P
Zinc	496	1.0		P

Qual Column - Data Reporting Qualifiers (See Sec 2 of Report)
M Column - Method Code (See Section 2 of Report)

ENVIROTECH RESEARCH INC.
777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

PAGE 1 OF 1

Name (for report and invoice)	Samplers Name (Printed)	Site/Project Identification: CELOTEX, EDGEWATER
Company: ALLIED/EPA	P.O. #	State (Location of site): NJ: ☒ NY: ☐ Other:
		Regulatory Program:
Address	Analysis Turnaround Time: Standard ☒	
City	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone Fax		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: K149

Sample Identification	Date	Time	Matrix	No. of. Cont.	TCL-VOS	TCL-BNs	TAL Metals									Sample Numbers
SOIL PILE #1	12/18/98	11:40A	SOIL	1	✓	✓	✓									103824
EXCAVATION #2	12/18/98	11:49A	SOIL	1	✓	✓	✓									103825
EXCAVATION #3	12/18/98	11:48A	SOIL	1	✓	✓	✓									103826
EXCAVATION #4	12/18/98	11:48A	SOIL	1	✓	✓	✓									103827

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH
6 = Other _____, 7 = Other _____

Soil:
Water:

Special Instructions

Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company
1) AKHIL VERMA for Bob Montgomery	EPA	12/18/98 12:30PM	1) K. CHALOKA	STL-ETL
2) K. CHALOKA	STL-ETL	12/18/98 2:53 PM	2) R Prudhoud	Envirotech
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12543), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

CE 3.2226

Environmental
Waste
Management
Associates

CE 3.2227

REMEDIAL INVESTIGATION REPORT

Volume I of II

Property Known As:

Former Celotex Industrial Park
River Road
Edgewater, Bergen County, New Jersey
Site No. NJDE981876642

Prepared for:

Edgewater Enterprises, LLC

September 2000

Submitted by:

Environmental Waste Management Associates, LLC
100 Misty Lane, P.O. Box 5430
Parsippany, New Jersey 07054
EWMA Case No. 200957

Rich Hodgson
ENVIRONMENTAL TECHNICIAN

Christopher Kirby
SENIOR PROJECT MANAGER

TABLE OF CONTENTS

CE 3.2228

1.0 INTRODUCTION 1

2.0 REMEDIAL INVESTIGATION REPORT 3

2.1 HISTORICAL INFORMATION 3
2.2 PHYSICAL SETTING 5
2.2.1 Physical Conditions of Site and Surroundings 5
2.2.2 Geology And Soil 5
2.2.3 Hydrogeology 6
2.2.4 Topography 6
2.2.5 Surface Water Bodies 7
2.2.6 USGS 7.5 Minute Topographic Map 7
2.2.7 National Wetlands Inventory Map 7
2.2.8 Boring Logs From On-Site Construction 7
2.2.9 Land Use Within 1,000 Foot Radius 7
2.3 TECHNICAL OVERVIEW 8
2.3.1 Reliability of Analytical Data 8
2.3.2 Site Contamination Summary 8
2.3.3 Significant Events or Seasonal Variation 10
2.3.4 Summary of Treatability, Bench Scale or Pilot Studies 10
2.3.5 Summary of Data for Permits 10
2.3.6 Summary of Ecological Assessments Conducted 11
2.4 FINDINGS AND RECOMMENDATIONS 11
2.4.1 Former 150,000-gallon AGSTs (All County Environmental Services Corp.) 11
2.4.2 Gypsum Landfill 12
2.4.3 Southern Portion of The Site 13
2.4.4 Volatile Organic Contamination 13
2.4.5 Hot Spot (Removal) Areas of Concern (AOC –12): 14
2.4.6 Hot Spot (Delineation) Areas of Concern 17
2.4.7 Excavated/Stockpiled Soils 21
2.4.8 AOC 13 23
2.4.9 AOC 14 23
2.4.10 AOC 16 23
2.4.11 Off Site Delineation 23
2.4.12 Ground Water 24

3.0 HAZSITE DATA 25

4.0 CERTIFICATION PAGE 25

5.0 SI/RI CHECKLIST 25

6.0 CONCLUSIONS 25

TABLES

ANALYTICAL METHODS/QUALITY ASSURANCE SUMMARY ..... TABLE 1
RESULTS SUMMARY - SOIL QUALITY ..... TABLE 2
RESULTS SUMMARY - GROUND WATER (12/21/99) ..... TABLE 3
RESULTS SUMMARY - SEDIMENT QUALITY ..... TABLE 4
RESULTS SUMMARY - SURFACE WATER QUALITY ..... TABLE 5

FIGURES

USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE ..... FIGURE 1
SITE PLAN (SHOWING AREAS OF CONCERN) ..... FIGURE 2
SOIL SAMPLE LOCATION ..... FIGURE 3
PAH SOIL CONTAMINATION ..... FIGURE 4
ARSENIC SOIL CONTAMINATION ..... FIGURE 5
LEAD SOIL CONTAMINATION ..... FIGURE 6
VOC SOIL CONTAMINATION ..... FIGURE 7
HUDSON RIVER SAMPLES ..... FIGURE 8
LANDFILL CHARACTERIZATION SOIL SAMPLES ..... FIGURE 9
C-77 POST EXCAVATION SOIL SAMPLES ..... FIGURE 10
SITE-WIDE DELINEATION (C-74, 75, 76 & 77 AREA) ..... FIGURE 11
C-79 ARSENIC & LEAD DELINEATION SAMPLES ..... FIGURE 12
SITE-WIDE DELINEATION (C-32, 34 & 35 AREA) ..... FIGURE 13
SITE-WIDE DELINEATION (C-62 & 63 AREA) ..... FIGURE 14
SALES AREA STOCKPILE SAMPLES (COM-1 TO COM-5) ..... FIGURE 15
CONTINUING CARE SOIL SAMPLES (CCF-1 TO CCF-11) ..... FIGURE 16
GROUND WATER FLOW (DECEMBER 1999) ..... FIGURE 17

APPENDICES

NJDEP LETTERS 1
AERIAL PHOTOGRAPHS 2
PHOTOGRAPHIC LOG 3
BORING LOGS 4
MONITORING WELL ABANDONMENT FORMS 5
DECEMBER 1999 SAMPLING EVENT PURGE GUIDE 6
HAZSITE DATA PACKAGE 7

1.0 INTRODUCTION

Environmental Waste Management Associates, LLC (EWMA) was retained by Edgewater Enterprises, LLC ("Edgewater Enterprises") to prepare this Remedial Investigation Report (RIR) for the Former Celotex Industrial Park. This 29.5-acre site is located at 1 River Road, Edgewater, Bergen County, New Jersey (referred to herein as either the subject Property or Site). The site location is depicted on **Figure 1**, which is an excerpt from the Central Park NY-NJ USGS Topographic Quadrangle. This RIR discusses remedial investigation activities implemented at the Site since August 1999 and it addresses specific comments from various letters written by the New Jersey Department of Environmental Protection (NJDEP).

In May of 1998 a waterfront development permit was issued by the NJDEP pursuant the Coastal Area Facility Review Act (CAFRA). The permit is for the construction of a mixed-use development that includes the subject Property. The permit stipulated that approval from the NJDEP Site Remediation Program was required prior to construction. This RIR summarizes the remedial actions that Edgewater Enterprises performed at the site with oversight from the NJDEP Site Remediation Program in accordance with this requirement.

In 1999 the NJDEP issued an Administrative Consent Order (ACO) enabling Edgewater Enterprises to conduct all necessary remedial activities for the Site. As part of the ACO Edgewater Enterprises was required to submit a Phase II Remedial Investigation Work Plan (Phase II RI Work Plan) in accordance with the NJDEP's December 15, 1997 comment letter and the Technical Requirements for Site Remediation (TRSR), N.J.A.C. 7:26E. However, due to the schedule for construction on adjacent parcels, and the overall need to expedite the site remediation process, certain actions began "at-peril." These activities have been discussed with the NJDEP (verbally and through written correspondence) and are documented herein. Recommendations for further action have been made within this RIR, but will be addressed in the revised Phase II RI Work Plan that is being submitted separately.

The remediation of this Property is complicated by the presence of three areas of concern (AOCs) that involve separate programs. These areas are: 1.) An on-site solid waste (gypsum) landfill that is subject to regulations enforced by the NJDEP Bureau of Landfill and Recycling Management; 2.) A hazardous waste treatment storage and disposal facility regulated by the United States Environmental Protection Agency (USEPA) under the Resource Conservation and Recovery Program (RCRA); and 3.) Contamination on the southernmost portions of this Property that is related to the Quanta Resources Superfund Site (Quanta Site), which is being remediated by Honeywell under USEPA oversight pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Due to the administrative differences in these programs, separate reports/documents must be prepared to address these AOCs. Specifically, a Landfill Closure Report must be prepared in accordance with the existing Sanitary Landfill Disruption Approval, and a RCRA Closure Report must be prepared following implementation of the RCRA Closure Plan. In addition, Edgewater

Enterprises must coordinate its development with Honeywell who is conducting investigations to address contaminated soil, groundwater and sediments on portions of the Property.

Due to the presence of free product (i.e. coal tar from the adjacent Quanta site) underneath the southeastern portion of the proposed development (see **Figure 2**), the development was scaled back to facilitate a future removal action (if necessary). Municipal approval for the revised site plan was issued in July 2000.

The purpose of this document is to demonstrate that the remedial actions/investigation addressing contaminated soils that has been completed to date is sufficient to allow Edgewater Enterprises to move forward with the pre-construction site grading and site preparation process. Eventually, the construction will encapsulate contaminated soils that will remain on the Property and thereby eliminate direct contact exposure in accordance with the NJDEP approved site-wide remedial approach initially described in the December 17, 1997 letter. In conjunction with the site development, Edgewater Enterprises will continue to address contaminated ground water and the need for additional off site remedial investigation of contaminated soils and sediments.

The AOCs investigated and/or discussed in this report are:

1. Former All County Environmental 150,000-gallon Above Ground Storage Tanks (AOC # 15)
2. Celotex Gypsum Landfill (a.k.a. on-site solid waste landfill)
3. Southern Portion of the Site (Quanta free product/coal tar plume)
4. Site Investigation For Volatile Organic Contamination
5. Soil Contamination Hot Spot (Removal) Areas of Concern (AOC 12)
6. Soil Contamination Hot Spot (Delineation) Areas of Concern (AOC 12)
7. Imported/Excavated /Stockpiled Soils
8. Academy Film (AOC 13)
9. J&T Leasing (AOC 14)
10. Havana Potato and Transport Co. (AOC 16)
11. Surface Water and Sediment Investigation
12. Ground Water Contamination
13. Arsenic and Lead Contaminated Soils

AOCs that can be geographically defined (i.e. All County, Gypsum Landfill, Southern Portion off the Site) are shown on **Figure 2**, which is a site plan that will serve as the area of concern base map for this RIR.

In addition to the aforementioned December 15, 1997 comment letter, the remedial investigation discussed herein was performed to address specific comments from the NJDEP in the following letters: 1998 –April 1st

1999 - January 30th, February 11th, February 24th, May 5th, and August 18th

2000 - January 12th, April 10th, July 3rd, August 2nd and August 8th

Copies of all of these letters are provided in **Appendix 1** for reference.

2.0 REMEDIAL INVESTIGATION REPORT

2.1 HISTORICAL INFORMATION

In accordance with N.J.A.C. 7:26E-4.8(b)1, historical site information about the Property is detailed in the June 1997 Preliminary Assessment Report (PAR) prepared by Enviro-Sciences, Inc. The PAR documents all sources of historical information used to investigate the site.

Based on the remedial investigation conducted to date, several different types of contamination (i.e. PAHs, arsenic, lead, and VOCs) are present at levels exceeding the NJDEP soil and ground water remediation standards. Refer to Section 2.3.2 for details regarding the site contamination summary. Using remedial investigation data collected since the PAR was prepared, EWMA re-evaluated the site history to determine which operations may have been responsible for the types of contamination found on-site. In addition, EWMA reviewed data from the NJDEP Geographic Information System and obtained additional historical aerial photographs showing the site.

Following the discovery of a concentrated area of arsenic and lead contamination (near River Road at the southwest corner of the Property) on-site historical operations were re-evaluated to determine if there were any obvious sources of this contamination. The PAR identified General Chemical Company as "a producer of industrial chemicals, reagent and fine chemicals, insecticides and fungicides" (Industrial Directory of New Jersey). Historical records obtained for the PAR indicate that General Chemical operated on-site from before 1912 until the early 1960s. The 1912 Atlas of Bergen County shows a complex of buildings on the Property identified as General Chemical. These buildings are visible in aerial photographs taken in the 1940's and 1950's, but they have been razed by the 1963 photograph. Refer to Enviro-Sciences June 1997 Remedial Investigation Report for the historical maps, industrial directories, and aerial photographs reviewed as par of the PAR. **Appendix 2** contains copies of additional aerial photographs obtained and reviewed for this investigation.

Around the turn of the 20th century, the use of arsenical pesticides became prominent in the United States. Lead arsenate was recommended and routinely used for insect pest control until the 1960's when the use of synthetic organochlorine pesticides became established. These dates correspond directly with the operation and subsequent demolition of the General Chemical buildings. Based on this information, historical operations conducted by General Chemical were identified as a possible source for the concentration of lead and arsenic contamination found on-site. EWMA inquired about this with Honeywell representatives. They informed EWMA that General Chemical did not manufacture any pesticides at this plant. Honeywell explained that the industrial directory noted pesticide production for marketing purposes, but General Chemical's pesticide manufacturing operations were actually located elsewhere. Based on the information

provided by Honeywell, the widespread presence of arsenic and lead cannot be attributed to pesticide manufacturing on-site.

Lead and arsenic are trace elements in coal that are released to the environment through smokestacks and by being buried with the fly ash and bottom ash[1] or boiler slag. This fact is recognized by the NJDEP as a common reason why elevated arsenic and lead levels are found in historic fill material. However, since the levels of arsenic and lead that were found in certain locations on the Property and on the adjacent Quanta site were higher than the maximum concentrations found at typical historic fill sites, fly ash was not identified as the most likely source.

In order to explain the elevated arsenic and lead levels, EWMA evaluated the possibility that the arsenic and lead is from bottom ash. Bottom ash was considered because it can contain higher metals concentrations that ordinary fly ash, and since the arsenic is also found in ground water on-site and the pH readings collected during EWMA's ground water sampling event indicated slightly acidic conditions. However, typical bottom ash does not match the physical appearance and the reddish-purple color of material that was noted in areas of the Property that exhibited the highest concentrations of arsenic and lead.

Based on EWMA's review of historical information, and information supplied by Honeywell, this report concludes that the arsenic and lead contamination hot spots on the Property are related to historical filling as part of the early site development/maintenance activities. This theory was developed based on the discovery of a distinctly recognizable layer of reddish-purple colored soil-like material that is usually found in areas that exhibited arsenic and lead levels exceeding the maximum limits set forth by the NJDEP TRSR (Summary of Target Contaminant Concentrations in Typical Historic Fill Material). The layer is not continuous, it is always found immediately beneath the former surface of the Property (above the water table) and it does not follow drainage patterns. Based on the long industrial history of this site and adjacent properties, it appears that some type of industrial process waste/byproduct was used to raise elevations in lower lying areas. Based on the long industrial history of this area, and the fact that this material is located beneath areas that have been paved for most of that time, the filling could have occurred more than 100 years ago and it certainly occurred before Celotex opoerated the site.

This report also concludes that there is a correlation between PAH contamination hot spots (also referred to historically as stained areas) and unpaved areas adjacent to the two former 150,000-gallon above ground storage tanks that were originally used for heating oil storage.

---

[1] Bottom ash is the coarse, solid, non-combustible particulate matter that results from the combustion of ground or powdered coal and falls to the bottom of the boiler, but has not melted. Bottom ash has a similar chemical composition to fly as but is produced in gradations ranging from fine sand to small aggregate (3/8"). Bottom ash is typically gray to black in color, angular, and has a porous surface texture. Bottom ash is usually a small portion of the total ash produced by the boiler. It may be vitrified or clinkered, but it is friable. It will often show metals in the leachate and may tend to be acid producing.

Unpaved areas and areas where buildings were subsequently demolished would have required periodic maintenance (i.e. filling) due to erosion and subsidence. Further evaluation of historical maps and aerial photographs shows a correlation between the arsenic, lead and PAH hot spots and historically low-lying and unpaved areas. Specifically, almost all of the hot spots have been located in the vicinity of old railroad tracks, larger unpaved areas adjacent to historical buildings, or in the filled drainage trench. Aerial photos clearly show maintenance activity in the area that was not paved for several years after the General Chemical buildings were demolished. Settlement over time (based on deterioration of the asphalt and standing water seen in photographs). In addition, the arsenic hot spots at C-79 and C-80 may be attributed to the filling of a drainage channel observed on historical maps.

2.2 PHYSICAL SETTING

2.2.1 Physical Conditions of Site and Surroundings

The Site is identified as One River Road, located in the Borough of Edgewater, Bergen County, New Jersey. The site is also known as the former Celotex Industrial Park. It consists of approximately 29.5 acres of filled land. Due to the historical industrial development and use of the land there are no surficial conditions or features on-site that are natural.

A movie theatre is under construction immediately to the north of the Property (a.k.a. former Lustrelon site). A retirement community is under construction (Sunrise Development) to the north of the theatre. The adjacent property to the south of the Site is a vacant. The vacant property is referred to herein as the Quanta Resources Superfund site. The Quanta site is being remediated by Honeywell under an Administrative Order on Consent with the USEPA. To the east of the site is the Hudson River, and to the west is River Road. Two high rise residential buildings are under construction on the adjacent property across River Road. Residential units are also under construction on a pier over the Hudson River that is attached to the Property.

The subject Property is fenced-off to prevent public access and its topographical contours are variable due to the presence of large quantities of fill material imported since the site buildings were demolished. Photographs included in **Appendix 3** show current conditions at the site.

2.2.2 Geology And Soil

The site is located within the Newark Basin, in the Piedmont Physiographic Providence of New Jersey. The site is underlain by Newark Supergroup sediments, deposited in the shallow, non-marine conditions during the late Triassic and early Jurassic time. One of the lower Newark Supergroup units, the Stockton Formation, outcrops west of the site in a roadcut along River Road. This unit is generally composed of yellow-gray to pale-brown arkose, siltstone, and mudstone deposits with minor conglomerate beds. In addition to the sediment deposits, igneous

intrusions and flows of basalt and diabase of Triassic and Jurassic age are found throughout the area.

Two to nine feet of recently deposited fill (imported since 1988) is present on top of the historical surface (i.e. grade level during historical operations). Up to 18 feet of imported fill material is present below the historical grade level. This material, overlying the natural sand, silt, and clay, meets the NJDEP's physical description and historical requirements for "historic fill material."

2.2.3 Hydrogeology

During the site investigation, groundwater was encountered at depths ranging between 7 and 14 feet below the current ground surface. The top of the water table is located in the historic fill material that was imported to raise to property for development. Based on ground water beneath the site appears flows toward the east, directly into the Hudson River through the fill. However, net ground water flow and hydraulic conditions are not fully understood and further remedial investigation is warranted.

2.2.4 Topography

The surface topography of this site has changed dramatically over its history. Most recently (since 1988) a layer of fill was imported and the surface elevation of the property was raised between 2 and 9 feet. Except for the recently constructed sediment control/drainage basin, the current topographical conditions are reflected on the "current conditions" map submitted within the August 17, 1999 Phase II RI Work Plan. Although the drainage basin exists, currently there are no active drainage features (catch basins, culverts, storm sewer lines, etc.) that would direct site drainage from this property into it. Based on site conditions indicate, there is no appreciable overland flow and all storm water infiltrates directly into the unpaved ground.

Although the earliest available records (late 19th century maps) show the site as being developed, subsurface investigation indicates that it is entirely filled or "made" land. As expected the top of the underlying natural material slopes from west to east towards the river. At this time there are no known historical maps showing drainage systems for the formers site buildings. However, many abandoned pipes have been encountered during site excavation work and it is clear that historical discharges went directly into the river.

Three major historical topographical changes in site conditions are evident based on available information: 1.) According to the Atlas of Bergen County, there is a dramatic change in the Hudson River shoreline between 1876 and 1912 (i.e. it extends approximately 200' further east in 1912); 2.) A culvert or drainage ditch is present immediately to the west and slightly north from the former location of Chemical Lane in 1912 but it has almost completely disappeared by 1947; and 3.) The gypsum landfill is created between 1957 and 1963.

2.2.5 Surface Water Bodies

According to the New Jersey Surface Water Quality Standards (SWQS), N.J.A.C. 7:9-4, this portion of the Hudson River is classified as saline estuarine waters ("SE2"), with the following designated uses:

1. Maintenance, migration and propagation of the natural and established biota;
2. Migration of diadromous fish;
3. Maintenance of wildlife;
4. Secondary contact recreation; and
5. Any other reasonable uses.

2.2.6 USGS 7.5 Minute Topographic Map

Figure 1 is the USGS Central Park, NY-NJ 7.5 Minute Topographic Quadrangle Map showing the site and surrounding area. The map was generated from a 1966 survey and photorevised in 1979.

2.2.7 National Wetlands Inventory Map

The site is not located within a wetland area. A copy of the NJDPE Freshwater Wetlands Map was included in the August 17, 1999 Phase II Remedial Investigation Workplan.

2.2.8 Boring Logs From On-Site Construction

Borings logs from all soil samples collected during the most recent remedial investigation work are included in **Appendix 4**.

2.2.9 Land Use Within 1,000 Foot Radius

Land use within 1,000 feet is currently a mix of commercial, retail and residential property, much of which is in the still in the process of being redeveloped. Historically, the area was heavily industrialized and properties to the north and south of this site will utilize institutional and engineering controls to address subsurface contamination.

According to the August 1998 well search performed by EnviroSciences, Inc., there were 162 recorded monitoring wells located in the search radius. However, there were no industrial, domestic or public water supply wells. The well serach records were submitted to Sharon Bruder as part of the Lustrelon case (#91278) on august 10, 1998.

2.3 TECHNICAL OVERVIEW

2.3.1 Reliability of Analytical Data

In accordance with N.J.A.C 7:26E-3.13(b)3.i, reliable laboratory analytical data was generated for the samples collected by following the requirements of N.J.A.C. 7:26E-2, Quality Assurance for Sampling and Laboratory Analysis. All sampling was performed in accordance with the May 1992 Field Sampling Procedures Manual (FSPM) and EWMA's company QA/QC Plan. The soil samples collected for volatile organic analysis were collected in accordance with NJDEP methanol extraction/preservation protocol.

EWMA reviewed the laboratory analytical data reports to confirm that sample holding times and method detection limits were not exceeded. In addition, Field and Trip Blank samples were generated during the remedial investigation for quality control purposes. Except for the surface water and sediment samples collected from the Hudson River, all remedial investigation samples were submitted to Integrated Analytical Laboratories, LLC (IAL), a NJDEP Certified Lab #14751.

In order to facilitate direct comparison with ecological assessment data collected as part of the Quanta site investigation, sediment and surface water samples collected by EWMA were submitted to Accutest, Dayton, New Jersey. Accutest laboratory reports were prepared to comply with the Contract Laboratory Program ("CLP") Data Deliverable Reporting Format.

The Analytical Methods/Quality Assurance Summary Table for the samples collected is included as **Table 1**. Precision and accuracy criteria for the analytical methods, and other indicators of data quality are detailed in the analytical data report packages that will be submitted separately due to the volume of material.

2.3.2 Site Contamination Summary

Historical site contamination includes PAHs, arsenic, lead, VOCs, PCBs, TPHs and other miscellaneous metals that have been detected on-site above the NJDEP soil cleanup criteria (SCC) guidance levels. The miscellaneous metals detected on-site include cadmium, beryllium, copper, mercury, selenium, thallium, zinc, and cyanide. Arsenic and lead are not grouped with the miscellaneous metals for the purpose of this report because the contamination level and distribution of these metals on the Property is not consistent with the random distribution patterns and maximum contamination levels typically observed at historic fill sites. **Table 2** presents a comprehensive summary of soil quality data collected during the site investigation/characterization process.

Volatile organic compounds, semivolatile organic compounds, and arsenic have been detected at levels exceeding the Ground Water Quality Standards for Class IIA Aquifers. **Table 3** presents

data collected during the most recent ground water sampling event. The presence of VOCs is attributed to random historical discharges of petroleum products and the presence of coal tar and waste oil on the Southern Portion of the Site. Based on the data collected during this investigation, it appears that the arsenic found in ground water can be attributed to the presence of fill material that was contaminated prior to its emplacement (probably some type of bulk industrial waste that was imported to the site and used to fill low lying areas). Acidic conditions and the percolation of rain water through the arsenic-contaminated fill layer may be responsible for the arsenic being detected in ground water.

Table 4 contains a summary of all available sediment quality data collected from the Hudson River in the immediate vicinity of the Property.

Free product (waste oil/coal tar) is present beneath the southernmost portions of the property. **Figure 2** shows the known limit of coal tar product plume as determined by Geosytec's investigation. Although this contamination is present on-site, it is being addressed as part of the adjacent Quanta Superfund site. In addition, historically the highest levels of arsenic contamination detected in ground water have been detected on the adjacent Quanta site.

Specific samples that exhibited PCB and TPH levels above the applicable SCC were addressed by removal actions implemented by Enviro-Sciences. In addition, with the removal of contaminated soils at sample locations C-79 and C-80, Enviro-Sciences addressed the highest concentrations of selenium, mercury, and copper found on-site. The removal actions at C-65, C-79 and C-80 were approved by the NJDEP in the February 11, 1999 letter. Encapsulation of sample locations C-84 and C-86 was approved by the August 18, 1999 letter as part of the access road construction. PAH, As, and Pb contamination still exists across most of the Site. VOCs have been detected in the vicinity of the All County Environmental Service operation and within the coal tar contaminated area.

The NJDEP's December 15, 1997 letter identified three distinct *"fill zones"* (Upper Fill, Historic Fill Surface, and Six-Inch Interval Above Groundwater) and identifies the contaminants of concern that needed to be further investigated. It is important to note that the fill material beneath this property extends below the water table in many areas and that soil contamination is present below the water table as well. In addition, it is extremely important to recognize that there are several layers of subsurface material, including asphalt pavement, that were historically the surface of this Property. EWMA observed layers of asphalt, gravel, and colored soil during hot spot excavations and test pit installations (see photographs in **Appendix 3**). The decomposed asphalt layers may not have been as recognizable during soil boring sampling events and they may explain some of the more elevated PAH levels found on-site.

Figure 4 shows the distribution of PAHs and locations exceeding the aforementioned cleanup criteria following the hot spot removal action. **Figure 5, Figure 6,** and **Figure 7** show the current distribution of As, Pb, and VOCs on-site.

2.3.3 Significant Events or Seasonal Variation

Surface and ground water at subject property is tidally influenced. Therefore, in order to comply with the TRSR and properly evaluate ground water flow conditions tidal effects from two rounds of hourly ground water and surface water levels must be collected. Each round of measurements must be collected for a 71-hour period during fair weather. EWMA attempted to perform the tidal study in December 1999. However, due to equipment failure, the tidal study performed by EWMA failed to yield usable data. Therefore, the tidal study must be completed during the next remedial investigation phase. Refer to the Phase II RI Work Plan for specifications and a schedule for performing another tidal study in accordance with the TRSR.

Seasonal temperature variations may affect the mobility of coal tar product associated with the Quanta site and the levels of dissolved phase ground water contamination as well.

2.3.4 Summary of Treatability, Bench Scale or Pilot Studies

The containment and exposure control approach that will be implemented to address the remaining soil contamination on this site does not require treatability, bench scale or pilot studies. Further investigation of ground water is planned to determine if ground water treatment will be necessary after the encapsulation. If ground water treatment is necessary treatability, bench scale or pilot studies will be performed to evaluate the chosen/appropriate remedial technologies.

In order to evaluate the feasibility of excavation and off site disposal as a remedial alternative for the arsenic and lead contaminated soil around C-79, EWMA performed waste classification tests. Based on toxicity characteristic leachate procedure (TCLP) test results, the excavated material would be classified as a hazardous waste for lead. The material did not fail the EPA's TCLP limit for arsenic or any other organic toxics. In addition to the enormous cost for disposing this material off site, other problematic conditions were uncovered during the evaluation process. Specifically, the area would need to be dewatered, which would also exacerbate the problem of migrating contamination from the Quanta site. Finally, excavation and off site disposal was eliminated as a feasible remedial alternative because migrating contamination from the Quanta site would re-contaminate any clean material that was used to restore the site unless a vertical barrier was installed to prevent the contamination from migrating.

2.3.5 Summary of Data for Permits

The containment and exposure control approach that will be implemented to address soil contamination remaining on this site will not require any permits. Please note that this does not include the possible need for a post closure permit as part of the RCRA Closure Plan.

2.3.6 Summary of Ecological Assessments Conducted

Several different investigations have been conducted to evaluate the quality of Hudson River sediments adjacent to the subject Property. These investigations include samples collected in 1998 by Enviro-Sciences, samples collected in June of 1995 by Roy F. Weston, and samples collected in November 1998 and June 1999 by Geosyntec. In November 1999, EWMA collected sediment and surface water samples in accordance with NJDEP comments as part of this remedial investigation. Hudson River sampling locations are shown on **Figure 8**. Although EWMA's Ecological Assessment Report is being submitted under separate cover, a brief summary of findings is provided herein.

Sediment samples collected by EWMA contained various metals, PCBs and semivolatiles at levels that exceeded the marine/estuarine sediment screening values in some locations. VOCs and pesticides were not detected. The analytical data from EWMA's November 1999 sediment sampling event is included as **Table 4**.

Surface water samples collected by EWMA contained elevated arsenic, copper, lead, and mercury levels. In addition, cadmium, chromium, selenium, silver, thallium, and zinc were detected. PCBs, pesticides, and VOCs were not detected and tentatively identified semivolatiles were detected at very low levels. The analytical data from EWMA's November 1999 surface water sampling event is included as **Table 5**.

Data collected during EWMA's sediment and surface water sampling investigation corresponds with data reported from the previous investigations. Aside from the product laden sediments in the river adjacent to the Quanta site, the presence of sediments impacted by arsenic and lead (adjacent to the Lustrelon site just north of the pier) appears to be the only contaminated area of concern that is not consistent with reference stations in the vicinity of this site.

Refer to the Ecological Assessment Report for more detailed analysis of the sediment and surface water sampling investigations conducted to date.

2.4 FINDINGS AND RECOMMENDATIONS

2.4.1 Former 150,000-gallon AGSTs (All County Environmental Services Corp.)

All County operated under "interim status" following their 1983 submission of a Part B permit application for treatment and storage of hazardous waste. Partial closure of the All County Environmental Services Corp. facility was completed and approved by the NJDEP in a letter dated April 1, 1998. Additional requirements stipulated in this letter were necessary to comply RCRA closure requirements. These requirements were reiterated with greater detail in the NJDEP's January 12, 2000 letter. In response, Edgewater Enterprises submitted a RCRA Closure Plan to the NJDEP in March, 2000.

NJDEP comments were received in a letter dated August 8, 2000. Based on discussions with NJDEP representatives, the Closure Plan implementation began on August 23, 2000.

Recommendations: Due to the site wide presence of PAHs and miscellaneous other contaminants, "clean closure" of the All County facility will almost certainly not be feasible. Therefore, at a minimum it will be included in the site wide remediation strategy (i.e. encapsulation and exposure control). However, Edgewater Enterprises acknowledges that the Closure Report and any specific remedial actions required under RCRA must be addressed separately.

2.4.2 Gypsum Landfill

Celotex created an on-site landfill for the disposal of process waste (i.e. gypsum wallboard). Since this area was an on-site process waste disposal landfill, a Major Landfill Disruption Permit application was submitted to the NJDEP Division of Solid Waste Management Bureau of Landfill Engineering in March 1999. The landfill disruption permit application was for the construction of a storm water detention basin required for the waterfront development permit. NJDEP issued a landfill disruption approval on September 24, 1999. On June 28, 1999, prior to the disruption permit approval, EWMA submitted a RIR for the landfill. The NJDEP responded in a letter dated August 18, 1999 with several requirements for further investigation. The investigation requirements were acknowledged in a letter to the NJDEP dated September 1, 1999 and subsequently implemented.

In accordance with the August 18th letter, four delineation samples (LFB2-1 to LFB-4) were collected and tested for VOCs. Two of these samples (LFB2-2 & LFB2-4) were also tested for PAH and three (LFB2-1, LFB2-2 & LFB2-4) were tested for PCBs. PCBs were not detected in any of these samples, several individual PAHs exceeded the NJDEP SCC in LFB2-4, and total xylenes slightly exceeded the 67 ppm NJDEP SCC in LFB2-1. Seven surface samples were taken from the gypsum after the area was re-shaped in preparation for capping. These samples (LFSS1 to LFSS-7) were tested for VOCs, PAHs, PCBs and metals). One sample contained PCBs above the unrestricted SCC (LFSS-4 @ 1.47 ppm) and one sample contained PAHs above the unrestricted SCC [LFSS-6 contained benzo(a)pyrene @ 0.828 ppm and benzo (b)fluoranthene @ 1.63 ppm]. Based on these levels, the plan for encapsulation and a Deed Notice should be sufficient to address this contamination. For sample locations and summarized data from the LFB2 and LFSS series samples refer to **Figure 9**.

The detention basin construction, and subsequently the landfill closure, remains incomplete at this time. Construction stopped because the entire cap was not in place when the construction of a river walk required by the waterfront development permit began. The situation was noted by the NJDEP and addressed in their April 10, 2000 letter. The situation was not addressed immediately because EPA initiated an investigation to determine if releasable asbestos fibers

were present in the solid waste. Until the results of this investigation were known, it was not possible to determine how to address the capping dilemma. After receiving the asbestos investigation results, EWMA submitted a technical response/evaluation letter on July 17, 2000. On August 16, 2000 NJDEP representatives informed EWMA that asbestos was no longer a concern based their review of the asbestos investigation results.

Recommendations: Due to the presence of the partially completed river walk, a revised plan for landfill closure must be approved by the NJDEP. In addition, the results of investigation activities implemented in accordance with comments from the August 18, 1999 and April 10, 2000 NJDEP letters must be addressed. Due to the separate jurisdiction over this matter, this ongoing work will be addressed in a separate report.

2.4.3 Southern Portion of The Site

The January 12, 2000 NJDEP comment letter referred to the three-acre area of concern adjacent to the Hudson River and the Quanta site as the "Southern Portion of The Site." Therefore, this designation will be used for the purposes of clarity within this report. This is an area where waste oil and coal tar (free product) has been identified and various issues have been raised by the NJDEP regarding the investigation and remediation of this area. However, these comments were all issued within the context of the previous development plan, which included constructing a building directly on top of this area. Due to the presence of significant contamination including the coal tar in this area, development plans were scaled back and modified to facilitate future source removal actions. Since the coal tar and waste oil contamination is being addressed as part of the EPA-guided remediation of the adjacent Quanta site, there is no longer a need to follow through with comments issued by the NJDEP regarding the off site delineation of this contamination.

Recommendations: Edgewater Enterprises proposes no further action for this AOC at this time. However, in accordance with the terms and conditions of the ACO, Edgewater Enterprises intends to cooperate with Honeywell in its efforts to remediate this area.

2.4.4 Volatile Organic Contamination

VOCs have been detected at levels exceeding the SCC in the Southern Portion of The Site, the landfill, the All County area, and following the excavation of source materials at hot spot C-48. In addition, VOCs have been detected in ground water samples collected in corresponding areas on-site. For soil sample locations and summarized data concerning VOCs in soil refer to **Figure 8.**

Based on comments from the February 11, 1999 letter, and discussions with NJDEP personnel, testing for VOCs was included as part of all hot spot removal excavations performed by EWMA. This testing documented compliance with the SCC at each of these locations except C-48.

Additional source removal was performed at C-48 in accordance with the NJDEP's July 3, 2000 comment letter.

Although gasoline contamination is referenced as a concern in the February 11, 1999 letter, the presence of VOCs in the Southern Portion of The Site can be attributed to either coal tar or waste oil. A geophysical survey was conducted in this area as part of the Quanta site investigation in November 1998 to identify any other potential sources/migration pathways for VOC contamination. Geophysical anomalies were marked and then investigated through the excavation of test pits. Numerous conduits for the migration of contamination were identified, but the investigation did not reveal any underground storage tanks. Remedial actions will be taken to address the VOC contamination in this area as part of the Quanta case. Therefore, no further investigation is proposed for VOCs in the Southern Portion of The Site.

Recommendations: Soil sampling performed to date has not revealed any significant volatile organic soil contamination source on the Property. However, further investigation of VOCs should continue to address ground water quality. The revised Phase II RI Work Plan will include testing for VOCs. In addition, please note that investigation for VOCs in soil is also part of the All County RCRA Closure Plan.

2.4.5 Hot Spot (Removal) Areas of Concern (AOC –12):

In accordance with comments from NJDEP letters dated 12/15/97, 2/11/99, and 1/12/00, source removal was performed for contamination identified at C-45, C-46, C-47, C-48, C-50, C-98, C-4, and C-79. Based on elevated PAH contamination levels, source material at C-77 was also removed. The removal of these hot spots was required because the NJDEP determined that *"potential hot spots exist that could significantly increase the short term threat to health, safety and the environment. Therefore, the Department recommends source removal of the hot spot areas of concern, as noted below, prior to the implementation of a non-permanent remedial action with engineering and institutional controls."* These locations were also identified as "stained soil" and attributed to historical operations at the site.

The total estimated quantity of contaminated material excavated from these hot spots is 450 cubic yards. Approximately 480 cubic yards of overburden material (imported since 1988) was excavated and stockpiled separately for on-site reuse evaluation. Post excavation soil sample results have been added to **Table 2,** the soil quality data summary table for this site. Excavated hot spot samples have been omitted from the aforementioned table since they no longer represent site conditions.

Post excavation data was provided to the NJDEP for comment/approval. NJDEP comments were issued in a letter dated July 3, 2000. For the purpose of this RIR, these NJDEP comments are briefly restated herein. As part of Edgewater Enterprise's effort to completely delineate contamination exceeding the NJDEP soil cleanup criteria, and in order to properly record a Deed

Notice for the contamination that will be encapsulated on-site, additional soil samples were collected below the base of two hot spot excavations on August 23, 2000. Specifically, vertical delineation samples were collected beneath former hot spot C-45 and C-50.

Excavated source materials will be taken off site for disposal at a facility permitted to accept this type of waste. Refer to Section 2.4.7.4 for details regarding soil the reuse proposal.

Please note that prior to the excavation of the hot spot excavations, EWMA planned to collect a series of samples (C2-1 to C2-28) as part of the effort to delineate soil contamination. One of the planned boring locations (C2-9) was located near the All County facility and it was never installed. Two other samples revealed elevated PAH contamination levels [benzo(a)pyrene in C2-10 @ 352 ppm and at 592 ppm in C2-12] that were not consistent with the PAH levels found elsewhere on-site. Subsequently these locations were addressed as part of the hot spot removal excavations at C-45-47 and C-46. The C2 series soil sample locations are shown on **Figure 3** and the data from the samples that were not excavated is summarized in **Table 2**.

2.4.5.1 C-45, 46, 47, 48 & 50

C-45 and C-47 were removed from the same excavation. Prior to the removal, the highest BaP concentration was 1,390 ppm. Following the removal, the highest BaP concentration was 20 ppm. Based on the NJDEP's 7/3/00 letter commenting on the post excavation soil sampling results, no additional sampling is necessary in this excavation and it may be backfilled. However, sample PEC45-D was collected in order to delineate a clean zone verticaly. PAHs were not detected in this sample, which was collected from 13' to 13.5' below the surface.

Prior to the removal of C-46, the highest BaP concentration was 2,100 ppm. Following the removal, the highest BaP concentration was 48 ppm. Based on the NJDEP's 7/3/00 letter commenting on the post excavation soil sampling results for the excavation around C-46, no additional sampling is necessary in this excavation and it may be backfilled.

Based on the NJDEP's review of post excavation soil sampling results for the excavation around C-48, additional source removal was deemed necessary. Prior to the removal of C-48, the highest BaP concentration was 172 ppm. Following the initial hot spot removal action, the highest BaP concentration was in the post excavation samples was 192 ppm (sample PEC48-2). On August 23, 2000 EWMA excavated this area (sample PEC48-2) and collected two additional post excavation samples (PEC48-6B & PEC48-6C). Laboratory test results for these samples, which revealed 1.34 and 1.77 ppm BaP, indicate that the majority of the contamination was successfully removed.

Prior to the removal of C-50, the highest BaP concentration was 1820 ppm. Following the removal, the highest BaP concentration was 105 ppm. Based on the NJDEP's 7/3/00 letter commenting on the post excavation soil sampling results for the excavation C-50, no additional

sampling is necessary in this excavation and it may be backfilled. However, sample PEC50-C was collected in order to delineate a clean zone verticaly. PAHs were not detected in this sample, which was collected from 13' to 13.5' below the surface.

2.4.5.2 C-98

Prior to the removal of C-98, the highest BaP concentration was 819 ppm. Following the removal, the highest BaP concentration was 11.1 ppm. Based on the NJDEP's 7/3/00 letter commenting on the post excavation soil sampling results for the excavation around C-98, it may be backfilled.

2.4.5.3 C-4 & C-79

In order to perform the hot spot removal action at sample locations C-4 and C-79, it was necessary to properly abandon MW-4 and MW-6. Well abandonment reports are included is **Appendix 5**.

Prior to the removal of C-4, the highest As concentration was 1,010 ppm. Following the removal, the highest As concentration was 44.9 ppm. Based on the NJDEP's 7/3/00 letter commenting on the post excavation soil sampling results for the excavation around C-4, no additional sampling is necessary in this excavation and it may be backfilled.

Prior to the removal of C-79, the highest As concentration was 3,370 ppm. Following the removal, the highest As concentration was 7,300 ppm. Post excavation soil sampling results for the excavation around C-79 indicated that significant arsenic and lead contamination still remained on-site. Additional sampling was performed to delineate this contamination. Subsequently, the lead and arsenic contamination discovered at this "hot spot" is more widespread than initially known and it must be addressed as its own AOC.

Twenty-one test pits were excavated around C-79 in a pattern forming a 50' sampling grid. Testing soil samples collected from these test pits established a direct correlation between the arsenic and lead contamination levels and a layer of reddish-purple material. Additional information regarding the delineation of contamination in this area is provided in section 2.4.6.2.

2.4.5.4 C-77

Delineation of PAHs, As and Pb contamination in C-77 was required based the 12/11/97, 2/11/99, and 1/12/00 NJDEP comments letters. However, since PAH contamination levels in one of the samples collected from this location exceeding the maximum concentration reported with the NJDEP Historic Fill database (N.J.A.C. 7:26E-4.6, Table 4-2), it was removed concurrently with the delineation sampling.

Due to the timing of the excavation to remove C-77, post excavation data was not provided to the NJDEP for comment/approval with the other areas addressed by EWMA. However, post excavation data demonstrates that source material has been removed. Residual contamination still exceeds the SCC and this area will be part of the Deed Notice for the site. **Figure 10** shows the excavation, post excavation sample locations and it summarizes the post excavation data.

Recommendations: In accordance with the NJDEP's August 2, 2000 letter. Edgewater Enterprises intends to backfill all hot spot excavations.

2.4.6 Hot Spot (Delineation) Areas of Concern

The 12/15/97 NJDEP letter indicated that *"Sitewide Delineation"* would be required to completely delineate the contamination on this Property to clean zones because *"it appears, at least in part, to be due to past historical operations."*

In accordance with N.J.A.C. 7:26E4.6(b)4, *"Areas of concern located in historic fill material shall be investigated independently of the historic fill material. To differentiate between contaminants in fill and those from site discharges, an evaluation of the contaminant type and concentration gradient in each are of concern and the contaminant distribution in the fill shall be conducted."* All of the sample locations identified in the 12/15/97 letter and various follow-up correspondences are addressed herein. The NJDEP position in this letter based on the requirement that contamination must be delineated to the most stringent criteria (i.e. unrestricted use) whenever it is due to a discharge from past industrial operations. However, this approach must be modified for this site for because the sites to the north and south are not only historic fill sites but also known contaminated sites with discharged contamination levels exceeding the NJDEP's most stringent criteria for the same contaminants of concern that are present on this Property. These facts, which are supported in the following sections of this report, must be taken into account because off-site delineation to unrestricted use SCC is an unreasonable requirement in this specific instance.

Due to construction activities performed on adjacent sites since the initial investigation of this property, surface grades have changed. Therefore, EWMA attempted to adjust sampling depths for off-site samples to evaluate the depths where elevated contamination levels were found on-site. This is particularly the case for off site samples collected to the west of this property since elevations changed during the construction of River Road. Please note that the samples collected in River Road were obtained by sampling through the landscaped median.

2.4.6.1 C-74, 75, 76 & 77

In accordance with comments from the 12/11/97, 2/11/99, and 1/12/00 NJDEP comments letters, four borings CC2-24, CC2-25, CC2-26, and CC2-27 were installed to horizontally delineate contamination to the west of C-74, C-75, C-76 and C-77. PAHs, As, Cu, and Pb were the

contaminants of concern in these locations. Test data from the delineation boring samples indicates compliance with the unrestricted SCC for the parameters of concern. The original data from these sample locations demonstrated that the PAHs were well below the maximum concentration and only slightly above the average limits reported within the NJDEP Historic Fill database (N.J.A.C. 7:26E-4.6, Table 4-2). **Figure 11** shows these sample locations and summarizes the analytical results from this area.

The site investigation samples from C-74, C-75 and C-76 that contained elevated PAHs were collected at depths ranging from 4' to 9' below surface grade. Based on spot elevation data from the same time, surface elevations in this area ranged from approximately 17' to 19' above sea level. Therefore, the maximum depth at which contamination above standards was detected was 10' above sea level. Since current elevations in the median of River Road are approximately 18' above sea level, EWMA's delineation borings were extended to 8' below grade.

As noted in section 2.4.5.4, C-77 was excavated as a hot spot. The bottom sample from this excavation demonstrates compliance with unrestricted SCC for the parameters of concern. This sample provides confirmation that vertical delineation is complete in this area. Refer to **Figure 10** for the sample locations and results from this excavation.

2.4.6.2 C-79

Contamination encountered at C-79 can no longer be considered an isolated hot spot. C-79 was slated for removal as part of the hot spot excavation work. However, following the review of post excavation sample results from C-79, concerns became evident that the As contamination was not limited to a hot spot. Although post excavation testing for PAHs revealed contamination levels consistent with the rest of the site, antimony (Sb), As, Cu, Pb, Hg, and thallium (Tl) were detected above the NJDEP SCC. Based on the high level of As and Pb contamination, 21 test pits were excavated and 80 samples were collected/analyzed in an attempt to delineate arsenic and lead levels. Laboratory testing documented that As and Pb is present across an area covering approximately 1-acre at concentrations significantly higher than the rest of this property. **Figure 12** shows the sample locations and provides a summary of the data collected to characterize/delineate this area.

Honeywell, after being instructed by EPA, collected a series of 18 soil samples beneath the pavement on the Quanta property adjacent to this area in June 2000. These samples were tested for arsenic. Test results indicated arsenic levels up to 35,100 ppm. The only sample collected on Celotex property that contained arsenic at a concentration greater than 35,100 ppm was sample C3-2C, which contained arsenic at 65,700 ppm. This sample was collected approximately 9.5-10' below grade immediately adjacent to the western property boundary. This property line was historically the limit of one of the above ground storage tank farms operated by the coal tar plant. Since the Quanta site is situated upgradient from C-79 based on ground water flow patterns, and since the most contaminated soils are located immediately beneath the pavement and above the

water table, it is reasonable to conclude that the arsenic contaminated on the Quanta site is not from a discharge that occurred on the Celotex property.

EWMA collected one off site sample (CC2-28) to the west of this area to delineate the extent of the arsenic and lead contamination exceeding the SCC because contamination was found up to the property boundary. Due to traffic patterns, this sample was collected in an inactive turning lane (the center of River Road) approximately 45' to the west of the property boundary. The sample location is shown on **Figure 3**. The reddish-purple colored material was not observed in sample CC2-28 and there were no obvious physical indications of contamination in this boring. In order to account for the difference in surface elevations between the street and the surface of the property, the sample was collected 7.5-8' below surface. This sample demonstrated compliance with arsenic and lead, but the concentration of PAHs including benzo(a)pyrene slightly exceeded the NJDEP's unrestricted use SCC. Nevertheless, there was no evidence of staining or reddish-purple material and the PAH level is consistent with historic fill.

2.4.6.3 C-32, 34 & 35

Comments from the 12/11/97, 2/11/99, and 1/12/00 NJDEP letters indicated that delineation was required for PAHs and As. In addition, ground water concerns regarding VOCs, As and naphthalenes were noted. These three sample locations fall within the Southern Portion of The Site. Due to the presence of significant contamination in this area, the development plans for this site have been scaled back. The contamination in and around this area is part of the ongoing Quanta site investigation and if necessary it will be removed in the future. Based on the situational changes, delineation of these sample locations was not completed. Two samples (CC2-18 and CC2-20) were collected near the property boundary in this area, but further delineation of these samples was not completed. **Figure 13** shows the locations of these two sample and provides a summary of the analytical data.

2.4.6.4 C-97

Comments from the 12/11/97, 2/11/99, and 1/12/00 NJDEP letters indicated that delineation was required for C-97. However, this sample location falls within the Southern Portion of The Site. Therefore, for the same reason stated in section 2.4.6.3, further delineation of this sample was not completed. A sediment quality investigation has been implemented in the river adjacent to the location of C-97.

2.4.6.5 C-62 & C-63

Three soil borings were installed to collect delineation samples around C-62. PAHs were ND is two of the three samples (C216 and C2-18) that were collected, but the third sample contained PAHs exceeding the NJDEP SCC. Further horizontal delineation was impossible due to site conditions. Specifically, the pier building is located north of this location and the riverbank is

immediately to the east. **Figure 14** shows the locations of these two sample and provides a summary of the analytical data.

Sample location C-62 could not be delineated to the east due to the pier building and the riverbank. Since the Lustrelon property is a known contaminated site with its own Deed Notice, there was no reason to attempt delineation to the north. The obvious receptor for contamination at these locations is the river and a sediment quality investigation has been implemented in the river adjacent to this location.

2.4.6.6 C-51 & C-52

Comments from the 12/11/97, 2/11/99, and 1/12/00 NJDEP letters indicated that delineation was required for C-51 and C-52. BaP was detected at levels up to 81.2 ppm in these two samples. Additional sampling was not performed to address these specific locations because the contamination in C-51 and C-52 was delineated to the west by sampling performed by Geosyntec. Specifically, Geosyntec collected soil samples during the installation of MW-110, which is located near the property boundary to the west of these samples. Soil samples collected from 12'-13', 20'-21', and 24'-25' were tested for PAHs, VOC, arsenic, lead, and chromium. Based on the differences in surface elevations between C-51 and C-52 and MW-110, the sample collected at 12'-13' represents the same vertical interval and demonstrates a significant reduction in contamination levels.

Recommendations: The objective for site wide delineation was to determine the horizontal and vertical extent of contamination beyond property boundaries because the contamination was determined to be, at least in part, due to past operations. Properties to the north and south have documented soil contamination problems that will be addressed either via encapsulation and exposure controls or treatment and removal. Therefore, it is unreasonable to expect Edgewater Enterprises to delineate contamination levels to unrestricted use SCC in these directions. In addition, testing performed on soil imported from the adjacent site (a.k.a. Continuing Care soils) was tested and it contains contaminants and levels associated with typical historic fill material.

Additional investigation of the river is warranted based on preliminary sediment and surface water quality data. Therefore, further investigation will be performed to the east.

Sampling performed through the median in River Road clearly demonstrates compliance with the unrestricted use SCC. However, sample CC2-28 did not demonstrate compliance with the unrestricted use SCC for PAHs. Nevertheless, the site-specific contaminants of concern in this area are arsenic and lead and based on the widespread presence of historic fill, this sample should be considered sufficient to consider contamination associated with this site completely delineated.

Vertically, a declining trend in contamination levels was documented in all of the soil samples collected around C-79, and in the bottom samples collected during hot spot removal activities. However, in order to document compliance with the unrestricted use SCC, additional soil samples were collected at greater depths from locations PEC-45 and PEC-50. Analyltical testing documented compliance with the NJDEP's most stringent criteria in both of these samples, which were collected from 13' to 13.5' below grade.

2.4.7 Excavated/Stockpiled Soils

2.4.7.1 Sales Area Stockpile

A temporary sales building and a parking lot were constructed near the entrance to the site from River Road. This area was graded flat prior to construction and the excess soil was stockpiled immediately to the south of the pavement. The construction was to the west of locations C-45, C-46, C-47, C-48, and C-50, but it did cover C-76, and C-77.

Due to the proximity of the road and the sales area, the top of the soil pile was cut down in height. However, it was not relocated and EWMA was able to collect five representative soil samples to characterize it. The samples were collected on December 13, 1999 and tested for BN+15, PCBs, PPM, and cyanide. The analytical data report was submitted to the NJDEP on March 28, 2000.

VOCs were not tested because field screening with a PID did not show any readings above background and historical investigation activities did not indicate that VOCs were a contaminant of concern in this area. PCBs and cyanide were not detected, and testing for metals demonstrated compliance with the unrestricted use SCC. Total BNAs were detected at levels ranging from 19.8 ppm (COM-1) to 43.9 ppm (COM-2) and benzo(a)pyrene was detected at levels ranging from 1.36 ppm to 2.9 ppm. The stockpile was graded-out some time after EWMA's sampling event. EWMA's sample location map is included as **Figure 15**, which also summarizes the analytical data from these samples.

Recommendations: Based on data from the five samples collected to characterize this soil: 1.) It contains contamination levels above the unrestricted use SCC; 2.) It demonstrates compliance with the impact to ground water SCC; and 3.) The level of PAH contamination is consistent with contamination levels documented across this entire site and on neighboring properties. Therefore, based on the type of contamination in this material on-site reuse with appropriate institutional and engineering controls is proposed.

2.4.7.2 "Continuing Care Soil" Stockpile

Comment No. 17 from the January 12, 2000 NJDEP letter requests sampling to characterize fill/soil imported to the Property from the continuing care facility on Old River Road. This

material was initially stockpiled near MW-11, but the pile was graded-out before being tested. The sampling program was discussed with the NJDEP Case Manager, and on March 16, 2000 sixteen soil samples were collected while the NJDEP was on-site. Analytical testing was performed for VO+10, BN+15, PCBs, pesticides, PPM, total cyanide and phenol.

Except for two samples containing elevated arsenic levels (CCF-11A @ 27.6 ppm & CCF-11B @ 37.1 ppm), VOCs, pesticides and metals not were not detected above the NJDEP's unrestricted use SCC. Two samples contained PCBs (CCF-1A @ 3.94 ppm & CCF-3 @ 0.869 ppm) above the NJDEP's unrestricted use SCC. Semivolatiles (Total BNAs), which were detected in every sample, ranged from 0.67 ppm (CCF-5) 427.5 ppm (CCF-3). The highest concentration of benzo(a)pyrene in any of these samples was 26.4 ppm (CCF-3). **Figure 16** shows the location of these samples and provides a summary of the analytical data.

Recommendations: Based on data from the 16 samples collected to characterize this soil: 1.) It contains contamination levels above the unrestricted use SCC; and 2.) It demonstrates compliance with the impact to ground water SCC. Therefore, based on the type of contamination in this material on-site reuse with appropriate institutional and engineering controls is proposed.

2.4.7.3 Four covered piles near MW-36

The January 12, 2000 NJDEP letter comments that *"There were 4 piles of material placed on and covered with black plastic near MW-36 and the road cut piles."*

EWMA tried to investigate the origin and nature of these piles in accordance with the NJDEP comment(s), but no information was available and the material was no longer present when the area was reinspected. Based on the construction activity, it is reasonable to assume that one of the contractors that were working on the adjacent sites was storing raw materials on plastic.

EWMA's investigation did confirm that the material was not generated during test pit investigation work performed by Geosyntec. EWMA inquired with Enviro-Sciences and Edgewater Enterprises personnel, but were not aware of these piles.

Recommendations: Since the material is no longer present, and all inquiries have failed to determine what it was, no further action is proposed.

2.4.7.4 Overburden Soils From Hot Spot Excavations

In accordance with comment 7A from the January 12, 2000 NJDEP letter, all overburden fill from the hot spot excavations was stockpiled separately and tested to determine if it was suitable for reuse on-site. Six samples (one from each stockpile of soil from above each hot spot) were tested for PAHs, As, and Pb to characterize this material. As and Pb levels in all six samples were below the unrestricted use SCC. Although PAHs were detected above the unrestricted use

SCC, the levels were consistently below the average contamination levels for soils on the Property.

Recommendations: Based on the level of contamination in this material on-site reuse with appropriate institutional and engineering controls is proposed.

2.4.8 AOC 13

PAHs and As were detected in soil samples collected to address possible discharges from Academy Film (C-62, C-63 & C-64). The concentration of PAHs was consistent with levels found across the entire site, but the presence of As remained a concern due to the discovery of high As levels in sediment off shore near C-63. The As issue is being addressed as part of the ecological assessment as a site-wide issue. Therefore, there is no reason to continue investigating or specifically referring to Academy Film or AOC-13 as an area of concern.

Recommendations: No further action is proposed specific to AOC 13.

2.4.9 AOC 14

In response to comment 5 from the January 12, 2000 NJDEP letter, elevated PAH levels detected in soils near J&T Leasing will be encapsulated and identified as part of the site-wide Deed Notice.

Recommendations: No further action is proposed specific to AOC 13.

2.4.10 AOC 16

Comment 6 from the January 12, 2000 NJDEP letter indicates that no further investigation was required specific to the samples collected near Havana Potato and Transport Co.

2.4.11 Off Site Delineation

Prior to initiating the off-site sampling to address concerns noted by the NJDEP in letters dated 12/11/97, 2/11/99, and 1/12/00, EWMA reviewed data collected during remedial investigations on adjacent properties to determine if historic fill material is present in the surrounding area. The adjacent sites include Lustrelon, a development underway immediately north of Lustrelon, the Hudson Towers development (a.k.a. Continuing Care facility) to the west, and the Quanta site to the south.

Based on a file review performed by EWMA, soil contamination at 361 River Road (immediately north of the former Lustrelon property) will be encapsulated in accordance with an approved Deed Notice. Data collected during the remedial investigation of this site revealed

total semivolatile contamination levels (based on BN+15 testing) up to 975.81 ppm. Benzo(a)pyrene levels up to 55.8 ppm were documented during the investigation and approved by the NJDEP for encapsulation. Arsenic levels up to 315 ppm and lead levels up to 745 ppm will also remain in place without treatment under the Deed Notice.

A Deed Notice will be filed for soil contamination to be encapsulated on the former Lustrelon site, which also includes PAHs, arsenic and lead. In addition, soil contamination levels on the Quanta site include PAHs, arsenic and lead above the NJDEP SCC. Due to the presence of coal tar/free product, delineation of a clean zone onto the Quanta property is not feasible.

As noted in section 2.4.7.2, soils brought onto the site from the adjacent Hudson Towers development contain levels of PAHs, arsenic, lead, and PCBs that are consistent with typical historic fill contamination levels. Based on this data, it is clear that historic fill material existed on this historical portion of the property before it was bisected by River Road. However, this data does not indicate any correlation with the elevated arsenic, lead, or PAH levels found on the Celotex site.

Recommendations: No further action is proposed to delineate off site soil contamination. Environmental investigations have been performed on all of the surrounding properties and the presence of historic fill related contamination has been documented. The delineation sampling performed as part of the investigation of this Property clearly demonstrates that the PAHs, arsenic, and lead contaminated soils that are not typical of historic fill have either been remediated as hot spots (in all cases except C-79) or sufficiently characterized to justify encapsulation and exposure control as an appropriate remedy.

2.4.12 Ground Water

In order to address comments from the NJDEP's December 17, 1997 letter, Enviro-Sciences installed eight additional monitoring wells on the Site in June of 1998. On July 2nd and 3rd 1998 Enviro-Sciences sampled these wells for PP+40. The original seven wells were sampled simultaneously for VO+10, As, total dissolved solids and chloride. The well installation, sampling activities, and investigation results were reported to the NJDEP in a November 1998 RIR Addendum. Comments 4 through 9 from the January 12, 2000 NJDEP letter were made without realizing that these issues had been addressed in the November 1998 RIR Addendum. These monitoring wells are shown on **Figure 2** and the ground water quality data from this sampling event is incorporated into **Table 3.** This data will be used to evaluate additional ground water investigation requirements set forth in the revised Phase II RI Work Plan.

EWMA collected one round of ground water samples in December 1999 and the data from that event is also incorporated into **Table 3.** The purge guide from this sampling event is included in **Appendix 6.** **Figure 17** is a ground water flow map constructed with water elevation data from

the December 1999 sampling event. However, as noted in Section 2.3.3, the tidal study has not been completed and this flow map should be evaluated with that fact in mind.

Geosyntec has sampled the monitoring wells on this site, on the Quanta site, and to the west and south of the property referred to as the Quanta site. The results from their sampling through October 1999 were presented in their Removal Site Investigation Report (Revision 0).

Based on all of the investigations performed to date, the highest ground water contamination levels are found on and adjacent to the Quanta site.

Currently there are 18 monitoring wells on-site. Four additional wells will be installed as part of the RCRA closure of the All County facility, and two monitoring wells must be installed to replace MW-4 and MW-6. In addition, the installation of one monitoring well in the vicinity of the landfill has been discussed with the NJDEP. Additional testing will be necessary to determine how the complete encapsulation of the site will affect ground water quality.

Recommendations: The revised RI Work Plan will present recommendations for additional ground water investigation activities.

3.0 HAZSITE DATA

The HazSite Data package is included in **Appendix 7**. The appendix includes a hard copy of the electronic data deliverable and a 3.5 inch floppy disk containing the electronic data deliverable files.

4.0 CERTIFICATION PAGE

(Attached)

5.0 SI/RI CHECKLIST

(Attached)

6.0 CONCLUSIONS

The remedial actions discussed herein were implemented to comply with NJDEP's hot spot removal and site wide delineation requirements first noted in the December 17, 1997 NJDEP letter. Based on the data presented herein, with the exception of C-79 hot spot removal actions successfully addressed all known soil contamination hot spots. These contamination levels exceeded not only the published limits for typical historic fill material but also the average contamination levels found at this site. Delineation sampling activities have shown that site specific contamination levels that are not attributed to historic fill material do not exist to the

west of the current property boundary. Contaminated soils existing on the north and south bounding properties are being addressed with oversight from NJDEP and EPA. Therefore, aside from the landfill and RCRA areas the soil contamination problems have been sufficiently investigated/characterized and Edgewater Enterprises proposes to encapsulate the remaining soil contamination on the Property. This approach was commented on in the December 17, 1997 NJDEP letter , which states that *"due to the random nature and extent of the fill/, that the most cost effective remedial solution is addressing the site and its contaminants as a whole."*

The proposed ground water investigation, which is discussed in the Revised Phase II RI Work Plan, will include additional testing before, during, and after the site work begins.

Table 1: SAMPLING SUMMARY TABLE

TABLE 1
SAMPLING SUMMARY TABLE

CE 3.2257

Location	Medium	Sample Depth	Analytical Parameters	Sampling Method
C-79 Area				
C3-01A	Soil	3.5-4	As & Pb	Test Pit/Scoop
C3-01B	Soil	4-4.5	As & Pb	Test Pit/Scoop
C3-01C	Soil	9.5-10	As & Pb	Test Pit/Scoop
C3-01-D	Soil	13.5-14	As & Pb	Test Pit/Scoop
C3-2A	Soil	5.5-6	As & Pb	Test Pit/Scoop
C3-2B	Soil	7.5-8	As & Pb	Test Pit/Scoop
C3-2C	Soil	9.5-10	As & Pb	Test Pit/Scoop
C3-2D	Soil	11.5-12	As & Pb	Test Pit/Scoop
C3-3A	Soil	5.5-6	As & Pb	Test Pit/Scoop
C3-3B	Soil	7.5-8	As & Pb	Test Pit/Scoop
C3-3C	Soil	14.5-15	As & Pb	Test Pit/Scoop
C3-4A	Soil	5.5-6	As & Pb	Test Pit/Scoop
C3-4B	Soil	6.5-7	As & Pb	Test Pit/Scoop
C3-4C	Soil	9.5-10	As & Pb	Test Pit/Scoop
C3-4D	Soil	14.5-15	As & Pb	Test Pit/Scoop
C3-5A	Soil	5.5-6	As & Pb	Test Pit/Scoop
C3-5B	Soil	7.5-8	As & Pb	Test Pit/Scoop
C3-5C	Soil	14.5-15	As & Pb	Test Pit/Scoop
C3-5D	Soil	15.5-16	As & Pb	Test Pit/Scoop
C3-6A	Soil	5.5-6	As & Pb	Test Pit/Scoop
C3-6B	Soil	7.5-8	As & Pb	Test Pit/Scoop
C3-6C	Soil	11.5-12	As & Pb	Test Pit/Scoop
C3-6D	Soil	13.5-14	As & Pb	Test Pit/Scoop
C3-7A	Soil	5.5-6	As & Pb	Test Pit/Scoop
C3-7B	Soil	7.5-8	As & Pb	Test Pit/Scoop
C3-7C	Soil	11.5-12	As & Pb	Test Pit/Scoop
C3-7D	Soil	13.5-14	As & Pb	Test Pit/Scoop
C3-8A	Soil	5.5-6	As & Pb	Test Pit/Scoop
C3-8B	Soil	7.5-8	As & Pb	Test Pit/Scoop
C3-8C	Soil	11.5-12	As & Pb	Test Pit/Scoop
C3-8D	Soil	12.5-13	As & Pb	Test Pit/Scoop
C3-9A	Soil	5.5-6	As & Pb	Test Pit/Scoop
C3-9B	Soil	7.5-8	As & Pb	Test Pit/Scoop
C3-9C	Soil	11.5-12	As & Pb	Test Pit/Scoop
C3-9D	Soil	12.5-13	As & Pb	Test Pit/Scoop
C3-10A	Soil	5.5-6	As & Pb	Test Pit/Scoop
C3-10B	Soil	6.5-7	As & Pb	Test Pit/Scoop
C3-10C	Soil	7.5-8	As & Pb	Test Pit/Scoop
C3-11A	Soil	5.5-6	As & Pb	Test Pit/Scoop
C3-11B	Soil	6.5-7	As & Pb	Test Pit/Scoop
C3-11C	Soil	11.5-12	As & Pb	Test Pit/Scoop
C3-11D	Soil	13.5-14	As & Pb	Test Pit/Scoop
C3-11Y	Soil	12-12.5	As & Pb	Test Pit/Scoop
C3-12A	Soil	4.5-5	As & Pb	Test Pit/Scoop
C3-12B	Soil	5.5-6	As & Pb	Test Pit/Scoop
C3-12C	Soil	11.5-12	As & Pb	Test Pit/Scoop
C3-12D	Soil	12.5-13	As & Pb	Test Pit/Scoop
C3-13A	Soil	5.5-6	As & Pb	Test Pit/Scoop
C3-13B	Soil	6.5-7	As & Pb	Test Pit/Scoop
C3-13C	Soil	11.5-12	As & Pb	Test Pit/Scoop
C3-13D	Soil	12.5-13	As & Pb	Test Pit/Scoop
C3-14A	Soil	5.5-6	As & Pb	Test Pit/Scoop
C3-14B	Soil	6.5-7	As & Pb	Test Pit/Scoop
C3-14C	Soil	8.5-9	As & Pb	Test Pit/Scoop
C3-15A	Soil	5.5-6	As & Pb	Test Pit/Scoop
C3-15B	Soil	7.5-8	As & Pb	Test Pit/Scoop
C3-15C	Soil	10.5-11	As & Pb	Test Pit/Scoop

Notes
PPM* refers to select metals
C & P** refers to cyanide and phenol

TABLE 1
SAMPLING SUMMARY TABLE

CE 3.2258

Location	Medium	Sample Depth	Analytical Parameters	Sampling Method
C3-15D	Soil	13.5-14	As & Pb	Test Pit/Scoop
E3-16A	Soil	5.5-6	As & Pb	Test Pit/Scoop
E3-16B	Soil	6.5-7	As & Pb	Test Pit/Scoop
E3-16C	Soil	10.5-11	As & Pb	Test Pit/Scoop
E3-17A	Soil	5.5-6	As & Pb	Test Pit/Scoop
E3-17B	Soil	6.5-7	As & Pb	Test Pit/Scoop
E3-17C	Soil	11.5-12	As & Pb	Test Pit/Scoop
E3-17D	Soil	13.5-14	As & Pb	Test Pit/Scoop
E3-18A	Soil	5.5-6	As & Pb	Test Pit/Scoop
E3-18B	Soil	6.5-7	As & Pb	Test Pit/Scoop
E3-18C	Soil	11.5-12	As & Pb	Test Pit/Scoop
E3-18D	Soil	13.5-14	As & Pb	Test Pit/Scoop
E3-19A	Soil	5.5-6	As & Pb	Test Pit/Scoop
E3-19B	Soil	6.5-7	As & Pb	Test Pit/Scoop
E3-19C	Soil	7.5-8	As & Pb	Test Pit/Scoop
E3-20A	Soil	5.5-6	As & Pb	Test Pit/Scoop
E3-20B	Soil	6.5-7	As & Pb	Test Pit/Scoop
E3-20C	Soil	11.5-12	As & Pb	Test Pit/Scoop
E3-20D	Soil	13.5-14	As & Pb	Test Pit/Scoop
E3-21A	Soil	5.5-6	As & Pb	Test Pit/Scoop
E3-21B	Soil	6.5-7	As & Pb	Test Pit/Scoop
E3-21C	Soil	11.5-12	As & Pb	Test Pit/Scoop
E3-21D	Soil	12.5-13	As & Pb	Test Pit/Scoop
PEC79-1A	Soil	4.5-5	PPM*	Post Excavation
PEC79-1B	Soil	6.5-7	PAH & PPM	Post Excavation
PEC79-1C	Soil	10-10.5	PAH & PPM*	Post Excavation
PEC79-2A	Soil	4.5-5	PPM*	Post Excavation
PEC79-2B	Soil	6.5-7	PAH & PPM	Post Excavation
PEC79-2C	Soil	10-10.5	PAH & PPM*	Post Excavation
PEC79-3	Soil	10-10.5	PAH & PPM	Post Excavation
PEC79-4A	Soil	4.5-5	VO+ & PPM*	Post Excavation
PEC79-4B	Soil	6.5-7	VO+, PAH & PPM	Post Excavation
PEC79-4C	Soil	10-10.5	VO+, PAH & PPM*	Post Excavation
PEC79-5A	Soil	4.5-5	PPM*	Post Excavation
PEC79-5B	Soil	6.5-7	PAH & PPM	Post Excavation
PEC79-5C	Soil	10-10.5	PAH & PPM*	Post Excavation
PEC79-C-79	Soil	13-13.5	PAH & PPM*	Post Excavation
C2-2A	Soil	4-4.5	PAH	Boring/Split Spoon
C2-2B	Soil	6-6.5	As, Cu, Pb & Tl	Boring/Split Spoon
C2-3	Soil	4.5-5		Boring/Split Spoon
C2-4	Soil	4.5-5	PAH	Boring/Split Spoon
C2-21	Soil	7.5-8	PAH	Boring/Split Spoon
C2-22	Soil	7.5-8	PAH & As	Boring/Split Spoon
CC2-28	Soil	7.5-8	PAH & PPM*	Boring/Split Spoon
C-4 Area				
PEC4-1A	Soil	5.5-6	As & Pb	Post Excavation
PEC4-1B	Soil	7.5-8	As & Pb	Post Excavation
PEC4-1C	Soil	10-10.5	As & Pb	Post Excavation
PEC4-2A	Soil	5.5-6	As & Pb	Post Excavation
PEC4-2B	Soil	7.5-8	As & Pb	Post Excavation
PEC4-2C	Soil	10-10.5	As & Pb	Post Excavation
PEC4-3A	Soil	5.5-6	As & Pb	Post Excavation
PEC4-3B	Soil	7.5-8	As & Pb	Post Excavation
PEC4-3C	Soil	10-10.5	As & Pb	Post Excavation
PEC4-4A	Soil	5.5-6	VO+, As & Pb	Post Excavation
PEC4-4B	Soil	7.5-8	VO+, As & Pb	Post Excavation
PEC4-4C	Soil	10-10.5	VO+, As & Pb	Post Excavation
PEC4-5	Soil	10-10.5	As & Pb	Post Excavation

Notes
PPM* refers to select metals
C & P** refers to cyanide and phenol

TABLE 1
SAMPLING SUMMARY TABLE

CE 3.2259

Location	Medium	Sample Depth	Analytical Parameters	Sampling Method
C2-5	Soil	7.5-8	PAH, As & Pb	Boring/Split Spoon
C2-6	Soil	7.5-8	PAH, As & Pb	Boring/Split Spoon
C2-7	Soil	7.5-8	PAH, As & Pb	Boring/Split Spoon
C-98 Area				
PEC98-1A	Soil	7.5-8	VO+, PAH, As & Pb	Post Excavation
PEC98-1B	Soil	10-10.5	VO+, PAH, As & Pb	Post Excavation
PEC98-2A	Soil	7.5-8	As & Pb	Post Excavation
PEC98-2B	Soil	10-10.5	PAH, As & Pb	Post Excavation
PEC98-3A	Soil	7.5-8	As & Pb	Post Excavation
PEC98-3B	Soil	10-10.5	PAH, As & Pb	Post Excavation
PEC98-4A	Soil	7.5-8	PAH, As, Cd, & Pb	Post Excavation
PEC98-4B	Soil	10-10.05	PAH, As & Pb	Post Excavation
PEC98-5	Soil	10-10.5	PAH, As & Pb	Post Excavation
C2-13	Soil	7.5-8	PAH, As & Pb	Boring/Split Spoon
C2-14	Soil	7.5-8	PAH, As & Pb	Boring/Split Spoon
C2-15	Soil	7.5-8	PAH, As & Pb	Boring/Split Spoon
C-50 Area				
PEC50-1A	Soil	8.5-9	NA	Post Excavation
PEC50-1B	Soil	10-10.5	PAH	Post Excavation
PEC50-2A	Soil	8.5-9	PAH	Post Excavation
PEC50-2B	Soil	10-10.5	PAH	Post Excavation
PEC50-3A	Soil	8.5-9	NA	Post Excavation
PEC50-3B	Soil	10-10.5	PAH	Post Excavation
PEC50-4A	Soil	8.5-9	VO+	Post Excavation
PEC50-4B	Soil	10-10.5	V0+ & PAH	Post Excavation
PEC50-5	Soil	10-10.5	PAH	Post Excavation
C-48 Area				
PEC48-1A	Soil	7-7.5	VO+	Post Excavation
PEC48-1B	Soil	8-8.5	VO+ & PAH	Post Excavation
PEC48-1C	Soil	10-10.5	VO+ & PAH	Post Excavation
PEC48-2A	Soil	7-7.5	PAH	Post Excavation
PEC48-2B	Soil	8-8.5	PAH	Post Excavation
PEC48-2C	Soil	10-10.5	PAH	Post Excavation
PEC48-3A	Soil	7-7.5	NA	Post Excavation
PEC48-3B	Soil	8-8.5	PAH	Post Excavation
PEC48-3C	Soil	10-10.5	PAH	Post Excavation
PEC48-4A	Soil	7-7.5	PAH	Post Excavation
PEC48-4B	Soil	8-8.5	PAH	Post Excavation
PEC48-4C	Soil	10-10.5	PAH	Post Excavation
PEC48-5	Soil	10-10.5	PAH	Post Excavation
PEC48-6	Soil	8-8.5	PAH	Post Excavation
PEC48-6	Soil	10-10.5	PAH	Post Excavation
C2-8	Soil		PAH	Boring/Split Spoon
C-45-47 Area				
PEC45-47-1A	Soil	5.5-6	PAH	Post Excavation
PEC45-47-1B	Soil	8.5-9	PAH	Post Excavation
PEC45-47-1C	Soil	10-10.5	PAH	Post Excavation
PEC45-47-2A	Soil	5.5-6	VO+ & PAH	Post Excavation
PEC45-47-2B	Soil	8.5-9	VO+ & PAH	Post Excavation
PEC45-47-2C	Soil	10-10.5	VO+ & PAH	Post Excavation
PEC45-47-3A	Soil	5.5-6	PAH	Post Excavation
PEC45-47-3B	Soil	8.5-9	PAH	Post Excavation
PEC45-47-3C	Soil	10-10.5	PAH	Post Excavation
PEC45-47-4A	Soil	5.5-6	PAH	Post Excavation
PEC45-47-4B	Soil	8.5-9	PAH	Post Excavation
PEC45-47-4C	Soil	10-10.5	PAH	Post Excavation
PEC45	Soil	10-10.5	PAH	Post Excavation

Notes
PPM* refers to select metals
C & P** refers to cyanide and phenol

TABLE 1
SAMPLING SUMMARY TABLE

CE 3.2260

Location	Medium	Sample Depth	Analytical Parameters	Sampling Method
PEC47	Soil	10-10.5	PAH	Post Excavation
PEC-C2-10	Soil	10-10.5	PAH	Post Excavation
C2-10	Soil	7.5-8	PAH	Boring/Split Spoon
C2-11	Soil	7.5-8	PAH	Boring/Split Spoon
C2-12	Soil	7.5-8	PAH	Boring/Split Spoon
C-46 Area				
PEC46-1A	Soil	6.5-7	NA	Post Excavation
PEC46-1B	Soil	10-10.5	PAH	Post Excavation
PEC46-2A	Soil	6.5-7	NA	Post Excavation
PEC46-2B	Soil	10-10.5	PAH	Post Excavation
PEC46-3A	Soil	6.5-7	PAH	Post Excavation
PEC46-3B	Soil	10-10.5	PAH	Post Excavation
PEC46-4A	Soil	6.5-7	VO+	Post Excavation
PEC46-4B	Soil	10-10.5	VO+ & PAH	Post Excavation
PEC46	Soil	10-10.5	PAH	Post Excavation
C-77 Area				
PEC77-1A	Soil	8-8.5	PAH, As & Pb	Post Excavation
PEC77-2A	Soil	8-8.5	PAH, As & Pb	Post Excavation
PEC77-3A	Soil	8-8.5	PAH, As & Pb	Post Excavation
PEC77-4A	Soil	8-8.5	VO+, PAH, As & Pb	Post Excavation
PEC77-1B	Soil	11.5-12	PAH, As, Cu & Pb	Post Excavation
PEC77-2B	Soil	11.5-12	PAH, As, Cu & Pb	Post Excavation
PEC77-3B	Soil	11.5-12	PAH, As, Cu & Pb	Post Excavation
PEC77-4B	Soil	11.5-12	VO+, PAH, As,Cu & Pb	Post Excavation
PEC77-5	Soil	11.5-12	PAH, As, Cu & Pb	Post Excavation
C-74, C-75, & C-76				
CC2-24	Soil	7.5-8	PAH	Boring/Split Spoon
CC2-25	Soil	7.5-8	PAH	Boring/Split Spoon
CC2-26	Soil	7.5-8	PAH	Boring/Split Spoon
CC2-27	Soil	7.5-8	PAH & PPM*	Boring/Split Spoon
C-32, 34 & 35 Area				
CC2-19	Soil	7.5-8	PAH	Boring/Split Spoon
CC2-20	Soil	7.5-8	PAH	Boring/Split Spoon
C-62 & C-63 Area				
C2-16	Soil	2.5-3	PAH	Boring/Split Spoon
C2-17	Soil	2.5-3	PAH	Boring/Split Spoon
C2-18	Soil	2.5-3	PAH	Boring/Split Spoon
Continuing Care Stockpile				
CCF-1A	Soil	5.5-6	VO, BN, PCB, PPM,	Test Pit/Scoop
CCF-1B	Soil	1-1.5	Pest, C & P**	Test Pit/Scoop
CCF-2	Soil	5.5-6	VO, BN, PCB, PPM,	Test Pit/Scoop
CCF-3	Soil	4.5-5	Pest, C & P**	Test Pit/Scoop
CCF-4A	Soil	5-5.5	VO, BN, PCB, PPM,	Test Pit/Scoop
CCF-4B	Soil	1-1.5	Pest, C & P**	Test Pit/Scoop
CCF-5	Soil	5-5.5	VO, BN, PCB, PPM,	Test Pit/Scoop
CCF-6A	Soil	4.5-5	Pest, C & P**	Test Pit/Scoop
CCF-6B	Soil	1-1.5	VO, BN, PCB, PPM,	Test Pit/Scoop
CCF-7	Soil	4.5-5	Pest, C & P**	Test Pit/Scoop
CCF-8	Soil	4.5-5	VO, BN, PCB, PPM,	Test Pit/Scoop
CCF-9A	Soil	4.5-5	Pest, C & P**	Test Pit/Scoop
CCF-9B	Soil	1-1.5	VO, BN, PCB, PPM,	Test Pit/Scoop
CCF-10	Soil	4-4.5	Pest, C & P**	Test Pit/Scoop
CCF-11A	Soil	4-4.5	VO, BN, PCB, PPM,	Test Pit/Scoop
CCF-11B	Soil	1-1.5	Pest, C & P**	Test Pit/Scoop
Sales Area Stockpile				
COM-1	Soil	NA	BN+, PCB, PPM & C	Test Pit/Scoop

Notes
PPM* refers to select metals
C & P** refers to cyanide and phenol

TABLE 1
SAMPLING SUMMARY TABLE

CE 3.2261

Location	Medium	Sample Depth	Analytical Parameters	Sampling Method
COM-2	Soil	NA	BN+, PCB, PPM & C	Test Pit/Scoop
COM-3	Soil	NA	BN+, PCB, PPM & C	Test Pit/Scoop
COM-4	Soil	NA	BN+, PCB, PPM & C	Test Pit/Scoop
COM-5	Soil	NA	BN+, PCB, PPM & C	Test Pit/Scoop
Ground Water				
MW-1	Groundwater	Unconfined	VO+ & As	Bailer
MW-2	Groundwater	Unconfined	VO+ & As	Bailer
MW-3	Groundwater	Unconfined	VO+ & As	Bailer
MW-4	Groundwater	Unconfined	VO+ & As	Bailer
MW-5	Groundwater	Unconfined	VO+ & As	Bailer
MW-6	Groundwater	Unconfined	VO+ & As	Bailer
MW-7	Groundwater	Unconfined	VO+ & As	Bailer
MW-10	Groundwater	Unconfined	VO+ & As	Bailer
MW-12	Groundwater	Unconfined	VO+ & As	Bailer
MW-13A	Groundwater	Unconfined	VO+, BN+ & PPM	Bailer
MW-14A	Groundwater	Unconfined	VO+, BN+ & PPM	Bailer
MW-19	Groundwater	Unconfined	VO+, BN+ & PPM	Bailer
MW-20	Groundwater	Unconfined	VO+, BN+ & PPM	Bailer
MW-21	Groundwater	Unconfined	VO+, BN+ & PPM	Bailer
MW-22	Groundwater	Unconfined	VO+, BN+ & PPM	Bailer
MW-31	Groundwater	Confined	VO+, BN+ & PPM	Bailer
MW-34	Groundwater	Unconfined	VO+, BN+ & PPM	Bailer
MW-35	Groundwater	Unconfined	VO+, BN+ & PPM	Bailer
MW-36	Groundwater	Unconfined	VO+, BN+ & PPM	Bailer

Notes
PPM* refers to select metals
C & P** refers to cyanide and phenol

SITE SPECIFIC CLEANUP OBJECTIVES

	RDCSCC	NRDCSCC	IGWSCC	HFM	HFA	ER-L	ER-M	SE2
Semivolatiles								
Naphthalene	230	4200	100	~	~			
Acenaphthylene	~	~	~	~	~	0.044	0.64	
Acenaphthene	3400	10000	100	~	~	0.016	0.5	
Fluorene	2300	10000	100	~	~	0.019	0.54	1340
Phenanthrene	~	~	~	~	~	0.24	1.5	
Anthracene	10000	10000	100	~	~	0.085	1.1	
Fluoranthene	2300	10000	100	~	~	0.6	5.1	393
Pyrene	1700	10000	100	~	~	0.665	2.6	8970
Benzo[a]anthracene	0.9	4	500	160	1.37	0.261	1.6	
Chrysene	9	40	500	~	~	0.384	2.8	0.031
Benzo[b]fluoranthene	0.9	4	50	110	1.91	~	~	0.031
Benzo[k]fluoranthene	0.9	4	500	93	1.79	0.24	1340	0.031
Benzo[a]pyrene	0.66	0.66	100	120	1.89	0.43	1.6	0.031
Indeno[1,2,3-cd]pyrene	0.9	4	500	67	1.41	0.2	320	0.031
Dibenz[a,h]anthracene	0.66	0.66	100	25	1.24	0.06	130	0.031
Benzo[g,h,i]perylene	~	~	~	~	~	0.17	320	
Arsenic	20	20	~	1098	13.15	8.2	70	0.0136
Lead	400	600	~	10700	574	47	218	5
Cadmium	39	100	~	510	11.15	1.2	9.6	
Beryllium	2	2	~	80	1.23			
Copper	600	600	~	~	~	34	270	5.6
Mercury	14	270	~	~	~	0.15	0.71	0.146
Selenium	63	3100	~	~	~			10
Thallium	2	2	~	~	~			6.22
Zinc	1500	1500	~	10900	575	150	150	
PCBs	0.49	2	50	~	~	0.023	0.18	

Notes

RDCSCC-Residential Direct Contact Soil Cleanup Criteria (mg/kg)
NRDCSCC-Non-Residential Direct Contact Soil Cleanup Criteria (mg/kg)
IGWSCC-Impact To Ground Water Soil Cleanup Criteria (mg/kg)
HFM-NJDEP Historic Fill Maximum from NJAC 7:26E Table 4-2 (mg/kg)
HFA-NJDEP Historic Fill Average from NJAC 7:26E Table 4-2 (mg/kg)
ER-L-Effects Range-Low from marine estuarine sediment screening guidelines (Long et al., 1995) (mg/kg)
ER-M-Effects Range- Medium from marine estuarine sediment screening g
SE2-Surface Water Classification & Surface Water Quality Standards from NJAC 7:9B (ug/l)

CE 3.2262

Table 2: RESULTS SUMMARY-SOIL QUALITY

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2264

Client ID:	C2-1	C2-2A	C2-2B	C2-3	C2-4	C2-5	C2-6
Sample Depth:	9-9.5	5-5.5	7-7.5	8-8.5	4.5	8-8.5	8-8.5
Lab ID:	3636-001	3636-002	3636-003	3730-001	4030-001	3730-002	3730-003
Date Sampled:	6/25/99	6/25/99	6/25/99	6/29/99	7/13/99	6/29/99	6/29/99
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-
Total Xylenes	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-	-
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
Benzoic acid	-	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	0.595	ND	-	7.49	2.76	ND	ND
4-Chloroaniline	-	-	-	-	-	-	-

CE 3.2265

Client ID:	C2-1	C2-2A	C2-2B	C2-3	C2-4	C2-5	C2-6
Sample Depth:	9-9.5	5-5.5	7-7.5	8-8.5	4.5	8-8.5	8-8.5
Lab ID:	3636-001	3636-002	3636-003	3730-001	4030-001	3730-002	3730-00
Date Sampled:	6/25/99	6/25/99	6/25/99	6/29/99	7/13/99	6/29/99	6/29/99
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]xachlorobutadiene	-	-	-	-	-	-	-
[redacted]hloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	0.401	ND	-	4.04	0.32	ND	ND
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	1.18	ND	-	14.9	5.77	ND	0.115
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	1.18	ND	-	9.49	4.68	ND	0.218
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	7.57	0.493	-	90.5	34.9	ND	2.8
Anthracene	1.77	ND	-	16.1	12	ND	0.585
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	10.7	1.02	-	165	69	ND	4.62
Benzidine	-	-	-	-	-	-	-
[redacted]yrene	8.42	0.803	-	136	53.8	ND	4.34
[redacted]-Dimethylbenzidine	-	-	-	-	-	-	-
[redacted]tylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	3.91	0.51	-	*84*	*32.9*	ND	2.13
Chrysene	4.47	0.607	-	*88.1*	36.2	ND	1.96
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	*5.93*	0.604	-	*119*	*51.1*	ND	1.95
Benzo[k]fluoranthene	2.22	0.335	-	*54.4*	*20.7*	ND	1.1
Benzo[a]pyrene	*3.96*	0.506	-	*88.2*	*35*	ND	*1.74*
Indeno[1,2,3-cd]pyrene	1.01	0.252	-	*52.5*	*13.6*	ND	1.08
Dibenz[a,h]anthracene	0.363	ND	-	*15.2*	*4.98*	ND	0.254
Benzo[g,h,I]perylene	1.15	0.274	-	57.7	15.8	ND	1.16
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
[redacted]'-DDE	-	-	-	-	-	-	-
[redacted]ldrin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

Client ID:	C2-1	C2-2A	C2-2B	C2-3	C2-4	C2-5	C2-6
Sample Depth:	9-9.5	5-5.5	7-7.5	8-8.5	4.5	8-8.5	8-8.5
Lab ID:	3636-001	3636-002	3636-003	3730-001	4030-001	3730-002	3730-003
Date Sampled:	6/25/99	6/25/99	6/25/99	6/29/99	7/13/99	6/29/99	6/29/99
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	~	~	~	~	~	~	~
Eosulfan sulfate	~	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~	~
Metals (ppm)							
Antimony	~	~	~	~	~	~	~
Arsenic	~	~	*1528.00*	*64.50*	~	*28.70*	11.50
Beryllium	~	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~	~
Chromium	~	~	~	~	~	~	~
Copper	~	~	570.00	134.00	~	~	~
Lead	~	~	*11780.00*	*1720.00*	~	339.00	119.00
Mercury	~	~	~	~	~	~	~
Nickel	~	~	~	~	~	~	~
Selenium	~	~	~	~	~	~	~
Silver	~	~	~	~	~	~	~
Thallium	~	~	*3.20*	~	~	~	~
Zinc	~	~	~	~	~	~	~
General Alytical							
Cyanide, Total (ppm)	~	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the MDL
All qualifiers on lividual Volatiles & Semivolatiles are carried down through summation.
* = Result from diluted alysis.

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

Client ID:	C2-7	C2-8	C2-11	C2-13	C2-14	C2-15	C2-16
Sample Depth:	8-8.5	11.5-12	7.5-8	7.5-8	7.5-8	7.5-8	2.5-3
Lab ID:	3730-004	3730-005	3730-007	3730-009	3730-010	3730-011	3730-012
Date Sampled:	6/29/99	6/29/99	6/30/99	6/30/99	6/30/99	6/30/99	6/30/99
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-
[illegible]ylbenzene	-	-	-	-	-	-	-
[illegible]al Xylenes	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-	-
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
[illegible]zoic acid	-	-	-	-	-	-	-
[illegible]ichlorophenol	-	-	-	-	-	-	-
[illegible]2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	ND	1.2	ND	ND	0.531	0.176	ND
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	C2-7	C2-8	C2-11	C2-13	C2-14	C2-15	C2-16
Sample Depth:	8-8.5	11.5-12	7.5-8	7.5-8	7.5-8	7.5-8	2.5-3
Lab ID:	3730-004	3730-005	3730-007	3730-009	3730-010	3730-011	3730-012
Date Sampled:	6/29/99	6/29/99	6/30/99	6/30/99	6/30/99	6/30/99	6/30/99
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	ND	ND	ND	ND	0.891	ND	ND
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	ND	3.06	ND	0.337	1.15	0.914	ND
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	ND	3.58	ND	0.355	2.97	0.841	ND
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	ND	20.4	1.08	3.84	34.2	7.14	ND
Anthracene	ND	4.77	ND	0.646	6.18	1.79	ND
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	ND	23.2	0.662	6.21	36.2	12.6	ND
Benzidine	-	-	-	-	-	-	-
Pyrene	ND	25	1.45	5.26	30.6	9.82	ND
3,3'-Dimethylbenzidine	-	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	ND	*12.8*	0.505	2.48	*10.6*	*5.08*	ND
Chrysene	ND	13	0.579	2.54	10.9	5.06	ND
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	ND	*15.9*	1.14	2.57	*17*	*5.34*	ND
Benzo[k]fluoranthene	ND	*4.52*	0.404	2.68	*17.7*	2.67	ND
Benzo[a]pyrene	ND	*12.9*	*1.3*	*1.92*	*9.79*	*4.29*	ND
Indeno[1,2,3-cd]pyrene	ND	*7.38*	0.726	0.965	*5.69*	2.42	ND
Dibenz[a,h]anthracene	ND	*2.24*	0.184	0.294	*1.39*	*0.876*	ND
Benzo[g,h,i]perylene	ND	9.02	1.15	1.07	5.97	2.55	ND
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

Client ID:	C2-7	C2-8	C2-11	C2-13	C2-14	C2-15	C2-16
Sample Depth:	8-8.5	11.5-12	7.5-8	7.5-8	7.5-8	7.5-8	2.5-3
Lab ID:	3730-004	3730-005	3730-007	3730-009	3730-010	3730-011	3730-012
Date Sampled:	6/29/99	6/29/99	6/30/99	6/30/99	6/30/99	6/30/99	6/30/99
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
aldehyde	-	-	-	-	-	-	-
lfan sulfate	-	-	-	-	-	-	-
4,4'-DDT	-	-	-	-	-	-	-
Erin Ketone	-	-	-	-	-	-	-
Methoxychlor	-	-	-	-	-	-	-
alpha-Chlordane	-	-	-	-	-	-	-
gamma-Chlordane	-	-	-	-	-	-	-
Toxaphene	-	-	-	-	-	-	-
Metals (ppm)							
Antimony	-	-	-	-	-	-	-
Arsenic	*104.00*	-	-	9.73	13.50	*60.80*	-
Beryllium	-	-	-	-	-	-	-
Cadmium	-	-	-	-	-	-	-
Chromium	-	-	-	-	-	-	-
Copper	-	-	-	-	-	-	-
Lead	204.00	-	-	93.20	128.00	*845.00*	-
Mercury	-	-	-	-	-	-	-
Nickel	-	-	-	-	-	-	-
Selenium	-	-	-	-	-	-	-
Silver	-	-	-	-	-	-	-
Thallium	-	-	-	-	-	-	-
Zinc	-	-	-	-	-	-	-
General Alytical							
Cyanide, Total (ppm)	-	-	-	-	-	-	-
Phenol (ppm)	-	-	-	-	-	-	-
Total Petroleum Hydrocarbons (ppm)	-	-	-	-	-	-	-

- = Sampie not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
Result from diluted alysis.

CF. 3.2269

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2270

Client ID:	C2-17	C2-18	CC2-19	CC2-20	CC2-21	CC2-22	CC2-24
Sample Depth:	2.5-3	2.5-3	7.5-8	7.5-8	7.5-8	7.5-8	7.5-8
Lab ID:	3730-012	3730-014	6694-001	6694-002	6694-003	6694-004	6694-005
Date Sampled:	6/30/99	6/30/99	11/4/99	11/4/99	11/4/99	11/4/99	11/4/99
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-
Total Xylenes	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-	-
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
Benzoic acid	-	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	1.82	ND	1.24	0.127	4.24	0.327	ND
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	C2-17	C2-18	CC2-19	CC2-20	CC2-21	CC2-22	CC2-24
Sample Depth:	2.5-3	2.5-3	7.5-8	7.5-8	7.5-8	7.5-8	7.5-8
Lab ID:	3730-012	3730-014	6694-001	6694-002	6694-003	6694-004	6694-005
Date Sampled:	6/30/99	6/30/99	11/4/99	11/4/99	11/4/99	11/4/99	11/4/99
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-	-
Chloro-3-methylphenol	-	-	-	-	-	-	-
2-Methylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	ND	ND	0.133	ND	0.308	ND	0.168
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	4.55	ND	5.28	0.756	9.29	0.124	N
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	3.39	ND	8.9	0.77	7.07	0.107	0.109
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	26.4	ND	2.74	0.264	51.6	0.509	0.543
Anthracene	6.15	ND	1.89	0.111	10.6	0.115	0.0957
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	33.4	ND	5.05	0.493	70.5	0.243	0.541
Benzidine	-	-	-	-	-	-	-
Pyrene	26.7	ND	2.62	0.381	65.3	0.191	0.918
3,3'-Dimethylbenzidine	-	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	*13.1*	ND	0.174	0.134	*50.3*	0.104	0.424
Chrysene	12.6	ND	0.172	0.123	*46.8*	0.086	0.531
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	*13.1*	ND	ND	0.107	*75.8*	ND	0.311
Benzo[k]fluoranthene	*7.13*	ND	ND	ND	*22.8*	ND	0.14
Benzo[a]pyrene	*11.4*	ND	ND	0.0993	*41.1*	ND	0.338
Indeno[1,2,3-cd]pyrene	*6.09*	ND	ND	ND	*7.66*	ND	0.127
Dibenz[a,h]anthracene	*1.93*	ND	ND	ND	*2.76*	ND	N
Benzo[g,h,I]perylene	6.42	ND	ND	ND	5.32	ND	0.136
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-	-
Endrin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

CE 3.2271

Client ID:	C2-17	C2-18	CC2-19	CC2-20	CC2-21	CC2-22	CC2-24
Sample Depth:	2.5-3	2.5-3	7.5-8	7.5-8	7.5-8	7.5-8	7.5-8
Lab ID:	3730-012	3730-014	6694-001	6694-002	6694-003	6694-004	6694-005
Date Sampled:	6/30/99	6/30/99	11/4/99	11/4/99	11/4/99	11/4/99	11/4/99
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	~	~	~	~	~	~	~
Eosulfan sulfate	~	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~	~
Metals (ppm)							
Antimony	~	~	~	~	~	ND	~
Arsenic	~	~	~	~	~	*983.00*	~
Beryllium	~	~	~	~	~	ND	~
Cadmium	~	~	~	~	~	ND	~
Chromium	~	~	~	~	~	ND	~
Copper	~	~	~	~	~	ND	~
Lead	~	~	~	~	~	ND	~
Mercury	~	~	~	~	~	ND	~
Nickel	~	~	~	~	~	ND	~
Selenium	~	~	~	~	~	ND	~
Silver	~	~	~	~	~	ND	~
Thallium	~	~	~	~	~	ND	~
Zinc	~	~	~	~	~	ND	~
General Alytical							
Cyanide, Total (ppm)	~	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.22

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2273

Client ID:	CC2-25	CC2-26	CC2-27	CC2-28	CC2-28	CC2-28	CC2-27
Sample Depth:	7.5-8	7.5-8	7.5-8	7.5-8	4.5-5	3.5-4	11.5-12
Lab ID:	6694-006	6694-007	6694-008	6694-009	6694-010	6694-011	6694-012
Date Sampled:	11/4/99	11/4/99	11/4/99	11/4/99	11/4/99	11/4/99	11/4/99
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	~	~	~	~	~	~	~
Vinyl Chloride	~	~	~	~	~	~	~
Bromomethane	~	~	~	~	~	~	~
Chloroethane	~	~	~	~	~	~	~
Trichlorofluoromethane	~	~	~	~	~	~	~
Acrolein	~	~	~	~	~	~	~
1,1-Dichloroethene	~	~	~	~	~	~	~
Methylene Chloride	~	~	~	~	~	~	~
Acrylonitrile	~	~	~	~	~	~	~
trans-1,2-Dichloroethene	~	~	~	~	~	~	~
1,1-Dichloroethane	~	~	~	~	~	~	~
Chloroform	~	~	~	~	~	~	~
1,1,1-Trichloroethane	~	~	~	~	~	~	~
Carbon Tetrachloride	~	~	~	~	~	~	~
1,2-Dichloroethane(EDC)	~	~	~	~	~	~	~
Benzene	~	~	~	~	~	~	~
Trichloroethene	~	~	~	~	~	~	~
1,2-Dichloropropane	~	~	~	~	~	~	~
Bromodichloromethane	~	~	~	~	~	~	~
2-Chloroethylvinyl Ether	~	~	~	~	~	~	~
cis-1,3-Dichloropropene	~	~	~	~	~	~	~
Toluene	~	~	~	~	~	~	~
trans-1,3-Dichloropropene	~	~	~	~	~	~	~
1,1,2-Trichloroethane	~	~	~	~	~	~	~
Tetrachloroethene	~	~	~	~	~	~	~
Dibromochloromethane	~	~	~	~	~	~	~
Chlorobenzene	~	~	~	~	~	~	~
[illegible]hylbenzene	~	~	~	~	~	~	~
[illegible]tal Xylenes	~	~	~	~	~	~	~
Bromoform	~	~	~	~	~	~	~
1,1,2,2-Tetrachloroethane	~	~	~	~	~	~	~
1,3-Dichlorobenzene	~	~	~	~	~	~	~
1,4-Dichlorobenzene	~	~	~	~	~	~	~
1,2-Dichlorobenzene	~	~	~	~	~	~	~
TOTAL VO's:	~	~	~	~	~	~	~
TOTAL TIC's:	~	~	~	~	~	~	~
TOTAL VO's & TIC's:	~	~	~	~	~	~	~
Semivolatiles (ppm)							
N-Nitrosodimethylamine	~	~	~	~	~	~	~
Phenol	~	~	~	~	~	~	~
Aniline	~	~	~	~	~	~	~
bis(2-Chloroethyl)ether	~	~	~	~	~	~	~
2-Chlorophenol	~	~	~	~	~	~	~
1,3-Dichlorobenzene	~	~	~	~	~	~	~
1,4-Dichlorobenzene	~	~	~	~	~	~	~
Benzyl alcohol	~	~	~	~	~	~	~
1,2-Dichlorobenzene	~	~	~	~	~	~	~
2-Methylphenol	~	~	~	~	~	~	~
bis(2-chloroisopropyl)ether	~	~	~	~	~	~	~
4-Methylphenol	~	~	~	~	~	~	~
N-Nitroso-di-n-propylamine	~	~	~	~	~	~	~
Hexachloroethane	~	~	~	~	~	~	~
Nitrobenzene	~	~	~	~	~	~	~
Isophorone	~	~	~	~	~	~	~
2-Nitrophenol	~	~	~	~	~	~	~
2,4-Dimethylphenol	~	~	~	~	~	~	~
bis(2-Chloroethoxy)methane	~	~	~	~	~	~	~
[illegible]nzoic acid	~	~	~	~	~	~	~
[illegible]-Dichlorophenol	~	~	~	~	~	~	~
[illegible]2,4-Trichlorobenzene	~	~	~	~	~	~	~
Naphthalene	ND	ND	ND	0.151	~	~	ND
4-Chloroaniline	~	~	~	~	~	~	~

Client ID:	CC2-25	CC2-26	CC2-27	CC2-28	CC2-28	CC2-28	CC2-27
Sample Depth:	7.5-8	7.5-8	7.5-8	7.5-8	4.5-5	3.5-4	11.5-12
Lab ID:	6694-006	6694-007	6694-008	6694-009	6694-010	6694-011	6694-012
Date Sampled:	11/4/99	11/4/99	11/4/99	11/4/99	11/4/99	11/4/99	11/4/99
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	ND	N	ND	0.28	-	-	ND
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	ND	N	ND	0.634	-	-	ND
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	ND	N	ND	0.615	-	-	ND
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	ND	0.315	ND	6.18	-	-	ND
Anthracene	ND	0.0852	ND	2.03	-	-	ND
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	ND	0.688	ND	8.64	-	-	ND
Benzidine	-	-	-	-	-	-	-
Pyrene	ND	0.687	ND	7.21	-	-	ND
3,3'-Dimethylbenzidine	-	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	ND	0.432	ND	3.73	-	-	ND
Chrysene	ND	0.451	ND	3.77	-	-	ND
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	ND	0.619	ND	4.2	-	-	ND
Benzo[k]fluoranthene	ND	0.269	ND	2.23	-	-	ND
Benzo[a]pyrene	ND	0.45	ND	3.13	-	-	ND
Indeno[1,2,3-cd]pyrene	ND	0.148	ND	0.787	-	-	ND
Dibenz[a,h]anthracene	ND	N	ND	0.322	-	-	ND
Benzo[g,h,I]perylene	ND	0.127	ND	0.69	-	-	ND
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

CE 3.2

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

Client ID:	PEC79-1A	PEC79-1B	PEC79-1C	PEC79-2A	PEC79-2B	PEC79-2C
Sample Depth:	4.5-5.0	6.5-7.0	10-10.5	4.5-5.0	6.5-7.0	10-10.5
Lab ID:	1629-001	1629-002	1629-003	1629-004	1629-005	1629-006
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)						
Chloromethane	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-
Benzene	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-
Toluene	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-
[illegible]ylbenzene	-	-	-	-	-	-
[illegible]tal Xylenes	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-
Semivolatiles (ppm)						
N-Nitrosodimethylamine	-	-	-	-	-	-
Phenol	-	-	-	-	-	-
Aniline	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-
[illegible]zoic acid	-	-	-	-	-	-
[illegible]Dichlorophenol	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-
Naphthalene	-	6.910	14.800	-	3.060	68.800
4-Chloroaniline	-	-	-	-	-	-

Client ID:	PEC79-1A	PEC79-1B	PEC79-1C	PEC79-2A	PEC79-2B	PEC79-2C
Sample Depth:	4.5-5.0	6.5-7.0	10-10.5	4.5-5.0	6.5-7.0	10-10.5
Lab ID:	1629-001	1629-002	1629-003	1629-004	1629-005	1629-006
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-
Acenaphthylene	-	ND	ND	-	ND	ND
3-Nitroaniline	-	-	-	-	-	-
Acenaphthene	-	.260	4.420	-	.595	12.100
2,4-Dinitrophenol	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-
Fluorene	-	ND	3.550	-	.402	11.000
4-Chlorophenyl-phenylether	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-
Phenanthrene	-	.783	35.600	-	2.840	30.000
Anthracene	-	.180	3.800	-	1.540	16.900
Carbazole	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-
Flouranthene	-	.1330	40.300	-	6.590	13.200
Benzidine	-	-	-	-	-	-
Pyrene	-	1.740	33.100	-	8.210	12.400
3,3'-Dimethylbenzidine	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-
Benzo[a]anthracene	-	.955	14.000	-	4.230	4.840
Chrysene	-	.997	13.000	-	4.000	3.730
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-
Benzo[b]fluoranthene	-	.849	11.900	-	4.190	2.960
Benzo[k]fluoranthene	-	.302	4.090	-	2.410	1.560
Benzo[a]pyrene	-	.691	8.710	-	3.470	2.390
Indeno[1,2,3-cd]pyrene	-	.378	3.900	-	1.550	.949
Dibenz[a,h]anthracene	-	ND	1.340	-	.493	ND
Benzo[g,h,I]perylene	-	.469	4.530	-	1.660	1.150
PCB's (ppm)						
Aroclor 1016	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-
Pesticides (ppm)						
alpha-BHC	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-
Erin	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-

Client ID:	PEC79-1A	PEC79-1B	PEC79-1C	PEC79-2A	PEC79-2B	PEC79-2C
Sample Depth:	4.5-5.0	6.5-7.0	10-10.5	4.5-5.0	6.5-7.0	10-10.5
Lab ID:	1629-001	1629-002	1629-003	1629-004	1629-005	1629-006
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]in aldehyde	-	-	-	-	-	-
[redacted]ulfan sulfate	-	-	-	-	-	-
[redacted]'-DDT	-	-	-	-	-	-
Erin Ketone	-	-	-	-	-	-
Methoxychlor	-	-	-	-	-	-
alpha-Chlordane	-	-	-	-	-	-
gamma-Chlordane	-	-	-	-	-	-
Toxaphene	-	-	-	-	-	-
Metals (ppm)						
Antimony	ND	*71.20*	*74.50*	ND	ND	*104.00*
Arsenic	*20.80*	*6210.00*	*399.00*	14.80	*1000.00*	*2520.00*
Beryllium	ND	ND	ND	ND	0.57	ND
Cadmium	0.27	0.44	0.50	0.42	0.77	*2.38*
Chromium	ND	25.60	ND	ND	82.70	ND
Copper	74.90	503.00	*688.00*	86.60	196.00	*6020.00*
Lead	124.00	*10900.00*	*5700.00*	120.00	*2160.00*	*9980.00*
Mercury	0.52	*40.90*	11.80	*108.00*	*25.60*	*474.00*
Nickel	ND	13.60	ND	ND	35.40	ND
Selenium	ND	52.70	61.60	ND	27.10	*874.00*
Silver	ND	11.30	ND	ND	1.33	ND
Thallium	0.25	*18.50*	*6.09*	0.31	*2.41*	*23.10*
Zinc	ND	212.00	ND	ND	195.00	ND
General Alytical						
Cyanide, Total (ppm)	-	-	-	-	-	-
Phenol (ppm)	-	-	-	-	-	-
Total Petroleum Hydrocarbons (ppm)	-	-	-	-	-	-

- = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on lividual Volatiles & Semiv
[redacted]= Result from diluted alysis.

CE 3.2276

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

Client ID:	PEC79-3	PEC79-4A	PEC79-4B	PEC79-4C	PEC79-5A	PEC79-5B
Sample Depth:	10-10.5	4.5-5.0	6.5-7.0	10-10.5	4.5-5.0	6.5-7.0
Lab ID:	1629-007	1629-008	1629-009	1629-010	1629-011	1629-012
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)						
Chloromethane	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-
Benzene	-	ND	.283	ND	-	-
Trichloroethene	-	ND	ND	ND	-	-
1,2-Dichloropropane	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-
Toluene	-	ND	.277	ND	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-
Tetrachloroethene	-	ND	ND	ND	-	-
Dibromochloromethane	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-
Ethylbenzene	-	ND	1.800	4.730	-	-
Total Xylenes	-	ND	5.150	16.100	-	-
Bromoform	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
TOTAL VO's:	-	ND	7.510	20.830	-	-
TOTAL TIC's:	-	ND	198.670	171.130	-	-
TOTAL VO's & TIC's:	-	ND	206.180	191.960	-	-
Semivolatiles (ppm)						
N-Nitrosodimethylamine	-	-	-	-	-	-
Phenol	-	-	-	-	-	-
Aniline	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-
Benzoic acid	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-
Naphthalene	50.300	-	73.300	141.000	-	11.600
4-Chloroaniline	-	-	-	-	-	-

CE 3.227

Client ID:	PEC79-3	PEC79-4A	PEC79-4B	PEC79-4C	PEC79-5A	PEC79-5B
Sample Depth:	10-10.5	4.5-5.0	6.5-7.0	10-10.5	4.5-5.0	6.5-7.0
Lab ID:	1629-007	1629-008	1629-009	1629-010	1629-011	1629-012
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]exachlorobutadiene	-	-	-	-	-	-
[redacted]hloro-3-methylphenol	-	-	-	-	-	-
[redacted]ethylnapthalene	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-
Acenaphthylene	.389	-	4.040	6.340	-	.237
3-Nitroaniline	-	-	-	-	-	-
Acenaphthene	6.580	-	31.100	53.500	-	1.860
2,4-Dinitrophenol	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-
Fluorene	7.190	-	30.200	56.000	-	1.730
4-Chlorophenyl-phenylether	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-
Phenanthrene	24.500	-	117.000	19.1000	-	6.750
Anthracene	23.100	-	16.100	25.300	-	5.290
Carbazole	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-
Flouranthene	9.660	-	42.600	77.700	-	5.870
Benzidine	-	-	-	-	-	-
Pyrene	9.210	-	41.900	55.500	-	6.500
[redacted]-Dimethylbenzidine	-	-	-	-	-	-
[redacted]ylbenzylphthalate	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-
Benzo[a]anthracene	2.940	-	11.500	18.600	-	3.280
Chrysene	3.190	-	10.700	13.600	-	3.440
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-
Benzo[b]fluoranthene	2.240	-	7.130	8.400	-	3.160
Benzo[k]fluoranthene	1.030	-	2.870	4.140	-	1.350
Benzo[a]pyrene	1.860	-	5.600	7.640	-	2.580
Indeno[1,2,3-cd]pyrene	.683	-	1.910	3.120	-	1.080
Dibenz[a,h]anthracene	.205	-	ND	.981	-	.358
Benzo[g,h,I]perylene	.787	-	2.150	3.260	-	1.110
PCB's (ppm)						
Aroclor 1016	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-
Pesticides (ppm)						
alpha-BHC	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-
[redacted]'-DDE	-	-	-	-	-	-
[redacted]drin	-	-	-	-	-	-
[redacted]in	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-

CE 3.2278

Client ID:	PEC79-3	PEC79-4A	PEC79-4B	PEC79-4C	PEC79-5A	PEC79-5B
Sample Depth:	10-10.5	4.5-5.0	6.5-7.0	10-10.5	4.5-5.0	6.5-7.0
Lab ID:	1629-007	1629-008	1629-009	1629-010	1629-011	1629-012
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	~	~	~	~	~	~
Eosulfan sulfate	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~
Metals (ppm)						
Antimony	*22.70*	ND	*52.80*	ND	ND	ND
Arsenic	*1210.00*	16.60	*7300.00*	*2400.00*	13.00	*360.00*
Beryllium	0.36	ND	0.28	ND	ND	0.58
Cadmium	*1.16*	*1.04*	*3.24*	ND	0.60	0.90
Chromium	16.00	ND	32.20	ND	ND	57.90
Copper	*668.00*	125.00	*1210.00*	591.00	73.10	194.00
Lead	*2396.00*	*6990.00*	*28400.00*	*4370.00*	194.00	*1240.00*
Mercury	*46.90*	0.49	*198.00*	*28.00*	0.60	11.20
Nickel	9.16	ND	19.90	ND	ND	33.20
Selenium	*122.00*	ND	*397.00*	ND	ND	22.50
Silver	ND	ND	22.60	ND	ND	ND
Thallium	*6.60*	*60.70*	*72.10*	*14.80*	0.20	*2.64*
Zinc	190.00	ND	578.00	ND	ND	185.00
General Alytical						
Cyanide, Total (ppm)	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.279

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

Client ID:	PEC79-5C	PEC79-C-79	PEC4-1A	PEC4-1B	PEC4-1C	PEC4-2A
Sample Depth:	10-10.5	13.5-14	5.5-6	7.5-8	10-10.5	5.5-6
Lab ID:	1629-0013	1629-014	1629-015	1629-016	1629-017	1629-018
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)						
Chloromethane	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-
Benzene	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-
Toluene	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-
[illegible]ylbenzene	-	-	-	-	-	-
[illegible]tal Xylenes	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-
Semivolatiles (ppm)						
N-Nitrosodimethylamine	-	-	-	-	-	-
Phenol	-	-	-	-	-	-
Aniline	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-
[illegible]nzoic acid	-	-	-	-	-	-
[illegible]-Dichlorophenol	-	-	-	-	-	-
[illegible]2,4-Trichlorobenzene	-	-	-	-	-	-
Naphthalene	4.640	ND	-	-	-	-
4-Chloroaniline	-	-	-	-	-	-

CE 3.2280

Client ID:	PEC79-5C	PEC79-C-79	PEC4-1A	PEC4-1B	PEC4-1C	PEC4-2A
Sample Depth:	10-10.5	13.5-14	5.5-6	7.5-8	10-10.5	5.5-6
Lab ID:	1629-0013	1629-014	1629-015	1629-016	1629-017	1629-018
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-
Acenaphthylene	ND	ND	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-
Acenaphthene	.661	ND	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-
Fluorene	.736	ND	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-
Phenanthrene	1.380	ND	-	-	-	-
Anthracene	.197	ND	-	-	-	-
Carbazole	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-
Flouranthene	.999	ND	-	-	-	-
Benzidine	-	-	-	-	-	-
Pyrene	.1070	ND	-	-	-	-
3,3'-Dimethylbenzidine	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-
Benzo[a]anthracene	.716	ND	-	-	-	-
Chrysene	.627	ND	-	-	-	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-
Benzo[b]fluoranthene	.654	ND	-	-	-	-
Benzo[k]fluoranthene	.311	ND	-	-	-	-
Benzo[a]pyrene	.430	ND	-	-	-	-
Indeno[1,2,3-cd]pyrene	.204	ND	-	-	-	-
Dibenz[a,h]anthracene	ND	ND	-	-	-	-
Benzo[g,h,I]perylene	.217	ND	-	-	-	-
PCB's (ppm)						
Aroclor 1016	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-
Pesticides (ppm)						
alpha-BHC	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-
Erin	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-

CE 3.2261

Client ID:	PEC79-5C	PEC79-C-79	PEC4-1A	PEC4-1B	PEC4-1C	PEC4-2A
Sample Depth:	10-10.5	13.5-14	5.5-6	7.5-8	10-10.5	5.5-6
Lab ID:	1629-0013	1629-014	1629-015	1629-016	1629-017	1629-018
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
[redacted] aldehyde	~	~	~	~	~	~
[redacted]lfan sulfate	~	~	~	~	~	~
[redacted]-DDT	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~
Metals (ppm)						
Antimony	*163.00*	ND	~	~	~	~
Arsenic	*5880.00*	*46.00*	3.48	*27.90*	11.10	8.42
Beryllium	ND	ND	~	~	~	~
Cadmium	ND	0.73	~	~	~	~
Chromium	ND	ND	~	~	~	~
Copper	68.80	29.80	~	~	~	~
Lead	*1260.00*	96.10	43.70	274.00	116.00	95.30
Mercury	*28.30*	13.90	~	~	~	~
Nickel	ND	ND	~	~	~	~
Selenium	*109.00*	ND	~	~	~	~
Silver	ND	ND	~	~	~	~
Thallium	*10.70*	0.49	~	~	~	~
Zinc	ND	ND	~	~	~	~
General Alytical						
Cyanide, Total (ppm)	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
Result from diluted alysis.

CE 3.2282

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2283

Client ID:	PEC4-2B	PEC4-2C	PEC4-3A	PEC4-3B	PEC4-3C	PEC4-4A	PEC4-4
Sample Depth:	7.5-8	10-10.5	5.5-6	7.5-8	10-10.5	5.5-6	7.5-8
Lab ID:	1629-019	1629-020	1629-021	1629-022	1629-023	1629-024	1629-025
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	ND	ND
Trichloroethene	-	-	-	-	-	ND	ND
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	ND	ND
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	ND	ND
Dibromochloromethane	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	ND	ND
Total Xylenes	-	-	-	-	-	ND	ND
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	ND	ND
TOTAL TIC's:	-	-	-	-	-	19.23	21.25
TOTAL VO's & TIC's:	-	-	-	-	-	19.23	21.25
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
Benzoic acid	-	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	-	-	-	-	-	-	-
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	PEC4-2B	PEC4-2C	PEC4-3A	PEC4-3B	PEC4-3C	PEC4-4A	PEC4-4B
Sample Depth:	7.5-8	10-10.5	5.5-6	7.5-8	10-10.5	5.5-6	7.5-8
Lab ID:	1629-019	1629-020	1629-021	1629-022	1629-023	1629-024	1629-025
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]achlorobutadiene	-	-	-	-	-	-	-
[redacted]oro-3-methylphenol	-	-	-	-	-	-	-
[redacted]ehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	-	-	-	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	-	-	-	-	-	-	-
Benzidine	-	-	-	-	-	-	-
Pyrene	-	-	-	-	-	-	-
[redacted]Dimethylbenzidine	-	-	-	-	-	-	-
[redacted]ibenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-
Benzo[a]pyrene	-	-	-	-	-	-	-
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	-	-	-	-	-	-	-
Benzo[g,h,I]perylene	-	-	-	-	-	-	-
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
[redacted]-DDE	-	-	-	-	-	-	-
[redacted]drin	-	-	-	-	-	-	-
[redacted]in	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

Client ID:	PEC4-2B	PEC4-2C	PEC4-3A	PEC4-3B	PEC4-3C	PEC4-4A	PEC4-4B
Sample Depth:	7.5-8	10-10.5	5.5-6	7.5-8	10-10.5	5.5-6	7.5-8
Lab ID:	1629-019	1629-020	1629-021	1629-022	1629-023	1629-024	1629-025
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	~	~	~	~	~	~	~
Eosulfan sulfate	~	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~	~
Metals (ppm)							
Antimony	~	~	~	~	~	~	~
Arsenic	10.20	3.08	3.17	*44.90*	4.28	4.50	*22.60*
Beryllium	~	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~	~
Chromium	~	~	~	~	~	~	~
Copper	~	~	~	~	~	~	~
Lead	59.30	14.10	62.60	*614.00*	52.40	87.70	204.00
Mercury	~	~	~	~	~	~	~
Nickel	~	~	~	~	~	~	~
Selenium	~	~	~	~	~	~	~
Silver	~	~	~	~	~	~	~
Thallium	~	~	~	~	~	~	~
Zinc	~	~	~	~	~	~	~
General Alytical							
Cyanide, Total (ppm)	~	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.2285

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2286

Client ID:	PEC4-4C	PEC4-5	PEC98-1A	PEC98-1B	PEC98-2A	PEC98-2B
Sample Depth:	10-10.5	10-10.5	7.5-8	10-10.5	7.5-8	10-10.5
Lab ID:	1629-026	1629-027	1629-028	1629-029	1629-030	1629-031
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)						
Chloromethane	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-
Benzene	ND	-	ND	ND	-	-
Trichloroethene	ND	-	ND	ND	-	-
1,2-Dichloropropane	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-
Toluene	ND	-	ND	ND	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-
Tetrachloroethene	ND	-	ND	ND	-	-
Dibromochloromethane	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-
[illegible]ylbenzene	ND	-	ND	ND	-	-
[illegible]tal Xylenes	ND	-	ND	ND	-	-
Bromoform	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
TOTAL VO's:	ND	-	ND	ND	-	-
TOTAL TIC's:	ND	-	ND	ND	-	-
TOTAL VO's & TIC's:	ND	-	ND	ND	-	-
Semivolatiles (ppm)						
N-Nitrosodimethylamine	-	-	-	-	-	-
Phenol	-	-	-	-	-	-
Aniline	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-
[illegible]nzoic acid	-	-	-	-	-	-
[illegible]-Dichlorophenol	-	-	-	-	-	-
[illegible],2,4-Trichlorobenzene	-	-	-	-	-	-
Naphthalene	-	-	ND	ND	•	.351
4-Chloroaniline	-	-	-	-	-	-

Client ID:	PEC4-4C	PEC4-5	PEC98-1A	PEC98-1B	PEC98-2A	PEC98-2B
Sample Depth:	10-10.5	10-10.5	7.5-8	10-10.5	7.5-8	10-10.5
Lab ID:	1629-026	1629-027	1629-028	1629-029	1629-030	1629-031
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-
Acenaphthylene	-	-	ND	ND	*	ND
3-Nitroaniline	-	-	-	-	-	-
Acenaphthene	-	-	.299	ND	*	.593
2,4-Dinitrophenol	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-
Fluorene	-	-	.209	ND	*	.577
4-Chlorophenyl-phenylether	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-
Phenanthrene	-	-	2.770	1.200	-	9.260
Anthracene	-	-	.557	.253	-	1.370
Carbazole	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-
Flouranthene	-	-	5.280	1.960	-	10.100
Benzidine	-	-	-	-	-	-
Pyrene	-	-	5.110	2.550	-	11.300
3,3'-Dimethylbenzidine	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-
Benzo[a]anthracene	-	-	3.310	1.570	-	5.230
Chrysene	-	-	2.930	1.100	-	3.670
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	3.670	1.130	-	3.790
Benzo[k]fluoranthene	-	-	1.170	.551	-	1.790
Benzo[a]pyrene	-	-	2.430	.970	-	3.330
Indeno[1,2,3-cd]pyrene	-	-	.882	.407	-	1.220
Dibenz[a,h]anthracene	-	-	.297	ND	-	.402
Benzo[g,h,I]perylene	-	-	.867	.439	-	1.260
PCB's (ppm)						
Aroclor 1016	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-
Pesticides (ppm)						
alpha-BHC	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-
Erin	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-

CE 3.22

Client ID:	PEC4-4C	PEC4-5	PEC98-1A	PEC98-1B	PEC98-2A	PEC98-2B
Sample Depth:	10-10.5	10-10.5	7.5-8	10-10.5	7.5-8	10-10.5
Lab ID:	1629-026	1629-027	1629-028	1629-029	1629-030	1629-031
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]in aldehyde	-	-	-	-	-	-
[redacted]ulfan sulfate	-	-	-	-	-	-
[redacted]'-DDT	-	-	-	-	-	-
Erin Ketone	-	-	-	-	-	-
Methoxychlor	-	-	-	-	-	-
alpha-Chlordane	-	-	-	-	-	-
gamma-Chlordane	-	-	-	-	-	-
Toxaphene	-	-	-	-	-	-
Metals (ppm)						
Antimony	-	-	-	-	-	-
Arsenic	5.14	9.44	*43.60*	*133.00*	7.47	*73.60*
Beryllium	-	-	-	-	-	-
Cadmium	-	-	ND	-	ND	-
Chromium	-	-	-	-	-	-
Copper	-	-	-	-	-	-
Lead	27.80	56.00	270.00	*833.00*	249.00	*862.00*
Mercury	-	-	-	-	-	-
Nickel	-	-	-	-	-	-
Selenium	-	-	-	-	-	-
Silver	-	-	-	-	-	-
Thallium	-	-	-	-	-	-
Zinc	-	-	-	-	-	-
General Alytical						
Cyanide, Total (ppm)	-	-	-	-	-	-
Phenol (ppm)	-	-	-	-	-	-
Total Petroleum Hydrocarbons (ppm)	-	-	-	-	-	-

- = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
= Result from diluted alysis.

CE 3.2288

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2289

Client ID:	PEC98-3A	PEC98-3B	PEC98-4A	PEC98-4B	PEC98-5	PEC50-1A
Sample Depth:	7.5-8	10-10.5	7.5-8	10-10.5	10-10.5	8.5-9
Lab ID:	1629-032	1629-033	1629-034	1629-035	1629-036	1629-037
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)						
Chloromethane	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-
Benzene	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-
Toluene	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-
Total Xylenes	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-
Semivolatiles (ppm)						
N-Nitrosodimethylamine	-	-	-	-	-	-
Phenol	-	-	-	-	-	-
Aniline	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-
Benzoic acid	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-
Naphthalene	•	.456	ND	ND	ND	•
4-Chloroaniline	-	-	-	-	-	-

Client ID:	PEC98-3A	PEC98-3B	PEC98-4A	PEC98-4B	PEC98-5	PEC50-1A
Sample Depth:	7.5-8	10-10.5	7.5-8	10-10.5	10-10.5	8.5-9
Lab ID:	1629-032	1629-033	1629-034	1629-035	1629-036	1629-037
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]xachlorobutadiene	-	-	-	-	-	-
[redacted]hloro-3-methylphenol	-	-	-	-	-	-
[redacted]-Mehtylnapthalene	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-
Acenaphthylene	•	ND	ND	4.440	ND	•
3-Nitroaniline	-	-	-	-	-	-
Acenaphthene	•	1.430	.0888	ND	ND	•
2,4-Dinitrophenol	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-
Fluorene	•	1.170	.0882	.222	ND	•
4-Chlorophenyl-phenylether	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-
Phenanthrene	-	18.200	.831	1.390	1.720	-
Anthracene	-	3.500	.356	1.510	.338	-
Carbazole	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-
Flouranthene	-	20.000	1.86	9.920	2.520	-
Benzidine	-	-	-	-	-	-
[redacted]yrene	-	20.400	1.77	11.200	3.050	-
[redacted]'-Dimethylbenzidine	-	-	-	-	-	-
[redacted]tylbenzylphthalate	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-
Benzo[a]anthracene	-	7.680	.927	9.210	1.520	-
Chrysene	-	5.940	.835	8.020	1.100	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-
Benzo[b]fluoranthene	-	6.550	.754	16.800	1.090	-
Benzo[k]fluoranthene	-	2.630	.307	6.540	.440	-
Benzo[a]pyrene	-	5.630	.609	11.100	.957	-
Indeno[1,2,3-cd]pyrene	-	1.780	.351	3.400	.596	-
Dibenz[a,h]anthracene	-	.567	.109	.893	.179	-
Benzo[g,h,I]perylene	-	.1920	.409	4.010	.692	-
PCB's (ppm)						
Aroclor 1016	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-
Pesticides (ppm)						
alpha-BHC	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-
[redacted]'-DDE	-	-	-	-	-	-
[redacted]eldrin	-	-	-	-	-	-
Erin	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-

CE 3.2290

Client ID:	PEC98-3A	PEC98-3B	PEC98-4A	PEC98-4B	PEC98-5	PEC50-1A
Sample Depth:	7.5-8	10-10.5	7.5-8	10-10.5	10-10.5	8.5-9
Lab ID:	1629-032	1629-033	1629-034	1629-035	1629-036	1629-037
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	~	~	~	~	~	~
Eosulfan sulfate	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~
Metals (ppm)						
Antimony	~	~	~	~	~	~
Arsenic	*22.10*	*60.00*	9.02	*281.00*	*154.00*	~
Beryllium	~	~	~	~	~	~
Cadmium	~	~	0.23	~	~	~
Chromium	~	~	~	~	~	~
Copper	~	~	~	~	~	~
Lead	376.00	*1290.00*	89.30	*972.00*	145.00	~
Mercury	~	~	~	~	~	~
Nickel	~	~	~	~	~	~
Selenium	~	~	~	~	~	~
Silver	~	~	~	~	~	~
Thallium	~	~	~	~	~	~
Zinc	~	~	~	~	~	~
General Alytical						
Cyanide, Total (ppm)	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.229

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2292

Client ID:	PEC50-1B	PEC50-2A	PEC50-2B	PEC50-3A	PEC50-3B	PEC50-4A
Sample Depth:	10-10.5	8.5-9	10-10.5	8.5-9	10-10.5	8.5-9
Lab ID:	1629-038	1629-039	1629-040	1629-041	1629-042	1629-043
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)						
Chloromethane	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-
Benzene	-	-	-	-	-	ND
Trichloroethene	-	-	-	-	-	ND
1,2-Dichloropropane	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-
Toluene	-	-	-	-	-	ND
trans-1,3-Dichloropropene	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	ND
Dibromochloromethane	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-
[illegible]thylbenzene	-	-	-	-	-	ND
[illegible]l Xylenes	-	-	-	-	-	ND
Bromoform	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	ND
TOTAL TIC's:	-	-	-	-	-	ND
TOTAL VO's & TIC's:	-	-	-	-	-	ND
Semivolatiles (ppm)						
N-Nitrosodimethylamine	-	-	-	-	-	-
Phenol	-	-	-	-	-	-
Aniline	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-
[illegible]nzoic acid	-	-	-	-	-	-
[illegible]Dichlorophenol	-	-	-	-	-	-
[illegible],4-Trichlorobenzene	-	-	-	-	-	-
Naphthalene	ND	4.99	14.200	*	.474	*
4-Chloroaniline	-	-	-	-	-	-

Client ID:	PEC50-1B	PEC50-2A	PEC50-2B	PEC50-3A	PEC50-3B	PEC50-4A
Sample Depth:	10-10.5	8.5-9	10-10.5	8.5-9	10-10.5	8.5-9
Lab ID:	1629-038	1629-039	1629-040	1629-041	1629-042	1629-043
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-
Acenaphthylene	ND	ND	4.940	•	.378	•
3-Nitroaniline	-	-	-	-	-	-
Acenaphthene	1.830	9.38	15.200	•	1.810	•
2,4-Dinitrophenol	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-
Fluorene	1.200	7.21	16.100	•	1.300	•
4-Chlorophenyl-phenylether	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-
Phenanthrene	12.300	77.2	227.000	-	21.100	-
Anthracene	2.070	14.7	26.400	-	1.950	-
Carbazole	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-
Flouranthene	25.300	143	213.000	-	27.700	-
Benzidine	-	-	-	-	-	-
Pyrene	22.600	127	206.000	-	23.300	-
3,3'-Dimethylbenzidine	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-
Benzo[a]anthracene	25.700	83.1	66.000	-	12.100	-
Chrysene	18.300	62.4	59.700	-	9.530	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-
Benzo[b]fluoranthene	38.700	95.6	61.800	-	18.000	-
Benzo[k]fluoranthene	13.100	40.4	20.500	-	7.380	-
Benzo[a]pyrene	14.800	64.2	47.200	-	7.720	-
Indeno[1,2,3-cd]pyrene	1.570	26.7	16.500	-	.644	-
Dibenz[a,h]anthracene	ND	9.88	5.640	-	.207	-
Benzo[g,h,I]perylene	1.240	28.6	17.200	-	.582	-
PCB's (ppm)						
Aroclor 1016	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-
Pesticides (ppm)						
alpha-BHC	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-
Erin	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-

CE 3.2293

Client ID:	PEC50-1B	PEC50-2A	PEC50-2B	PEC50-3A	PEC50-3B	PEC50-4A
Sample Depth:	10-10.5	8.5-9	10-10.5	8.5-9	10-10.5	8.5-9
Lab ID:	1629-038	1629-039	1629-040	1629-041	1629-042	1629-043
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
[redacted] aldehyde	-	-	-	-	-	-
[redacted]lfan sulfate	-	-	-	-	-	-
4,4'-DDT	-	-	-	-	-	-
Erin Ketone	-	-	-	-	-	-
Methoxychlor	-	-	-	-	-	-
alpha-Chlordane	-	-	-	-	-	-
gamma-Chlordane	-	-	-	-	-	-
Toxaphene	-	-	-	-	-	-
Metals (ppm)						
Antimony	-	-	-	-	-	-
Arsenic	-	-	-	-	-	-
Beryllium	-	-	-	-	-	-
Cadmium	-	-	-	-	-	-
Chromium	-	-	-	-	-	-
Copper	-	-	-	-	-	-
Lead	-	-	-	-	-	-
Mercury	-	-	-	-	-	-
Nickel	-	-	-	-	-	-
Selenium	-	-	-	-	-	-
Silver	-	-	-	-	-	-
Thallium	-	-	-	-	-	-
Zinc	-	-	-	-	-	-
General Alytical						
Cyanide, Total (ppm)	-	-	-	-	-	-
Phenol (ppm)	-	-	-	-	-	-
Total Petroleum Hydrocarbons (ppm)	-	-	-	-	-	-

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on lividual Volatiles & Semiv
[redacted] Result from diluted alysis.

CE 3.2294

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2295

Client ID:	PEC50-4B	PEC50-5	PEC48-1A	PEC48-1B	PEC48-1C	PEC48-2A
Sample Depth:	10-10.5	10-10.5	7-7.5	8-8.5	10-10.5	7-7.5
Lab ID:	1629-044	1629-045	1629-046	1629-047	1629-048	1629-049
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)						
Chloromethane	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-
Benzene	ND	-	ND	ND	ND	-
Trichloroethene	ND	-	ND	ND	ND	-
1,2-Dichloropropane	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-
Toluene	ND	-	ND	ND	ND	-
trans-1,3-Dichloropropene	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-
Tetrachloroethene	ND	-	ND	ND	ND	-
Dibromochloromethane	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-
Ethylbenzene	ND	-	ND	ND	ND	-
Total Xylenes	ND	-	ND	ND	ND	-
Bromoform	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
TOTAL VO's:	ND	-	ND	ND	ND	-
TOTAL TIC's:	ND	-	ND	ND	ND	-
TOTAL VO's & TIC's:	ND	-	ND	ND	ND	-
Semivolatiles (ppm)						
N-Nitrosodimethylamine	-	-	-	-	-	-
Phenol	-	-	-	-	-	-
Aniline	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-
Benzoic acid	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-
Naphthalene	.527	1.840	•	.902	ND	ND
4-Chloroaniline	-	-	-	-	-	-

Client ID:	PEC50-4B	PEC50-5	PEC48-1A	PEC48-1B	PEC48-1C	PEC48-2A
Sample Depth:	10-10.5	10-10.5	7-7.5	8-8.5	10-10.5	7-7.5
Lab ID:	1629-044	1629-045	1629-046	1629-047	1629-048	1629-049
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]xachlorobutadiene	-	-	-	-	-	-
[redacted]hloro-3-methylphenol	-	-	-	-	-	-
[redacted]Mehtylnapthalene	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-
Acenaphthylene	ND	ND	•	.384	ND	ND
3-Nitroaniline	-	-	-	-	-	-
Acenaphthene	1.500	3.610	•	1.280	ND	ND
2,4-Dinitrophenol	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-
Fluorene	.969	2.690	•	1.200	ND	ND
4-Chlorophenyl-phenylether	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-
Phenanthrene	9.210	29.800	-	6.590	.444	.518
Anthracene	1.970	4.780	-	1.110	ND	.0987
Carbazole	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-
Flouranthene	18.500	57.700	-	10.300	.668	1
Benzidine	-	-	-	-	-	-
Pyrene	16.500	49.000	-	11.500	.798	1.15
[redacted]-Dimethylbenzidine	-	-	-	-	-	-
[redacted]tylbenzylphthalate	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-
Benzo[a]anthracene	9.550	34.900	-	4.760	.435	.758
Chrysene	8.840	26.200	-	4.400	.329	.649
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-
Benzo[b]fluoranthene	13.600	46.100	-	4.180	.306	.687
Benzo[k]fluoranthene	5.420	16.700	-	1.370	ND	.287
Benzo[a]pyrene	7.890	29.700	-	3.210	.270	.552
Indeno[1,2,3-cd]pyrene	1.800	8.730	-	1.770	.168	.357
Dibenz[a,h]anthracene	.642	3.210	-	.547	ND	.118
Benzo[g,h,i]perylene	1.470	7.900	-	.2060	.204	.391
PCB's (ppm)						
Aroclor 1016	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-
Pesticides (ppm)						
alpha-BHC	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-
[redacted]'-DDE	-	-	-	-	-	-
[redacted]drin	-	-	-	-	-	-
[redacted]rin	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-

CE 3.2296

Client ID:	PEC50-4B	PEC50-5	PEC48-1A	PEC48-1B	PEC48-1C	PEC48-2A
Sample Depth:	10-10.5	10-10.5	7-7.5	8-8.5	10-10.5	7-7.5
Lab ID:	1629-044	1629-045	1629-046	1629-047	1629-048	1629-049
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	~	~	~	~	~	~
Eosulfan sulfate	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~
Metals (ppm)						
Antimony	~	~	~	~	~	~
Arsenic	~	~	~	~	~	~
Beryllium	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~
Chromium	~	~	~	~	~	~
Copper	~	~	~	~	~	~
Lead	~	~	~	~	~	~
Mercury	~	~	~	~	~	~
Nickel	~	~	~	~	~	~
Selenium	~	~	~	~	~	~
Silver	~	~	~	~	~	~
Thallium	~	~	~	~	~	~
Zinc	~	~	~	~	~	~
General Alytical						
Cyanide, Total (ppm)	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on lividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.22

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2298

Client ID:	PEC48-2B	PEC48-2C	PEC48-3A	PEC48-3B	PEC48-3C	PEC48-4A
Sample Depth:	8-8.5	10-10.5	7-7.5	8-8.5	10-10.5	7-7.5
Lab ID:	1629-050	1629-051	1629-052	1629-053	1629-054	1629-055
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)						
Chloromethane	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-
Benzene	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-
Toluene	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-
[illegible]hylbenzene	-	-	-	-	-	-
[illegible]otal Xylenes	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-
Semivolatiles (ppm)						
N-Nitrosodimethylamine	-	-	-	-	-	-
Phenol	-	-	-	-	-	-
Aniline	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-
[illegible]nzoic acid	-	-	-	-	-	-
[illegible]-Dichlorophenol	-	-	-	-	-	-
[illegible],2,4-Trichlorobenzene	-	-	-	-	-	-
Naphthalene	17.500	ND	•	2.970	ND	.197
4-Chloroaniline	-	-	-	-	-	-

Client ID:	PEC48-2B	PEC48-2C	PEC48-3A	PEC48-3B	PEC48-3C	PEC48-4A
Sample Depth:	8-8.5	10-10.5	7-7.5	8-8.5	10-10.5	7-7.5
Lab ID:	1629-050	1629-051	1629-052	1629-053	1629-054	1629-055
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-
Acenaphthylene	ND	ND	•	2.230	ND	ND
3-Nitroaniline	-	-	-	-	-	-
Acenaphthene	34.300	ND	•	18.200	ND	.53
2,4-Dinitrophenol	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-
Fluorene	25.500	ND	•	12.700	ND	.389
4-Chlorophenyl-phenylether	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-
Phenanthrene	266.000	ND	-	109.000	ND	4
Anthracene	41.200	ND	-	23.100	ND	.792
Carbazole	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-
Flouranthene	427.000	ND	-	157.000	ND	8.09
Benzidine	-	-	-	-	-	-
Pyrene	356.000	.0678	-	140.000	ND	8.17
3,3'-Dimethylbenzidine	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-
Benzo[a]anthracene	235.000	.0696	-	62.600	ND	5.55
Chrysene	189.000	ND	-	48.900	ND	4.2
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-
Benzo[b]fluoranthene	272.000	ND	-	44.500	ND	6.08
Benzo[k]fluoranthene	98.400	ND	-	18.300	ND	2.58
Benzo[a]pyrene	192.000	ND	-	42.200	ND	4.27
Indeno[1,2,3-cd]pyrene	73.200	ND	-	21.700	ND	1.43
Dibenz[a,h]anthracene	24.800	ND	-	6.830	ND	.539
Benzo[g,h,i]perylene	69.500	ND	-	25.500	ND	1.39
PCB's (ppm)						
Aroclor 1016	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-
Pesticides (ppm)						
alpha-BHC	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-
Erin	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-

Client ID:	PEC48-2B	PEC48-2C	PEC48-3A	PEC48-3B	PEC48-3C	PEC48-4A
Sample Depth:	8-8.5	10-10.5	7-7.5	8-8.5	10-10.5	7-7.5
Lab ID:	1629-050	1629-051	1629-052	1629-053	1629-054	1629-055
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00	19-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]rin aldehyde	~	~	~	~	~	~
[redacted]ulfan sulfate	~	~	~	~	~	~
[redacted]'-DDT	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~
Metals (ppm)						
Antimony	~	~	~	~	~	~
Arsenic	~	~	~	~	~	~
Beryllium	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~
Chromium	~	~	~	~	~	~
Copper	~	~	~	~	~	~
Lead	~	~	~	~	~	~
Mercury	~	~	~	~	~	~
Nickel	~	~	~	~	~	~
Selenium	~	~	~	~	~	~
Silver	~	~	~	~	~	~
Thallium	~	~	~	~	~	~
Zinc	~	~	~	~	~	~
General Alytical						
Cyanide, Total (ppm)	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
[redacted] = Result from diluted alysis.

CE 3.2300

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2301

Client ID:	PEC48-4B	PEC48-4C	PEC48-5	PEC45-47-1A	PEC45-47-1B
Sample Depth:	8-8.5	10-10.5	10-10.5	5.5-6	8.5-9
Lab ID:	1629-056	1629-057	1629-058	1629-059	1629-060
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)					
Chloromethane	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-
Bromomethane	-	-	-	-	-
Chloroethane	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-
Acrolein	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-
Methylene Chloride	-	-	-	-	-
Acrylonitrile	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-
Chloroform	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-
Benzene	-	-	-	-	-
Trichloroethene	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-
Toluene	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-
Chlorobenzene	-	-	-	-	-
Ethylbenzene	-	-	-	-	-
Total Xylenes	-	-	-	-	-
Bromoform	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-
Semivolatiles (ppm)					
N-Nitrosodimethylamine	-	-	-	-	-
Phenol	-	-	-	-	-
Aniline	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-
2-Methylphenol	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-
4-Methylphenol	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-
Hexachloroethane	-	-	-	-	-
Nitrobenzene	-	-	-	-	-
Isophorone	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-
Benzoic acid	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-
Naphthalene	ND	ND	ND	4.57	3.440
4-Chloroaniline	-	-	-	-	-

Client ID:	PEC48-4B	PEC48-4C	PEC48-5	PEC45-47-1A	PEC45-47-1B
Sample Depth:	8-8.5	10-10.5	10-10.5	5.5-6	8.5-9
Lab ID:	1629-056	1629-057	1629-058	1629-059	1629-060
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil
[redacted]achlorobutadiene	-	-	-	-	-
[redacted]oro-3-methylphenol	-	-	-	-	-
[redacted]ethylnapthalene	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-
Acenaphthylene	ND	ND	ND	ND	ND
3-Nitroaniline	-	-	-	-	-
Acenaphthene	ND	.220	ND	6.81	5.380
2,4-Dinitrophenol	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-
Dibenzofuran	-	-	-	-	-
Diethylphthalate	-	-	-	-	-
Fluorene	ND	ND	ND	3.88	3.520
4-Chlorophenyl-phenylether	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-
Phenanthrene	.996	.973	ND	40.8	42.700
Anthracene	.211	ND	ND	6.29	6.490
Carbazole	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-
Flouranthene	1.970	1.420	ND	66.2	69.000
Benzidine	-	-	-	-	-
[redacted]yrene	1.700	1.490	ND	53.2	69.700
[redacted]Dimethylbenzidine	-	-	-	-	-
[redacted]lbenzylphthalate	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-
Benzo[a]anthracene	1.450	.976	ND	33.6	43.200
Chrysene	1.160	.758	ND	30	30.100
bis(2-Ethylhexyl)phthalate	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-
Benzo[b]fluoranthene	1.570	.798	ND	42.6	47.600
Benzo[k]fluoranthene	.557	.297	ND	15.8	16.600
Benzo[a]pyrene	.980	.576	ND	29.7	31.700
Indeno[1,2,3-cd]pyrene	.346	.208	ND	10.9	11.700
Dibenz[a,h]anthracene	ND	ND	ND	4.16	4.260
Benzo[g,h,I]perylene	.328	.244	ND	12.5	9.490
PCB's (ppm)					
Aroclor 1016	-	-	-	-	-
Aroclor 1221	-	-	-	-	-
Aroclor 1232	-	-	-	-	-
Aroclor 1242	-	-	-	-	-
Aroclor 1248	-	-	-	-	-
Aroclor 1254	-	-	-	-	-
Aroclor 1260	-	-	-	-	-
Pesticides (ppm)					
alpha-BHC	-	-	-	-	-
beta-BHC	-	-	-	-	-
gamma-BHC	-	-	-	-	-
delta-BHC	-	-	-	-	-
Heptachlor	-	-	-	-	-
Aldrin	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-
Eosulfan I	-	-	-	-	-
[redacted]DDE	-	-	-	-	-
[redacted]rin	-	-	-	-	-
[redacted]in	-	-	-	-	-
Eosulfan II	-	-	-	-	-
4,4'-DDD	-	-	-	-	-

CE 3.2302

Client ID:	PEC48-4B	PEC48-4C	PEC48-5	PEC45-47-1A	PEC45-47-1B
Sample Depth:	8-8.5	10-10.5	10-10.5	5.5-6	8.5-9
Lab ID:	1629-056	1629-057	1629-058	1629-059	1629-060
Date Sampled:	19-Mar-00	19-Mar-00	19-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	~	~	~	~	~
Eosulfan sulfate	~	~	~	~	~
4,4'-DDT	~	~	~	~	~
Erin Ketone	~	~	~	~	~
Methoxychlor	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~
Toxaphene	~	~	~	~	~
Metals (ppm)					
Antimony	~	~	~	~	~
Arsenic	~	~	~	~	~
Beryllium	~	~	~	~	~
Cadmium	~	~	~	~	~
Chromium	~	~	~	~	~
Copper	~	~	~	~	~
Lead	~	~	~	~	~
Mercury	~	~	~	~	~
Nickel	~	~	~	~	~
Selenium	~	~	~	~	~
Silver	~	~	~	~	~
Thallium	~	~	~	~	~
Zinc	~	~	~	~	~
General Alytical					
Cyanide, Total (ppm)	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.2

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2304

Client ID:	PEC45-47-1C	PEC45-47-2A	PEC45-47-2B	PEC45-47-2C	PEC45-47-3A
Sample Depth:	10-10.5	5.5-6	8.5-9	10-10.5	5.5-6
Lab ID:	1629-061	1629-062	1629-063	1629-064	1629-065
Date Sampled:	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)					
Chloromethane	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-
Bromomethane	-	-	-	-	-
Chloroethane	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-
Acrolein	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-
Methylene Chloride	-	-	-	-	-
Acrylonitrile	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-
Chloroform	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-
Benzene	-	ND	ND	ND	-
Trichloroethene	-	ND	ND	0.24	-
1,2-Dichloropropane	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-
Toluene	-	ND	ND	ND	-
trans-1,3-Dichloropropene	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-
Tetrachloroethene	-	ND	*9.92*	*14.60*	-
Dibromochloromethane	-	-	-	-	-
Chlorobenzene	-	-	-	-	-
Ethylbenzene	-	ND	ND	0.47	-
Total Xylenes	-	ND	ND	8.01	-
Bromoform	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-
TOTAL VO's:	-	ND	9.92	23.32	-
TOTAL TIC's:	-	ND	ND	ND	-
TOTAL VO's & TIC's:	-	ND	9.92	23.32	-
Semivolatiles (ppm)					
N-Nitrosodimethylamine	-	-	-	-	-
Phenol	-	-	-	-	-
Aniline	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-
2-Methylphenol	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-
4-Methylphenol	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-
Hexachloroethane	-	-	-	-	-
Nitrobenzene	-	-	-	-	-
Isophorone	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-
Benzoic acid	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-
Naphthalene	1.350	3.15	.232	ND	•
4-Chloroaniline	-	-	-	-	-

Client ID:	PEC45-47-1C	PEC45-47-2A	PEC45-47-2B	PEC45-47-2C	PEC45-47-3A
Sample Depth:	10-10.5	5.5-6	8.5-9	10-10.5	5.5-6
Lab ID:	1629-061	1629-062	1629-063	1629-064	1629-065
Date Sampled:	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-
2,4,6-Trichiorophenol	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-
Acenaphthylene	ND	.549	ND	ND	•
3-Nitroaniline	-	-	-	-	-
Acenaphthene	1.950	4.68	.345	ND	•
2,4-Dinitrophenol	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-
Dibenzofuran	-	-	-	-	-
Diethylphthalate	-	-	-	-	-
Fluorene	1.280	3.31	.256	ND	•
4-Chlorophenyl-phenylether	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-
Phenanthrene	14.600	28.7	4.710	3.490	-
Anthracene	2.240	5.53	.821	.237	-
Carbazole	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-
Flouranthene	23.800	47.9	19.400	5.450	-
Benzidine	-	-	-	-	-
Pyrene	18.100	38.6	5.400	1.900	-
3,3'-Dimethylbenzidine	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-
Benzo[a]anthracene	12.600	22.6	3.210	2.710	-
Chrysene	9.640	22	7.370	2.850	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-
Benzo[b]fluoranthene	14.300	26.6	9.510	.2490	-
Benzo[k]fluoranthene	5.100	10	1.560	.768	-
Benzo[a]pyrene	9.600	20	2.080	.616	-
Indeno[1,2,3-cd]pyrene	3.830	7.8	.373	.522	-
Dibenz[a,h]anthracene	1.450	2.81	.174	.257	-
Benzo[g,h,I]perylene	3.850	8.57	.263	433	-
PCB's (ppm)					
Aroclor 1016	-	-	-	-	-
Aroclor 1221	-	-	-	-	-
Aroclor 1232	-	-	-	-	-
Aroclor 1242	-	-	-	-	-
Aroclor 1248	-	-	-	-	-
Aroclor 1254	-	-	-	-	-
Aroclor 1260	-	-	-	-	-
Pesticides (ppm)					
alpha-BHC	-	-	-	-	-
beta-BHC	-	-	-	-	-
gamma-BHC	-	-	-	-	-
delta-BHC	-	-	-	-	-
Heptachlor	-	-	-	-	-
Aldrin	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-
Eosulfan I	-	-	-	-	-
4,4'-DDE	-	-	-	-	-
Dieldrin	-	-	-	-	-
Erin	-	-	-	-	-
Eosulfan II	-	-	-	-	-
4,4'-DDD	-	-	-	-	-

CE 3.2305

Client ID:	PEC45-47-1C	PEC45-47-2A	PEC45-47-2B	PEC45-47-2C	PEC45-47-3A
Sample Depth:	10-10.5	5.5-6	8.5-9	10-10.5	5.5-6
Lab ID:	1629-061	1629-062	1629-063	1629-064	1629-065
Date Sampled:	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil
[redacted]in aldehyde	-	-	-	-	-
[redacted]ulfan sulfate	-	-	-	-	-
4,4'-DDT	-	-	-	-	-
Erin Ketone	-	-	-	-	-
Methoxychlor	-	-	-	-	-
alpha-Chlordane	-	-	-	-	-
gamma-Chlordane	-	-	-	-	-
Toxaphene	-	-	-	-	-
Metals (ppm)					
Antimony	-	-	-	-	-
Arsenic	-	-	-	-	-
Beryllium	-	-	-	-	-
Cadmium	-	-	-	-	-
Chromium	-	-	-	-	-
Copper	-	-	-	-	-
Lead	-	-	-	-	-
Mercury	-	-	-	-	-
Nickel	-	-	-	-	-
Selenium	-	-	-	-	-
Silver	-	-	-	-	-
Thallium	-	-	-	-	-
Zinc	-	-	-	-	-
General Alytical					
Cyanide, Total (ppm)	-	-	-	-	-
Phenol (ppm)	-	-	-	-	-
Total Petroleum Hydrocarbons (ppm)	-	-	-	-	-

- = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on lividual Volatiles & Semiv
= Result from diluted alysis.

CE 3.2306

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2307

Client ID:	PEC45-47-3B	PEC45-47-3C	PEC45-47-4A	PEC45-47-4B	PRC45-47-4C
Sample Depth:	8.5-9	10-10.5	5.5-6	8.5-9	10-10.5
Lab ID:	1629-066	1629-067	1629-068	1629-069	1629-070
Date Sampled:	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)					
Chloromethane	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-
Bromomethane	-	-	-	-	-
Chloroethane	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-
Acrolein	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-
Methylene Chloride	-	-	-	-	-
Acrylonitrile	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-
Chloroform	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-
Benzene	-	-	-	-	-
Trichloroethene	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-
Toluene	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-
Chlorobenzene	-	-	-	-	-
Ethylbenzene	-	-	-	-	-
Total Xylenes	-	-	-	-	-
Bromoform	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-
Semivolatiles (ppm)					
N-Nitrosodimethylamine	-	-	-	-	-
Phenol	-	-	-	-	-
Aniline	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-
2-Methylphenol	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-
4-Methylphenol	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-
Hexachloroethane	-	-	-	-	-
Nitrobenzene	-	-	-	-	-
Isophorone	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-
Benzoic acid	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-
Naphthalene	ND	ND	*	ND	ND
4-Chloroaniline	-	-	-	-	-

Client ID:	PEC45-47-3B	PEC45-47-3C	PEC45-47-4A	PEC45-47-4B	PRC45-47-4C
Sample Depth:	8.5-9	10-10.5	5.5-6	8.5-9	10-10.5
Lab ID:	1629-066	1629-067	1629-068	1629-069	1629-070
Date Sampled:	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil
[redacted]chlorobutadiene	-	-	-	-	-
[redacted]loro-3-methylphenol	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-
Acenaphthylene	ND	ND	*	.139	ND
3-Nitroaniline	-	-	-	-	-
Acenaphthene	.912	.300	*	.305	.233
2,4-Dinitrophenol	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-
Dibenzofuran	-	-	-	-	-
Diethylphthalate	-	-	-	-	-
Fluorene	ND	.205	*	.176	.166
4-Chlorophenyl-phenylether	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-
Phenanthrene	7.130	1.810	-	2.910	1.370
Anthracene	1.340	.354	-	.534	.263
Carbazole	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-
Flouranthene	16.000	3.340	-	6.160	2.560
Benzidine	-	-	-	-	-
[redacted]ene	20.500	2.770	-	6.260	2.320
[redacted]Dimethylbenzidine	-	-	-	-	-
[redacted]tylbenzylphthalate	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-
Benzo[a]anthracene	12.800	1.990	-	4.050	1.520
Chrysene	13.300	1.910	-	3.940	1.650
bis(2-Ethylhexyl)phthalate	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-
Benzo[b]fluoranthene	25.600	1.990	-	4.720	1.550
Benzo[k]fluoranthene	7.450	.638	-	1.720	.597
Benzo[a]pyrene	14.300	1.570	-	3.460	1.270
Indeno[1,2,3-cd]pyrene	4.190	1.140	-	1.970	.987
Dibenz[a,h]anthracene	1.470	.391	-	.687	.332
Benzo[g,h,I]perylene	6.470	1.520	-	2.100	1.270
PCB's (ppm)					
Aroclor 1016	-	-	-	-	-
Aroclor 1221	-	-	-	-	-
Aroclor 1232	-	-	-	-	-
Aroclor 1242	-	-	-	-	-
Aroclor 1248	-	-	-	-	-
Aroclor 1254	-	-	-	-	-
Aroclor 1260	-	-	-	-	-
Pesticides (ppm)					
alpha-BHC	-	-	-	-	-
beta-BHC	-	-	-	-	-
gamma-BHC	-	-	-	-	-
delta-BHC	-	-	-	-	-
Heptachlor	-	-	-	-	-
Aldrin	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-
Eosulfan I	-	-	-	-	-
[redacted]DDE	-	-	-	-	-
[redacted]drin	-	-	-	-	-
Erin	-	-	-	-	-
Eosulfan II	-	-	-	-	-
4,4'-DDD	-	-	-	-	-

CE 3.2308

Client ID:	PEC45-47-3B	PEC45-47-3C	PEC45-47-4A	PEC45-47-4B	PRC45-47-4C
Sample Depth:	8.5-9	10-10.5	5.5-6	8.5-9	10-10.5
Lab ID:	1629-066	1629-067	1629-068	1629-069	1629-070
Date Sampled:	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	-	-	-	-	-
Eosulfan sulfate	-	-	-	-	-
4,4'-DDT	-	-	-	-	-
Erin Ketone	-	-	-	-	-
Methoxychlor	-	-	-	-	-
alpha-Chlordane	-	-	-	-	-
gamma-Chlordane	-	-	-	-	-
Toxaphene	-	-	-	-	-
Metals (ppm)					
Antimony	-	-	-	-	-
Arsenic	-	-	-	-	-
Beryllium	-	-	-	-	-
Cadmium	-	-	-	-	-
Chromium	-	-	-	-	-
Copper	-	-	-	-	-
Lead	-	-	-	-	-
Mercury	-	-	-	-	-
Nickel	-	-	-	-	-
Selenium	-	-	-	-	-
Silver	-	-	-	-	-
Thallium	-	-	-	-	-
Zinc	-	-	-	-	-
General Alytical					
Cyanide, Total (ppm)	-	-	-	-	-
Phenol (ppm)	-	-	-	-	-
Total Petroleum Hydrocarbons (ppm)	-	-	-	-	-

- = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.2309

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2310

Client ID:	PEC45	PEC47	PEC-C2-10	PEC46-1A	PEC46-1B	PEC46-2A
Sample Depth:	10-10.5	10-10.5	10-10.5	6.5-7	10-10.5	6.5-7
Lab ID:	1629-071	1629-072	1629-073	1629-075	1629-076	1629-077
Date Sampled:	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)						
Chloromethane	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-
Benzene	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-
Toluene	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-
[illegible]hlorobenzene	-	-	-	-	-	-
[illegible]ylbenzene	-	-	-	-	-	-
[illegible]tal Xylenes	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-
Semivolatiles (ppm)						
N-Nitrosodimethylamine	-	-	-	-	-	-
Phenol	-	-	-	-	-	-
Aniline	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-
[illegible]nzoic acid	-	-	-	-	-	-
[illegible]-Dichlorophenol	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-
Naphthalene	ND	ND	ND	•	ND	•
4-Chloroaniline	-	-	-	-	-	-

Client ID:	PEC45	PEC47	PEC-C2-10	PEC46-1A	PEC46-1B	PEC46-2A
Sample Depth:	10-10.5	10-10.5	10-10.5	6.5-7	10-10.5	6.5-7
Lab ID:	1629-071	1629-072	1629-073	1629-075	1629-076	1629-077
Date Sampled:	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-
Acenaphthylene	ND	ND	ND	•	ND	•
3-Nitroaniline	-	-	-	-	-	-
Acenaphthene	ND	.147	.183	•	ND	•
2,4-Dinitrophenol	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-
Fluorene	ND	ND	ND	•	ND	•
4-Chlorophenyl-phenylether	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-
Phenanthrene	.296	1.240	1.780	-	.776	-
Anthracene	ND	2.14	.316	-	ND	-
Carbazole	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-
Flouranthene	.758	2.000	4.480	-	1.030	-
Benzidine	-	-	-	-	-	-
Pyrene	1.110	2.330	5.160	-	1.310	-
3,3'-Dimethylbenzidine	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-
Benzo[a]anthracene	1.200	1.390	2.990	-	.952	-
Chrysene	1.140	1.130	2.970	-	.637	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-
Benzo[b]fluoranthene	1.630	1.160	2.920	-	.790	-
Benzo[k]fluoranthene	.684	.593	.909	-	.266	-
Benzo[a]pyrene	1.270	1.040	2.040	-	.606	-
Indeno[1,2,3-cd]pyrene	1.250	.679	1.530	-	.558	-
Dibenz[a,h]anthracene	.401	.223	.529	-	.177	-
Benzo[g,h,i]perylene	1.430	.861	1.930	-	.704	-
PCB's (ppm)						
Aroclor 1016	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-
Pesticides (ppm)						
alpha-BHC	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-
Erin	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-

CE 3.2311

Client ID:	PEC45	PEC47	PEC-C2-10	PEC46-1A	PEC46-1B	PEC46-2A
Sample Depth:	10-10.5	10-10.5	10-10.5	6.5-7	10-10.5	6.5-7
Lab ID:	1629-071	1629-072	1629-073	1629-075	1629-076	1629-077
Date Sampled:	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
[illegible]aldehyde	~	~	~	~	~	~
[illegible]fan sulfate	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~
Metals (ppm)						
Antimony	~	~	~	~	~	~
Arsenic	~	~	~	~	~	~
Beryllium	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~
Chromium	~	~	~	~	~	~
Copper	~	~	~	~	~	~
Lead	~	~	~	~	~	~
Mercury	~	~	~	~	~	~
Nickel	~	~	~	~	~	~
Selenium	~	~	~	~	~	~
Silver	~	~	~	~	~	~
Thallium	~	~	~	~	~	~
Zinc	~	~	~	~	~	~
General Alytical						
Cyanide, Total (ppm)	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on lividual Volatiles & Semiv
Result from diluted alysis.

CE 3.2312

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2313

Client ID:	PEC46-2B	PEC46-3A	PEC46-3B	PEC46-4A	PEC46-4B	PEC46
Sample Depth:	10-10.5	6.5-7	10-10.5	6.5-7	10-10.5	10-10.5
Lab ID:	1629-078	1629-079	1629-080	1629-081	1629-082	1629-083
Date Sampled:	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)						
Chloromethane	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-
Benzene	-	-	-	ND	ND	-
Trichloroethene	-	-	-	ND	ND	-
1,2-Dichloropropane	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-
Toluene	-	-	-	ND	ND	-
trans-1,3-Dichloropropene	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-
Tetrachloroethene	-	-	-	ND	1.55	-
Dibromochloromethane	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-
Ethylbenzene	-	-	-	ND	ND	-
Total Xylenes	-	-	-	ND	ND	-
Bromoform	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
TOTAL VO's:	-	-	-	ND	1.55	-
TOTAL TIC's:	-	-	-	ND	ND	-
TOTAL VO's & TIC's:	-	-	-	ND	1.55	-
Semivolatiles (ppm)						
N-Nitrosodimethylamine	-	-	-	-	-	-
Phenol	-	-	-	-	-	-
Aniline	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-
Benzoic acid	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-
Naphthalene	ND	8.43	ND	*	ND	ND
4-Chloroaniline	-	-	-	-	-	-

Client ID:	PEC46-2B	PEC46-3A	PEC46-3B	PEC46-4A	PEC46-4B	PEC46
Sample Depth:	10-10.5	6.5-7	10-10.5	6.5-7	10-10.5	10-10.5
Lab ID:	1629-078	1629-079	1629-080	1629-081	1629-082	1629-083
Date Sampled:	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]achlorobutadiene	-	-	-	-	-	-
[redacted]loro-3-methylphenol	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-
Acenaphthylene	ND	ND	ND	*	ND	ND
3-Nitroaniline	-	-	-	-	-	-
Acenaphthene	ND	11	ND	*	ND	ND
2,4-Dinitrophenol	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-
Fluorene	ND	7.02	ND	*	ND	ND
4-Chlorophenyl-phenylether	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-
Phenanthrene	.502	66	2.040	-	.691	ND
Anthracene	ND	10.5	.415	-	ND	ND
Carbazole	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-
Flouranthene	.776	107	3.340	-	1.470	.291
Benzidine	-	-	-	-	-	-
[redacted]ene	.890	101	4.050	-	2.020	.359
[redacted]-Dimethylbenzidine	-	-	-	-	-	-
[redacted]utylbenzylphthalate	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-
Benzo[a]anthracene	.725	53.6	2.120	-	1.450	.287
Chrysene	.535	47.6	1.550	-	.825	.218
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-
Benzo[b]fluoranthene	.607	72.7	1.510	-	1.200	.217
Benzo[k]fluoranthene	.270	29.2	.548	-	.494	ND
Benzo[a]pyrene	.472	48.2	1.370	-	1.030	ND
Indeno[1,2,3-cd]pyrene	.310	12.8	.790	-	.740	ND
Dibenz[a,h]anthracene	ND	1.34	.227	-	.235	ND
Benzo[g,h,I]perylene	.368	14.1	.1030	-	.959	ND
PCB's (ppm)						
Aroclor 1016	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-
Pesticides (ppm)						
alpha-BHC	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-
[redacted]-DDE	-	-	-	-	-	-
[redacted]ldrin	-	-	-	-	-	-
Erin	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-

CE 3.2314

Client ID:	PEC46-2B	PEC46-3A	PEC46-3B	PEC46-4A	PEC46-4B	PEC46
Sample Depth:	10-10.5	6.5-7	10-10.5	6.5-7	10-10.5	10-10.5
Lab ID:	1629-078	1629-079	1629-080	1629-081	1629-082	1629-083
Date Sampled:	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00	20-Mar-00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	~	~	~	~	~	~
Eosulfan sulfate	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~
Metals (ppm)						
Antimony	~	~	~	~	~	~
Arsenic	~	~	~	~	~	~
Beryllium	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~
Chromium	~	~	~	~	~	~
Copper	~	~	~	~	~	~
Lead	~	~	~	~	~	~
Mercury	~	~	~	~	~	~
Nickel	~	~	~	~	~	~
Selenium	~	~	~	~	~	~
Silver	~	~	~	~	~	~
Thallium	~	~	~	~	~	~
Zinc	~	~	~	~	~	~
General Alytical						
Cyanide, Total (ppm)	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on fividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.2315

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2316

Client ID:	C3-01A	C3-01B	C3-01C	C3-01D	C3-2A	C3-2B	C3-2C
Sample Depth:	3.5-4	4-4.5	9.5-10	13.5-14	5.5-6	7.5-8	9.5-10
Lab ID:	3472-001	3472-002	3472-003	3472-004	3472-005	3472-006	3472-007
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
[illegible]lorobenzene	-	-	-	-	-	-	-
[illegible]ylbenzene	-	-	-	-	-	-	-
Total Xylenes	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-	-
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
[illegible]zoic acid	-	-	-	-	-	-	-
[illegible]-Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	-	-	-	-	-	-	-
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	C3-01A	C3-01B	C3-01C	C3-01D	C3-2A	C3-2B	C3-2C
Sample Depth:	3.5-4	4-4.5	9.5-10	13.5-14	5.5-6	7.5-8	9.5-10
Lab ID:	3472-001	3472-002	3472-003	3472-004	3472-005	3472-006	3472-007
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	-	-	-	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	-	-	-	-	-	-	-
Benzidine	-	-	-	-	-	-	-
Pyrene	-	-	-	-	-	-	-
3,3'-Dimethylbenzidine	-	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-
Benzo[a]pyrene	-	-	-	-	-	-	-
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	-	-	-	-	-	-	-
Benzo[g,h,I]perylene	-	-	-	-	-	-	-
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

CE 3.2317

Client ID:	C3-01A	C3-01B	C3-01C	C3-01D	C3-2A	C3-2B	C3-2C
Sample Depth:	3.5-4	4-4.5	9.5-10	13.5-14	5.5-6	7.5-8	9.5-10
Lab ID:	3472-001	3472-002	3472-003	3472-004	3472-005	3472-006	3472-007
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]in aldehyde	-	-	-	-	-	-	-
[redacted]sulfan sulfate	-	-	-	-	-	-	-
4,4'-DDT	-	-	-	-	-	-	-
Erin Ketone	-	-	-	-	-	-	-
Methoxychlor	-	-	-	-	-	-	-
alpha-Chlordane	-	-	-	-	-	-	-
gamma-Chlordane	-	-	-	-	-	-	-
Toxaphene	-	-	-	-	-	-	-
Metals (ppm)							
Antimony	-	-	-	-	-	-	-
Arsenic	16.80	*224.00*	*159.00*	3.08	7.92	*251.00*	*65700.00*
Beryllium	-	-	-	-	-	-	-
Cadmium	-	-	-	-	-	-	-
Chromium	-	-	-	-	-	-	-
Copper	-	-	-	-	-	-	-
Lead	267.00	*1610.00*	*6310.00*	50.20	110.00	*574.00*	*2930.00*
Mercury	-	-	-	-	-	-	-
Nickel	-	-	-	-	-	-	-
Selenium	-	-	-	-	-	-	-
Silver	-	-	-	-	-	-	-
Thallium	-	-	-	-	-	-	-
Zinc	-	-	-	-	-	-	-
General Alytical							
Cyanide, Total (ppm)	-	-	-	-	-	-	-
Phenol (ppm)	-	-	-	-	-	-	-
Total Petroleum Hydrocarbons (ppm)	-	-	-	-	-	-	-

- = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
= Result from diluted alysis.

CE 3.2318

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2319

Client ID:	C3-2D	C3-3A	C3-3B	C3-3C	C3-16A	C3-4A	C3-4B
Sample Depth:	11.5-12	5.5-6	7.5-8	14.5-15	5.5-6	5.5-6	6.5-7
Lab ID:	3472-008	3472-009	3472-010	3472-011	3472-012	3472-013	3472-014
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-
Total Xylenes	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-	-
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
Benzoic acid	-	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	-	-	-	-	-	-	-
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	C3-2D	C3-3A	C3-3B	C3-3C	C3-16A	C3-4A	C3-4B
Sample Depth:	11.5-12	5.5-6	7.5-8	14.5-15	5.5-6	5.5-6	6.5-7
Lab ID:	3472-008	3472-009	3472-010	3472-011	3472-012	3472-013	3472-014
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]xachlorobutadiene	-	-	-	-	-	-	-
[redacted]hloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethyiphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	-	-	-	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	-	-	-	-	-	-	-
Benzidine	-	-	-	-	-	-	-
[redacted]yrene	-	-	-	-	-	-	-
[redacted]'-Dimethylbenzidine	-	-	-	-	-	-	-
[redacted]utylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-
Benzo[a]pyrene	-	-	-	-	-	-	-
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	-	-	-	-	-	-	-
Benzo[g,h,I]perylene	-	-	-	-	-	-	-
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
[redacted]'-DDE	-	-	-	-	-	-	-
[redacted]eldrin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

CE 3.2320

Client ID:	C3-2D	C3-3A	C3-3B	C3-3C	C3-16A	C3-4A	C3-4B
Sample Depth:	11.5-12	5.5-6	7.5-8	14.5-15	5.5-6	5.5-6	6.5-7
Lab ID:	3472-008	3472-009	3472-010	3472-011	3472-012	3472-013	3472-014
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	~	~	~	~	~	~	~
Eosulfan sulfate	~	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~	~
Metals (ppm)							
Antimony	~	~	~	~	~	~	~
Arsenic	*1680.00*	*104.00*	*2240.00*	*32.20*	15.30	14.80	*352.00*
Beryllium	~	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~	~
Chromium	~	~	~	~	~	~	~
Copper	~	~	~	~	~	~	~
Lead	34.70	158.00	*2060.00*	29.50	155.00	84.00	*1070.00*
Mercury	~	~	~	~	~	~	~
Nickel	~	~	~	~	~	~	~
Selenium	~	~	~	~	~	~	~
Silver	~	~	~	~	~	~	~
Thallium	~	~	~	~	~	~	~
Zinc	~	~	~	~	~	~	~
General Alytical							
Cyanide, Total (ppm)	~	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.2321

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD98:876642
Lab Case No.: 10990-2881

CE 3.2322

Client ID:	C3-4C	C3-4D	C3-5A	C3-5B	C3-5C	C3-5D	C3-6A
Sample Depth:	9.5-10	14.5-15	5.5-6	7.5-8	14.5-15	15.5-16	5.5-6
Lab ID:	3472-015	3472-016	3472-017	3472-018	3472-019	3472020	3472-021
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
[redacted]lorobenzene	-	-	-	-	-	-	-
[redacted]lbenzene	-	-	-	-	-	-	-
[redacted]al Xylenes	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-	-
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
[redacted]zoic acid	-	-	-	-	-	-	-
[redacted]Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	-	-	-	-	-	-	-
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	C3-4C	C3-4D	C3-5A	C3-5B	C3-5C	C3-5D	C3-6A
Sample Depth:	9.5-10	14.5-15	5.5-6	7.5-8	14.5-15	15.5-16	5.5-6
Lab ID:	3472-015	3472-016	3472-017	3472-018	3472-019	3472020	3472-021
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	-	-	-	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	-	-	-	-	-	-	-
Benzidine	-	-	-	-	-	-	-
Pyrene	-	-	-	-	-	-	-
3,3'-Dimethylbenzidine	-	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-
Benzo[a]pyrene	-	-	-	-	-	-	-
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	-	-	-	-	-	-	-
Benzo[g,h,I]perylene	-	-	-	-	-	-	-
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

CE 3.2320

Client ID:	C3-4C	C3-4D	C3-5A	C3-5B	C3-5C	C3-5D	C3-6A
Sample Depth:	9.5-10	14.5-15	5.5-6	7.5-8	14.5-15	15.5-16	5.5-6
Lab ID:	3472-015	3472-016	3472-017	3472-018	3472-019	3472020	3472-021
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
[illegible]in aldehyde	~	~	~	~	~	~	~
[illegible]ulfan sulfate	~	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~	~
Metals (ppm)							
Antimony	~	~	~	~	~	~	~
Arsenic	*853.00*	*1830.00*	*22.30*	*549.00*	*7130.00*	*4740.00*	*22.00*
Beryllium	~	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~	~
Chromium	~	~	~	~	~	~	~
Copper	~	~	~	~	~	~	~
Lead	*17300.00*	*1040.00*	98.90	*1680.00*	*16000.00*	126.00	170.00
Mercury	~	~	~	~	~	~	~
Nickel	~	~	~	~	~	~	~
Selenium	~	~	~	~	~	~	~
Silver	~	~	~	~	~	~	~
Thallium	~	~	~	~	~	~	~
Zinc	~	~	~	~	~	~	~
General Alytical							
Cyanide, Total (ppm)	~	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
= Result from diluted alysis.

CE 3.2324

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

Client ID:	C3-6B	C3-6C	C3-6D	C3-7A	C3-7B	C3-7C	C3-7D
Sample Depth:	7.5-8	11.5-12	13.5-14	5.5-6	7.5-8	11.5-12	13.5-14
Lab ID:	3472-022	3472-023	3472-024	3472-025	3472-026	3472-027	3472-028
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-
Total Xylenes	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-	-
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
Benzoic acid	-	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	-	-	-	-	-	-	-
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	C3-6B	C3-6C	C3-6D	C3-7A	C3-7B	C3-7C	C3-7D
Sample Depth:	7.5-8	11.5-12	13.5-14	5.5-6	7.5-8	11.5-12	13.5-14
Lab ID:	3472-022	3472-023	3472-024	3472-025	3472-026	3472-027	3472-028
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]achlorobutadiene	-	-	-	-	-	-	-
[redacted]hloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	-	-	-	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	-	-	-	-	-	-	-
Benzidine	-	-	-	-	-	-	-
[redacted]rene	-	-	-	-	-	-	-
[redacted]-Dimethylbenzidine	-	-	-	-	-	-	-
[redacted]tylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-
Benzo[a]pyrene	-	-	-	-	-	-	-
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	-	-	-	-	-	-	-
Benzo[g,h,i]perylene	-	-	-	-	-	-	-
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
[redacted]-DDE	-	-	-	-	-	-	-
[redacted]drin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

CE 3.2326

Client ID:	C3-6B	C3-6C	C3-6D	C3-7A	C3-7B	C3-7C	C3-7D
Sample Depth:	7.5-8	11.5-12	13.5-14	5.5-6	7.5-8	11.5-12	13.5-14
Lab ID:	3472-022	3472-023	3472-024	3472-025	3472-026	3472-027	3472-028
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	~	~	~	~	~	~	~
Eosulfan sulfate	~	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~	~
Metals (ppm)							
Antimony	~	~	~	~	~	~	~
Arsenic	*244.00*	*2550.00*	*4320.00*	*28.20*	*139.00*	*5000.00*	*69.80*
Beryllium	~	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~	~
Chromium	~	~	~	~	~	~	~
Copper	~	~	~	~	~	~	~
Lead	*1540.00*	*5280.00*	141.00	198.00	*3030.00*	*14900.00*	196.00
Mercury	~	~	~	~	~	~	~
Nickel	~	~	~	~	~	~	~
Selenium	~	~	~	~	~	~	~
Silver	~	~	~	~	~	~	~
Thallium	~	~	~	~	~	~	~
Zinc	~	~	~	~	~	~	~
General Alytical							
Cyanide, Total (ppm)	~	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.2327

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2328

Client ID:	C3-8A	C3-8B	C3-8C	C3-8D	C3-9A	C3-9B	C3-9C
Sample Depth:	5.5-6	7.5-8	11.5-12	12.5-13	5.5-6	7.5-8	11.5-12
Lab ID:	3472-029	3472-030	3472-031	3472-032	3472-033	3472-034	3472-035
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-
[illegible]ylbenzene	-	-	-	-	-	-	-
[illegible]tal Xylenes	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-	-
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
[illegible]nzoic acid	-	-	-	-	-	-	-
[illegible]-Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	-	-	-	-	-	-	-
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	C3-8A	C3-8B	C3-8C	C3-8D	C3-9A	C3-9B	C3-9C
Sample Depth:	5.5-6	7.5-8	11.5-12	12.5-13	5.5-6	7.5-8	11.5-12
Lab ID:	3472-029	3472-030	3472-031	3472-032	3472-033	3472-034	3472-035
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	-	-	-	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	-	-	-	-	-	-	-
Benzidine	-	-	-	-	-	-	-
Pyrene	-	-	-	-	-	-	-
3,3'-Dimethylbenzidine	-	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-
Benzo[a]pyrene	-	-	-	-	-	-	-
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	-	-	-	-	-	-	-
Benzo[g,h,i]perylene	-	-	-	-	-	-	-
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

CE 3.2529

Client ID:	C3-8A	C3-8B	C3-8C	C3-8D	C3-9A	C3-9B	C3-9C
Sample Depth:	5.5-6	7.5-8	11.5-12	12.5-13	5.5-6	7.5-8	11.5-12
Lab ID:	3472-029	3472-030	3472-031	3472-032	3472-033	3472-034	3472-035
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]in aldehyde	~	~	~	~	~	~	~
[redacted]ulfan sulfate	~	~	~	~	~	~	~
[redacted]'-DDT	~	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~	~
Metals (ppm)							
Antimony	~	~	~	~	~	~	~
Arsenic	10.40	*2250.00*	*1840.00*	*938.00*	17.20	*535.00*	*1390.00*
Beryllium	~	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~	~
Chromium	~	~	~	~	~	~	~
Copper	~	~	~	~	~	~	~
Lead	81.90	*2830.00*	*15500.00*	326.00	140.00	*4460.00*	*43400.00*
Mercury	~	~	~	~	~	~	~
Nickel	~	~	~	~	~	~	~
Selenium	~	~	~	~	~	~	~
Silver	~	~	~	~	~	~	~
Thallium	~	~	~	~	~	~	~
Zinc	~	~	~	~	~	~	~
General Alytical							
Cyanide, Total (ppm)	~	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on [redacted]ividual Volatiles & Semiv
[redacted] = Result from diluted alysis.

CE 3.2330

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2331

Client ID:	C3-9D	C3-10A	C3-10B	C3-10C	C3-11A	C3-11B	C3-11C
Sample Depth:	12.5-13	5.5-6	6.5-7	7.5-8	5.5-6	6.5-7	11.5-12
Lab ID:	3472-036	3472-037	3472-038	3472-039	3472-040	3472-041	3472-042
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-
Total Xylenes	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-	-
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
Benzoic acid	-	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	-	-	-	-	-	-	-
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	C3-9D	C3-10A	C3-10B	C3-10C	C3-11A	C3-11B	C3-11C
Sample Depth:	12.5-13	5.5-6	6.5-7	7.5-8	5.5-6	6.5-7	11.5-12
Lab ID:	3472-036	3472-037	3472-038	3472-039	3472-040	3472-041	3472-042
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]achlorobutadiene	-	-	-	-	-	-	-
[redacted]hloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	-	-	-	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	-	-	-	-	-	-	-
Benzidine	-	-	-	-	-	-	-
[redacted]rene	-	-	-	-	-	-	-
[redacted]-Dimethylbenzidine	-	-	-	-	-	-	-
[redacted]tylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-
Benzo[a]pyrene	-	-	-	-	-	-	-
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	-	-	-	-	-	-	-
Benzo[g,h,I]perylene	-	-	-	-	-	-	-
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
[redacted]'-DDE	-	-	-	-	-	-	-
[redacted]ldrin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

CE 3.2332

Client ID:	C3-9D	C3-10A	C3-10B	C3-10C	C3-11A	C3-11B	C3-11C
Sample Depth:	12.5-13	5.5-6	6.5-7	7.5-8	5.5-6	6.5-7	11.5-12
Lab ID:	3472-036	3472-037	3472-038	3472-039	3472-040	3472-041	3472-042
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	~	~	~	~	~	~	~
Eosulfan sulfate	~	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~	~
Metals (ppm)							
Antimony	~	~	~	~	~	~	~
Arsenic	*687.00*	*950.00*	*778.00*	*6470.00*	*64.40*	*271.00*	*6550.00*
Beryllium	~	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~	~
Chromium	~	~	~	~	~	~	~
Copper	~	~	~	~	~	~	~
Lead	352.00	*1200.00*	*1910.00*	*35000.00*	374.00	*3920.00*	*9070.00*
Mercury	~	~	~	~	~	~	~
Nickel	~	~	~	~	~	~	~
Selenium	~	~	~	~	~	~	~
Silver	~	~	~	~	~	~	~
Thallium	~	~	~	~	~	~	~
Zinc	~	~	~	~	~	~	~
General Alytical							
Cyanide, Total (ppm)	~	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
* = Result from diluted alysis.

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2334

Client ID:	C3-11D	C3-11Y	C3-12A	C3-12B	C3-12C	C3-12D	C3-13A
Sample Depth:	13.5-14	12-12.3	4.5-5	5.5-6	11.5-12	12.5-13	5.5-6
Lab ID:	3472-043	3472-044	3472-045	3472-046	3472-047	3472-048	3472-049
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-
[illegible]ylbenzene	-	-	-	-	-	-	-
[illegible]tal Xylenes	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-	-
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
[illegible]nzoic acid	-	-	-	-	-	-	-
[illegible] Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	-	-	-	-	-	-	-
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	C3-11D	C3-11Y	C3-12A	C3-12B	C3-12C	C3-12D	C3-13A
Sample Depth:	13.5-14	12-12.3	4.5-5	5.5-6	11.5-12	12.5-13	5.5-6
Lab ID:	3472-043	3472-044	3472-045	3472-046	3472-047	3472-048	3472-049
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	-	-	-	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	-	-	-	-	-	-	-
Benzidine	-	-	-	-	-	-	-
Pyrene	-	-	-	-	-	-	-
3,3'-Dimethylbenzidine	-	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-
Benzo[a]pyrene	-	-	-	-	-	-	-
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	-	-	-	-	-	-	-
Benzo[g,h,I]perylene	-	-	-	-	-	-	-
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

Client ID:	C3-11D	C3-11Y	C3-12A	C3-12B	C3-12C	C3-12D	C3-13A
Sample Depth:	13.5-14	12-12.3	4.5-5	5.5-6	11.5-12	12.5-13	5.5-6
Lab ID:	3472-043	3472-044	3472-045	3472-046	3472-047	3472-048	3472-049
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]rin aldehyde	-	-	-	-	-	-	-
[redacted]sulfan sulfate	-	-	-	-	-	-	-
4,4'-DDT	-	-	-	-	-	-	-
Erin Ketone	-	-	-	-	-	-	-
Methoxychlor	-	-	-	-	-	-	-
alpha-Chlordane	-	-	-	-	-	-	-
gamma-Chlordane	-	-	-	-	-	-	-
Toxaphene	-	-	-	-	-	-	-
Metals (ppm)							
Antimony	-	-	-	-	-	-	-
Arsenic	*458.00*	*3090.00*	14.80	*85.70*	*2150.00*	*184.00*	5.12
Beryllium	-	-	-	-	-	-	-
Cadmium	-	-	-	-	-	-	-
Chromium	-	-	-	-	-	-	-
Copper	-	-	-	-	-	-	-
Lead	69.10	300.00	161.00	*4670.00*	*32300.00*	50.50	145.00
Mercury	-	-	-	-	-	-	-
Nickel	-	-	-	-	-	-	-
Selenium	-	-	-	-	-	-	-
Silver	-	-	-	-	-	-	-
Thallium	-	-	-	-	-	-	-
Zinc	-	-	-	-	-	-	-
General Alytical							
Cyanide, Total (ppm)	-	-	-	-	-	-	-
Phenol (ppm)	-	-	-	-	-	-	-
Total Petroleum Hydrocarbons (ppm)	-	-	-	-	-	-	-

- = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on [redacted]ividual Volatiles & Semiv
[redacted]= Result from diluted alysis.

CE 3.2336

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2337

Client ID:	C3-13B	C3-13C	C3-13D	C3-14A	C3-14B	C3-14C	C3-15A
Sample Depth:	6.5-7	11.5-12	12.5-13	5.5-6	6.5-7	8.5-9	5.5-6
Lab ID:	3472-050	3472-051	3472-052	3472-053	3472-054	3472-055	3472-056
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acroiein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-
Total Xylenes	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-	-
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
Benzoic acid	-	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	-	-	-	-	-	-	-
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	C3-13B	C3-13C	C3-13D	C3-14A	C3-14B	C3-14C	C3-15A
Sample Depth:	6.5-7	11.5-12	12.5-13	5.5-6	6.5-7	8.5-9	5.5-6
Lab ID:	3472-050	3472-051	3472-052	3472-053	3472-054	3472-055	3472-056
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]xachlorobutadiene	-	-	-	-	-	-	-
[redacted]Chloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	-	-	-	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	-	-	-	-	-	-	-
Benzidine	-	-	-	-	-	-	-
[redacted]rene	-	-	-	-	-	-	-
[redacted]'-Dimethylbenzidine	-	-	-	-	-	-	-
[redacted]utylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-
Benzo[a]pyrene	-	-	-	-	-	-	-
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	-	-	-	-	-	-	-
Benzo[g,h,I]perylene	-	-	-	-	-	-	-
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
[redacted]'-DDE	-	-	-	-	-	-	-
[redacted]ldrin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

CE 3.2338

Client ID:	C3-13B	C3-13C	C3-13D	C3-14A	C3-14B	C3-14C	C3-15A
Sample Depth:	6.5-7	11.5-12	12.5-13	5.5-6	6.5-7	8.5-9	5.5-6
Lab ID:	3472-050	3472-051	3472-052	3472-053	3472-054	3472-055	3472-056
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	~	~	~	~	~	~	~
Eosulfan sulfate	~	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~	~
Metals (ppm)							
Antimony	~	~	~	~	~	~	~
Arsenic	*990.00*	*2660.00*	*522.00*	5.08	*568.00*	*2490.00*	4.79
Beryllium	~	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~	~
Chromium	~	~	~	~	~	~	~
Copper	~	~	~	~	~	~	~
Lead	*1000.00*	*5080.00*	108.00	52.20	*10100.00*	*8160.00*	83.10
Mercury	~	~	~	~	~	~	~
Nickel	~	~	~	~	~	~	~
Selenium	~	~	~	~	~	~	~
Silver	~	~	~	~	~	~	~
Thallium	~	~	~	~	~	~	~
Zinc	~	~	~	~	~	~	~
General Alytical							
Cyanide, Total (ppm)	~	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.2339

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2340

Client ID:	C3-15B	C3-15C	C3-15D	C3-16B	C3-16C	C3-17A	C3-17B
Sample Depth:	7.5-8	10.5-11	13.5-14	6.5-7	10.5-11	5.5-6	6.5-7
Lab ID:	3472-057	3472-058	3472-059	3472-060	3472-061	3472-062	3472-063
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
[illegible]lorobenzene	-	-	-	-	-	-	-
[illegible]ylbenzene	-	-	-	-	-	-	-
Total Xylenes	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-	-
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
[illegible]zoic acid	-	-	-	-	-	-	-
[illegible]-Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	-	-	-	-	-	-	-
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	C3-15B	C3-15C	C3-15D	C3-16B	C3-16C	C3-17A	C3-17B
Sample Depth:	7.5-8	10.5-11	13.5-14	6.5-7	10.5-11	5.5-6	6.5-7
Lab ID:	3472-057	3472-058	3472-059	3472-060	3472-061	3472-062	3472-063
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	-	-	-	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	-	-	-	-	-	-	-
Benzidine	-	-	-	-	-	-	-
Pyrene	-	-	-	-	-	-	-
3,3'-Dimethylbenzidine	-	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-
Benzo[a]pyrene	-	-	-	-	-	-	-
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	-	-	-	-	-	-	-
Benzo[g,h,I]perylene	-	-	-	-	-	-	-
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

CE 3.2341

Client ID:	C3-15B	C3-15C	C3-15D	C3-16B	C3-16C	C3-17A	C3-17B
Sample Depth:	7.5-8	10.5-11	13.5-14	6.5-7	10.5-11	5.5-6	6.5-7
Lab ID:	3472-057	3472-058	3472-059	3472-060	3472-061	3472-062	3472-063
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
in aldehyde	~	~	~	~	~	~	~
sulfan sulfate	~	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~	~
Metals (ppm)							
Antimony	~	~	~	~	~	~	~
Arsenic	*49.20*	*6670.00*	*2480.00*	*480.00*	*503.00*	13.20	*298.00*
Beryllium	~	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~	~
Chromium	~	~	~	~	~	~	~
Copper	~	~	~	~	~	~	~
Lead	*8870.00*	*46000.00*	36.10	*3640.00*	*5890.00*	211.00	*2720.00*
Mercury	~	~	~	~	~	~	~
Nickel	~	~	~	~	~	~	~
Selenium	~	~	~	~	~	~	~
Silver	~	~	~	~	~	~	~
Thallium	~	~	~	~	~	~	~
Zinc	~	~	~	~	~	~	~
General Alytical							
Cyanide, Total (ppm)	~	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
= Result from diluted alysis.

CE 3.2342

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2343

Client ID:	C3-17C	C3-17D	C3-18A	C3-18B	C3-18C	C3-18D	C3-19A
Sample Depth:	10.5-11	13.5-14	5.5-6	6.5-7	11.5-12	13.5-14	5.5-6
Lab ID:	3472-064	3472-065	3472-066	3472-067	3472-068	3472-069	3472-070
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-
Total Xylenes	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-	-
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
Benzoic acid	-	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	-	-	-	-	-	-	-
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	C3-17C	C3-17D	C3-18A	C3-18B	C3-18C	C3-18D	C3-19A
Sample Depth:	10.5-11	13.5-14	5.5-6	6.5-7	11.5-12	13.5-14	5.5-6
Lab ID:	3472-064	3472-065	3472-066	3472-067	3472-068	3472-069	3472-070
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]exachlorobutadiene	-	-	-	-	-	-	-
[redacted]Chloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chlorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	-	-	-	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	-	-	-	-	-	-	-
Benzidine	-	-	-	-	-	-	-
[redacted]yrene	-	-	-	-	-	-	-
[redacted]'-Dimethylbenzidine	-	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-
Benzo[a]pyrene	-	-	-	-	-	-	-
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	-	-	-	-	-	-	-
Benzo[g,h,i]perylene	-	-	-	-	-	-	-
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
[redacted]'-DDE	-	-	-	-	-	-	-
[redacted]ieldrin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

CE 3.2344

Client ID:	C3-17C	C3-17D	C3-18A	C3-18B	C3-18C	C3-18D	C3-19A
Sample Depth:	10.5-11	13.5-14	5.5-6	6.5-7	11.5-12	13.5-14	5.5-6
Lab ID:	3472-064	3472-065	3472-066	3472-067	3472-068	3472-069	3472-070
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	~	~	~	~	~	~	~
Eosulfan sulfate	~	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~	~
Metals (ppm)							
Antimony	~	~	~	~	~	~	~
Arsenic	*451.00*	*528.00*	12.70	*78.30*	*667.00*	*4040.00*	8.72
Beryllium	~	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~	~
Chromium	~	~	~	~	~	~	~
Copper	~	~	~	~	~	~	~
Lead	*2710.00*	161.00	260.00	*5460.00*	*23500.00*	67.30	111.00
Mercury	~	~	~	~	~	~	~
Nickel	~	~	~	~	~	~	~
Selenium	~	~	~	~	~	~	~
Silver	~	~	~	~	~	~	~
Thallium	~	~	~	~	~	~	~
Zinc	~	~	~	~	~	~	~
General Alytical							
Cyanide, Total (ppm)	~	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.2

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2346

Client ID:	C3-19B	C3-19C	C3-20A	C3-20B	C3-20C	C3-20D	C3-21A
Sample Depth:	6.5-7	7.5-8	5.5-6	6.5-7	11.5-12	13.5-14	5.5-6
Lab ID:	3472-071	3472-072	3472-073	3472-074	3472-075	3472-076	3472-077
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-
Methylene Chloride	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
Carbon Tetrachloride	-	-	-	-	-	-	-
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
2-Chloroethylvinyl Ether	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-
Dibromochloromethane	-	-	-	-	-	-	-
[illegible]lorobenzene	-	-	-	-	-	-	-
[illegible]ylbenzene	-	-	-	-	-	-	-
Total Xylenes	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
TOTAL VO's:	-	-	-	-	-	-	-
TOTAL TIC's:	-	-	-	-	-	-	-
TOTAL VO's & TIC's:	-	-	-	-	-	-	-
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
[illegible]zoic acid	-	-	-	-	-	-	-
[illegible]Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	-	-	-	-	-	-	-
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	C3-19B	C3-19C	C3-20A	C3-20B	C3-20C	C3-20D	C3-21A
Sample Depth:	6.5-7	7.5-8	5.5-6	6.5-7	11.5-12	13.5-14	5.5-6
Lab ID:	3472-071	3472-072	3472-073	3472-074	3472-075	3472-076	3472-077
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Hexachlorobutadiene	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chiorophthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	-	-	-	-	-	-	-
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	-	-	-	-	-	-	-
4-Chiorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	-	-	-	-	-	-	-
Anthracene	-	-	-	-	-	-	-
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	-	-	-	-	-	-	-
Benzidine	-	-	-	-	-	-	-
Pyrene	-	-	-	-	-	-	-
3,3'-Dimethylbenzidine	-	-	-	-	-	-	-
Butylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	-	-	-	-
Chrysene	-	-	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	-	-	-	-	-
Benzo[k]fluoranthene	-	-	-	-	-	-	-
Benzo[a]pyrene	-	-	-	-	-	-	-
Indeno[1,2,3-cd]pyrene	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	-	-	-	-	-	-	-
Benzo[g,h,i]perylene	-	-	-	-	-	-	-
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
4,4'-DDE	-	-	-	-	-	-	-
Dieldrin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

CE 3.2347

Client ID:	C3-19B	C3-19C	C3-20A	C3-20B	C3-20C	C3-20D	C3-21A
Sample Depth:	6.5-7	7.5-8	5.5-6	6.5-7	11.5-12	13.5-14	5.5-6
Lab ID:	3472-071	3472-072	3472-073	3472-074	3472-075	3472-076	3472-077
Date Sampled:	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00	6/8/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]n aldehyde	-	-	-	-	-	-	-
[redacted]lfan sulfate	-	-	-	-	-	-	-
[redacted]-DDT	-	-	-	-	-	-	-
Erin Ketone	-	-	-	-	-	-	-
Methoxychlor	-	-	-	-	-	-	-
alpha-Chlordane	-	-	-	-	-	-	-
gamma-Chlordane	-	-	-	-	-	-	-
Toxaphene	-	-	-	-	-	-	-
Metals (ppm)							
Antimony	-	-	-	-	-	-	-
Arsenic	*345.00*	*3030.00*	*58.60*	*109.00*	*691.00*	*410.00*	7.25
Beryllium	-	-	-	-	-	-	-
Cadmium	-	-	-	-	-	-	-
Chromium	-	-	-	-	-	-	-
Copper	-	-	-	-	-	-	-
Lead	*5920.00*	*25400.00*	236.00	*2150.00*	*747.00*	69.00	140.00
Mercury	-	-	-	-	-	-	-
Nickel	-	-	-	-	-	-	-
Selenium	-	-	-	-	-	-	-
Silver	-	-	-	-	-	-	-
Thallium	-	-	-	-	-	-	-
Zinc	-	-	-	-	-	-	-
General Alytical							
Cyanide, Total (ppm)	-	-	-	-	-	-	-
Phenoi (ppm)	-	-	-	-	-	-	-
Total Petroleum Hydrocarbons (ppm)	-	-	-	-	-	-	-

- = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on iividual Volatiles & Semiv
[redacted]Result from diluted alysis.

CE 3.2348

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2349

Client ID:	C3-21B	C3-21C	C3-21D	PEC77-1A	PEC77-2A	PEC77-3A	PEC77-
Sample Depth:	6.5-7	11.5-12	12.5-13	8-8.5	8-8.5	8-8.5	8-8.5
Lab ID:	3472-078	3472-079	3472-080	3730-001	3730-002	3730-003	3730-004
Date Sampled:	6/8/00	6/8/00	6/8/00	6/21/00	6/21/00	6/21/00	6/21/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Volatiles (ppm)							
Chloromethane	-	-	-	-	-	-	ND
Vinyl Chloride	-	-	-	-	-	-	ND
Bromomethane	-	-	-	-	-	-	ND
Chloroethane	-	-	-	-	-	-	ND
Trichlorofluoromethane	-	-	-	-	-	-	ND
Acrolein	-	-	-	-	-	-	ND
1,1-Dichloroethene	-	-	-	-	-	-	ND
Methylene Chloride	-	-	-	-	-	-	ND
Acrylonitrile	-	-	-	-	-	-	ND
trans-1,2-Dichloroethene	-	-	-	-	-	-	ND
1,1-Dichloroethane	-	-	-	-	-	-	ND
Chloroform	-	-	-	-	-	-	ND
1,1,1-Trichloroethane	-	-	-	-	-	-	ND
Carbon Tetrachloride	-	-	-	-	-	-	ND
1,2-Dichloroethane(EDC)	-	-	-	-	-	-	ND
Benzene	-	-	-	-	-	-	ND
Trichloroethene	-	-	-	-	-	-	ND
1,2-Dichloropropane	-	-	-	-	-	-	ND
Bromodichloromethane	-	-	-	-	-	-	ND
2-Chloroethylvinyl Ether	-	-	-	-	-	-	ND
cis-1,3-Dichloropropene	-	-	-	-	-	-	ND
Toluene	-	-	-	-	-	-	ND
trans-1,3-Dichloropropene	-	-	-	-	-	-	ND
1,1,2-Trichloroethane	-	-	-	-	-	-	ND
Tetrachloroethene	-	-	-	-	-	-	ND
Dibromochloromethane	-	-	-	-	-	-	ND
Chlorobenzene	-	-	-	-	-	-	ND
Ethylbenzene	-	-	-	-	-	-	ND
Total Xylenes	-	-	-	-	-	-	ND
Bromoform	-	-	-	-	-	-	ND
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	ND
1,3-Dichlorobenzene	-	-	-	-	-	-	ND
1,4-Dichlorobenzene	-	-	-	-	-	-	ND
1,2-Dichlorobenzene	-	-	-	-	-	-	ND
TOTAL VO's:	-	-	-	-	-	-	ND
TOTAL TIC's:	-	-	-	-	-	-	ND
TOTAL VO's & TIC's:	-	-	-	-	-	-	ND
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	-	-
Phenol	-	-	-	-	-	-	-
Aniline	-	-	-	-	-	-	-
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-
2-Chlorophenol	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
Benzyl alcohol	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-
2-Methylphenol	-	-	-	-	-	-	-
bis(2-chloroisopropyl)ether	-	-	-	-	-	-	-
4-Methylphenol	-	-	-	-	-	-	-
N-Nitroso-di-n-propylamine	-	-	-	-	-	-	-
Hexachloroethane	-	-	-	-	-	-	-
Nitrobenzene	-	-	-	-	-	-	-
Isophorone	-	-	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	-	-
2,4-Dimethylphenol	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-
Benzoic acid	-	-	-	-	-	-	-
2,4-Dichlorophenol	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
Naphthalene	-	-	-	0.27	0.19	1.85	ND
4-Chloroaniline	-	-	-	-	-	-	-

Client ID:	C3-21B	C3-21C	C3-21D	PEC77-1A	PEC77-2A	PEC77-3A	PEC77-4A
Sample Depth:	6.5-7	11.5-12	12.5-13	8-8.5	8-8.5	8-8.5	8-8.5
Lab ID:	3472-078	3472-079	3472-080	3730-001	3730-002	3730-003	3730-004
Date Sampled:	6/8/00	6/8/00	6/8/00	6/21/00	6/21/00	6/21/00	6/21/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
[redacted]xachlorobutadiene	-	-	-	-	-	-	-
[redacted]hloro-3-methylphenol	-	-	-	-	-	-	-
2-Mehtylnapthalene	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	-	-	-	-
2-Chloronaphthalene	-	-	-	-	-	-	-
2-Nitroaniline	-	-	-	-	-	-	-
Dimethylphthalate	-	-	-	-	-	-	-
2,6-Dinitrotoluene	-	-	-	-	-	-	-
Acenaphthylene	-	-	-	ND	ND	ND	ND
3-Nitroaniline	-	-	-	-	-	-	-
Acenaphthene	-	-	-	0.61	0.30	3.62	0.45
2,4-Dinitrophenol	-	-	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	-	-	-	-
Dibenzofuran	-	-	-	-	-	-	-
Diethylphthalate	-	-	-	-	-	-	-
Fluorene	-	-	-	0.57	0.23	3.26	3.65
4-Chlorophenyl-phenylether	-	-	-	-	-	-	-
4-Nitroaniline	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	-	-	-	-	-	-	-
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	-	-
4-Bromophenyl-phenylether	-	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	-	-
Phenanthrene	-	-	-	3.71	1.73	20.50	2.86
Anthracene	-	-	-	1.09	0.49	4.71	0.88
Carbazole	-	-	-	-	-	-	-
Di-n-butylphthalate	-	-	-	-	-	-	-
Flouranthene	-	-	-	4.83	2.69	17.50	4.37
Benzidine	-	-	-	-	-	-	-
[redacted]yrene	-	-	-	4.11	2.54	12.30	4.16
[redacted]-Dimethylbenzidine	-	-	-	-	-	-	-
[redacted]tylbenzylphthalate	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	-	-	-	-	-	-	-
Benzo[a]anthracene	-	-	-	2.18	1.47	6.23	2.31
Chrysene	-	-	-	1.87	1.12	4.90	1.68
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	-	-
Di-n-octylphthalate	-	-	-	-	-	-	-
Benzo[b]fluoranthene	-	-	-	2.86	2.13	6.96	3.11
Benzo[k]fluoranthene	-	-	-	1.13	0.56	2.72	0.81
Benzo[a]pyrene	-	-	-	1.94	1.38	5.21	1.88
Indeno[1,2,3-cd]pyrene	-	-	-	0.45	0.42	1.25	0.40
Dibenz[a,h]anthracene	-	-	-	ND	ND	0.41	ND
Benzo[g,h,i]perylene	-	-	-	0.46	0.43	1.08	0.35
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	-	-
Aroclor 1221	-	-	-	-	-	-	-
Aroclor 1232	-	-	-	-	-	-	-
Aroclor 1242	-	-	-	-	-	-	-
Aroclor 1248	-	-	-	-	-	-	-
Aroclor 1254	-	-	-	-	-	-	-
Aroclor 1260	-	-	-	-	-	-	-
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	-	-
beta-BHC	-	-	-	-	-	-	-
gamma-BHC	-	-	-	-	-	-	-
delta-BHC	-	-	-	-	-	-	-
Heptachlor	-	-	-	-	-	-	-
Aldrin	-	-	-	-	-	-	-
Heptachlor Epoxide	-	-	-	-	-	-	-
Eosulfan I	-	-	-	-	-	-	-
[redacted]'-DDE	-	-	-	-	-	-	-
[redacted]ldrin	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-
Eosulfan II	-	-	-	-	-	-	-
4,4'-DDD	-	-	-	-	-	-	-

CE 3.2350

Client ID:	C3-21B	C3-21C	C3-21D	PEC77-1A	PEC77-2A	PEC77-3A	PEC77-4A
Sample Depth:	6.5-7	11.5-12	12.5-13	8-8.5	8-8.5	8-8.5	8-8.5
Lab ID:	3472-078	3472-079	3472-080	3730-001	3730-002	3730-003	3730-004
Date Sampled:	6/8/00	6/8/00	6/8/00	6/21/00	6/21/00	6/21/00	6/21/00
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Erin aldehyde	~	~	~	~	~	~	~
Eosulfan sulfate	~	~	~	~	~	~	~
4,4'-DDT	~	~	~	~	~	~	~
Erin Ketone	~	~	~	~	~	~	~
Methoxychlor	~	~	~	~	~	~	~
alpha-Chlordane	~	~	~	~	~	~	~
gamma-Chlordane	~	~	~	~	~	~	~
Toxaphene	~	~	~	~	~	~	~
Metals (ppm)							
Antimony	~	~	~	~	~	~	~
Arsenic	*22.00*	*785.00*	*34.40*	5.20	5.04	5.82	4.78
Beryllium	~	~	~	~	~	~	~
Cadmium	~	~	~	~	~	~	~
Chromium	~	~	~	~	~	~	~
Copper	~	~	~				
Lead	*920.00*	*13400.00*	39.80	100.00	97.90	99.30	95.10
Mercury	~	~	~	~	~	~	~
Nickel	~	~	~	~	~	~	~
Selenium	~	~	~	~	~	~	~
Silver	~	~	~	~	~	~	~
Thallium	~	~	~	~	~	~	~
Zinc	~	~	~	~	~	~	~
General Alytical							
Cyanide, Total (ppm)	~	~	~	~	~	~	~
Phenol (ppm)	~	~	~	~	~	~	~
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~	~	~

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on lividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.2351

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2352

Client ID:	PEC77-1B	PEC77-2B	PEC77-3B	PEC77-4B	PEC77-5	CCF-1A	CCF-1B
Sample Depth:	11.5-12	11.5-12	11.5-12	11.5-12	11.5-12	5.5-6	1.0-1.5
Lab ID:	3730-005	3730-006	3730-007	3730-008	3730-009	1541-001	1541-002
Date Sampled:	6/21/00	6/21/00	6/21/00	6/21/00	6/21/00	3/16/00	3/16/00
Matrix:	Soil	Soil	Soil	Soil	Soil	soil	soil
Volatiles (ppm)							
Chloromethane	-	-	-	ND	-	ND	ND
Vinyl Chloride	-	-	-	ND	-	ND	ND
Bromomethane	-	-	-	ND	-	ND	ND
Chloroethane	-	-	-	ND	-	ND	ND
Trichlorofluoromethane	-	-	-	ND	-	ND	ND
Acrolein	-	-	-	ND	-	ND	ND
1,1-Dichloroethene	-	-	-	ND	-	ND	ND
Methylene Chloride	-	-	-	ND	-	ND	ND
Acrylonitrile	-	-	-	ND	-	ND	ND
trans-1,2-Dichloroethene	-	-	-	ND	-	ND	ND
1,1-Dichloroethane	-	-	-	ND	-	ND	ND
Chloroform	-	-	-	ND	-	ND	ND
1,1,1-Trichloroethane	-	-	-	ND	-	ND	ND
Carbon Tetrachloride	-	-	-	ND	-	ND	ND
1,2-Dichloroethane(EDC)	-	-	-	ND	-	ND	ND
Benzene	-	-	-	ND	-	ND	ND
Trichloroethene	-	-	-	ND	-	ND	ND
1,2-Dichloropropane	-	-	-	ND	-	ND	ND
Bromodichloromethane	-	-	-	ND	-	ND	ND
2-Chloroethylvinyl Ether	-	-	-	ND	-	ND	ND
cis-1,3-Dichloropropene	-	-	-	ND	-	ND	ND
Toluene	-	-	-	ND	-	ND	ND
trans-1,3-Dichloropropene	-	-	-	ND	-	ND	ND
1,1,2-Trichloroethane	-	-	-	ND	-	ND	ND
Tetrachloroethene	-	-	-	ND	-	ND	ND
Dibromochloromethane	-	-	-	ND	-	ND	ND
[illegible]hlorobenzene	-	-	-	ND	-	ND	ND
[illegible]hylbenzene	-	-	-	ND	-	ND	ND
Total Xylenes	-	-	-	ND	-	ND	ND
Bromoform	-	-	-	ND	-	ND	ND
1,1,2,2-Tetrachloroethane	-	-	-	ND	-	ND	ND
1,3-Dichlorobenzene	-	-	-	ND	-	ND	ND
1,4-Dichlorobenzene	-	-	-	ND	-	ND	ND
1,2-Dichlorobenzene	-	-	-	ND	-	ND	ND
TOTAL VO's:	-	-	-	ND	-	ND	ND
TOTAL TIC's:	-	-	-	ND	-	ND	ND
TOTAL VO's & TIC's:	-	-	-	ND	-	ND	ND
Semivolatiles (ppm)							
N-Nitrosodimethylamine	-	-	-	-	-	ND	ND
Phenol	-	-	-	-	-	ND	ND
Aniline	-	-	-	-	-	ND	ND
bis(2-Chloroethyl)ether	-	-	-	-	-	ND	ND
2-Chlorophenol	-	-	-	-	-	ND	ND
1,3-Dichlorobenzene	-	-	-	-	-	ND	ND
1,4-Dichlorobenzene	-	-	-	-	-	ND	ND
Benzyl alcohol	-	-	-	-	-	ND	ND
1,2-Dichlorobenzene	-	-	-	-	-	ND	ND
2-Methylphenol	-	-	-	-	-	ND	ND
bis(2-chloroisopropyl)ether	-	-	-	-	-	ND	ND
4-Methylphenol	-	-	-	-	-	ND	ND
N-Nitroso-di-n-propylamine	-	-	-	-	-	ND	ND
Hexachloroethane	-	-	-	-	-	ND	ND
Nitrobenzene	-	-	-	-	-	ND	ND
Isophorone	-	-	-	-	-	ND	ND
2-Nitrophenol	-	-	-	-	-	ND	ND
2,4-Dimethylphenol	-	-	-	-	-	ND	ND
bis(2-Chloroethoxy)methane	-	-	-	-	-	ND	ND
[illegible]nzoic acid	-	-	-	-	-	ND	ND
[illegible]-Dichlorophenol	-	-	-	-	-	ND	ND
1,2,4-Trichlorobenzene	-	-	-	-	-	ND	ND
Naphthalene	0.20	0.16	7.14	ND	ND	ND	ND
4-Chloroaniline	-	-	-	-	-	ND	ND

Client ID:	PEC77-1B	PEC77-2B	PEC77-3B	PEC77-4B	PEC77-5	CCF-1A	CCF-1B
Sample Depth:	11.5-12	11.5-12	11.5-12	11.5-12	11.5-12	5.5-6	1.0-1.5
Lab ID:	3730-005	3730-006	3730-007	3730-008	3730-009	1541-001	1541-002
Date Sampled:	6/21/00	6/21/00	6/21/00	6/21/00	6/21/00	3/16/00	3/16/00
Matrix:	Soil	Soil	Soil	Soil	Soil	soil	soil
Hexachlorobutadiene	-	-	-	-	-	ND	ND
4-Chloro-3-methylphenol	-	-	-	-	-	ND	ND
2-Mehtylnapthalene	-	-	-	-	-	ND	ND
Hexachlorocyclopentadiene	-	-	-	-	-	ND	ND
2,4,6-Trichlorophenol	-	-	-	-	-	ND	ND
2,4,5-Trichlorophenol	-	-	-	-	-	ND	ND
2-Chlorophthalene	-	-	-	-	-	ND	ND
2-Nitroaniline	-	-	-	-	-	ND	ND
Dimethylphthalate	-	-	-	-	-	ND	ND
2,6-Dinitrotoluene	-	-	-	-	-	ND	ND
Acenaphthylene	ND	0.23	ND	2.93	ND	ND	ND
3-Nitroaniline	-	-	-	-	-	ND	ND
Acenaphthene	0.43	0.42	15.00	0.33	ND	0.23	ND
2,4-Dinitrophenol	-	-	-	-	-	ND	ND
4-Nitrophenol	-	-	-	-	-	ND	ND
2,4-Dinitrotoluene	-	-	-	-	-	ND	ND
Dibenzofuran	-	-	-	-	-	ND	ND
Diethylphthalate	-	-	-	-	-	ND	ND
Fluorene	0.38	0.29	15.70	0.43	ND	ND	ND
4-Chlorophenyl-phenylether	-	-	-	-	-	ND	ND
4-Nitroaniline	-	-	-	-	-	ND	ND
4,6-Dinitro-2-methylphenol	-	-	-	-	-	ND	ND
N-Nitrosodiphenylamine	-	-	-	-	-	ND	ND
1,2-Diphenylhydrazine/Azobenzene	-	-	-	-	-	ND	ND
4-Bromophenyl-phenylether	-	-	-	-	-	ND	ND
Hexachlorobenzene	-	-	-	-	-	ND	ND
Pentachlorophenol	-	-	-	-	-	ND	ND
Phenanthrene	2.97	2.92	110.00	12.40	0.19	2.08	0.21
Anthracene	0.70	0.71	34.80	2.80	ND	0.71	ND
Carbazole	-	-	-	-	-	0.15	ND
Di-n-butylphthalate	-	-	-	-	-	ND	ND
Flouranthene	3.97	6.17	152.00	37.80	0.29	3.65	0.50
Benzidine	-	-	-	-	-	ND	ND
Pyrene	2.92	5.12	110.00	29.30	0.24	3.40	0.59
3,3'-Dimethylbenzidine	-	-	-	-	-	ND	ND
Butylbenzylphthalate	-	-	-	-	-	ND	ND
3,3'-Dichlorobenzidine	-	-	-	-	-	ND	ND
Benzo[a]anthracene	1.79	3.13	*68.20*	*15.90*	0.20	1.86	0.33
Chrysene	1.51	2.92	*48.50*	13.40	ND	1.80	0.31
bis(2-Ethylhexyl)phthalate	-	-	-	-	-	0.20	ND
Di-n-octylphthalate	-	-	-	-	-	ND	ND
Benzo[b]fluoranthene	2.17	*5.96*	*61.50*	*18.70*	ND	1.27	0.19
Benzo[k]fluoranthene	0.66	1.52	*22.70*	*5.82*	ND	1.40	0.14
Benzo[a]pyrene	*1.60*	*3.52*	*51.70*	*14.30*	ND	*1.57*	0.32
Indeno[1,2,3-cd]pyrene	0.81	1.03	*26.00*	*5.35*	ND	1.00	ND
Dibenz[a,h]anthracene	0.25	0.36	*8.08*	*1.59*	ND	0.30	ND
Benzo[g,h,i]perylene	0.89	1.11	26.50	5.16	ND	1.02	ND
PCB's (ppm)							
Aroclor 1016	-	-	-	-	-	ND	ND
Aroclor 1221	-	-	-	-	-	ND	ND
Aroclor 1232	-	-	-	-	-	ND	ND
Aroclor 1242	-	-	-	-	-	ND	ND
Aroclor 1248	-	-	-	-	-	ND	ND
Aroclor 1254	-	-	-	-	-	ND	ND
Aroclor 1260	-	-	-	-	-	3.94	ND
Pesticides (ppm)							
alpha-BHC	-	-	-	-	-	ND	ND
beta-BHC	-	-	-	-	-	ND	ND
gamma-BHC	-	-	-	-	-	ND	ND
delta-BHC	-	-	-	-	-	ND	ND
Heptachlor	-	-	-	-	-	ND	ND
Aldrin	-	-	-	-	-	ND	ND
Heptachlor Epoxide	-	-	-	-	-	ND	ND
Eosulfan I	-	-	-	-	-	ND	ND
4,4'-DDE	-	-	-	-	-	ND	ND
Dieldrin	-	-	-	-	-	ND	ND
Erin	-	-	-	-	-	ND	ND
Eosulfan II	-	-	-	-	-	ND	ND
4,4'-DDD	-	-	-	-	-	ND	ND

CE 3.2353

Client ID:	PEC77-1B	PEC77-2B	PEC77-3B	PEC77-4B	PEC77-5	CCF-1A	CCF-1B
Sample Depth:	11.5-12	11.5-12	11.5-12	11.5-12	11.5-12	5.5-6	1.0-1.5
Lab ID:	3730-005	3730-006	3730-007	3730-008	3730-009	1541-001	1541-002
Date Sampled:	6/21/00	6/21/00	6/21/00	6/21/00	6/21/00	3/16/00	3/16/00
Matrix:	Soil	Soil	Soil	Soil	Soil	soil	soil
[illegible]rin aldehyde	~	~	~	~	~	ND	ND
[illegible]sulfan sulfate	~	~	~	~	~	ND	ND
4,4'-DDT	~	~	~	~	~	0 03	ND
Erin Ketone	~	~	~	~	~	ND	ND
Methoxychlor	~	~	~	~	~	ND	ND
alpha-Chlordane	~	~	~	~	~	ND	ND
gamma-Chlordane	~	~	~	~	~	ND	ND
Toxaphene	~	~	~	~	~	ND	ND
Metals (ppm)							
Antimony	~	~	~	~	~	ND	ND
Arsenic	*80.90*	*23.10*	*55.20*	*105.00*	4.56	4.47	2.47
Beryllium	~	~	~	~	~	0.56	0.67
Cadmium	~	~	~	~	~	0.33	ND
Chromium	~	~	~	~	~	30.10	23.50
Copper	279.00	50.30	102.00	407.00	17.10	57.60	31.70
Lead	*661.00*	217.00	214.00	*1090.00*	12.00	87.50	65.20
Mercury	~	~	~	~	~	0.21	0.09
Nickel	~	~	~	~	~	23.40	15.20
Selenium	~	~	~	~	~	ND	ND
Silver	~	~	~	~	~	ND	ND
Thallium	~	~	~	~	~	0.29	0.17
Zinc	~	~	~	~	~	227.00	49.70
General Alytical							
Cyanide, Total (ppm)	~	~	~	~	~	ND	ND
Phenol (ppm)	~	~	~	~	~	ND	ND
Total Petroleum Hydrocarbons (ppm)	~	~	~	~	~		

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on [illegible]ividual Volatiles & Semiv
[illegible] = Result from diluted alysis.

CE 3.2354

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2355

Client ID:	CCF-2	CCF-3	CCF-4A	CCF-4B	CCF-5	CCF-6A	CCF-6B
Sample Depth:	5-5.5	4.5-5	5-5.5	5-5.5	5-5.5	4.5-5	1-1.5
Lab ID:	1541-003	1541-004	1541-005	1541-006	1541-007	1541-008	1541-009
Date Sampled:	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00
Matrix:	soil	soil	soil	soil	soil	soil	soil
Volatiles (ppm)							
Chloromethane	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND
Acrolein	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane(EDC)	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl Ether	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
TOTAL VO's:	ND	ND	ND	ND	ND	ND	ND
TOTAL TIC's:	ND	ND	ND	ND	ND	ND	ND
TOTAL VO's & TIC's:	ND	ND	ND	ND	ND	ND	ND
Semivolatiles (ppm)							
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND
Benzoic acid	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	0.77	0.21	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND	ND

Client ID:	CCF-2	CCF-3	CCF-4A	CCF-4B	CCF-5	CCF-6A	CCF-6B
Sample Depth:	5-5.5	4.5-5	5-5.5	5-5.5	5-5.5	4.5-5	1-1.5
Lab ID:	1541-003	1541-004	1541-005	1541-006	1541-007	1541-008	1541-009
Date Sampled:	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00
Matrix:	soil	soil	soil	soil	soil	soil	soil
[redacted]xachlorobutadiene	ND	ND	ND	ND	ND	ND	ND
[redacted]hloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND
2-Mehtylnapthalene	ND	ND	0.13	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND
2-Chlorophthalene	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	0.29	ND	ND	0.36	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	0.65	4.67	0.62	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	1.22	0.18	ND	ND	ND	ND
Diethylphthalate	ND	2.35	0.74	ND	ND	ND	ND
Fluorene	0.34	2.97	0.41	ND	ND	ND	ND
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	4.20	31.50	4.76	0.57	ND	2.36	0.34
Anthracene	1.56	14.10	1.39	0.21	ND	0.79	0.15
Carbazole	0.51	2.60	0.54	ND	ND	0.22	ND
Di-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND
Flouranthene	7.84	74.80	8.29	0.93	0.22	4.32	0.65
Benzidine	ND	ND	ND	ND	ND	ND	ND
[redacted]yrene	7.37	61.10	6.77	0.92	0.27	4.20	0.77
[redacted]'-Dimethylbenzidine	ND	ND	ND	ND	ND	ND	ND
[redacted]utylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	*4.08*	*39.60*	*4.30*	0.43	0.18	2.13	0.39
Chrysene	3.58	29.50	4.24	0.48	ND	1.99	0.39
bis(2-Ethylhexyl)phthalate	0.34	ND	0.28	0.21	ND	ND	0.14
Di-n-octylphthalate	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	2.60	*26.30*	3.00	0.29	ND	1.41	0.38
Benzo[k]fluoranthene	3.23	*22.40*	2.79	0.19	ND	1.82	0.17
Benzo[a]pyrene	*3.18*	*26.40*	*3.68*	0.34	ND	*2.00*	0.34
Indeno[1,2,3-cd]pyrene	2.27	*16.40*	2.36	0.23	ND	1.26	ND
Dibenz[a,h]anthracene	*0.81*	*5.02*	*0.68*	ND	ND	*0.67*	ND
Benzo[g,h,I]perylene	2.69	16.80	2.74	0.25	ND	1.48	ND
PCB's (ppm)							
Aroclor 1016	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	ND	ND	ND	ND	ND	ND	ND
Aroclor 1242	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	ND	ND	ND	ND	ND	ND	ND
Aroclor 1254	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	0.47	0.87	0.19	ND	ND	0.39	0.17
Pesticides (ppm)							
alpha-BHC	ND	ND	ND	ND	ND	ND	ND
beta-BHC	ND	ND	ND	ND	ND	ND	ND
gamma-BHC	ND	ND	ND	ND	ND	ND	ND
delta-BHC	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	ND	ND	ND	ND	ND	ND	ND
Eosulfan I	ND	ND	ND	ND	ND	ND	ND
[redacted]'-DDE	ND	ND	ND	ND	ND	ND	ND
[redacted]eldrin	ND	ND	ND	ND	ND	ND	ND
Erin	ND	ND	ND	ND	ND	ND	ND
Eosulfan II	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND

CE 3.2356

Client ID:	CCF-2	CCF-3	CCF-4A	CCF-4B	CCF-5	CCF-6A	CCF-6B
Sample Depth:	5-5.5	4.5-5	5-5.5	5-5.5	5-5.5	4.5-5	1-1.5
Lab ID:	1541-003	1541-004	1541-005	1541-006	1541-007	1541-008	1541-009
Date Sampled:	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00
Matrix:	soil	soil	soil	soil	soil	soil	soil
Erin aldehyde	ND	ND	ND	ND	ND	ND	ND
Eosulfan sulfate	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	0.01	0.04	ND	ND	ND	ND	ND
Erin Ketone	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND	ND
alpha-Chlordane	ND	ND	ND	ND	ND	ND	ND
gamma-Chlordane	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND
Metals (ppm)							
Antimony	ND	ND	ND	ND	ND	ND	ND
Arsenic	4.56	6.22	19.20	3.79	2.54	9.41	3.50
Beryllium	0.65	0.50	0.47	0.49	0.50	0.48	0.54
Cadmium	0.38	0.44	0.49	ND	ND	0.34	ND
Chromium	27.80	37.20	25.40	24.30	21.20	22.90	20.40
Copper	43.20	42.40	47.60	30.40	25.80	48.10	30.10
Lead	78.00	164.00	137.00	43.10	29.30	93.50	41.00
Mercury	0.26	0.17	0.38	0.13	0.06	0.30	0.16
Nickel	23.90	20.40	21.90	20.40	20.00	23.20	19.90
Selenium	ND	ND	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND	ND
Thallium	0.17	0.25	0.25	0.21	0.14	0.22	0.17
Zinc	138.00	122.00	148.00	73.90	74.40	131.00	75.70
General Alytical							
Cyanide, Total (ppm)	ND	ND	ND	ND	ND	ND	ND
Phenol (ppm)	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (ppm)							

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on lividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.2.7

Table 2: Soil Quality Summary Report
Project: The Former Celotex Facility
NJD981876642
Lab Case No.: 10990-2881

CE 3.2358

Client ID:	CCF-7	CCF-8	CCF-9A	CCF-9B	CCF-10	CCF-11A	CCF-11B
Sample Depth:	4.5-5	4.5-5	4.5-5	1-1.5	4-4.5	4-4.5	1.0
Lab ID:	1541-010	1541-011	1541-012	1541-013	1541-014	1541-015	1541-016
Date Sampled:	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00
Matrix:	soil	soil	soil	soil	soil	soil	soil
Volatiles (ppm)							
Chloromethane	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND
Acrolein	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane(EDC)	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl Ether	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
TOTAL VO's:	ND	ND	ND	ND	ND	ND	ND
TOTAL TIC's:	ND	ND	ND	ND	ND	ND	ND
TOTAL VO's & TIC's:	ND	ND	ND	ND	ND	ND	ND
Semivolatiles (ppm)							
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl)ether	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND
Benzoic acid	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND	ND

Client ID:	CCF-7	CCF-8	CCF-9A	CCF-9B	CCF-10	CCF-11A	CCF-11B
Sample Depth:	4.5-5	4.5-5	4.5-5	1-1.5	4-4.5	4-4.5	1.0
Lab ID:	1541-010	1541-011	1541-012	1541-013	1541-014	1541-015	1541-016
Date Sampled:	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00
Matrix:	soil	soil	soil	soil	soil	soil	soil
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND
2-Mehtylnapthalene	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND
2-Chlorophthalene	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	0.20	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	0.17	0.29	0.20
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	1.06	0.74	0.74	0.58	0.44	0.52	0.45
Fluorene	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine/Azobenzene	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	0.85	ND	ND	ND	1.74	2.55	2.21
Anthracene	0.27	ND	ND	ND	0.58	0.99	0.95
Carbazole	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	ND	ND	ND	ND	ND	0.16	ND
Flouranthene	1.39	0.25	ND	0.13	3.54	5.96	4.57
Benzidine	ND	ND	ND	ND	ND	ND	ND
Pyrene	1.36	0.30	ND	0.13	3.19	5.47	4.08
3,3'-Dimethylbenzidine	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	0.82	ND	ND	ND	1.89	3.86	2.58
Chrysene	0.75	ND	ND	ND	1.78	2.55	2.09
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.84	ND	ND	ND	1.59	3.35	2.26
Benzo[k]fluoranthene	0.37	ND	ND	ND	0.71	0.99	1.12
Benzo[a]pyrene	*0.72*	ND	ND	ND	*1.58*	*3.32*	*2.18*
Indeno[1,2,3-cd]pyrene	0.40	ND	ND	ND	1.02	2.19	ND
Dibenz[a,h]anthracene	ND	ND	ND	ND	*1.20*	*2.47*	ND
Benzo[g,h,i]perylene	0.49	ND	ND	ND	ND	ND	1.65
PCB's (ppm)							
Aroclor 1016	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	ND	ND	ND	ND	ND	ND	ND
Aroclor 1242	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	ND	ND	ND	ND	0.26	ND	ND
Aroclor 1254	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	0.41	ND	ND	ND	ND	2.42	ND
Pesticides (ppm)							
alpha-BHC	ND	ND	ND	ND	ND	ND	ND
beta-BHC	ND	ND	ND	ND	ND	ND	ND
gamma-BHC	ND	ND	ND	ND	ND	ND	ND
delta-BHC	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	ND	ND	ND	ND	ND	ND	ND
Eosulfan I	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND
Erin	ND	ND	ND	ND	ND	ND	ND
Eosulfan II	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND

CE 3.2359

Client ID:	CCF-7	CCF-8	CCF-9A	CCF-9B	CCF-10	CCF-11A	CCF-11B
Sample Depth:	4.5-5	4.5-5	4.5-5	1-1.5	4-4.5	4-4.5	1.0
Lab ID:	1541-010	1541-011	1541-012	1541-013	1541-014	1541-015	1541-016
Date Sampled:	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00	3/16/00
Matrix:	soil	soil	soil	soil	soil	soil	soil
Erin aldehyde	ND	ND	ND	ND	ND	ND	ND
ulfan sulfate	ND	ND	ND	ND	ND	ND	ND
'-DDT	ND	ND	ND	ND	ND	ND	ND
Erin Ketone	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND	ND
alpha-Chlordane	ND	ND	ND	ND	ND	ND	ND
gamma-Chlordane	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND
Metals (ppm)							
Antimony	ND	ND	ND	ND	ND	ND	ND
Arsenic	3.72	2.17	2.36	2.48	2.66	*27.60*	*37.10*
Beryllium	0.55	0.43	0.53	0.46	0.39	0.56	0.48
Cadmium	0.26	ND	ND	ND	0.45	0.57	0.54
Chromium	19.60	19.70	19.20	19.60	16.90	33.50	21.20
Copper	38.10	20.40	19.90	21.10	19.10	90.50	113.00
Lead	45.80	21.20	15.80	22.10	127.00	195.00	315.00
Mercury	0.18	0.06	0.45	0.06	0.19	0.83	1.17
Nickel	17.60	19.90	19.50	19.10	19.50	25.10	21.00
Selenium	ND	ND	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND	ND
Thallium	0.13	0.16	0.11	0.13	0.10	0.38	1.33
Zinc	65.80	60.00	54.10	65.80	112.00	203.00	177.00
General Alytical							
Cyanide, Total (ppm)	ND	ND	ND	ND	ND	ND	ND
Phenol (ppm)	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (ppm)							

~ = Sample not alyzed for
= Alyzed for but Not Detected at the MDL
J = The concentration was detected at a val
All qualifiers on ividual Volatiles & Semiv
* = Result from diluted alysis.

CE 3.2360

Table 3: RESULTS SUMMARY-GROUND WATER QUALITY (12/21/99)

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CE 3.2362

SUMMARY REPORT

Client: Environmental Waste Management Associates, LLC.

Project: EDGEWATER - 200957

Lab Case No.: 10990-7695

Lab ID:	7695-001	7695-002		7695-003	7695-004	7695-005
Client ID:	MW-1	MW-2		MW-3	MW-4	MW-5
Matrix:	Aqueous	Aqueous		Aqueous	Aqueous	Aqueous
Sampled Date:	12/21/1999	12/21/1999		12/21/1999	12/21/1999	12/21/1999
PARAMETER(Units)						
Volatiles (ppb)						
Chloroethane	3.01	ND		ND	ND	ND
1,1-Dichloroethane	28.7	ND		ND	ND	ND
Chloroform	0.664	ND		ND	ND	ND
Benzene	56.4	1780	D	ND	228	ND
Trichloroethene	1.1	ND		ND	ND	ND
Toluene	9.42	106		ND	113	ND
Tetrachloroethene	2.03	ND		ND	ND	ND
Chlorobenzene	17.3	ND		ND	ND	ND
Ethylbenzene	48.8	398		ND	439	ND
Total Xylenes	63.8	326		ND	1500	ND
1,4-Dichlorobenzene	0.714	ND		ND	ND	ND
1,2-Dichlorobenzene	0.928	ND		ND	ND	ND
TOTAL VO's:	232.866	2610		ND	2280	ND
TOTAL TIC's:	289.7	2846		39.8	13434	4.1
TOTAL VO's & TIC's:	522.566	5456		39.8	15714	4.1
Metals (ppm)						
Arsenic	0.348	0.020		ND	0.313	ND

ND = Analyzed for but Not Detected at the MDL

D = The compound was reported from the diluted run.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

CE 3.2363

SUMMARY REPORT

Client: Environmental Waste Management Associates, LLC.

Project: EDGEWATER - 200957

Lab Case No.: 10990-7695

Lab ID:	7695-006	7695-007	7695-008	7695-009	7695-010
Client ID:	MW-6	MW-7	MW-10	MW-12	MW-13A
Matrix:	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Sampled Date:	12/21/1999	12/21/1999	12/21/1999	12/21/1999	12/21/1999
PARAMETER(Units)					
Volatiles (ppb)					
1,1-Dichloroethane	5.01	ND	10.3	0.717	0.683
Benzene	336	221	1.16	ND	ND
Toluene	88.3	138	ND	ND	ND
Chlorobenzene	ND	ND	0.3	ND	ND
Ethylbenzene	136	108	0.296	ND	ND
Total Xylenes	489	445	ND	ND	ND
TOTAL VO's:	1054.31	912	12.056	0.717	0.683
TOTAL TIC's:	12767	1887	3.1	8.7	26.3
TOTAL VO's & TIC's:	13821.3	2799	15.156	9.417	26.983
Semivolatiles - BNA (ppb)					
TOTAL BNA'S:	~	~	~	~	ND
TOTAL TIC's:	~	~	~	~	ND
TOTAL BNA'S & TIC's:	~	~	~	~	ND
Metals (ppm)					
Antimony	~	~	~	~	ND
Arsenic	150	0.0103	0.0151	1.35	0.00648
Beryllium	~	~	~	~	ND
Cadmium	~	~	~	~	0.000959
Chromium	~	~	~	~	ND
Copper	~	~	~	~	ND
Lead	~	~	~	~	0.0234
Mercury	~	~	~	~	ND
Nickel	~	~	~	~	0.043
Selenium	~	~	~	~	ND
Silver	~	~	~	~	ND
Thallium	~	~	~	~	ND
Zinc	~	~	~	~	0.487

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200957
Lab Case No.: 10990-7695

CE 3.2364

Lab ID:	7695-011	7695-012	7695-013	7695-014		7695-015
Client ID:	MW-14A	MW-19	MW-20	MW-21		MW-22
Matrix:	Aqueous	Aqueous	Aqueous	Aqueous		Aqueous
Sampled Date:	12/21/1999	12/21/1999	12/21/1999	12/21/1999		12/21/1999
PARAMETER(Units)						
Volatiles (ppb)						
Methylene Chloride	ND	3.05	ND	ND		ND
1,1-Dichloroethane	1.1	ND	0.548	2.98		ND
Chloroform	ND	ND	ND	0.637		ND
Benzene	ND	ND	ND	70.3		ND
Toluene	ND	ND	ND	75.8		ND
Tetrachloroethene	ND	0.363	ND	0.748		ND
Ethylbenzene	ND	ND	ND	329	D	ND
Total Xylenes	ND	ND	ND	916	D	ND
TOTAL VO's:	1.1	3.413	0.548	1395.47		ND
TOTAL TIC's:	44.9	3.5	4.4	2831.8		ND
TOTAL VO's & TIC's:	46	6.913	4.948	4227.27		ND
Semivolatiles - BNA (ppb)						
4-Methylphenol	ND	ND	ND	0.945		ND
2,4-Dimethylphenol	ND	ND	ND	3.93		ND
Naphthalene	ND	22	ND	729	D	ND
2-Methylnaphthalene	ND	0.923	ND	44		ND
Acenaphthene	ND	ND	ND	19		ND
Dibenzofuran	ND	ND	ND	10.2		ND
Fluorene	ND	ND	ND	11.2		ND
Phenanthrene	ND	ND	ND	11.4		ND
Anthracene	ND	ND	ND	1.83		ND
Carbazole	ND	ND	ND	7.78		ND
Fluoranthene	ND	ND	ND	1.77		ND
Pyrene	ND	ND	ND	1.44		ND
bis(2-Ethylhexyl)phthalate	ND	ND	1.49	1.21		ND
TOTAL BNA'S:	ND	22.923	1.49	843.705		ND
TOTAL TIC's:	ND	ND	ND	925.5		ND
TOTAL BNA'S & TIC's:	ND	22.923	1.49	1769.21		ND
Metals (ppm)						
Antimony	ND	ND	ND	ND		ND
Arsenic	0.0055	0.0538	0.0431	0.0155		0.843
Beryllium	ND	ND	ND	ND		ND
Cadmium	ND	0.00129	ND	ND		ND
Chromium	ND	ND	ND	ND		ND
Copper	ND	ND	ND	ND		ND
Lead	0.00585	0.023	ND	ND		0.0153
Mercury	ND	ND	ND	ND		ND
Nickel	ND	ND	ND	ND		ND
Selenium	ND	ND	ND	ND		ND
Silver	ND	ND	ND	ND		ND
Thallium	ND	ND	ND	ND		ND
Zinc	ND	0.136	0.047	0.049		0.037

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the MDL
All qualifiers on individual Semivolatiles are carried down through summation.
D = The compound was reported from the diluted run.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200957
Lab Case No.: 10990-7695

CE 3.2365

Lab ID:	7695-016	7695-017	7695-018	7695-019	7695-020
Client ID:	MW-31	MW-34	MW-35	MW-36	FB
Matrix:	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Sampled Date:	12/21/1999	12/21/1999	12/21/1999	12/21/1999	12/21/1999
PARAMETER(Units)					
Volatiles (ppb)					
Trichlorofluoromethane	ND	ND	20.2	ND	ND
Chloroform	2.18	ND	ND	ND	ND
1,2-Dichloroethane(EDC)	ND	ND	6.09	ND	ND
Benzene	3.32	ND	ND	ND	ND
Trichloroethene	1.06	ND	0.369	ND	ND
Bromodichloromethane	0.242	ND	ND	ND	ND
Toluene	3.21	ND	ND	ND	ND
Ethylbenzene	1.86	ND	0.661	ND	ND
Total Xylenes	7.36	ND	ND	ND	ND
TOTAL VO's:	19.232	ND	27.32	ND	ND
TOTAL TIC's:	137.8	ND	17.7	ND	ND
TOTAL VO's & TIC's:	157.032	ND	45.02	ND	ND
Semivolatiles - BNA (ppb)					
Naphthalene	75.6	ND	ND	ND	~
2-Methylnaphthalene	54.3	ND	ND	ND	~
Acenaphthene	23.6	ND	ND	ND	~
Dibenzofuran	16.2	ND	ND	ND	~
Fluorene	17.9	ND	ND	ND	~
Phenanthrene	28.3	ND	ND	ND	~
Anthracene	3.58	ND	ND	ND	~
Carbazole	3.67	ND	ND	ND	~
Fluoranthene	2.97	ND	ND	ND	~
Pyrene	1.95	ND	ND	ND	~
bis(2-Ethylhexyl)phthalate	1.48	ND	ND	ND	~
TOTAL BNA'S:	229.55	ND	ND	ND	~
TOTAL TIC's:	82.6	ND	ND	ND	~
TOTAL BNA'S & TIC's:	312.15	ND	ND	ND	~
Metals (ppm)					
Antimony	ND	ND	ND	ND	~
Arsenic	0.914	0.0249	0.00528	0.00782	~
Beryllium	0.0277	ND	ND	ND	~
Cadmium	0.0396	0.0445	0.000891	ND	~
Chromium	0.046	ND	ND	ND	~
Copper	3.12	ND	ND	ND	~
Lead	0.0168	ND	0.00566	0.0914	~
Mercury	ND	ND	ND	ND	~
Nickel	0.319	ND	ND	ND	~
Selenium	0.0202	ND	ND	0.00975	~
Silver	ND	ND	ND	ND	~
Thallium	0.0245	ND	ND	ND	~
Zinc	10.7	0.298	0.076	0.117	~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

Table 4: RESULTS SUMMARY-SEDIMENT QUALITY

Table: 4 [Sediment (0-6)]
Site: Edgewater
Location: River Road, Edgewater, NJ
Case No.: 200957

Sample ID	99EE1	99EE2	99EE3	99EE4	99EE5	99EE6	99EE7	99EE8*	99EE9*	99EE10*	99EE11*	99EE12
Lab ID	E58287-11	E58287-13	E58287-1	E58287-7	E57975-2	E58287-2	E58287-3	E58051-14	E58051-11	E57975-8	E57975-5	E58287-9
Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Sample Date	11/1/99	11/1/99	11/1/99	11/1/99	10/27/99	11/1/99	11/1/99	10/28/99	10/28/99	10/27/99	10/27/99	11/1/99
Depth	0.0-6"	0.0-6"	0.0-6"	0.0-6"	0.0-6"	0.0-6"	0.0-6"	0.0-6"	0.0-6"	0.0-6"	0.0-6"	0.0-6"
pH (su)	7.4	7.6	7.7	7.8	7.6	7.3	7.6	7.5	7.5	7.6	7.6	7.1
Total Organic Carbon (pp	25900	23700	22600	27000	38400	28100	31100	34400	24900	28500	33600	27600
Particle Size (%)												
3 Inch Sieve	100	100	100	100	100	100	100	100		100		100
1.5 Inch Sieve	100	100	100	100	100	100	100	100		100		100
0.75 Inch Sieve	100	100	100	100	100	100	100	100		100		100
0.375 Inch Sieve	59	70.9	66.6	50	51.5	37	57.9	46		39.6		42.4
Solids, Percent	43.4	45.6	46.6	43.4	44.2	44.7	39.4	39.5	45.8	43.6	42.4	43.1
No. 4 Sieve	25.4	35.4	34.8	24.3	23.8	19.1	21.9	19.7		16.5		14.4
No. 8 Sieve	12.3	18	17.2	12.5	13.6	9.9	9.6	8.2		7.3		6.6
No. 16 Sieve	6.8	10.4	10.4	7.4	7.5	5.8	5.3	3.5		3.3		3.4
No. 30 Sieve	4.8	7.2	8.2	4.9	4.9	3.6	3.2	1.9		2.1		2
No. 50 Sieve	3.5	5.7	6.6	3.5	3.3	2.3	2.7	1.1		1.7		1.4
No. 100 Sieve	2.8	4.1	5.6	2.8	2.6	1.8	2.1	0.93		1.2		0.89
No. 200 Sieve	2.1	2	4.8	2.5	1.4	1.3	1.7	0.56		0		0.45
Metals (ppm)												
Antimony	1.1 UN	1.1 UN	1 UN	1.1 UN	1.1 UN	1.1 UN	1.2 UN					1.1 UN
Arsenic	12.3	9.2	9.4	29.1	14.1	*96*	*99*	27.1	11.6	15.6	13.2	11.2
Beryllium	0.77	.67 B	.69 B	.83 B	.65 B	.84 B	.83 B					.73 B
Cadmium	1.4	.89 B	.92 B	1 B	1.1 B	1.3 B	1.6 B					1 B
Chromium	89.1	60.4	61.8	69.7	67.5	74.2	79.1	77	69.9	68.6	80	66.6
Copper	113	76.7	77.9	86	87.3	101	106					86.7
Lead	104	75.4	80.8	93.5	98.1	105	132	118	92.7	91.6	106	88.2
Mercury	*1.4*	*1*	*0.93*	*1.4*	*1*	*1.2*	*1.7*					*0.98*
Selenium	ND	ND	ND	2.1 B	1.9 UN	2.1 B	ND					ND
Silver	4.6	3.1 B	3 B	3.3 B	3.3 B	3.7 B	3.9 B					3.4 B
Thallium	2 UN	1.9 UN	1.8 UN	2 UN	ND	1.9 UN	2.2 UN					2 UN
Zinc	*200*	*153*	*162*	*184*	*192*	*203*	*206*					*174*
Volatiles (ppm)												
Acetone	0.042	ND	0.033	0.036	ND	0.099	0.067	ND	ND	0.029	.023 U	0.23
2-Butanone	ND	ND	ND	ND	ND	0.025	.016 J	ND	ND	ND	.023 U	0.029
Total TIC, Volatile	0	0	0	0	0	0	0	0	0	0	0	0
Semivolatiles (ppm)												
Naphthalene	.77 U	.68 U	.690 U	.75 U		.120 J	.860 U	.15 J	.097 J	.081 J	.099 J	.8 U
Acenaphthylene	.077 J	.058 J	.060 J	.1 J	.37 J	.160 J	.093 J	.36 J	.29 J	.31 J	.43 J	.08 J
Acenaphthene	*.77 U*	*.68 U*	*.690 U*	*.75 U*	.44 J	*.520 J*	*.860 U*	.39 J	.076 J	.077 J	.1 J	*.8 U*
Fluorene	*.77 U*	*.68 U*	*.690 U*	.039 J	.38 J	*.650 J*	*.860 U*	.28 J	.092 J	.11 J	.11 J	*.8 U*
Phenanthrene	.12 J	.12 J	.190 J	.29 J	*3.3*	*3.1*	.260 J	*1.6*	.39 J	.73 J	.49 J	.14 J
Anthracene	.049 J	.044 J	.082 J	.099 J	0.94	*1.8*	.091 J	.63 J	.26 J	.32 J	.32 J	.075 J
Fluoranthene	.27 J	.27 J	.470 J	.62 J	4.4	2.6	.680 J	3.1	1.2	1.7	1.8	.33 J
Pyrene	.26 J	.32 J	.420 J	0.78	*3.4*	1.9	.630 J	*3.2*	1.3	1.6	2.2	.33 J
Benzo(a)anthracene	.16 J	.17 J	.260 J	.35 J	*1.8*	0.82	.380 J	1.5	0.61	0.85	0.94	.2 J
Chrysene	.17 J	.18 J	.290 J	.39 J	1.3	0.79	.390 J	1.7	.6 J	0.93	1	.22 J
Benzo(b)fluoranthene	.16 J	.16 J	.210 J	.33 J	1.4	.540 J	.390 J	2.4	1.2	1.2	1.9	.16 J
Benzo(k)fluoranthene	.17 J	.15 J	.250 J	.37 J	1.3	.470 J	.320 J	1.3	0.47	0.52	0.9	.2 J
Benzo(a)pyrene	.22 J	.21 J	.280 J	.43 J	1.6	.700 J	.470 J	*1.7*	0.8	0.92	1.3	.24 J
Indeno(1,2,3-cd)pyrene	.098 J	.1 J	.140 J	.23 J	.66 J	.290 J	.230 J	0.57	0.28	0.39	0.41	.14 J
Dibenz(a,h)anthracene	.77 U	.057 J	.68 J	.11 J	.28 J	.150 J	.110 J					.8 U
Benzo(g,h,i)perylene	.13 J	.12 J	.170 J	.26 J	.66 J	.350 J	.270 J	.46 J	.24 J	.3 J	.33 J	.15 J
Total TIC, Semi-Volatile	8.9	1.36	1.73	17.23	4.14	7.64	8.48	19.3	7.9	10	12.3	9.55
PCB's (ppm)												
Aroclor 1016	.075 U	.070 U	.075 U	.075 U	.0790 U	.074 U	.090 U	.14 U	.14 U	.16 U	.15 U	.075 U
Aroclor 1221	.150 U	.140 U	.150 U	.150 U	.160 U	.150 U	.180 U	.14 U	.14 U	.16 U	.15 U	.150 U
Aroclor 1232	.075 U	.070 U	.075 U	.075 U	.079 U	.074 U	.090 U	.14 U	.14 U	.16 U	.15 U	.075 U
Aroclor 1242	.075 U	.070 U	.075 U	.075 U	.079 U	.074 U	.090 U	*0.57*	*.65 P*	*.52 P*	*.56 P*	.075 U
Aroclor 1248	0.1	.070 U	0.095	.075 U	.079 U	.074 U	.090 U	.14 U	.14 U	.16 U	.15 U	.075 U
Aroclor 1254	.075 U	.070 U	.075 U	.075 U	.079 U	.074 U	.090 U	*0.33*	*0.27*	*0.21*	*0.25*	.075 U
Aroclor 1260	.075 U	.070 U	.075 U	.075 U	.079 U	.074 U	.090 U	.14 U	.14 U	.16 U	.15 U	.075 U
Pesticides (ppm)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Note: Boldface data exceeds Sediment Quality Effects Range-Low
Italic boldface data exceeds Sediment Quality Effects Range -Medium

Table: 4 [Sediment (7-12)]
Site: Edgewater
Location: River Road, Edgewater, NJ
Case No.: 200957

Sample ID	99EE1	99EE2	99EE3	99EE4	99EE5	99EE6	99EE7	99EE8	99EE9	99EE10	99EE11	99EE12
Lab ID	E58287-12	E58287-14	E58287-2	E58287-8	E57975-3	E58287-6	E58287-4	E58051-15	E58051-12	E57975-9	E57975-6	E58287-10
Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Sample Date	11/1/99	11/1/99	11/1/99	11/1/99	10/27/99	11/1/99	11/1/99	10/28/99	10/28/99	10/27/99	10/27/99	11/1/99
Depth	7-12"	7-12"	7-12"	7-12"	7-12"	7-12"	7-12"	7-12"	7-12"	7-12"	7-12"	7-12"
pH (su)	7.4	7.6	7.4	7.6	7.7	7.4	7.4	7.5	7.7	7.7	7.5	7.3
Total Organic Carbon	26800	26400	22000	25000	35300	28600	29500	34100	22700	39200	31500	26200
Particle Size (%)												
3 Inch Sieve	100	100	100	100	100	100	100	100		100		100
1.5 Inch Sieve	100	100	100	100	100	100	100	100		100		100
0.75 Inch Sieve	100	100	100	100	100	100	100	100		100		100
0.375 Inch Sieve	47.9	62.5	55.8	37.9	47.2	58.7	38.5	46.7		60.4		51.1
Solids, Percent	44.6	45.9	46.4	43.2	43.9	39.8	41.7	39.2	49.3	41.7	41	43.8
No. 4 Sieve	21.7	24.9	26.4	16.1	25.8	24.2	18.8	20.7		24.4		20.2
No. 8 Sieve	10.4	12.3	14.1	6.9	12.6	11.6	9.4	8.5		11		9.4
No. 16 Sieve	6.3	7	9	3.5	7.4	6.4	5.1	4.4		5.6		5.3
No. 30 Sieve	4.3	5	6.8	1.8	17.5	3.9	3	2.5		3.7		3.4
No. 50 Sieve	3.5	3.6	5.6	1.2	3.3	2.7	2.2	1.5		2.3		2.7
No. 100 Sieve	2.7	3	4.9	0.92	2.5	2	1.8	1.1		1.9		2
No. 200 Sieve	1.7	1.9	3.9	0.46	1.4	1.6	1.3	0.76		1.2		1.4
Metals (ppm)												
Antimony	1.1 UN	1 UN	1 UN	1.1 UN	1.1 UN	2 BN	1.2 UN					1.1 UN
Arsenic	**13.2**	9.6	9	**32.3**	**13.3**	***476***	***83.3***					**10**
Beryllium	.77 B	.68 B	.61 B	.72 B	.56 B	.68 B	.77 B					.74 B
Cadmium	**2.4**	1 B	.97 B	**1.3 B**	1.1 B	**1.4 B**	**1.7 B**					1.1 B
Chromium	121	61.7	60.8	70.4	62.4	68.3	81.8					64
Copper	**157**	**80.6**	**78.8**	**93.6**	**85**	**106**	**111**					**80.8**
Lead	**145**	**77.8**	**81.1**	**97.1**	**94.6**	***469***	**133**					**79.7**
Mercury	***2.2***	***1***	***1.1***	***1.3***	***1.8***	***5***	***1.6***					***0.94***
Selenium	ND	ND	ND	ND	2 UN	6.9	ND					ND
Silver	6	2.9 B	3.5 B	3.9 B	3.2 B	4.3 B	4.4 B					3.4 B
Thallium	1.9 UN	1.9 UN	1.9 UN	2 UN	ND	2.2 UN	2.1 UN					2 UN
Zinc	***248***	***166***	***158***	***182***	***179***	***192***	***209***					***168***
Volatiles (ppm)												
Acetone	ND	0.023	0.046	0.034	ND	0.11	0.1	.024 J		.009 J	0.029	0.061
2-Butanone	ND	ND	.011 J	ND	ND	.025 J	0.028	ND		ND	ND	.015 J
Total TIC, Volatile	0	0	0	0	0	0	0	0	0	0	0	0
Semivolatiles (ppm)												
Naphthalene	.71 U	.71 U	.750 U	.8 U	.2 J	.250 J	.084 J					.74 U
Acenaphthylene	**.09 J**	**.067 J**	**.087 J**	**.05 J**	**.073 J**	**.340 J**	**.190 J**					**.076 J**
Acenaphthene	***.71 U***	***.71 U***	***.750 U***	***.8 U***	**.12 J**	**1**	**.150 J**					***.74 U***
Fluorene	***.71 U***	***.71 U***	***.750 U***	***.8 U***	**.12 J**	**1.5**	**.150 J**					***.74 U***
Phenanthrene	.16 J	.13 J	.240 J	.13 J	***.44 J***	***6.4***	**.550 J**					.14 J
Anthracene	.069 J	.048 J	.110 J	.046 J	**.1 J**	***3.7***	**.390 J**					.068 J
Fluoranthene	.36 J	.28 J	.690 J	.32 J	.5 J	**5.6**	**1.6**					.31 J
Pyrene	.37 J	.33 J	.630 J	.31 J	.45 J	***4.2***	**1.3**					.32 J
Benzo(a)anthracene	.24 J	.18 J	**.360 J**	.2 J	.25 J	**1.6**	**.800 J**					.21 J
Chrysene	.25 J	.2 J	**.390 J**	.2 J	.2 J	**1.6**	**.840 J**					.21 J
Benzo(b)fluoranthene	.19 J	.19 J	.370 J	.16 J	.23 J	1.1	.630 J					.19 J
Benzo(k)fluoranthene	.23 J	.14 J	.320 J	.17 J	.23 J	0.91	.630 J					.18 J
Benzo(a)pyrene	.3 J	.22 J	**.440 J**	.23 J	.27 J	**1.4**	**.810 J**					.26 J
Indeno(1,2,3-cd)pyrene	.14 J	.11 J	.200 J	.11 J	.13 J	**.540 J**	**.380 J**					.13 J
Dibenz(a,h)anthracene	**.065 J**	.056 J	**.110 J**	**.8 U**		**.880 U**	**.180 J**					.06 J
Benzo(g,h,i)perylene	**.18 J**	.14 J	**.270 J**	.14 J	.14 J	.680 J	.440 J					.15 J
Total TIC, Semi-Volatile	16.91	1.8	12.72	1.14	0.63	13.84	5.49					2.45
PCB's (ppm)												
Aroclor 1016	**.073 U**	**.067 U**	**.072 U**	**.079 U**	**.081 U**	**.087 U**	**.080 U**					**.072 U**
Aroclor 1221	**.150 U**	**.130 U**	**.140 U**	**.160 U**	**.16 U**	**.170 U**	**.160 U**					**.140 U**
Aroclor 1232	**.073 U**	**.067 U**	**.072 U**	**.079 U**	**.081 U**	**.087 U**	**.080 U**					**.072 U**
Aroclor 1242	**.073 U**	**.067 U**	**.072 U**	**.079 U**	**.081 U**	**.087 U**	**.080 U**					**.072 U**
Aroclor 1248	**0.087**	**0.085**	**.072 U**	**.079 U**	**.081 U**	**.087 U**	**.080 U**					**.072 U**
Aroclor 1254	**.073 U**	**.067 U**	**.072 U**	**.079 U**	**.081 U**	**.087 U**	**.080 U**					**.072 U**
Aroclor 1260	**.073 U**	**.067 U**	**.072 U**	**.079 U**	**.081 U**	**.087 U**	**.080 U**					**.072 U**
Pesticides (ppm)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Note: Boldface type exceeds Sediment Quality Effects Range-Low
Italic Boldface type exceeds Sediment Quality Effects Range-Medium

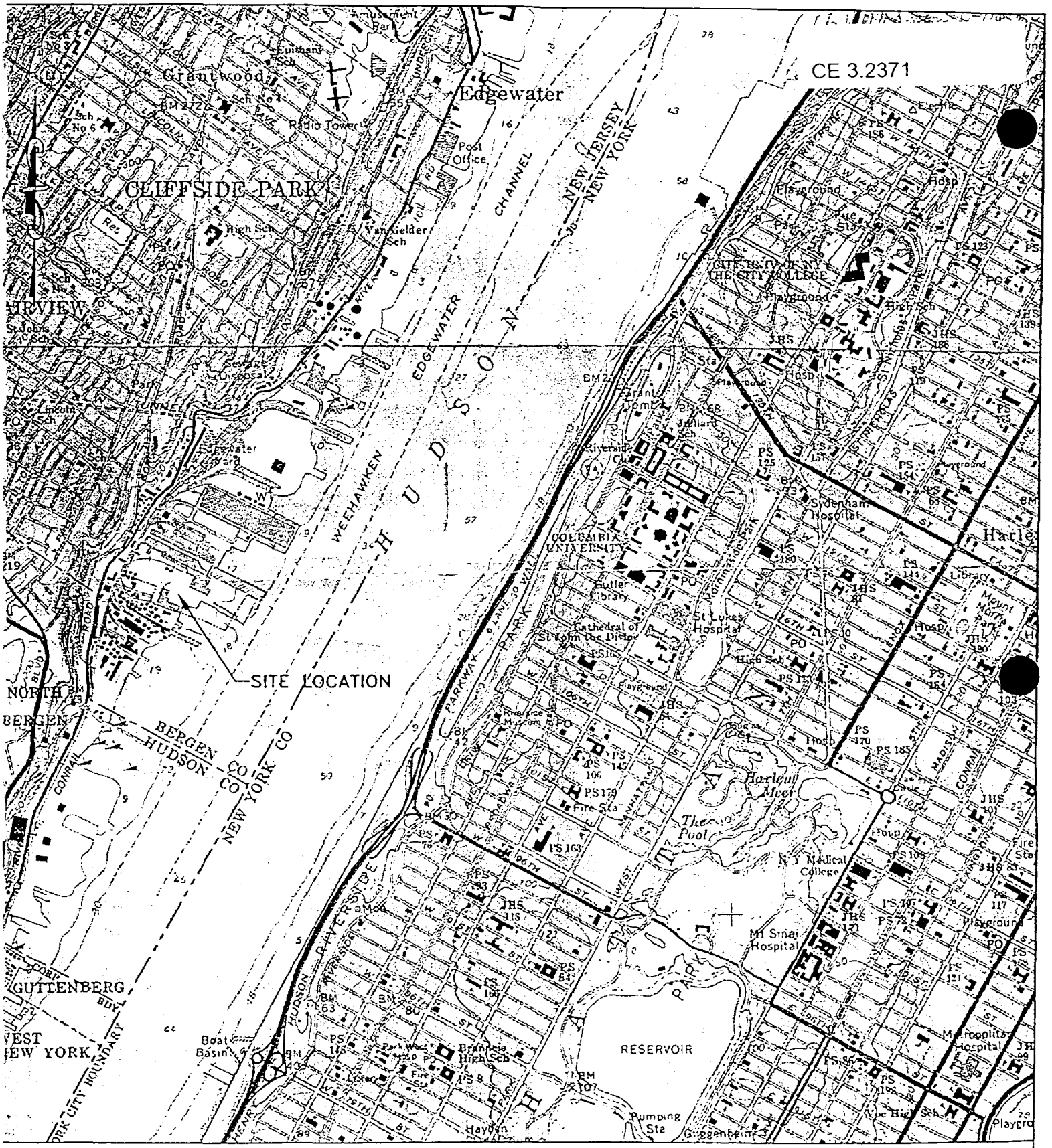
Table 5: Results Summary-Surface Water Quality

Table: 5 (Surface Water)
Site: Edgewater
Location: River Road, Edgewater, NJ
Case No.: 200957

Sample ID	99EE1	99EE2	99EE3	99EE4	99EE5	99EE6	99EE7	99EE8	99EE9	99EE10	99EE11	99EE12
Lab ID	E58051-5	E58051-6	E58051-4	E58051-3	E57975-1	E58051-1	E58051-2	E58051-13	E58051-10	E57975-7	E57975-4	E58051-7
Matrix	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Sample Date	10/28/99	10/28/99	10/28/99	10/28/99	10/27/99	10/28/99	10/28/99	10/28/99	10/28/99	10/27/99	10/27/99	10/28/99
Oxygen, Dissolved (Field) (mg/l)	5.7	6	5.1	6.2	6.2	5.8	7.4	4.7	6.7	9.4	5.7	6.1
pH (Field) (su)	7.6	7.7	7.7	7.7	7.6	7.7	7.7	7.7	7.6	7.7	7.6	7.8
Salinity (g/kg)	1.7	1.8	2.1	1.4	1.4	1.4	1.4	1.6	1.4	1.9	2.2	2
Hardness, Total (mg/l)	2980	3040	3370	2600	2210	2420	2650	2770	2360	2810	3600	3150
Total Organic Carbon (mg/l)	2.7	2.6	3	3	3.3	3.1	2.9	2.9	3.6	4.6	3.7	2.7
Metals (ppb)												
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	**8.1 B**	**5.5 B**	**5.1 B**	**3.8 B**	**6.1 B**	**6.8 B**	**6.4 B**	**7.3 B**	**4.1 B**	**5.8 B**	**9.2 B**	**7.8 B**
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	0.47 B	.33 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	.32 B
Chromium	19.8	5.3 B	10 B	ND	ND	ND	ND	ND	3.4 B	3.9 B	7.3 B	11.7
Copper	**28.2**	**11.1 B**	**17.3 B**	4.2 B	**12.8 B**	**5.9 B**	4.9 B	**8.4 B**	**10 B**	**11 B**	**16.1 B**	**21.6 B**
Lead	**28.1**	**9.5**	**14.1**	ND	3.4	3.8	2.2 B	**5.4**	6.9	**7.5**	**11.9**	**21**
Mercury	**0.41**	**.2 B**	**0.43**	ND	ND	ND	ND	**0.11**	**.11 B**	**0.42**	**0.27**	**0.23**
Selenium	4.3 UN	4.3 UN	4.3 UN	4.3 UN	4.3 UN	4.3 UN	4.3 UN	4.3 UN	4.3 UN	4.3 UN	8.6 UN	4.3 UN
Silver	1.5 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	ND	4.4 B	ND	ND	ND	ND	ND	ND	5 B	ND	ND	ND
Zinc	88.4 *	76.9 *	42.4 *	12.6 B*	32.9	18.6 B*	51.4 *	43.6 *	47.9 *	64.1	45	54.6 *
Targeted Semi-Volatiles (ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TIC, Semi-Volatile (ppb)	9	17	37	10	0	23	8	14	5	0	0	18
Targeted Volatiles (ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TIC, Volatile (ppb)	0	0	0	0	0	0	0	0	0	0	0	0
PCB's (ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides (ppb)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Note: Boldface data exceeds maximum allowable SWQS for SE2

CE 3.2370



NEW JERSEY QUADRANGLE LOCATION

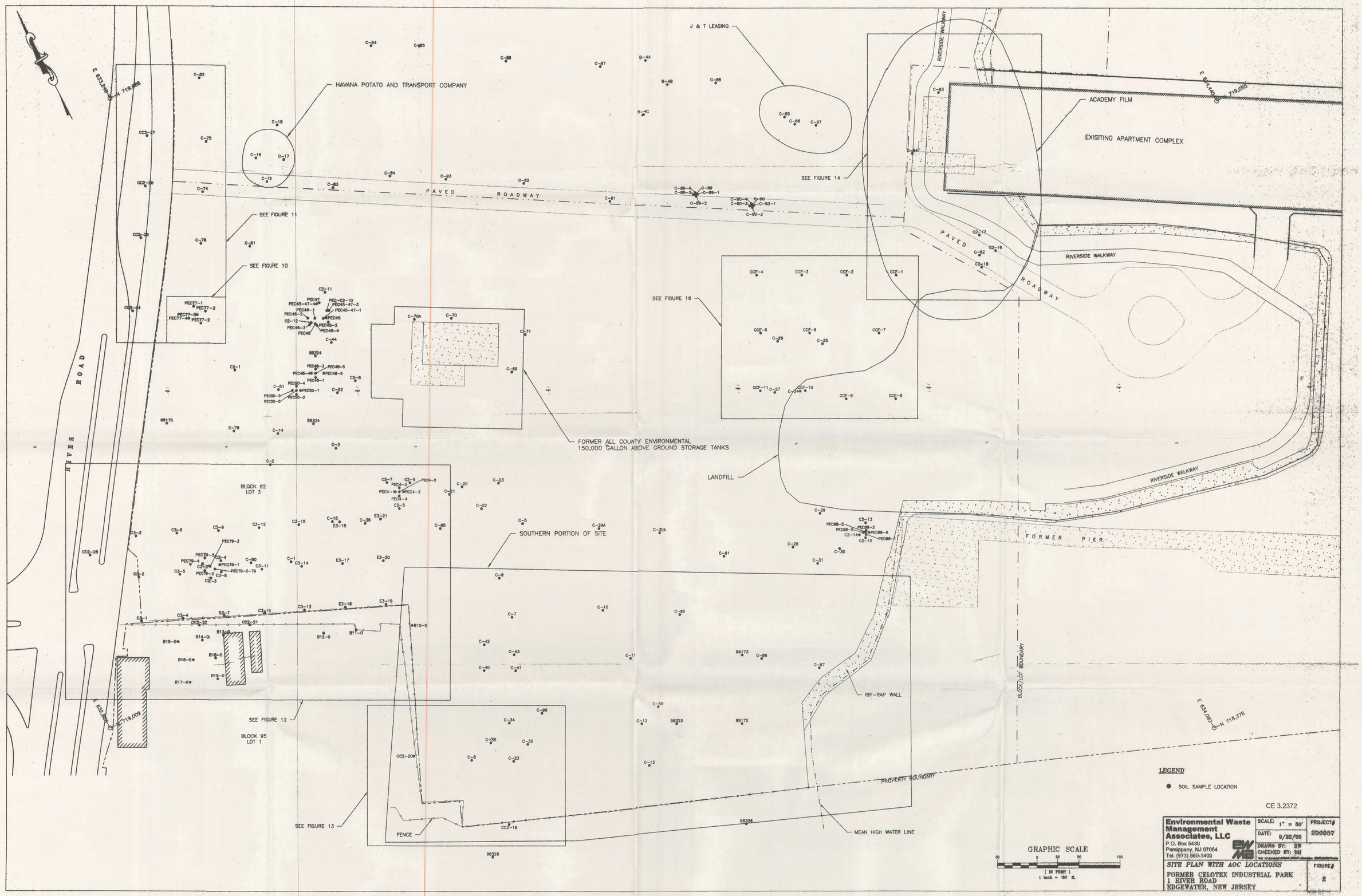
GRAPHIC SCALE

0 0.5 1 MILE

(IN MILES)

SOURCE: USGS CENTRAL PARK, N.Y.– N.J. 7.5 MINUTE QUADRANGLE

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: 1" = 2,000' DATE: 9/22/00 DRAWN BY: RR CHECKED BY: CK	PROJECT# 200957
SITE LOCATION FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		FIGURE# 1



CE 3.2372

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: 1" = 50' DATE: 9/22/00 DRAWN BY: DW CHECKED BY: RH	PROJECT# 200957
SITE PLAN WITH AOC LOCATIONS FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		FIGURE# 2

ROAD

RIVER

E 833,246 N 719,886

PAVED ROADWAY

RIVERSIDE WALKWAY

EXISITING APARTMENT COMPLEX

E 834,440 N 719,055

PAVED ROADWAY

RIVERSIDE WALKWAY

FORMER PIER

BLOCK 92
LOT 3

BLOCK 95
LOT 1

BLOCK/LOT BOUNDARY

RIP-RAP WALL

PROPERTY BOUNDARY

FENCE

MEAN HIGH WATER LINE

E 834,082 N 718,378

E 832,869 N 719,009

LEGEND

● SOIL SAMPLE LOCATION

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50 ft.

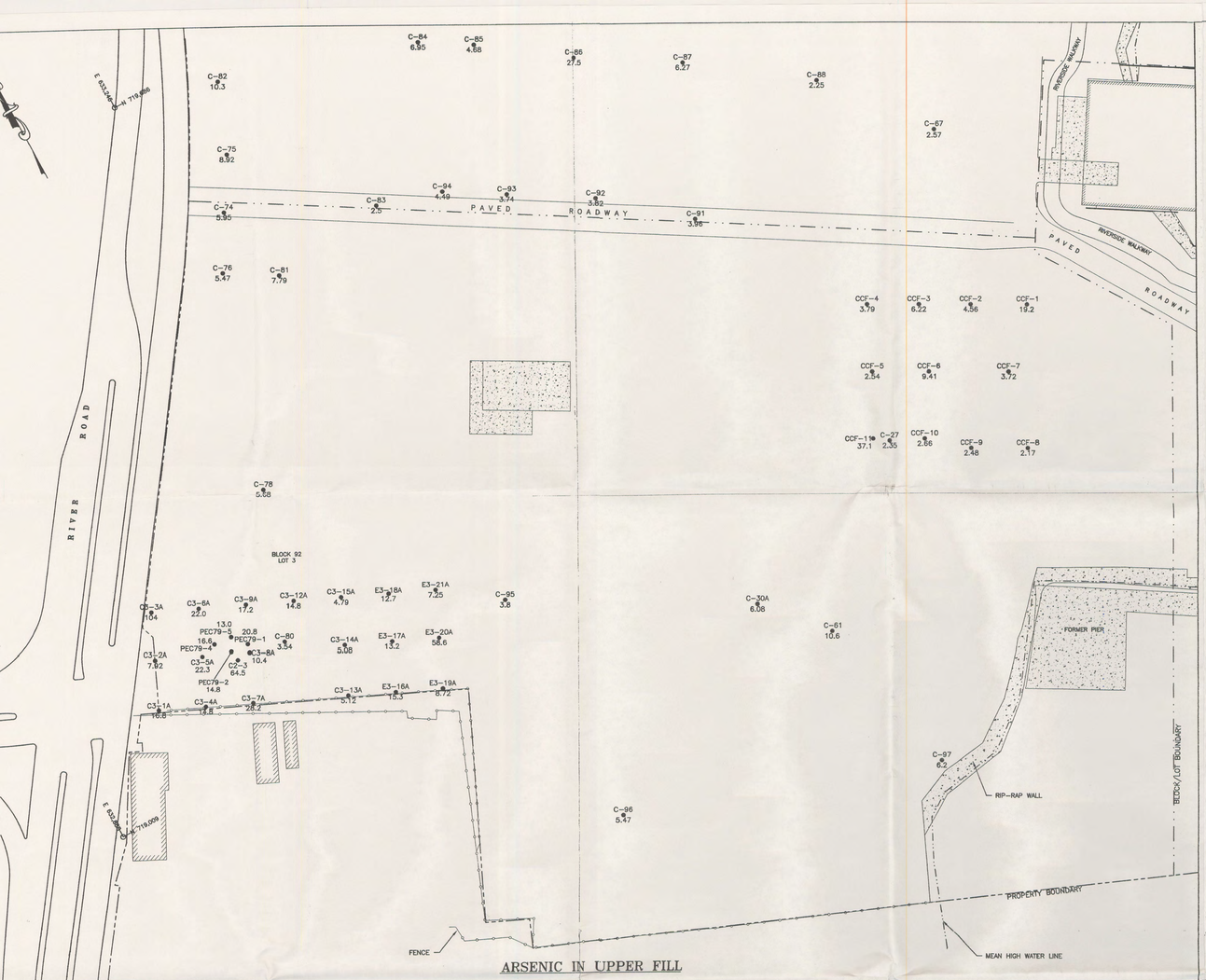
CE 3.2373

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: 1" = 50'	PROJECT# 200957
	DATE: 9/22/00	
	DRAWN BY: DW CHECKED BY: RR	
SOIL SAMPLE LOCATION PLAN FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		FIGURE# 3

Environmental Waste Management Associates, LLC
P.O. Box 5430
Parsippany, NJ 07054
Tel: (973) 560-1400

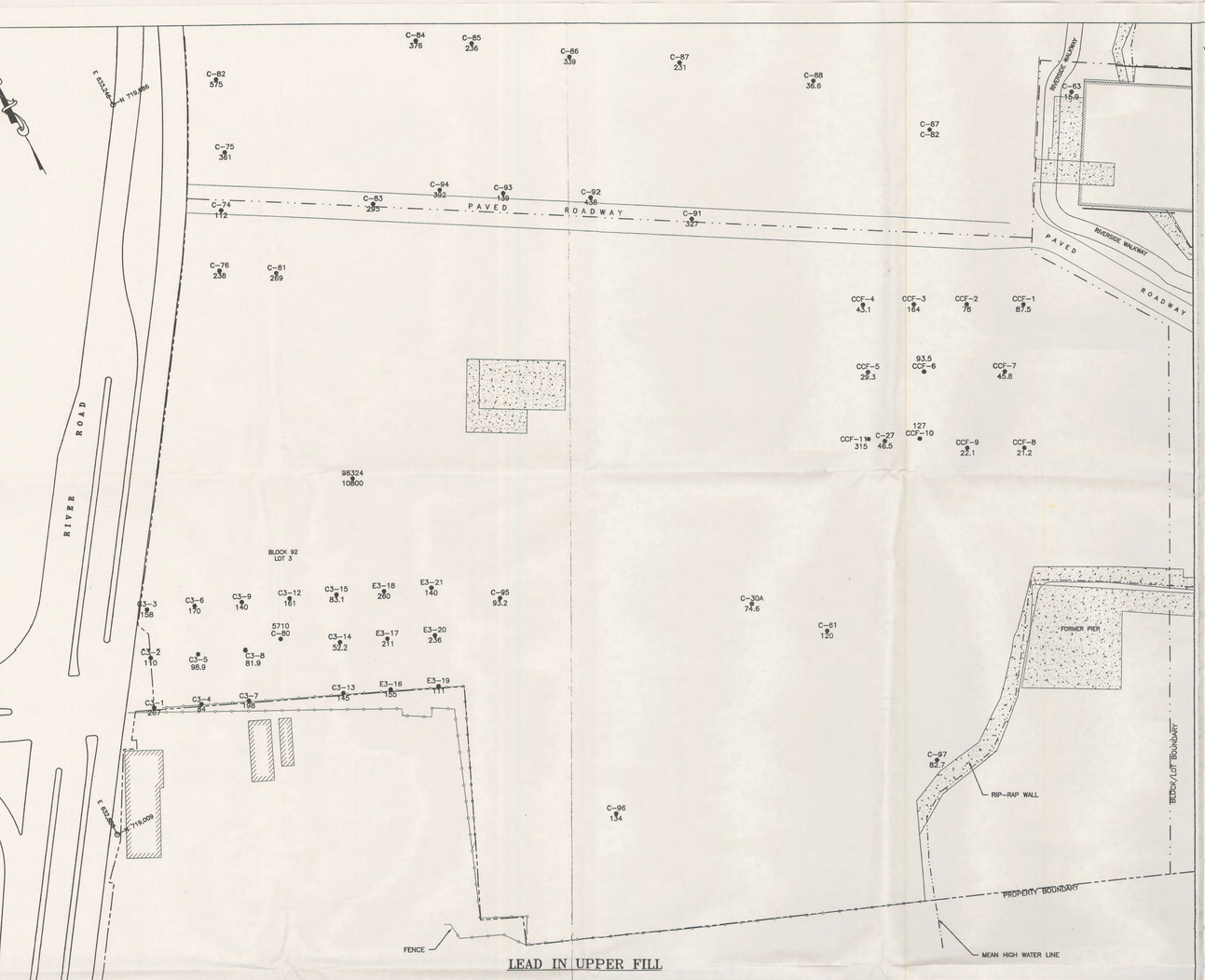
SCALE: 1" = 60'
DATE: 9/21/00
DRAWN BY: DW
CHECKED BY: RH

PAH SOIL CONTAMINATION PLAN
FORMER CELOTEX INDUSTRIAL PARK
1 RIVER ROAD
EDGEWATER, NEW JERSEY

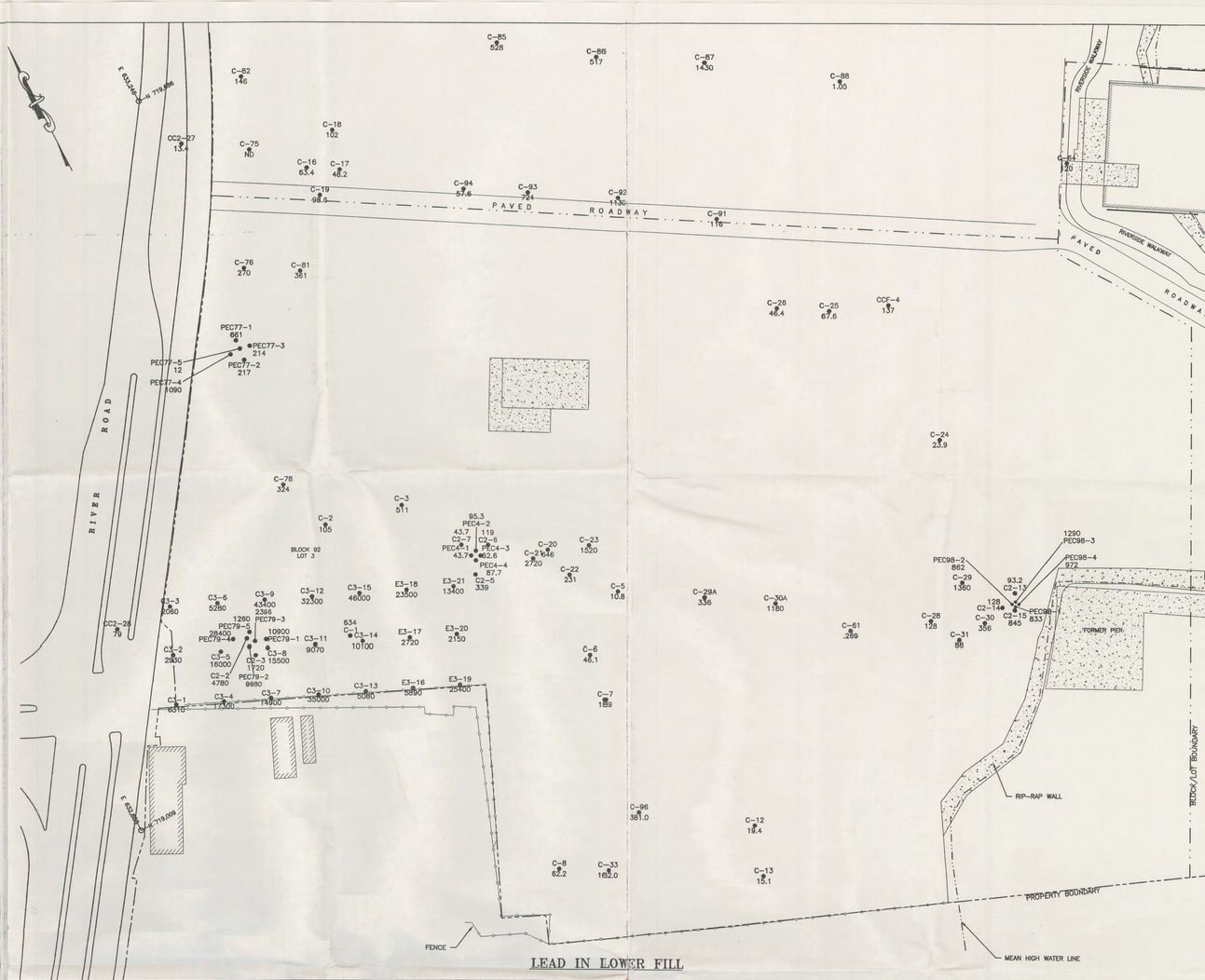


CE 3.237

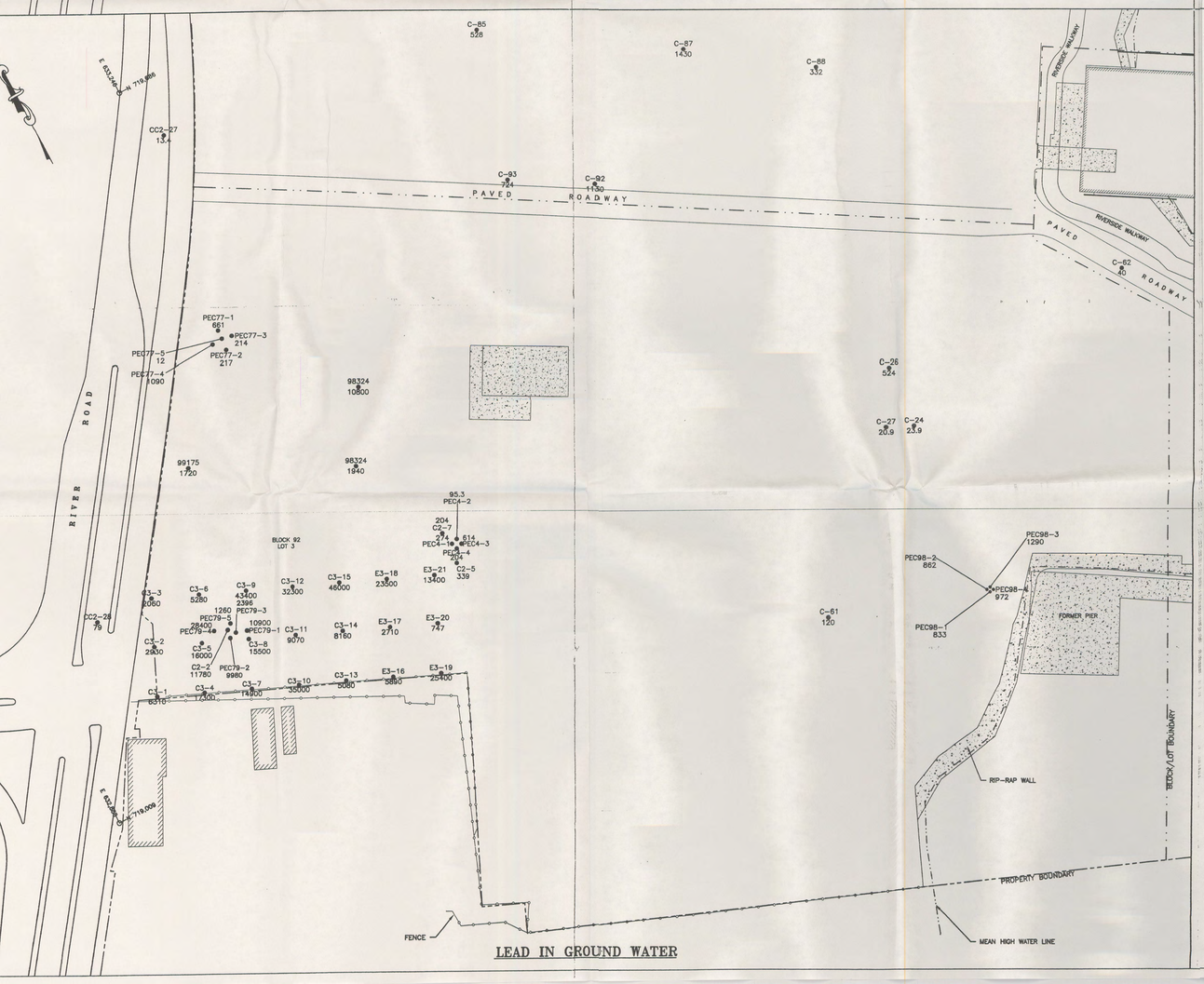
Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 580-1400	SCALE: 1" = 60' DATE: 9/21/00 DRAWN BY: DW CHECKED BY: RH PROJECT# 200957
ARSENIC SOIL CONTAMINATION PLAN FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY	FIGURE# 5



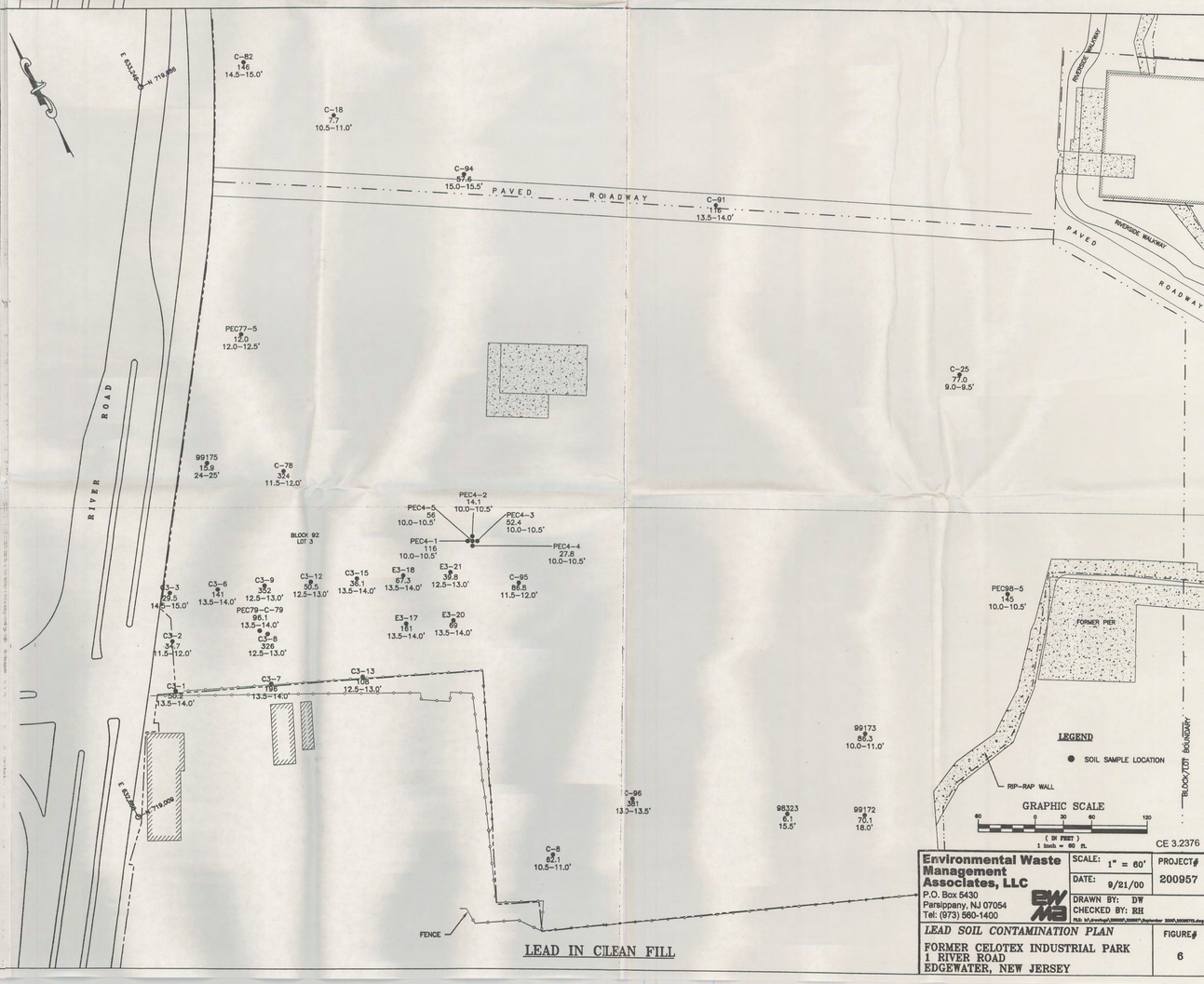
LEAD IN UPPER FILL



LEAD IN LOWER FILL



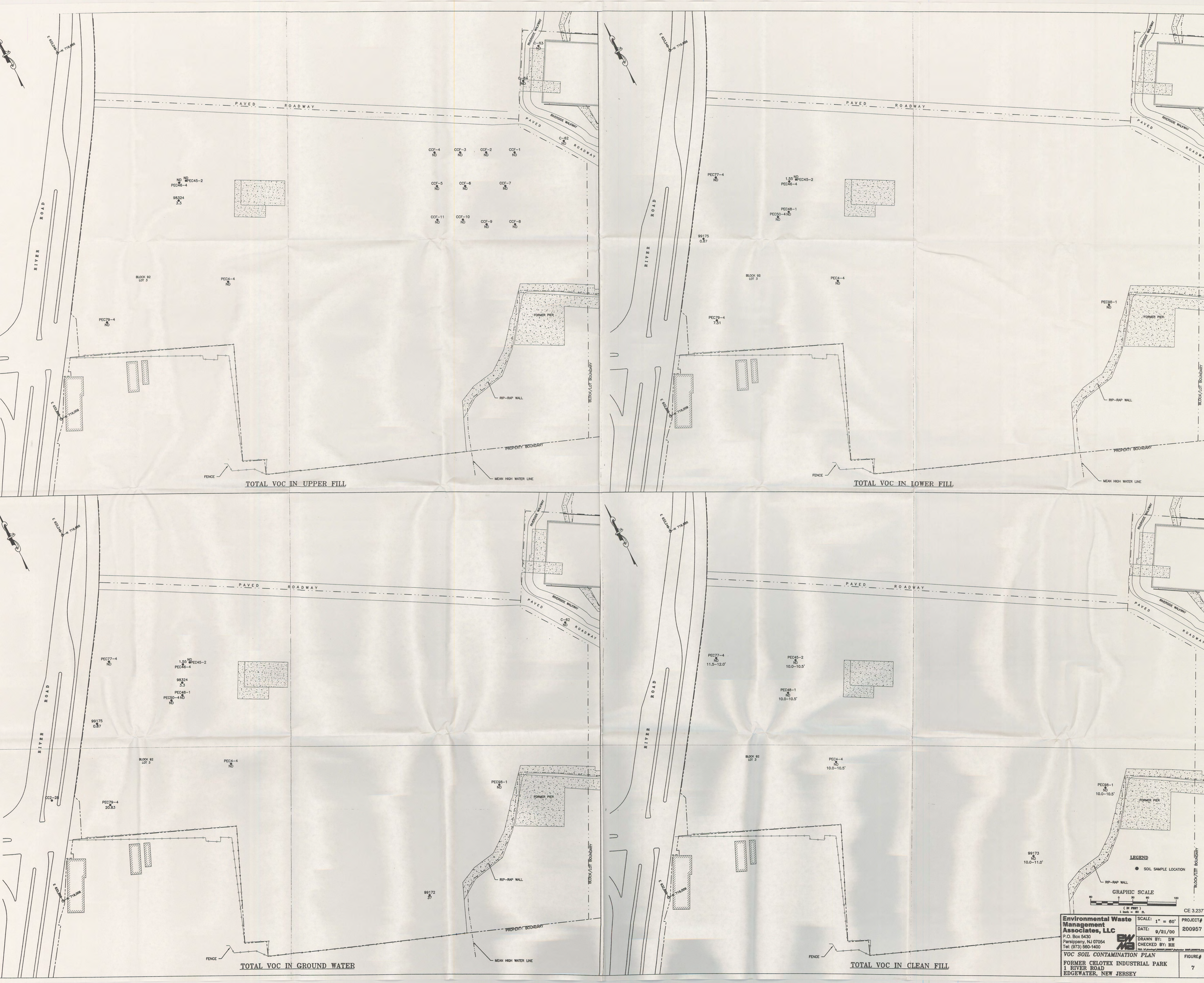
LEAD IN GROUND WATER



LEAD IN CLEAN FILL

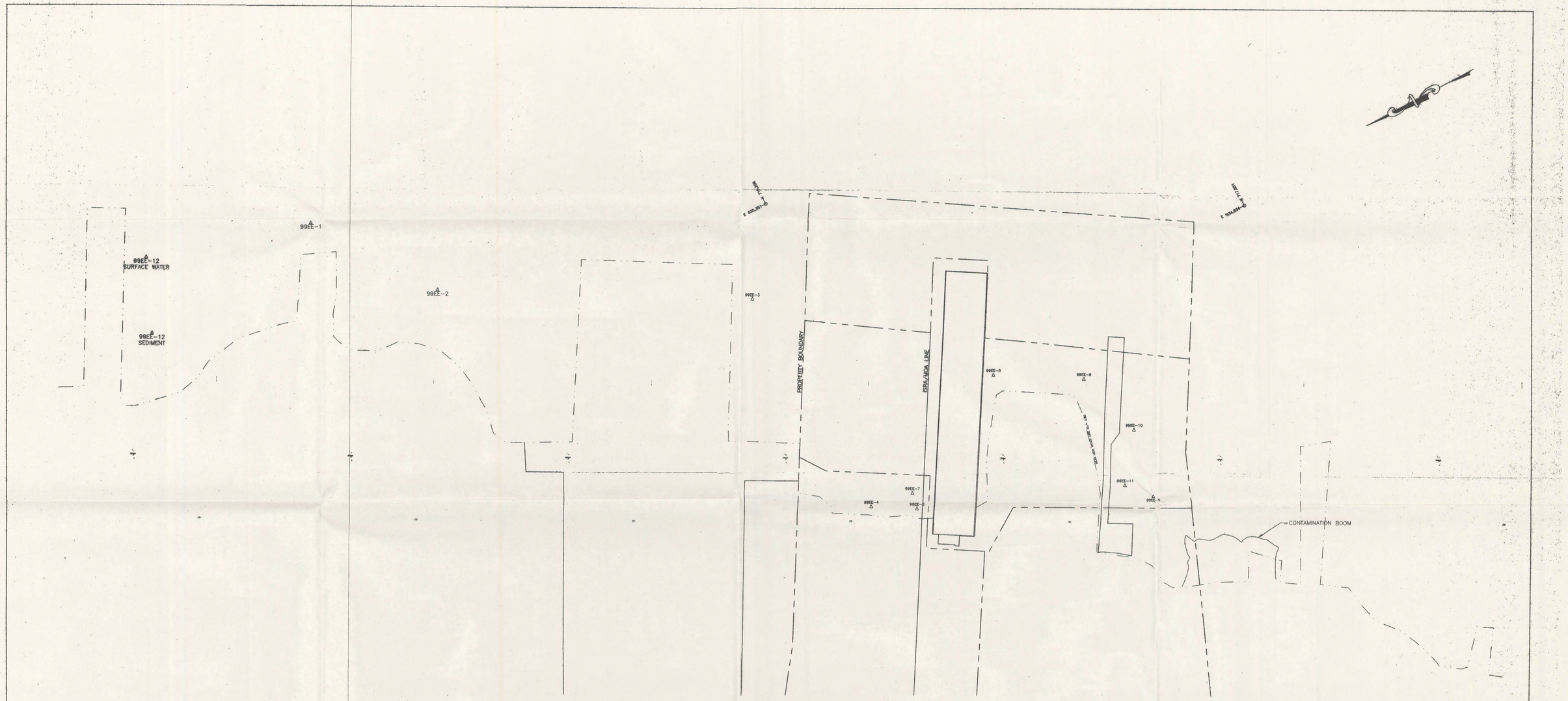
Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: 1" = 60'	PROJECT# 200957
	DATE: 9/21/00	
	DRAWN BY: DW CHECKED BY: RH	
LEAD SOIL CONTAMINATION PLAN FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		FIGURE# 6

CE 3.2376



CE 3.237

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: 1" = 60' DATE: 9/21/00 DRAWN BY: DW CHECKED BY: RH	PROJECT# 200957
VOC SOIL CONTAMINATION PLAN FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		FIGURE# 7



LEGEND

99EE-2 EWMA SURFACE WATER & SEDIMENT CORE SAMPLING LOCATION

GRAPHIC SCALE

150 0 75 150 300

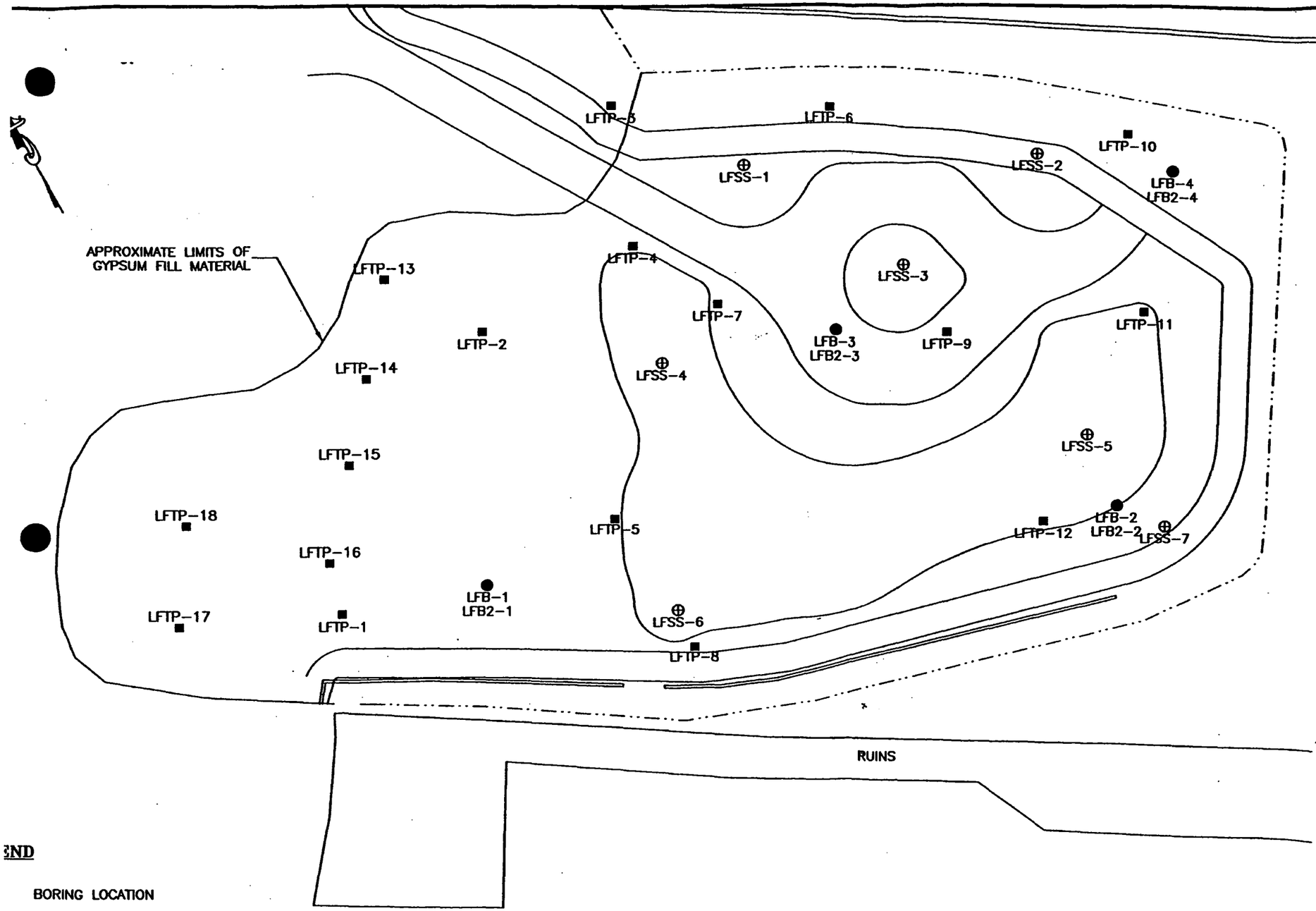
(IN FEET)

1 inch = 150 ft.

CE 3.2378

NOTE: GRID IS N.J.S.P.C.S. 1983

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: 1" = 150'	PROJECT# 200957
	DATE: 9/22/00	
	DRAWN BY: DLW CHECKED BY: CK	
HUDSON RIVER SAMPLE LOCATION PLAN FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		FIGURE# 8



END

BORING LOCATION

SHALLOW SOIL SAMPLE LOCATION

TEST PIT LOCATION

GRAPHIC SCALE

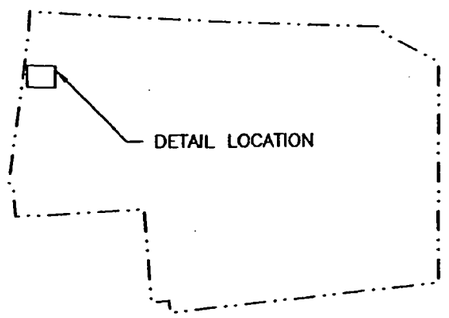
60 0 30 60 120

(IN FEET)

1 inch = 60 ft.

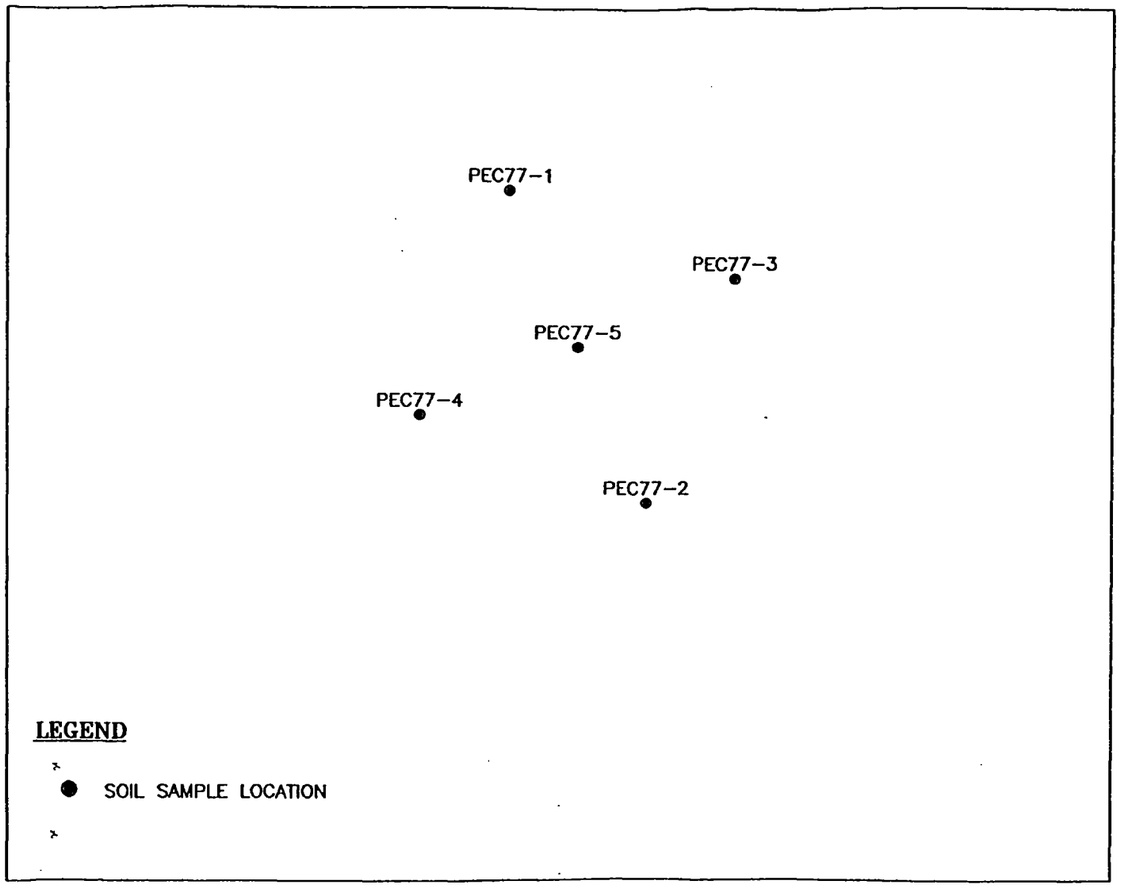
CE 3.2379

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: 1" = 60'	PROJECT: 200957
	DATE: 9/22/00	
	DRAWN BY: DLW/RR CHECKED BY: BT	
LANDFILL CHARACTERIZATION *SOIL SAMPLE LOCATION PLAN* FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		FIGURE# 9



SITE PLAN SHOWING DETAIL LOCATION

Sample ID:				PEC77-1A	PEC77-2A	PEC77-3A	PEC77-4A	PEC77-1B	PEC77-2B	PEC77-3B	PEC77-4B	PEC77-5
Lab ID:				3730-001	3730-002	3730-003	3730-004	3730-005	3730-006	3730-007	3730-008	3730-009
Sample Date:				21-Jun-00	21-Jun-00	21-Jun-00	21-Jun-00	21-Jun-00	21-Jun-00	21-Jun-00	21-Jun-00	21-Jun-00
Sample Media:	Unrlstricted	Restricted	IGW	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Sample Depth (feet bgs):	SCC	SCC		8-8.5	8-8.5	8-8.5	8-8.5	11.5-12	11.5-12	11.5-12	11.5-12	11.5-12
Units:	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Volatiles (ppm)												
Benzene	3	13	1	~	~	~	~	~	ND	ND	~	~
Toluene	1000	1000	500	~	~	~	~	~	ND	ND	~	~
Trichloroethene	23	54	1	~	~	~	~	~	ND	ND	~	~
Tetrachloroethene	4	6	1	~	~	~	~	~	ND	ND	~	~
Ethylbenzene	1000	1000	100	~	~	~	~	~	ND	ND	~	~
Total Xylenes	410	1000	67	~	~	~	~	~	ND	ND	~	~
TOTAL VO's:				~	~	~	~	~	ND	ND	~	~
TOTAL TIC's:				~	~	~	~	~	ND	ND	~	~
TOTAL VO's & TIC's:	1000	1000	1000	~	~	~	~	~	ND	ND	~	~
Semivolatiles - PAH (ppm)												
Naphthalene	230	4200	100	0.274	0.190	1.850	ND	0.204	0.156	7.140	ND	ND
Acenaphthylene	NS	NS	NS	ND	ND	ND	ND	ND	0.234	ND	2.930	ND
Acenaphthene	3400	10000	100	0.609	0.295	3.620	0.451	0.432	0.423	15.000	0.332	ND
Fluorene	2300	10000	100	0.568	0.232	3.260	0.365	0.377	0.290	15.700	0.433	ND
Phenanthrene	NS	NS	NS	3.710	1.730	20.500	2.860	2.970	2.920	110.000	12.400	ND
Anthracene	10000	10000	100	1.090	0.490	4.710	0.883	0.699	0.714	34.800	2.800	0.186
Fluoranthene	2300	10000	100	4.830	2.690	17.500	4.370	3.970	6.170	152.000	37.800	ND
Pyrene	1700	10000	100	4.110	2.540	12.300	4.160	2.920	5.120	110.000	29.300	0.289
Benzo[a]anthracene	0.9	4	500	2.180	1.470	6.230	2.310	1.790	3.130	68.200	15.900	0.240
Chrysene	9	40	500	1.870	1.120	4.900	1.680	1.510	2.920	48.500	13.400	0.196
Benzo[b]fluoranthene	0.9	4	50	2.860	2.130	6.960	3.110	2.170	5.960	61.500	18.700	ND
Benzo[k]fluoranthene	0.9	4	500	1.130	0.558	2.720	0.809	0.659	1.520	22.700	5.820	ND
Benzo[a]pyrene	0.66	0.66	100	1.940	1.380	5.210	1.880	1.600	3.520	51.700	14.300	ND
Indeno[1,2,3-cd]pyrene	0.9	4	500	0.446	0.422	1.250	0.400	0.808	1.030	26.000	5.350	ND
Dibenz[a,h]anthracene	0.66	0.66	100	ND	ND	0.414	ND	0.251	0.358	8.080	1.590	ND
Benzo[g,h,i]perylene	NS	NS	NS	0.456	0.429	1.080	0.347	0.890	1.110	26.500	5.160	ND
Metals (ppm)												
Antimony	14	340	NS	~	~	~	~	~	~	~	~	~
Arsenic	20	20	NS	5.2	5.04	5.82	4.78	80.9	23.1	55.2	105	4.56
Beryllium	2	2	NS	~	~	~	~	~	~	~	~	~
Cadmium	39	100	NS	~	~	~	~	~	~	~	~	~
Chromium	240	NS	NS	~	~	~	~	~	~	~	~	~
Copper	600	600	NS	~	~	~	~	279	50.3	102	407	17.1
Lead	400	600	NS	100	97.9	99.3	95.1	661	217	214	1090	12
Mercury	14	270	NS	~	~	~	~	~	~	~	~	~
Nickel	250	2400	NS	~	~	~	~	~	~	~	~	~
Selenium	63	3100	NS	~	~	~	~	~	~	~	~	~
Silver	110	4100	NS	~	~	~	~	~	~	~	~	~
Thallium	2	2	NS	~	~	~	~	~	~	~	~	~
Zinc	1500	1500	NS	~	~	~	~	~	~	~	~	~



LEGEND

- SOIL SAMPLE LOCATION

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)

1 inch = 20 ft.

CE 3.2380

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: 1" = 20'	PROJEC 20095
	DATE: 9/22/00	
	DRAWN BY: DW CHECKED BY: RH	
C-77 POST EXCAVATION SOIL SAMPLE LOCATION PLAN FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		FIGURE 10

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200754
Lab Case No.: 10990-6694

Lab ID:	6694-001	6694-002	6694-003	6694-004	6694-005
Client ID:	CC2-19	CC2-20	CC2-21	CC2-22	CC2-24
Matrix:	Soil	Soil	Soil	Soil	Soil
Sampled Date:	11/4/1999	11/4/1999	11/4/1999	11/4/1999	11/4/1999
ETER(Units)					7.5-8
tiles - PAH (ppb)					
ene	1240	127	4240	327	ND
hylene	133 J	ND	308 J	ND	168
hene	5280	756	9290	124	ND
	8900	770	7070	107 J	109 J
rene	2740	264	51600	509	543
ae	1890	111 J	10600	115 J	95.7 J
ene	5050	493	70500	243	541
	2620	381	65300	191	918
nthracene	174 J	134 J	50300	104 J	424
	172 J	123 J	46800	86 J	531
luoranthene	ND	107 J	75800	ND	311
luoranthene	ND	ND	22800	ND	140
yrene	ND	99.3 J	41100	ND	338
2,3-cd]pyrene	ND	ND	7660	ND	127
b]anthracene	ND	ND	2760	ND	ND
,i]perylene	ND	ND	5320	ND	136
pm)					
	-	-	-	983	-

le not analyzed for
alyzed for but Not Detected at the MDL
oncentration was detected at a value below the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200754
Lab Case No.: 10990-6694

Lab ID:	6694-006	6694-007	6694-008	6694-009	6694-010
Client ID:	CC2-25	CC2-26	CC2-27	CC2-28	CC2-28
Depth:	7.5-8	7.5-8	7.5-8	7.5-8	4.5-5
Matrix:	Soil	Soil	Soil	Soil	Soil
Sampled Date:	11/4/1999	11/4/1999	11/4/1999	11/4/1999	11/4/1999
PARAMETER(Units)					
Semivolatiles - PAH (ppb)					
Naphthalene	ND	ND	ND	151 J	
Acenaphthylene	ND	ND	ND	280	
Acenaphthene	ND	ND	ND	634	
Fluorene	ND	ND	ND	615	
Phenanthrene	ND	315	ND	6180	
Anthracene	ND	85.2 J	ND	2030	
Fluoranthene	ND	688	ND	8640	
Pyrene	ND	687	ND	7210	
Benzo[a]anthracene	ND	432	ND	3730	
Chrysene	ND	451	ND	3770	
Benzo[b]fluoranthene	ND	619	ND	4200	
Benzo[k]fluoranthene	ND	269	ND	2230	
Benzo[a]pyrene	ND	450	ND	3130	
Indeno[1,2,3-cd]pyrene	ND	148	ND	787	
Dibenz[a,h]anthracene	ND	ND	ND	322	
Benzo[g,h,i]perylene	ND	127	ND	690	
Metals (ppm)					
Arsenic	-	-	2.30	3.94	-
Beryllium	-	-	0.565	0.506	-
Cadmium	-	-	ND	0.319	-
Copper	-	-	14.9	48.5	-
Lead	-	-	13.4	79.0	-
Selenium	-	-	ND	ND	-
Thallium	-	-	ND	0.221	-
Zinc	-	-	31.2	119	-

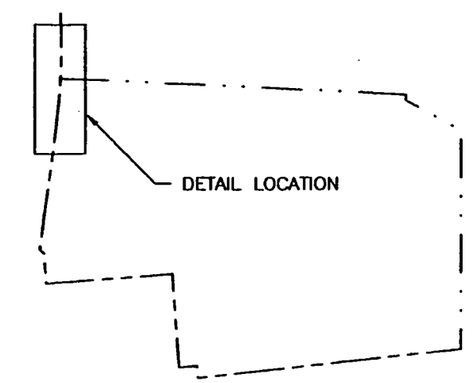
- = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the MDL

TED ANALYTICAL LABORATORIES, LLC.

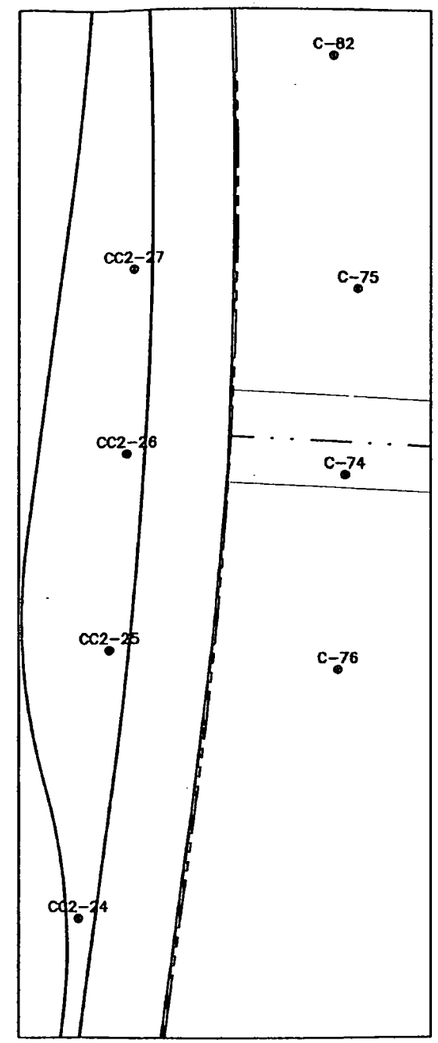
SUMMARY REPORT
nvironmental Waste Management Associates, LLC.
P EDGEWATER - 200754
Case No.: 10990-6694

Lab ID:	6694-011	6694-012
Client ID:	CC2-28	CC2-27
Depth:	3.5-4	11.5-12
Matrix:	Soil	Soil
Sampled Date:	11/4/1999	11/4/1999
ER(Units)		
s - PAH (ppb)		
	-	ND
ene	-	ND
e	-	ND
	-	ND
s	-	ND
	-	ND
	-	ND
racene	-	ND
	-	ND
ranthene	-	ND
ranthene	-	ND
ne	-	ND
-cd]pyrene	-	ND
ndracene	-	ND
perylene	-	ND
)		
	-	6.46
	-	0.399
	-	ND
	-	78.8
	-	32.0
	-	ND
	-	0.128
	-	12.3

- not analyzed for
zed for but Not Detected at the MDL



SITE PLAN SHOWING DETAIL LOCATION



LEGEND

● SOIL SAMPLE LOCATION

GRAPHIC SCALE

50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

CE 3.2381

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: 1" = 50' DATE: 9/22/00 DRAWN BY: DW CHECKED BY: RH	PROJECT# 200957
SITE-WIDE DELINEATION (C-74, 75, 76 & 77) SAMPLE LOCATION PLAN FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		FIGURE# 11

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200957
Lab Case No.: E00-3472

	Lab ID:	3472-001	3472-002	3472-003	3472-004	3472-005
	Client ID:	C3-01A	C3-01B	C3-01C	C3-01D	C3-2A
	Depth:	5.5-6'	4-4.5'	9.5-10'	13.5-14'	5.5-6'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		16.8	224	159	3.08	7.92
Lead		207	1610	6310	20.2	132
	Lab ID:	3472-006	3472-007	3472-008	3472-009	3472-010
	Client ID:	C3-2B	C3-2C	C3-2D	C3-3A	C3-3B
	Depth:	7.5-8'	9.5-10'	11.5-12'	5.5-6'	7.5-8'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		251	6570	1680	104	2260
Lead		274	2200	34.7	158	2090
	Lab ID:	3472-011	3472-012	3472-013	3472-014	3472-015
	Client ID:	C3-3C	E3-16A	C3-4A	C3-4B	C3-4C
	Depth:	14.5-15'	5.5-6'	5.5-6'	6.5-7'	9.5-10'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		32.2	15.3	14.8	352	853
Lead		29.5	155	94.0	1070	17900
	Lab ID:	3472-016	3472-017	3472-018	3472-019	3472-020
	Client ID:	C3-4D	C3-5A	C3-5B	C3-5C	C3-5D
	Depth:	14.5-15'	5.5-6'	7.5-8'	14.5-15'	15.5-16'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		1830	22.3	549	7130	4740
Lead		1040	98.9	1680	16000	126

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200957
Lab Case No.: E00-3472

	Lab ID:	3472-021	3472-022	3472-023	3472-024	3472-025
	Client ID:	C3-6A	C3-6B	C3-6C	C3-6D	C3-7A
	Depth:	5.5-6'	7.5-8'	11.5-12'	13.5-14'	6.5-6'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		32.0	244	2550	4320	28.2
Lead		120	1540	5280	141	198
	Lab ID:	3472-026	3472-027	3472-028	3472-029	3472-030
	Client ID:	C3-7B	C3-7C	C3-7D	C3-8A	C3-8B
	Depth:	7.5-8'	11.5-12'	13.5-14'	5.5-6'	7.5-8'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		139	5000	69.8	10.4	2250
Lead		3030	14900	196	81.9	2830
	Lab ID:	3472-031	3472-032	3472-033	3472-034	3472-035
	Client ID:	C3-8C	C3-8D	C3-9A	C3-9B	C3-9C
	Depth:	11.5-12'	13.5-13'	5.5-6'	7.5-8'	11.5-12'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		1840	938	17.2	535	1390
Lead		15900	226	146	4460	45400
	Lab ID:	3472-036	3472-037	3472-038	3472-039	3472-040
	Client ID:	C3-9D	C3-10A	C3-10B	C3-10C	C3-11A
	Depth:	13.5-13'	5.5-6'	6.5-7'	7.5-8'	5.5-6'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		687	950	778	6470	64.4
Lead		352	1200	1910	35000	374

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200957
Lab Case No.: E00-3472

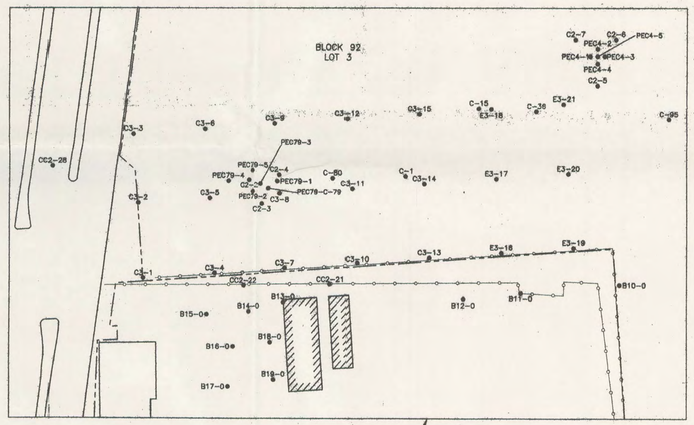
	Lab ID:	3472-041	3472-042	3472-043	3472-044	3472-045
	Client ID:	C3-11B	C3-11C	C3-11D	C3-11Y	C3-12A
	Depth:	6.5-7'	11.5-12'	13.5-14'	12-12.3'	6.5-7'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		271	650	458	3090	14.8
Lead		3920	9170	69.1	900	151
	Lab ID:	3472-046	3472-047	3472-048	3472-049	3472-050
	Client ID:	C3-12B	C3-12C	C3-12D	C3-13A	C3-13B
	Depth:	5.5-6'	11.5-12'	12.5-13'	5.5-6'	6.5-7'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		85.7	2150	184	5.12	990
Lead		4670	32300	50.5	145	1000

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200957
Lab Case No.: E00-3472

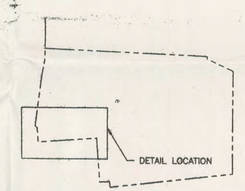
	Lab ID:	3472-051	3472-052	3472-053	3472-054	3472-055
	Client ID:	C3-13C	C3-13D	E3-14A	C3-14B	C3-14C
	Depth:	11.5-12'	12.5-13'	5.5-6'	6.5-7'	8.5-9'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		2660	522	5.08	568	2490
Lead		3080	178	22.2	10100	5160
	Lab ID:	3472-056	3472-057	3472-058	3472-059	3472-060
	Client ID:	C3-15A	C3-15B	C3-15C	C3-15D	E3-16B
	Depth:	5.5-6'	7.5-8'	10.5-11'	13.5-14'	6.5-7'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		4.79	49.2	6670	2480	480
Lead		83.1	8870	66000	36.1	3640
	Lab ID:	3472-061	3472-062	3472-063	3472-064	3472-065
	Client ID:	E3-16C	E3-17A	E3-17B	E3-17C	E3-17D
	Depth:	10.5-11'	5.5-6'	6.5-7'	10.5-11'	13.5-14'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		903	13.2	298	451	528
Lead		5890	211	2720	2710	161
	Lab ID:	3472-066	3472-067	3472-068	3472-069	3472-070
	Client ID:	E3-18A	E3-18B	E3-18C	E3-18D	E3-19A
	Depth:	5.5-6'	6.5-7'	11.5-12'	13.5-14'	5.5-6'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		12.7	78.3	667	4040	8.72
Lead		260	5460	23500	67.3	131

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200957
Lab Case No.: E00-3472

	Lab ID:	3472-071	3472-072	3472-073	3472-074	3472-075
	Client ID:	E3-19B	E3-19C	E3-20A	E3-20B	E3-20C
	Depth:	6.5-7'	7.5-8'	5.5-6'	6.5-7'	11.5-12'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		345	3030	58.6	109	691
Lead		5920	25400	236	2150	747
	Lab ID:	3472-076	3472-077	3472-078	3472-079	3472-080
	Client ID:	E3-20D	E3-21A	E3-21B	E3-21C	E3-21D
	Depth:	13.5-14'	5.5-6'	6.5-7'	11.5-12'	12.5-13'
	Matrix:	Soil	Soil	Soil	Soil	Soil
	Sampled Date:	6/8/2000	6/8/2000	6/8/2000	6/8/2000	6/8/2000
PARAMETER(Units)						
Metals (ppm)						
Arsenic		410	7.25	22.0	785	34.4
Lead		99.0	140	920	13400	318



SEE FIGURE 12



SITE PLAN SHOWING DETAIL LOCATION

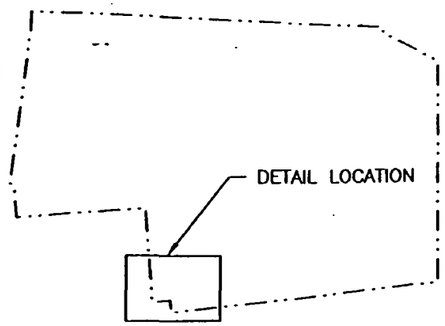
LEGEND

● SOIL SAMPLE LOCATION

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50' ft.

CE 3.2382

Environmental Waste Management Associates, LLC P.O. Box 6430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: 1" = 50'	PROJECT#
	DATE: 9/22/00	200957
	DRAWN BY: SW CHECKED BY: RH	
C-78 ARSENIC & LEAD DELINEATION SAMPLE LOCATION PLAN FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		FIGURE# 12



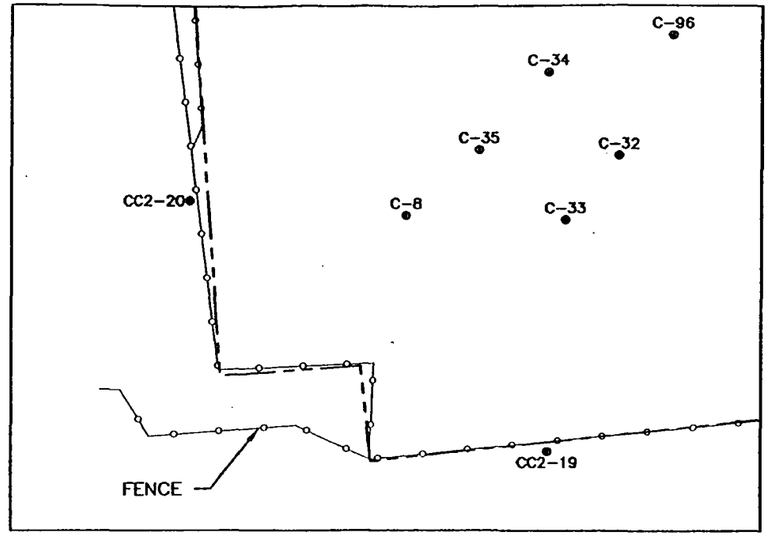
SITE PLAN SHOWING DETAIL LOCATION

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200754
Lab Case No.: 10990-6694

	Lab ID:	6694-001		6694-002		6694-003		6694-004		6694-005	
	Client ID:	CC2-19		CC2-20		CC2-21		CC2-22		CC2-24	
	Matrix:	Soil		Soil		Soil		Soil		Soil	
	Sampled Date:	11/4/1999		11/4/1999		11/4/1999		11/4/1999		11/4/1999	
PARAMETER(Units)										7.5-8	
Semivolatiles - PAH (ppb)											
Naphthalene		1240		127		4240		327		ND	
Acenaphthylene		133	J	ND		308	J	ND		168	
Acenaphthene		5280		756		9290		124		ND	
Fluorene		8900		770		7070		107	J	109	J
Phenanthrene		2740		264		51600		509		543	
Anthracene		1890		111	J	10600		115	J	95.7	J
Fluoranthene		5050		493		70500		243		541	
Pyrene		2620		381		65300		191		918	
Benzo[a]anthracene		174	J	134	J	50300		104	J	424	
Chrysene		172	J	123	J	46800		86	J	531	
Benzo[b]fluoranthene		ND		107	J	75800		ND		311	
Benzo[k]fluoranthene		ND		ND		22800		ND		140	
Benzo[a]pyrene		ND		99.3	J	41100		ND		338	
Indeno[1,2,3-cd]pyrene		ND		ND		7660		ND		127	
Dibenz[a,h]anthracene		ND		ND		2760		ND		ND	
Benzo[g,h,i]perylene		ND		ND		5320		ND		136	
Metals (ppm)											
Arsenic		-		-		-		983		-	

- = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the MDL



98326

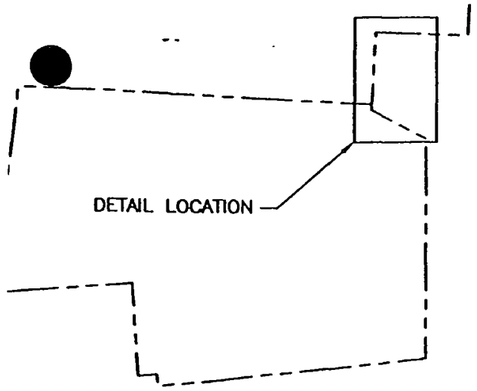
LEGEND

● SOIL SAMPLE LOCATION

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

CE 3.2383

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: 1" = 50'	PROJECT# 200957
	DATE: 9/22/00	
	DRAWN BY: DW CHECKED BY: RH	
SITE-WIDE DELINEATION (C-32, 34 & 35 AREA) SAMPLE LOCATION PLAN FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		FIGURE# 13



TE PLAN SHOWING DETAIL LOCATION

(14)

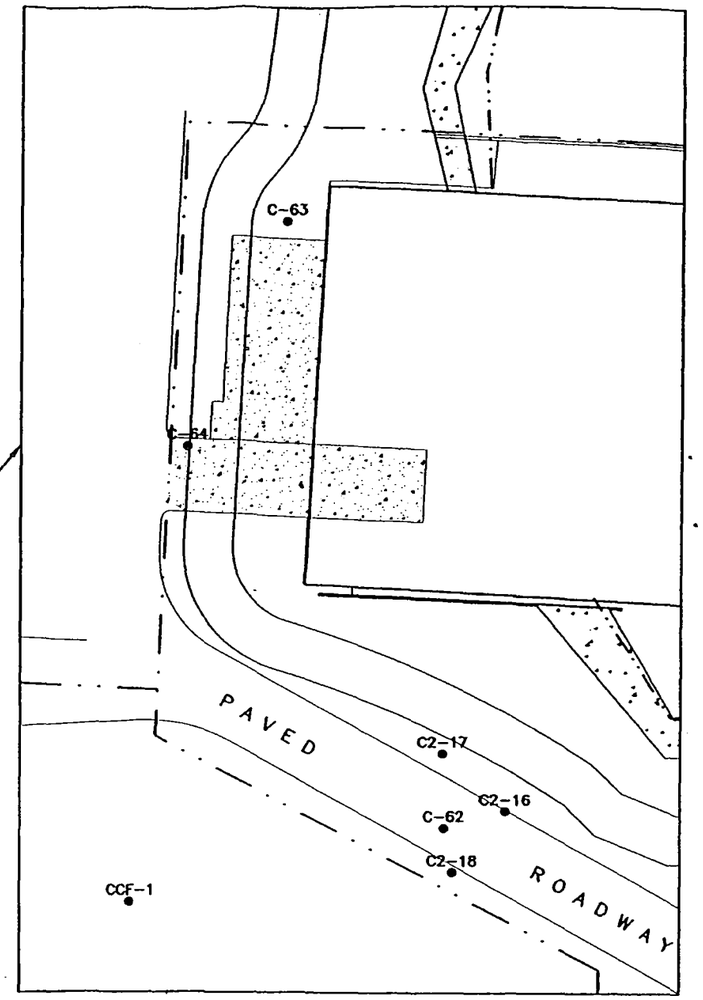
INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER ENTERPRISES - 200754
Lab Case No.: 10990-3730

Lab ID:	3730-011	3730-012	3730-013	3730-014	3730-015
Client ID:	C2-15	C2-16	C2-17	C2-18	DUP-1
Matrix:	Soil	Soil	Soil	Soil	Soil
Sampled Date:	6/30/99	6/30/99	6/30/99	6/30/99	6/30/99
PARAMETER(Units)	7.5-8'	2.5-3'	2.5-3'	2.5-3'	
Semivolatiles - PAH (ppb)					
Naphthalene	176 J	ND	1820	ND	59700
Acenaphthylene	ND	ND	ND	ND	ND
Acenaphthene	914	ND	4550	ND	161000
Fluorene	841	ND	3390	ND	145000
Phenanthrene	7140	ND	26400	ND	759000
Anthracene	1790	ND	6150	ND	158000
Fluoranthene	12600	ND	33400	ND	955000
Pyrene	9820	ND	26700	ND	685000
Benzo[a]anthracene	5080	ND	13100	ND	422000
Chrysene	5060	ND	12600	ND	409000
Benzo[b]fluoranthene	5340	ND	13100	ND	498000
Benzo[k]fluoranthene	2670	ND	7130	ND	273000
Benzo[a]pyrene	4290	ND	11400	ND	410000
Indeno[1,2,3-cd]pyrene	2420	ND	6090	ND	225000
Dibenz[a,h]anthracene	876	ND	1930	ND	66900
Benzo[g,h,i]perylene	2550	ND	6420	ND	246000
Metals (ppm)					
Arsenic	60.8	~	~	~	~
Lead	845	~	~	~	~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the MDL

SEE FIGURE 14



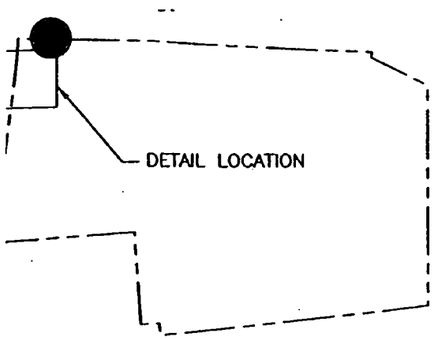
LEGEND

● SOIL SAMPLE LOCATION

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

CE 3.2384

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: 1" = 50'	PROJECT# 200957
	DATE: 9/22/00	
	DRAWN BY: DW CHECKED BY: RH	
SITE-WIDE DELINEATION (C-62 & C-63 AREA) SAMPLE LOCATION PLAN FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		FIGURE# 14



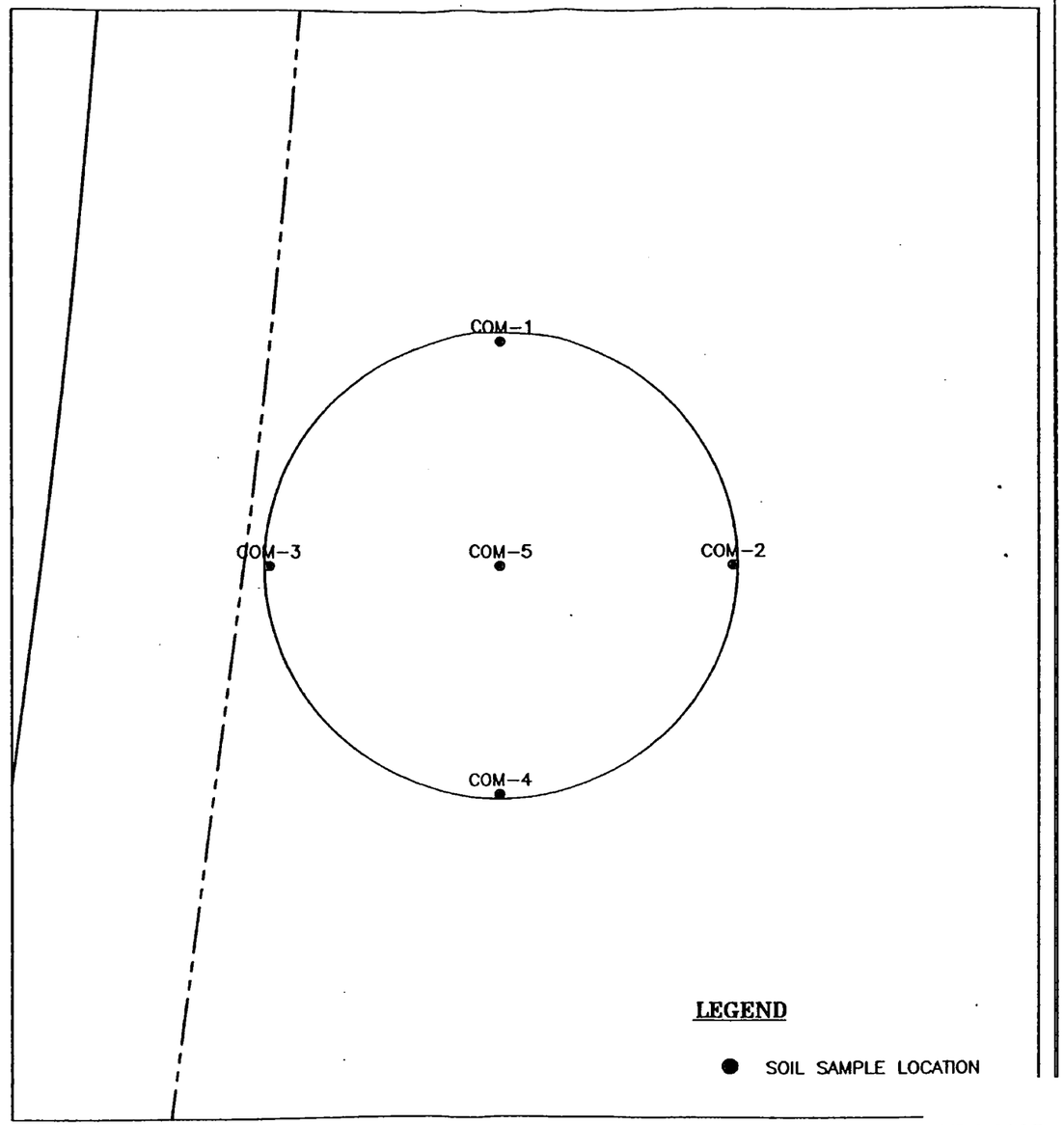
ITE PLAN SHOWING DETAIL LOCATION

	Lab ID:	7617-001		7617-002		7617-003		7617-004		7617-005	
	Client ID:	COM-1		COM-2		COM-3		COM-4		COM-5	
	Matrix:	Soil		Soil		Soil		Soil		Soil	
	Sampled Date:	12/13/1999		12/13/1999		12/13/1999		12/13/1999		12/13/1999	
PARAMETER(Units)		1.5-2		1.5-2		1.5-2		1.5-2		1.5-2	
Semivolatiles - BN (ppb)											
Naphthalene		ND		102	J	ND		ND		ND	
Acenaphthylene		85.3	J	127		112		86.8	J	88.3	J
Acenaphthene		228		620		187		99.6	J	99.7	J
Dibenzofuran		ND		134	J	ND		ND		ND	
Fluorene		83.6	J	248		227		ND		ND	
Phenanthrene		1180		3460		2540		1010		792	
Anthracene		306		790		626		325		253	
Carbazole		ND		223		160	J	ND		ND	
Fluoranthene		2620		5610		4140		2420		2170	
Pyrene		2640		6140		4580		2590		2800	
Benzo[a]anthracene		1470		2870		2180		1510		1470	
Chrysene		1120		2090		1560		962		1180	
bis(2-Ethylhexyl)phthalate		105	J	112		154		106	J	1590	
Benzo[b]fluoranthene		2270		4270		3120		2090		2160	
Benzo[k]fluoranthene		818		1460		1100		760		846	
Benzo[a]pyrene		1500		2900		1900		1360		1440	
Indeno[1,2,3-cd]pyrene		696		1150		906		613		629	
Dibenz[a,h]anthracene		277		500		349		266		268	
Benzo[g,h,i]perylene		727		1370		901		684		658	
TOTAL BN'S:		16125.9	J	34176	J	24742	J	14882.4	J	16444	J
TOTAL TIC's:		3684		9749		6542		6267		4833	
TOTAL BN'S & TIC's:		19809.9	J	43925	J	31284	J	21149.4	J	21277	J
PCB's (ppb)		ND		ND		ND		ND		ND	
Metals (ppm)											
Arsenic		6.66		6.84		6.61		5.82		4.66	
Beryllium		0.608		0.549		0.689		0.539		0.497	
Cadmium		0.601		0.542		0.577		0.481		0.566	
Copper		51.0		51.8		53.2		43.4		49.6	
Lead		126		131		117		101		140	
Mercury		0.295		0.392		0.308		0.278		0.327	
Selenium		ND		ND		ND		ND		ND	
Thallium		0.181		0.175		0.174		0.143		0.154	
Zinc		160		173		165		141		160	
General Analytical											
Cyanide, Total (ppm)		ND		ND		ND		ND		ND	

ND = Analyzed for but Not Detected at the MDL

J = The concentration was detected at a value below the MDL

All qualifiers on individual Semivolatiles are carried down through summation.



GRAPHIC SCALE

50 0 25 50 100

(IN FEET)

1 inch = 50 ft.

CE 3.2385

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: 1" = 50'	PROJECT# 200957
	DATE: 9/22/00	
	DRAWN BY: DW CHECKED BY: RH	
SALES AREA STOCKPILE (COM-1 – COM-5) *SAMPLE LOCATION PLAN* FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		FIGURE# 15

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200957
Lab Case No.: E00-1541

Lab ID:	1541-001	1541-002	1541-003	1541-004	1541-005
Client ID:	CCF-1A	CCF-1B	CCF-2	CCF-3	CCF-4A
Matrix:	Soil	Soil	Soil	Soil	Soil
Sampled Date:	3/16/2000	3/16/2000	3/16/2000	3/16/2000	3/16/2000
PARAMETER(Units)	5'-6'	5'-5.5'	5'-5.5'	4.5'-5.0'	5'-5.5'
Volatiles (ppb)					
TOTAL VO's:	ND	ND	ND	ND	ND
TOTAL TIC's:	ND	ND	ND	ND	ND
TOTAL VO's & TIC's:	ND	ND	ND	ND	ND
Semivolatiles - BNA (ppb)					
Naphthalene	ND	ND	ND	771	213
2-Methylnaphthalene	ND	ND	ND	ND	126 J
Acenaphthylene	ND	ND	ND	ND	286
Acenaphthene	233	ND	646	4670	818
Dibenzofuran	ND	ND	ND	1220	179 J
Diethylphthalate	ND	ND	ND	2330	758
Fluorene	310	ND	356	2970	407
Phenanthrene	2080	215	4200	31500	4700
Anthracene	705	ND	1360	14100	1800
Carbazole	150 J	ND	505	2600	535
Fluoranthene	3650	504	7840	74800	8290
Pyrene	3400	592	7370	61000	6770
Benzo(a)anthracene	1860	306	4080	39600	4500
Chrysene	1850	312	3580	29500	4240
bis(2-Ethylhexyl)phthalate	199 J	ND	335	ND	280
Benzo(b)fluoranthene	1270	185 J	2600	26300	3000
Benzo(k)fluoranthene	1400	140 J	3230	22400	2790
Benzo(a)pyrene	1570	325	3140	26400	3680
Indeno(1,2,3-cd)pyrene	995	ND	2270	16400	2360
Dibenz(a,h)anthracene	300	ND	811	5020	680
Benzo(g,h,i)perylene	1020	ND	2690	16800	2740
TOTAL BNA'S:	20632 J	2587 J	45233	378801	48385 J
TOTAL TIC's:	ND	ND	1930	49040	3965
TOTAL BNA'S & TIC's:	20632 J	2587 J	47163	427841	52346 J

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the MDL
All qualifiers on individual Semivolatiles are carried down through summation.
Continued on next page.

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200957
Lab Case No.: E00-1541

Lab ID:	1541-001	1541-002	1541-003	1541-004	1541-005
Client ID:	CCF-1A	CCF-1B	CCF-2	CCF-3	CCF-4A
Matrix:	Soil	Soil	Soil	Soil	Soil
Sampled Date:	3/16/2000	3/16/2000	3/16/2000	3/16/2000	3/16/2000
PARAMETER(Units)					
PCB's (ppb)					
Aroclor-1016	ND	ND	ND	ND	ND
Aroclor-1221	ND	ND	ND	ND	ND
Aroclor-1232	ND	ND	ND	ND	ND
Aroclor-1242	ND	ND	ND	ND	ND
Aroclor-1248	ND	ND	ND	ND	ND
Aroclor-1254	ND	ND	ND	ND	ND
Aroclor-1260	3940	ND	467	897	186
Pesticides (ppb)					
alpha-BHC	ND	ND	ND	ND	ND
beta-BHC	ND	ND	ND	ND	ND
gamma-BHC	ND	ND	ND	ND	ND
delta-BHC	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND
4,4'-DDT	25.8	ND	12.1	55.7	ND
Chlordane	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND
Metals (ppm)					
Antimony	ND	ND	ND	ND	ND
Arsenic	4.43	2.47	4.56	6.23	19.2
Beryllium	0.559	0.667	0.645	0.499	0.474
Cadmium	0.334	ND	0.379	0.458	0.493
Chromium	30.1	23.9	27.8	37.2	25.4
Copper	57.6	31.7	43.2	42.4	47.6
Lead	87.3	65.2	78.0	164	137
Mercury	0.209	0.0903	0.257	0.172	0.376
Nickel	23.4	15.2	23.9	20.4	21.9
Selenium	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND
Thallium	0.289	0.167	0.169	0.253	0.233
Zinc	227	49.7	198	122	165
General Analytical					
Cyanide, Total (ppm)	ND	ND	ND	ND	ND
Phenol (ppm)	ND	ND	ND	ND	ND

ND = Analyzed for but Not Detected at the MDL

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200957
Lab Case No.: E00-1541

Lab ID:	1541-006	1541-007	1541-008	1541-009	1541-010
Client ID:	CCF-4B	CCF-5	CCF-6A	CCF-6B	CCF-7
Matrix:	Soil	Soil	Soil	Soil	Soil
Sampled Date:	3/16/2000	3/16/2000	3/16/2000	3/16/2000	3/16/2000
PARAMETER(Units)	5'-5.5'	5'-5.5'	4.5'-5.0'	1'-1.5'	4.5'-5'
Volatiles (ppb)					
TOTAL VO's:	ND	ND	ND	ND	ND
TOTAL TIC's:	ND	ND	ND	ND	ND
TOTAL VO's & TIC's:	ND	ND	ND	ND	ND
Semivolatiles - BNA (ppb)					
Acenaphthylene	ND	ND	364	ND	ND
Diethylphthalate	ND	ND	ND	ND	1060
Phenanthrene	874	ND	2350	337	849
Anthracene	214 J	ND	792	146 J	274
Carbazole	ND	ND	222	ND	ND
Fluoranthene	939	217	4320	652	1390
Pyrene	919	269	4200	768	1350
Benzo(a)anthracene	431	184 J	2130	391	820
Chrysene	477	ND	1990	388	749
bis(2-Ethylhexyl)phthalate	213 J	ND	ND	164 J	ND
Benzo(b)fluoranthene	285	ND	1410	276	540
Benzo(k)fluoranthene	185 J	ND	1820	167 J	373
Benzo(a)pyrene	344	ND	1900	357	715
Indeno(1,2,3-cd)pyrene	229	ND	1260	ND	400
Dibenz(a,h)anthracene	ND	ND	685	ND	ND
Benzo(g,h,i)perylene	231	ND	1480	ND	489
TOTAL BNA'S:	3931 J	670 J	25013	3706 J	9319
TOTAL TIC's:	ND	ND	ND	ND	1020 J
TOTAL BNA'S & TIC's:	3931 J	670 J	25013	3706 J	10339 J
PCB's (ppb)					
Aroclor-1016	ND	ND	ND	ND	ND
Aroclor-1221	ND	ND	ND	ND	ND
Aroclor-1232	ND	ND	ND	ND	ND
Aroclor-1242	ND	ND	ND	ND	ND
Aroclor-1248	ND	ND	ND	ND	ND
Aroclor-1254	ND	ND	ND	ND	ND
Aroclor-1260	ND	ND	385	174	408

ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected at a value below the MDL
All qualifiers on individual Semivolatiles are carried down through summation.
Continued on next page.

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200957
Lab Case No.: E00-1541

Lab ID:	1541-006	1541-007	1541-008	1541-009	1541-010
Client ID:	CCF-4B	CCF-5	CCF-6A	CCF-6B	CCF-7
Matrix:	Soil	Soil	Soil	Soil	Soil
Sampled Date:	3/16/2000	3/16/2000	3/16/2000	3/16/2000	3/16/2000
PARAMETER(Units)					
Pesticides (ppb)					
alpha-BHC	ND	ND	ND	ND	ND
beta-BHC	ND	ND	ND	ND	ND
gamma-BHC	ND	ND	ND	ND	ND
delta-BHC	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND	ND
Chlordane	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND
Metals (ppm)					
Antimony	ND	ND	ND	ND	ND
Arsenic	2.17	2.36	2.48	2.68	27.6
Beryllium	0.430	0.530	0.458	0.388	0.550
Cadmium	ND	ND	ND	0.447	0.568
Chromium	19.7	19.2	19.6	16.9	33.5
Copper	20.4	19.9	21.1	19.1	90.5
Lead	21.2	13.8	22.1	127	195
Mercury	0.0391	0.0451	0.0604	0.192	0.827
Nickel	19.9	19.5	19.1	19.5	25.1
Selenium	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND
Thallium	0.157	0.113	0.133	0.0883	0.383
Zinc	60.0	54.1	65.8	112	203
General Analytical					
Cyanide, Total (ppm)	ND	ND	ND	ND	ND
Phenol (ppm)	ND	ND	ND	ND	ND

ND = Analyzed for but Not Detected at the MDL.

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200957
Lab Case No.: E00-1541

Lab ID:	1541-011	1541-012	1541-013	1541-014	1541-015
Client ID:	CCF-8	CCF-9A	CCF-9B	CCF-10	CCF-11A
Matrix:	Soil	Soil	Soil	Soil	Soil
Sampled Date:	3/16/2000	3/16/2000	3/16/2000	3/16/2000	3/16/2000
PARAMETER(Units)	4.5'-5'	4.5'-5'	1'-1.5'	4'-4.5'	4'-4.5'
Volatiles (ppb)					
TOTAL VO's:	ND	ND	ND	ND	ND
TOTAL TIC's:	ND	ND	ND	ND	ND
TOTAL VO's & TIC's:	ND	ND	ND	ND	ND
Semivolatiles - BNA (ppb)					
Acenaphthylene	ND	ND	ND	ND	195 J
Acenaphthene	ND	ND	171 J	294	
Diethylphthalate	737	743	575	443	519
Phenanthrene	ND	ND	ND	1740	2550
Anthracene	ND	ND	ND	575	986
Di-n-butylphthalate	ND	ND	ND	ND	160 J
Fluoranthene	249	ND	132 J	3540	5960
Pyrene	296	ND	126 J	3190	5470
Benzo(a)anthracene	ND	ND	ND	1890	3860
Chrysene	ND	ND	ND	1780	3550
Benzo(b)fluoranthene	ND	ND	ND	1590	3350
Benzo(k)fluoranthene	ND	ND	ND	707	993
Benzo(a)pyrene	ND	ND	ND	1580	3020
Indeno(1,2,3-cd)pyrene	ND	ND	ND	1020	2150
Benzo(g,h,i)perylene	ND	ND	ND	1200	2470
TOTAL BNA'S:	1282	743	833 J	19426 J	34867 J
TOTAL TIC's:	ND	ND	ND	ND	ND
TOTAL BNA'S & TIC's:	1282	743	833 J	19426 J	34867 J
PCB's (ppb)					
Aroclor-1016	ND	ND	ND	ND	ND
Aroclor-1221	ND	ND	ND	ND	ND
Aroclor-1232	ND	ND	ND	ND	ND
Aroclor-1242	ND	ND	ND	ND	ND
Aroclor-1248	ND	ND	ND	ND	ND
Aroclor-1254	ND	ND	ND	ND	ND
Aroclor-1260	ND	ND	ND	ND	2420

ND = Analyzed for but Not Detected at the MDL.
J = The concentration was detected at a value below the MDL.
All qualifiers on individual Semivolatiles are carried down through summation.
Continued on next page.

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200957
Lab Case No.: E00-1541

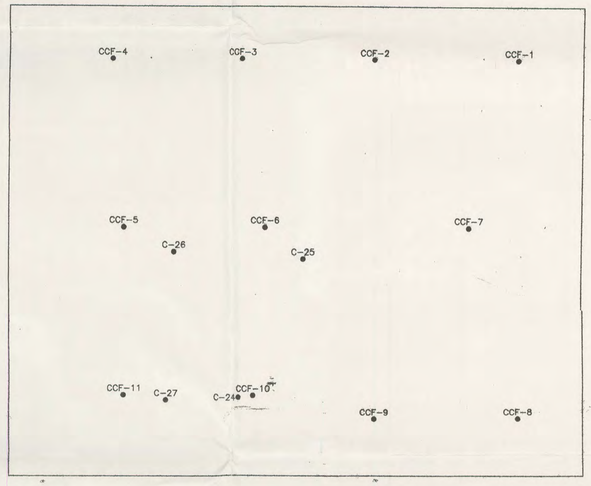
Lab ID:	1541-011	1541-012	1541-013	1541-014	1541-015
Client ID:	CCF-8	CCF-9A	CCF-9B	CCF-10	CCF-11A
Matrix:	Soil	Soil	Soil	Soil	Soil
Sampled Date:	3/16/2000	3/16/2000	3/16/2000	3/16/2000	3/16/2000
PARAMETER(Units)					
Pesticides (ppb)					
alpha-BHC	ND	ND	ND	ND	ND
beta-BHC	ND	ND	ND	ND	ND
gamma-BHC	ND	ND	ND	ND	ND
delta-BHC	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND	ND
Chlordane	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND
Metals (ppm)					
Antimony	ND	ND	ND	ND	ND
Arsenic	2.17	2.36	2.48	2.68	27.6
Beryllium	0.430	0.530	0.458	0.388	0.550
Cadmium	ND	ND	ND	0.447	0.568
Chromium	19.7	19.2	19.6	16.9	33.5
Copper	20.4	19.9	21.1	19.1	90.5
Lead	21.2	13.8	22.1	127	195
Mercury	0.0391	0.0451	0.0604	0.192	0.827
Nickel	19.9	19.5	19.1	19.5	25.1
Selenium	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND
Thallium	0.157	0.113	0.133	0.0883	0.383
Zinc	60.0	54.1	65.8	112	203
General Analytical					
Cyanide, Total (ppm)	ND	ND	ND	ND	ND
Phenol (ppm)	ND	ND	ND	ND	ND

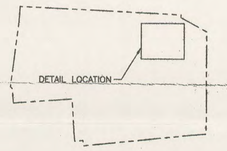
ND = Analyzed for but Not Detected at the MDL.

SUMMARY REPORT
Client: Environmental Waste Management Associates, LLC.
Project: EDGEWATER - 200957
Lab Case No.: E00-1541

Lab ID:	1541-016
Client ID:	CCF-11B
Matrix:	Soil
Sampled Date:	3/16/2000
PARAMETER(Units)	
Volatiles (ppb)	
TOTAL VO's:	ND
TOTAL TIC's:	ND
TOTAL VO's & TIC's:	ND
Semivolatiles - BNA (ppb)	
Acenaphthene	199 J
Diethylphthalate	445
Phenanthrene	2210
Anthracene	952
Fluoranthene	4570
Pyrene	4080
Benzo(a)anthracene	2580
Chrysene	2090
Benzo(b)fluoranthene	2260
Benzo(k)fluoranthene	1120
Benzo(a)pyrene	2180
Benzo(g,h,i)perylene	1650
TOTAL BNA'S:	24339 J
TOTAL TIC's:	1420
TOTAL BNA'S & TIC's:	25759 J
PCB's (ppb)	ND
Pesticides (ppb)	ND
Metals (ppm)	
Antimony	ND
Arsenic	37.1
Beryllium	0.480
Cadmium	0.540
Chromium	21.2
Copper	113
Lead	315
Mercury	1.17
Nickel	21.0
Selenium	ND
Silver	ND
Thallium	1.33
Zinc	177
General Analytical	
Cyanide, Total (ppm)	ND
Phenol (ppm)	ND

ND = Analyzed for but Not Detected at the MDL.
J = The concentration was detected at a value below the MDL.
All qualifiers on individual Semivolatiles are carried down through summation.





SITE PLAN SHOWING DETAIL LOCATION

LEGEND

● SOIL SAMPLE LOCATION

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

CE 3.2386

Environmental Waste Management Associates, LLC	SCALE: 1" = 20'	PROJECT# 200957
P.O. Box 5430	DATE: 9/22/00	
Parsippany, NJ 07054	DRAWN BY: DW	
Tel: (973) 560-1400	CHECKED BY: RH	
CONTINUING CAVE (CCF-1 TO CCF-11)		FIGURE#
SOIL SAMPLE LOCATION PLAN		
FORMER CELOTEX INDUSTRIAL PARK		1B
1 RIVER ROAD		
EDGEWATER, NEW JERSEY		

E 633,248 N 719,866

ROAD

RIVER

PAVED ROADWAY

RIVERSIDE WALKWAY

E 634,440 N 719,055

EXISITING APARTMENT COMPLEX

PAVED ROADWAY

RIVERSIDE WALKWAY

FORMER PIER

BLOCK 92
LOT 3

BLOCK 95
LOT 1

BLOCK/LOT BOUNDARY

RIP-RAP WALL

PROPERTY BOUNDARY

MEAN HIGH WATER LINE

FENCE

E 632,888 N 719,009

E 634,082 N 718,578

CONTAMINANT	CONCENTRATION
VOC-S	ND
ARSENIC	ND

MW-9 3.90

CONTAMINANT	CONCENTRATION
VOC-S	1.8
LEAD	5.85
ARSENIC	5.5

MW-14A 2.55

CONTAMINANT	CONCENTRATION
VOC-S	188
LEAD	23.4
ARSENIC	6.48

MW-13A 2.23

CONTAMINANT	CONCENTRATION
VOC-S	717
ARSENIC	1350

MW-12 1.85

CONTAMINANT	CONCENTRATION
VOC-S	ND
LEAD	ND
ARSENIC	24.9

MW-34 1.56

CONTAMINANT	CONCENTRATION
VOC-S	27.32
LEAD	5.68
ARSENIC	5.28

MW-35 1.34

CONTAMINANT	CONCENTRATION
VOC-S	ND
LEAD	91.4
ARSENIC	7.82

MW-36 4.55

CONTAMINANT	CONCENTRATION
VOC-S	12,056
ARSENIC	15.1

MW-10 4.46

CONTAMINANT	CONCENTRATION
VOC-S	ND
LEAD	15.3
ARSENIC	843

MW-22 1.75

CONTAMINANT	CONCENTRATION
VOC-S	2280
ARSENIC	313

MW-4 5.35

CONTAMINANT	CONCENTRATION
VOC-S	1054
ARSENIC	150,000

MW-6 5.00

CONTAMINANT	CONCENTRATION
VOC-S	ND
ARSENIC	ND

MW-3 2.18

CONTAMINANT	CONCENTRATION
VOC-S	3,413
ARSENIC	53.8

MW-19 1.58

CONTAMINANT	CONCENTRATION
VOC-S	548
LEAD	ND
ARSENIC	43.1

MW-20 4.40

CONTAMINANT	CONCENTRATION
VOC-S	2610
ARSENIC	020

MW-2 3.32

CONTAMINANT	CONCENTRATION
VOC-S	19,432
LEAD	18.8
ARSENIC	814

MW-31 4.75

CONTAMINANT	CONCENTRATION
VOC-S	232
ARSENIC	348

MW-1 6.05

CONTAMINANT	CONCENTRATION
VOC-S	1385.47
LEAD	ND
ARSENIC	15.5

MW-21 4.33

CONTAMINANT	CONCENTRATION
VOC-S	912
ARSENIC	10.3

MW-7 4.02

ID	NORTHING	EASTING
MW-1	719,769	633,261
MW-2	719,675	633,374
MW-3	719,848	633,554
MW-4	719,088	633,436
MW-5	719,655	633,268
MW-6	719,198	633,355
MW-7	718,587	633,663
MW-10	719,167	633,536
MW-12	719,255	633,679
MW-13	719,406	633,879
MW-13A	719,491	633,972
MW-14	719,578	634,068
MW-19	718,784	633,710
MW-20A	718,819	633,706
MW-21	718,722	633,908
MW-22	719,444	633,364
MW-31	718,785	633,517
MW-33	719,431	633,269
MW-34	719,455	633,807
MW-35	718,175	633,617

LEGEND

CONTAMINANT	CONCENTRATION
VOC-S	27.32
PAH	ND
LEAD	5.68
ARSENIC	5.28

MW-35 4.55 — MONITORING WELL LOCATION WITH CONTAMINANT CONCENTRATIONS AND GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (AMSL)

MW-6 ⊕ — PREVIOUSLY REMOVED MONITORING WELL LOCATION

ND — NOT DETECTED

GROUNDWATER CONTOUR WITH ELEVATION IN FEET (AMSL) WITH FLOW DIRECTION

NOTE: ALL SAMPLES ARE IN PARTS PER BILLION

GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50 ft.

CE 3.2387

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: 1" = 50'	PROJECT# 200957
	DATE: 9/22/00	
	DRAWN BY: DLW	
	CHECKED BY: RH	
GROUND WATER FLOW PLAN – DECEMBER 1999 FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		FIGURE# 17

Environmental
Waste
Management
Associates

CE 3.2388

REMEDIAL INVESTIGATION REPORT

Volume II of II

Property Known As:

Former Celotex Industrial Park
River Road
Edgewater, Bergen County, New Jersey
Site No. NJDE981876642

Prepared for:

Edgewater Enterprises, LLC

September 2000

Submitted by:

Environmental Waste Management Associates, LLC
100 Misty Lane, P.O. Box 5430
Parsippany, New Jersey 07054
EWMA Case No. 200957

Appendix 1: NJDEP LETTERS

CE 3.2390

State of New Jersey

Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, Jr
Commissioner

JAN 30 1998

RECEIVED
FEB 04 1998

Mr. James Demetrakis
PO Box 379
Fort Lee, NJ 07024-379

Dear Mr. Demetrakis:

Re: Remedial Action Work Plan Addendum for Parcel A; Celotex Property, One River Road, Edgewater Borough, Bergen County
MOA Case # 96-05-1722-24

The New Jersey Department of Environmental Protection (NJDEP or Department) has completed its review of the Remedial Action Work Plan Addendum (RAWP - Addendum) for Parcal A, dated January 29, 1998, for the Celotex Property (site), prepared by Enviro-Sciences, Inc., for Edgewater Associates. Based on this review, NJDEP has determined that the RAWP - Addendum is acceptable to the Department. It shall be noted that this approval is subject to the Department's review and assessment of an Ecological Evaluation to be conducted in accordance with N.J.A.C. 7:26E-3.11, as a part of the site wide remedial investigation for the eastern portion of the Celotex site as previous discussed in the NJDEP's December 15, 1997 letter.

Edgewater Associates shall notify the case manager, Robert Hayton, in writing of its intent to implement the RAWP at least 14 calendar days prior to implementation of the plan. Upon completion of the remedial action activities, Edgewater Associates shall submit, for the Department's review and approval, a Remedial Action Report in accordance with N.J.A.C.7:26E-6.6.

In conclusion, it must be understood that if any changes or modifications to the RAWP - Addendum are necessary, Edgewater Associates shall communicate to the Department in writing prior to implementation of such change/modification which are subject to written approval by the Department. If you have any questions regarding this approval or if Case Manager Robert Hayton can be of any further assistance, please contact him directly at (609) 633-1455.

Sincerely,

Pamela Lange, Section Supervisor
Bureau Federal Case Management

State of New Jersey

Christine Todd Whitman
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.
Commissioner

Division of Responsible Party Site Remediation
CN 028
Trenton, NJ 08625-0028

TO: Irv Cohen / John Gaw

FAX: (973) 398-8037 NUMBER OF PAGES (INCLUDING COVER): 3

FROM: Bob Hayton

BUREAU OF Federal Case Management

TELE: 609 633 0794 FAX: (609) 633-1454

COMMENTS:

CE 3.2392

State of New Jersey

Christine Todd Whitman
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.
Commissioner

Mr. James Demetrakis
PO Box 379
Fort Lee, New Jersey 07024-379

April 1, 1998

Re: Celotex Remedial Investigation
MOA Case # 96-05-1722-24

Dear Mr. Demetrakis:

As we discussed at our March 20, 1998 meeting at EPA Regional Office in Edison, the Department believes that the 150,000 gallon above ground storage tank and the secondary containment, which was originally part of All County Environmental Service Corporation (All County), was never properly closed under RCRA. As I stated at above referenced meeting All County applied for interim status under RCRA In 1980 and submitted their RCRA, Part B permit application for treatment and storage of hazardous wastes in 1983. As part of All County's Part B interim status designation, proper closure under RCRA was and is still required for the above ground storage tank and secondary containment.

I understand that Edgewater Associates is currently in the process of removing the waste from the only remaining above ground storage tank left at the now defunct All County site, under a Consent Order with USEPA's TOSCA program. As we discussed at the meeting, EPA's concern and jurisdiction relative to this Order is limited to the removal and proper disposal of the waste, remaining residue in the tank and possibly the removal of the tank itself. The proper closure of the tank and impoundment area pursuant to RCRA still needs to be addressed. EPA recently faxed me a copy of a letter they received from Irving Cohen of Enviro-Sciences Inc. concerning the decontaminating procedure for the above ground storage tank. The following items were proposed to EPA for finalizing the waste removal project:

- The remaining heel in the tank will be washed with diesel fuel to enable the material to be pumped and collected for ultimate fuel blending disposal at Lancaster Oil in Pennsylvania;
- The tank walls will be washed with diesel fuel and mixed with the heel contents for fuel blending disposal;
- The tank will be steam cleaned prior to dismantling and shipment to Hugo Nuc Schnitzer, Jersey City for metal smelting; and
- The collected condensate from the steam cleaning will be disposed of properly.

The Department approves of the items above as they will constitute partial closure under RCRA. The following additional requirements will need to be addressed as part of the final closure of the unit:

- Prior to dismanteling of the tank an engineering inspection of the internal base of the tank must occur to determine structural integrity;

CE 3.239

- Prior to dismanteling of the tank, the interior of the secondary containment area must be sampled. This will require a sampling and analysis plan being submitted and approved. Any area where the secondary containment was breached must be included in the sampling plan;
- A supplemental workplan to the site wide RI must be submitted to address possible releases from activities associated with operating this unit. This can be done subsequent to the dismanteling of the tank.

If you have any questions or would like to discuss this letter in detail please call me at (609) 633-0744.

Sincerely,

Robert Hayton
Case Manager,
Bureau of Federal Case Management

c. Terry Bourbon, USEPA
Bob Montgomery, USEPA
Leonard Voo, USEPA
Sharon Bruder, NJDEP
Chris Lacey, NJDEP
Irving Cohen, Enviro-Sciences

CE 3.2394

State of New Jersey

Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, J
Commissioner

Mr. Scott Heller, Executive Vice President
Edgewater Enterprises LLC
525 River Road
Edgewater, New Jersey 07020

February 11, 1999

RE: Celotex Industrial Park: Parcel A Removal Action Report, January 18, 1999
Revised Soil Reuse Proposal, January 6, 1999

Dear Mr. Heller:

The Department Of Environmental Protection has reviewed the above referenced documents and has the following comments:

Parcel A Removal Action Report, January 18, 1999

Excavation of TPH Contaminated Soil

The TPH hotspot removal associated C-65 is approved. All remaining contamination at concentrations above their respective most stringent criteria must be included in the Deed Notice and capping strategy.

Excavation of Arsenic Contaminated Soil

The arsenic hotspot removal associated C-89 and C-90 is approved. All remaining contamination at concentrations above their respective most stringent criteria must be included in the Deed Notice and capping strategy. Additionally, it is important to note that the arsenic is still being considered site related and is not indicative of levels normally found in historic fill.

Revised Soil Reuse Proposal

Site Development Activities

The proposal to use crushed concrete originating from the Pier building is acceptable. The proposal to sample this material prior to reuse is also acceptable.

Soil Movement

The stock piled soil (approx. 350 yd^3) on the Celotex property will either be returned to its point of origin or it may be reused on the Lustrelon site. In either case the soil pile will be sampled. Three samples will be collected and analyzed for PP+40 and TPH. The soil pile must be sampled in accordance with the soil reuse guidelines. The sampling must adequately represent the conditions within the entire pile, not just the surficial interval. Additionally, if contamination is detected, then sampling of the soil beneath the pile will also need to be investigated. The soil, if contaminated should be disposed offsite.

As discussed at the January 27, 1999 meeting, the road construction was approved with the following conditions:

1. All Contaminated soil from the road cut only, will be placed on National Amusements property in places where it will not have to be disturbed again and where it will be capped. The cap and the road will be required to meet at a minimum, the specifications that were stated in the Remedial Action Work Plan Addendum dated January 29, 1999 and approved by the Department on January 30, 1999.

2. Because the road cut will be partially on the Celotex site, contaminated soil cannot be placed on the National Amusements property until the Department receives an affidavit from the land owner, National Amusements, stating that they have reviewed the data from the subject area and understand that contaminated soil will be brought onto their property from the Celotex site.

3. Improvements to the sales area (grading, placement of trailers or gravel) cannot resume until the hotspots are removed and the post ex analyses are approved by the Department.

4. Enviro-Sciences will have someone directly oversee the cutting operation.

5. The road cut will not extend into the landfill on the eastern end of the property just south of the pier.

It should be noted that if the road cut should proceed in the vicinity of sample locations C-84 and C-86, then soil removed from these locations should be disposed offsite and cannot be reused on either the Lustrelon or Celotex sites. The levels of PAHs (up to 76 and 108 ppm between 0 to 3.5 ft) represent a health threat and are not consistent with levels remaining elsewhere.

Also, as we discussed at the meeting, when visibly contaminated soil (i.e.,black staining) is encountered, excavation will stop and samples will be taken. Enviro-Sciences will also take digital photographs.

Sales Building Area

As stated above, it is not recommended that activities in this vicinity begin until the remedial investigation of the Celotex site is completed. Due to the levels currently observed within this area, remediation will be necessary.

However as discussed during the 1/27/99 meeting, NJDEP can only allow construction to proceed if this area is excavated and the contamination observed at locations C-45, 46, 47, 48, and 50 is adequately disposed offsite. The PAH contamination within these locations exceeds the total organic cap and presents an unacceptable health risk due to the carcinogenic nature of the contaminants. As the remedial investigation has not been completed in this area, post-excavation sampling will be necessary. All post-ex data must be reviewed and approved by NJDEP prior to proceeding with constructing the sales area.

Construction Staging Area

This area is to be utilized for the staging of modular equipment associated with construction of the Pier Building. The area is in the vicinity of the eastern portion of the former Mill Building.

Based on a review of existing data points, collected in 1997, it is apparent that no data exists for this portion of the property. The closest data points, C-25, C-26, and C-62 lie outside of the proposed footprint. Sampling of the soils in this area between 0 and 3.0 ft is necessary prior to the movement of soils or staging of equipment. Note: Additional investigation may be necessary pending the sampling results (i.e. delineation both lateral and vertical).

ADDITIONAL COMMENTS

A considerable amount of data was collected for this site in 1997. The results were presented to NJDEP within the June 1997 RIR. NJDEP issued a comment letter on Dec. 15, 1997 declaring the remedial investigation incomplete. To date, no response to this letter has been received nor have the outlined concerns been addressed.

Ideally, the items outlined within the 12/15/97 letter, should be addressed prior to implementation of any soil reuse proposal. The following is a summary of many of the issues considered outstanding, but by no means notes every required action. The 12/15/97, 4/1/98 NJDEP letters should be referenced for greater details.

1. Investigation/Remediation of Site Specific Contaminants – The following parameters are considered site specific contaminants and must be fully investigation / delineated – offsite if necessary. Arsenic, Lead, Cadmium, Beryllium, Copper, Mercury, Selenium, Thallium, Zinc, cyanide, TPH, PCBs, VOCs and PAHs.

2. The following Areas of Concern Require Additional Action:
   a. AOC-12 = Stained soil – Elevated PAHs (i.e. hot-spots) have been shown to exist in the vicinity of C-45 to 52 and C-56 to 61. Remediation has already been determined to be necessary at C-45 to 52. Location C-57 is also considered a hot-spot.
   b. AOC 13 = Academy Film - A diagram of the floor drain system in relation to sample locations must be submitted.
   c. AOC 14 = J&T Leasing – Sample location C-65 was excavated as part of the Parcel A project, however other items were noted within the 12/15/97 letter that required clarification.
   d. AOC 15 = All County Environmental – This area was not adequately investigated during phase 1. Whether or not the 150,000 AGST was properly closed under RCRA has been in question. A letter was issued from NJDEP dated 4/1/98. Additional actions in this area are necessary.
   e. AOC 16 = Havana Potato and Transport Co. – Sample location and original depth of staining required clarification.
   f. Landfill Investigation – No samples were actually collected within this area. Future plans for the landfilled material (gypsum board) should be detailed. Sampling will be necessary.

3. Additional Site-wide Delineation – The horizontal and vertical extent of contamination must still be addressed. Offsite delineation is required. Delineation includes, but is not limited to the areas in the vicinity of C-74 to C-77; C-79; C-80; C-32, 34, and 35; MOO-7; C-97, 98; C-62, 63.

4. Volatile Contamination – Historical site data as well as GW data indicates that VOCs are a concern on the Celotex site. VOCs were not targeted during the

phase 1 RI. Additional investigation is required, especially in light of the test pit data most recently collected.

5. Hot-spot Areas of Concern – It was determined that hot-spots are present across the Celotex site. Remediation/removal was recommended. These areas include but are not limited to:
   - C-45, 46, 47, 50, and 98 for PAHs
   - C-4, C-79, C-89, and C-90 for Arsenic

   Note: Locations C-45, 46, 47, 48, and 50 are required to be removed prior to construction of the proposed Sales Building. Please refer to soil reuse comments above.
   Note: Locations C-89 and 90 were excavated as part of the Parcel A project.
   Note: Additional locations on the Celotex site warrant the same level of concern as the locations noted in the 12/15/97 NJDEP letter. These additional locations are C-34, C-35, C-57, C-77 for PAHs. These locations exhibit levels of the PAH (BaP) above 100 ppm.

6. Ecological Evaluation – Edgewater Associates submitted an Ecological Assessment report that addressed both the Lustrelon and Celotex sites. This April 1998 report was reviewed by ETRA PAHs were detected above the ER-L criteria in the sediment samples collected.

   Overall, the sample locations were considered insufficient for characterization of the two sites. It was recommended that a supplementary sediment sampling plan be developed for each of the two sites separately. At present, only additional investigation has been conducted in association with the Lustrelon property.

7. Test Pit Investigation – In March 1998 a test-pit investigation was undertaken in an attempt to determine the source of the discharge to the Hudson River. This investigation further supported the need for continued investigation and stressed the importance of coordinating activities with Allied Signal —the RP currently performing an investigation on the adjacent Quanta – superfund site.

   Gasoline Contamination – During the test-pit investigation, gasoline related contamination was observed. The source must be identified and the contamination delineated at a minimum.

   The Department still has not received the report concerning the All County Environmental Services area. Further remediation may be necessary in this area. As we discussed, RCRA closure will be required for this area.

If you have any questions or would like to discuss these issues in further detail, please call me at (609) 633-0744.

Sincerely,

Robert Hayton
Case Manager
Bureau of Federal Case Management

c. Robert Montgomery, USEPA
Steve Picco, Reed, Smith, Shaw & McClay LLP
Chris Lacy, NJDEP
Anne Pavelka

CE 3.2399

State of New Jersey

Christine Todd Whitman
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.
Commissioner

Certified Mail Return Receipt Requested
P 127 638 054

Mr. Scott Heller, Executive Vice President
Edgewater Enterprises LLC
525 River Road
Edgewater, New Jersey 07020

February 24, 1999

RE: February 11, 1999 letters from Enviro-Sciences concerning Celotex Industrial Park

Dear Mr. Heller:

The Department has reviewed the two letters received from Enviro-Sciences on your behalf concerning the proposed remedial action at the proposed sales area and the use of crushed concrete associated with the former pier building. Our comments are provided below:

1. Proposed Remedial Actions – The proposal to excavate the four boring areas is acceptable. In addition to the noted borings, location C-48 was recommended to be included in the removal action. The contaminated interval is present at 7-7.5 feet and 8-8.5 feet at this location and is considered part of the contamination identified within boring C-50. Additionally, interval C-45-2 (5.5-6 feet) also needs to be included in this removal action.

   The four sidewall post-ex samples are acceptable, however base samples are also required to verify that all contamination of concern has been removed to appropriate levels.

   The use of certified clean fill to backfill the excavations is acceptable. The use of soil removed from the contaminated areas (i.e. above the zone of removal) is not recommended. The soil above the proposed removal depths has not been fully characterized and may not be "reused" without sampling as per the soil reuse guidelines found at N.J.A.C. 7:26E-6.4(d)1. It is recommended that all soil be disposed offsite and the entire excavation be backfilled with certified clean fill.

2. Proposal to use crushed concrete – The analyses from the crushed concrete piles indicate that both the residential and non-residential cleanup criteria for lead and several carcinogenic PAH's are exceeded. Two issues exist regarding these analyses. The first issue, your request for using the material as a sub-base for a road bed or a parking lot, can be conditionally approved since the types and levels of contamination present in the pile is consistent with the contaminants in the soil already existing at the site. These contaminants will be capped and deed noticed. It should be noted that this is a conditional approval pending the receipt, review and DEP approval of a complete laboratory deliverables package for the above referenced analyses.

The second issue rises from the fact that the pile of crushed concrete originates from the pier. As stated above, the levels of contamination exceed the Department's residential cleanup standards. Prior to any further construction on the pier, Edgewater Enterprises LLC must propose a sampling plan for the remaining concrete on the pier. If the analyses indicate contamination exceeding the Department's residential cleanup standards then remedial action will be necessary prior to any further construction.

If you have any questions or would like to discuss these issues in greater detail, please call me at (609) 633-0744.

Sincerely,

Robert Hayton
Case Manager
Bureau of Federal Case Management

c. Robert Montgomery, USEPA
Steve Picco, Reed, Smith, Shaw & McClay LLP
Karl Braun, LURP, NJDEP
John Candelmo, Edgewater Borough Code Official
James Taradash, Bergen County Department of Health Services
Chris Lacy, BEERA, NJDEP

CE 3.2401

State of New Jersey

Christine Todd Whitman
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.
Commissioner

CERTIFIED MAIL,
RETURN RECEIPT REQUESTED
Z 294 321 750

Mr. Scott Heller, Executive Vice President May 5, 1999
Edgewater Enterprises LLC
525 River Road
Edgewater, New Jersey 07020

RE: Review of Ecological Evaluation (Sediment and Surface Water Sampling Program) for the Edgewater Associates former Colotex Property Site, Edgewater, NJ March 8, 1999

Dear Mr. Heller:

The New Jersey Department of Environmental (Department) has reviewed the above referenced document and has the following comments:

Comments

1. Proposed sample locations should be place on one figure/map to facilitate review. It is unclear how data from the formerly sampled Geosyntec locations will be used and why these sample locations were chosen to be repeated. Those locations intended to be used as reference locations must be clearly identified as such. Guidance for the selection of references/background locations can be found in the Department's Guidance for Sediment Quality Evaluations, November 1998. Justification for the selection of these locations must be included. Examination of Figure 2 gives the impression that only two locations, "QRC – 16" and "QRC – 17," are upgradient enough to be outside of the influence of Lustrelon and Celotex sites. It is generally recommended, as per NJDEP and USEPA Region II guidance, that the range of data from between 3-5 reference samples be compared with the range of data from potentially site-related samples.

2. In order to more thoroughly evaluate the potential for adverse ecological effects, additional samples should be located adjacent to the site, especially in near-shore areas between the collapsed concrete pier and the pier north of the gypsum pile (pier proposed for development). Since deep subsurface coal tar product is located offshore of the Quanta and southern portion of the Celotex site, subsurface analyses are required at appropriate locations, pursuant to 7:26E-4.1. Subsurface analyses are also necessary to assess the potential for adverse ecological effects from resuspension of contaminated subsurface sediments during flood/current-based scouring events, dredging operations, or other disturbances.

3. The work plan must indicated that samples will be collected in depositional areas at low tide, during the same tidal cycle.

Post-it® Fax Note 7671	Date	# of pages ▶ 4
To Chris Kirby	From S. Heller	
Co./Dept.	Co.	
Phone #	Phone #	
Fax # 973-560-0181	Fax #	

CE 3.2402

4. The analytical method(s) and laboratory intended to be used must be identified. The use of USEPA/CLP/IFB methodology (OLMO 3.2, August 1994, or more recent version), with the TCL/TAL analyte list, is strongly urged to ensure data comparability with investigations at the adjacent Quanta Site (USEPA-lead Superfund site).

   Non-target (tentatively identified) compounds must be reported with other analytical results. Note that "+15" analytes were indicated for VOAs; this should be corrected to "+30" according to current methodology. "Semivolatile + 30" should be added to the list of analyses in the work plan (the plan currently lists "Base Neutrals," but not Acid Extractables).

5. With regard to the proposed surface water sampling program , the appropriate Surface Water Quality Standards that will be used for data evaluation must be cited. Note that the number of sample stations stated for surface water (ten) does not agree with the number of sediment stations proposed (eight). Again, the TCL/TAL analyses should be used for the surface water samples.

6. It is requested that the final report include the data gathered pursuant to this work plan as well as historic data for this portion of the Hudson River from available appropriate sources (i.e., data previously gathered by Enviro-Sciences, Geosyntec, State or Federal authorities, etc.). These shall preferably be placed on one site map per chemical fraction, with locations and contaminant concentrations clearly labeled.

If you have any questions please call me at (609) 633-0744.

Sincerely,

Robert Hayton

Robert Hayton
Bureau of Federal Case Management

C: Steve Picco, Reed, Smith, Shaw & McClay LLP
Robert Montgomery, USEPA
Chris Lacy, NJDEP

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
#_____

Mr. Scott Heller, Executive Vice President August 18, 1999
Edgewater Enterprises LLC
525 River Road
Edgewater, New Jersey 07020

RE: Access Road Soil Stockpile Sample Results, May 25, 1999

Celotex Industrial Park, Remedial Investigation Report: Gypsum Board Landfill, June 28, 1999

Dear Mr. Heller:

The New Jersey Department of Environmental Protection has reviewed the above referenced documents and has the following comments:

Access Road Stockpile Sample Results

1. Sample locations C-84 and C-86 - The remaining Levels are consistent with the levels currently present on the Lustrelon property. The proposal to include thee two areas in the previously approved site wide strategy is acceptable. The areas must be addressed by both the engineering and institutional controls.

2. Access Road Soil Stockpile - The placement of soil in the vicinity of P-4, 5 and 6 must occur within the delineation boundaries described within the March 26, 1999 report. The soil must be placed within the boundaries represented by samples with concentrations below .49 ppm.

   With regard to the Soil (2100yd^3) used to backfill the building 3 basement located on the former Lustrelon property- it shall be confirmed as to whether or not the soil originated from the 0-3 ft level previously approved for reuse.

   As required for the PCB contamination on the former Lustrelon property, it must be documented that all PCB contamination has been delineated to the residential criterion of .49 ppm. Due to the detection of PCB's within the access road stockpiled soils it must be confirmed and documented on a site figure that either no PCB contamination remains in the vicinity of the access road, or at a minimum the contamination remaining is adequately delineated.

CE 3.2404

RI Report, Gypsum Board Landfill

1. All samples were analyzed for TPH, however TPH was not demonstrated to be an effective indicator of contamination. A review of the boring logs indicates that many of the borings with elevated PID readings were not analyzed for any other parameters. Note: VOCs were not investigated within the borings advanced to 50 ft. As such it is required that at a minimum samples LFB-2 (20-22 ft), LFB-3 (24-26 ft), and LFB-4 (22-24 ft) be analyzed for VOCs. Boring locations LFB-2 (20-22 ft) and LFB-4 (22-24 ft) shall be analyzed for PAHs and PCBs. In addition unknown aromatics were noted to be present at LFB-1 (25-26 ft) this sample shall be additionally analyzed for VOCs.

2. PCBs have already been determined to be a site-specific contaminant. At a minimum delineation to the residential criteria is required before the area can be included in a deed notice/capping strategy. Currently delineation of PCBs is required in the vicinity of LFTP-4 and LFB-3. Both vertical and horizontal delineation must be completed to the residential criteria.

3. Both lead and arsenic were detected at levels above residential criteria. The NJDEP evaluated the presence of these two metals within the 12/15/97 letter. It was determined that these metals could not be attributed solely to the presence of historic fill. Additional investigation is required for these two metals. At a minimum delineation is required before this area may be included in a site wide deed notice strategy.

4. Lastly, based on visual observations noted during the RI, it was determined that gypsum material was present between the depths of 2 and 25 ft. Fill material was shown to be present from surface to 2.0 ft. It is noted that no samples were collected or analyzed within material present between 0 and 6.0 ft. Only one sample was collected at 6-6.5 ft and was analyzed for TPH only. The landfill will be "reshaped" followed by the placement of 2.0 ft of clean fill for the cap. Data characterizing the 0-2 ft level of the landfill is necessary to determine if a 2.0 ft soil cap is sufficient for covering this area and preventing any future environmental and health impacts. This area will be in close proximity to the residential units on the pier and will also be used for passive recreation when the river walk is completed as well as having a manned guardhouse on top of the landfill.

   The characterization/delineation of the upper portion of the landfill may be done after the reshaping/contouring occurs provided that the Department's Bureau of Landfill and Recycling Management concurs. However, it should be noted that any soil contamination that exceeds the levels found consistently throughout the site shall be removed and disposed off site. Also, a contingency plan needs to be in place when excavation begins in case hazardous materials (drums, product etc.) are found.

Please note that a disruption permit will be needed from the Department as well as addressing comments 1, 2 and 3 above prior to initiating the reshaping/contouring of the landfill.

CE 3.2405

As per Paragraph 34 of the April 6, 1999 ACO please notify me at least 14 days prior to initiating any field activities regarding the above comments. If there are any questions please call me at (609) 633-0744.

Sincerely,

Robert Hayton
Case Manager
Bureau of Case Management

C: Steve Picco, Reed, Smith, Shaw & McClay
Sukhdev Bhalla, BLRM
Chris Lacy, BEERA
Anne Pavelka, BGWPA
Sharon Bruder, BEECRA

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
#_____

Mr. Scott Heller, Executive Vice President
Edgewater Enterprises LLC
525 River Road
Edgewater, New Jersey 07020

January 12, 2000

RE: Celotex Industrial Park: Phase II Remedial Investigation Work Plan
August 17, 1999

Dear Mr. Heller:

The Department of Environmental Protection has reviewed the above referenced document and has the following comments:

General Comments

1. Former 150,000 Gal. Above Ground Storage Tanks (AGSTs) AOC 15– These tanks were located within a concrete secondary containment unit. The AGSTs were dismantled and removed from the site. The concrete footprint of the containment structure remains intact. No letter of closure was issued by USEPA under TSCA. It should be noted that this Area of Concern (AOC) is the former location of All County Environmental Services Corporation which was a hazardous waste treatment storage and disposal facility that was and is regulated under the Resource Conservation and Recovery Act (RCRA). In order to fulfill the requirements of RCRA you are required to demonstrate closure of the unit pursuant to 40 CFR 264.197. A report shall be submitted to the Department documenting the closure of the unit that has taken place to date. This report shall include full documentation of all aspects of the closure pursuant to the above cited federal regulation including but not limited to:

    - Tank content analyses
    - Detailed discussion of tank content removal procedures
    - Manifests documenting ultimate disposition of hazardous waste
    - Decontamination procedures of all piping and tank structures
    - Wipe sample analyses of piping and tank structures
    - Ultimate disposition of all piping and tank structures

    The data provided in Appendix 3 indicates a high correlation between it and the data from the waste sample analyses obtained by EPA on March 16, 1998. This correlation indicates a release has occurred from the regulated tanks. Pursuant to the above cited federal regulations if "not all contaminated soils can be practicably removed or decontaminated as required

.....then the owner or operator must close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (§264.310)." Please submit a closure plan for the remaining tank containment area and tank trailer holding area immediately south of the containment area. This closure plan shall conform to the above cited federal regulations. Ground water monitoring wells shall be placed around the secondary containment area for the AGST's in such a way to determine if the ground water has been impacted by the release. This is typically done by placing 3 monitoring wells down gradient and one upgradient of the area of concern. These wells shall be placed close to the area of concern so as to minimize possible interference from other areas of concern.

The sample depths for PT-1 to PT-5 were not noted within the Aug. 1999 report. The sample summary sheets should be revised to reflect the depth of sample collection. Delineation of all parameters of concern for this area must be established. It is noted that one sample (C2-9) is proposed in this vicinity, however it is unclear as to the purpose of this one sample.

2. Gypsum Landfill – A separate remedial investigation report was submitted for this area in June, 1999. Test pits and soils borings were completed within this area. A request for no further investigation was made within the June 1999 report. A request for no further action has been made to the NJDEP Bureau of Landfill Engineering for approval.

   The Department has not received a response to our August 18, 1999 comment letter concerning the access road soil stockpile and gypsum board landfill. These comments shall be addressed as part of the response to this comment letter. The landfill closure report shall also be submitted.

   Attachment 2 of the 9/1/99 EWMA letter was also reviewed. It appears that four additional borings (LFB2-1, 2-2, 2-3, and 2-4) are proposed within the landfill area. Samples, according to the attached table will be analyzed for VOCs, PCBs, and PAHs depending upon the boring. These additional locations are acceptable, however only address a few of the Departments concerns outlined in the 8/18/99 letter.

   In a recent discussion with Chris Kirby of EWMA, it was requested that surplus gypsum board from the landfill be allowed to be used as fill material elsewhere on site. This material can not be used as fill material on site. The material is regulated as solid waste and shall be disposed of accordingly.

3. AOC 12 – The proposal to perform soil removal within these areas was previously approved by the Department. The proposal is still acceptable. Edgewater Enterprises should clearly document at what depth the original contamination was located in relation to the excavation boundaries and post-ex sample depth intervals. All significant contamination within these locations should be removed during this next phase.

   The proposal to include the contamination at C-56 to 61 with the offsite delineation strategy is acceptable at this time, however it is premature to discuss remedial options for this area of the site. The remedial strategy for this southern portion will likely require coordination with EPA/Allied Signal. But first delineation and characterization activities must be completed.

4. AOC 13 = Academy Film – Three borings were completed (C-62, 63, 64) during the original phase of investigation to investigate the possible discharge of film process chemicals to the

open drain system within this area. Two samples from each boring were collected at what was believed to be the depth of the former floor drains. Each sample was analyzed for PP+40. Only PAHs and As were discovered to be present at the sampled locations. The contamination was consistent with that detected across the remainder of the site, however no floor drain diagram was submitted for review as requested by the Department.

The proposal to include these locations in the site wide remedial investigation strategy was previously approved within the Department's 12/15/97 letter. This is still considered acceptable at this time. It should be noted that the highest arsenic concentrations in the Hudson River sediments have been detected adjacent to the Pier Building off shore of the former Lustrelon property. Please refer to the Geosyntec Oct. 1999 report generated for Allied Signal. The source of this arsenic is still considered to be from onsite operations. This issue is to be further investigated.

5. AOC 14 = J&T Leasing – Three borings (C-65, 66, 67) were completed outside J&T Leasing, immediately north of building 1. Samples were collected from surface soils (0-4 ft) below grade from the area where a surface oil spill was noted. The samples were collected prior to the placement of additional fill material within this vicinity. Concentrations of TPH were above 10,000 at location C-65 (15,000 ppm). Elevated PAH levels were also noted to be present at 6 of 7 sampling locations.

   Sample location C-65 has since been removed. This location was excavated during the Parcel A project. Contamination, however, does still remain above criteria at these locations.

   No proposal was specifically noted for this area; however it is presumed that the remaining contamination will be addressed along with the site wide delineation strategy. This is acceptable. Eventually figures depicting clean zone boundaries for all depth intervals will need to be submitted to the Department for review.

6. AOC 16 = Havana Potato and Transport Co. - Historically one sample (C-68/C-16) was collected from an area of heavy staining adjacent to a diesel AGST southwest of building 1. The results reported TPH and PAHs below criteria, however the location of the sample was questioned by NJDEP.

   The location of the sample has been clarified as outside the original building footprint from within the area of staining. The building had been demolished prior to sampling. Figure 3 of the original RI report indicating that the sample was collected below former Building 1 was incorrect. It is presumed that no additional actions specific to this sample location are proposed. This is acceptable at this time.

7. Hot Spot Areas of Concern – Based on the Department's review of specific criteria such as land use, toxicity, and contaminant concentrations (i.e. As and CaPAHs), it had been determined that potential hot spots exist that would significantly increase the short-term threat to health, safety and the environment. Therefore the Department required source removal at specific locations on the Edgewater Enterprises property, prior to implementation of a non-permanent remedial action (e.g. capping with institutional controls).

   The 12/15/97 NJDEP letter outlined the specific locations to be addressed – PAHs = C-45, 46, 47, 50, 98; Arsenic = C-4, C-79, C-89, and C-90. Based on additional reviews and

discussions held between previous land owner, Edgewater Associates and the Department representatives, additional locations were added, including C-48. Please note that additional locations are also being considered hot spots, however removal actions were not yet required. Some of these locations will be investigated by delineation boring locations. These locations include C-32, 34, 35, C49, 51, 52, C-56 to 61, C-57, and C-77. Some of these locations were already addressed during the implementation of other activities related to the pending development of the site.

A. C-45, 46, 47, 48 and 50 – The PAH contamination at these locations will be addressed by excavation and removal. Two separate excavations will be performed (C-45, 46, 47) and (C-48 and 50). Each excavation will address the contamination at specific depths. Soil will be removed from a 10x10-ft area extending approximately 4.0 ft vertically at the interval in question. Five post-ex samples from each hot spot will be collected (4 sidewall / 1 base). The samples will be analyzed for PAHs. All soil removed will be disposed at a certified facility. The excavated areas will be backfilled with soil that meets the New Jersey Residential Soil Standards.

   A proposal to address these two areas was previously commented on within the Department's 2/24/99 correspondence. The reuse of any soil above the zone of removal was not recommended. This soil has not been sampled/characterized and may not be "reused" without sampling. All soil shall be disposed offsite and the entire excavated area be backfilled with certified clean fill.

   During excavation activities all contaminated intervals shall be removed. The following intervals shall be considered for removal. C-45 (5.5-6 ft, 8.5-9 ft); C-46 (6.5-7 ft); C-47 (8.5-9 ft); C-48 (7-7.5 ft, 8-8.5 ft), C-50 (8.5-9.0 ft). The post-ex samples shall take these depths into consideration.

B. C-98 – This boring is located to the southwest of the Gypsum Landfill. Elevated PAHs were detected within this area at a depth of 7.5-8.0 ft. As stated above removal of the soil in this area was required.

   It is unclear in this work plan as to how this area will be addressed. Edgewater Enterprises states that this area still requires removal however does not specifically state that it will be included in the upcoming removal action. Figure 8 also does not depict this area being excavated. It appears that additional delineation samples will be collected surrounding this location. This area needs to be further addressed in the revision to this work plan.

C. C-89 and 90 – These areas were identified for the removal of soils contaminated with high levels of arsenic. During the Parcel A project the soil at these two locations was excavated. This removal was approved by the Department within the 2/11/99 letter.

D. C-4 and C-79 – These two areas were previously determined to be hot spots for arsenic. The Department requested the removal of this contamination within the 12/15/97 letter. Edgewater Enterprises acknowledges that

removal is necessary at both locations, however has not proposed excavation. It is also noted that these locations are not included on Figure 8.

Edgewater Enterprises shall include in the revised RI work plan a detailed discussion on how these areas will be excavated. Removal is still considered necessary. According to the report it appears that only delineation sampling is proposed

8. Site Wide Fill Delineation –In addition to onsite areas, offsite areas also require both horizontal and vertical delineation to determine the extent of the contamination.

   A. C-74, 75, 76, and 77 – Four borings are to be advanced (C2-24 to 2-27) to the west of each of these historical boring locations. Samples are proposed to be collected at 7.5-8.0 ft and analyzed for PAHs.

      The proposal to pursue delineation to the west of these boring locations is an acceptable strategy. However, delineation must be completed for all contaminants elevated above their respective most stringent criteria. PAHs are not the only contaminants of concern at these former boring locations. For example Pb and As are present at C-77. Also, all contaminated intervals must be delineated. Whether or not the 7.5-8.0 ft proposed sampling interval would address the former 0-6" interval as well as the 12.5-13 ft and 15.5-16 ft interval at C-77 is unlikely. This shall be clarified, with greater sampling proposal details provided as well as a proposal for additional sampling depths. Vertical delineation shall also be completed.

      A revised proposal shall be developed that reflects the above noted concerns.

   B. C-79 and 80 – Three borings are to be advanced to the south and west of these two historical locations. Samples are proposed to be collected at 7.5-8 ft for PAH and As analysis. In addition four samples will be collected in the vicinity of C-79. These samples will be collected at 5-5.5 ft, 7-7.5 ft, 4.5-5 ft, and 7.5-8 ft. These additional samples will address the concerns with the other contaminants present, including Cu, Pb, and Tl.

      As stated for the area above, the proposal to pursue delineation in the vicinity of these boring locations is an acceptable strategy. However, delineation shall be completed for all contaminants elevated above their respective most stringent criteria. PAHs are not the only contaminants of concern at these former boring locations. In addition to PAHs and As, Pb, Sb, Hg, Cu, and Se are also known to be elevated in this vicinity. Not all of these contaminants are addressed by the above proposal. Delineation is especially important near the adjacent property boundaries. Vertical delineation is also necessary and does not appear to be addressed by the proposed borings outlined in Table 2.

      A revised proposal shall be developed that reflects the above noted concerns.

   C. C-32, 34, and 35 – The report specifically documents that proposed delineation samples would address this area. These borings are not included

in Table 2, however it appears that the samples noted for MW-1 and MW-21 are also being used for delineation of C-32, 34, and 35. Two samples are proposed (C2-19 and 2-20) at 7.5-8.0 ft. Both samples will be analyzed for PAHs.

This proposal does not adequately address the contamination detected in C-32, 34, and 35. Locations C-32 and 34 are considered hot spots due to the levels of PAHs previously detected. Contamination was previously detected at 5.5-6 ft, 7-7.5 ft, and 7.5-8 ft. It should be noted that only PAHs were analyzed, a complete priority pollutant metals scan and VOC analysis was not completed at these locations. Samples to the south and west of these locations are acceptable, however must take all concerns into consideration. Ground water in this area is contaminated with VOCs, As, and Naphthalenes. Soils shall also be analyzed for these parameters in addition to PAHs. Vertical delineation is also necessary in the immediate vicinity of these locations.

A revised proposal shall be developed that reflects the above noted concerns.

D. C-97 and 98 – According to figure 8 historical location C-98 will be delineated by three sampling locations (C2-13, 2-14, and 2-15). Samples will be collected from 7.5-8 ft at all three locations. Each sample will be analyzed for PAHs.

The proposal to delineate this location is acceptable, however this area is also noted to be a hot spot and in need of removal. It is unclear as to why samples are being collected at this point in time. It would appear beneficial to remove the area of contamination first and collect post-ex samples for all contaminants of concern. PAHs are not the only contaminants of concern at this location. Arsenic and lead levels were also found to be elevated at the 7.5- 8.0-ft interval within C-98 and shall be addressed.

Location C-97 is noted as requiring delineation, however no proposal is noted within this report. Elevated PAHs are present at this location, which is adjacent to the shoreline along the southern portion of the site. As contamination likely extends to the water, it does not appear beneficial to collect samples surrounding this location at this time, as they are likely to be contaminated.

E. C-62 and 63 – These historical borings are located in the vicinity of the former Pier Building within what has been noted to be AOC-13. Borings are proposed surrounding location C-62. Three samples (C2-16, 2-17, and 2-18) will be collected at 2.5- 3ft and analyzed for PAHs.

Delineation surrounding this location is an acceptable strategy. As previously stated delineation shall target all parameters of concern and all previously determined contaminated depth intervals. These boring locations were known to exhibit contamination at 2-2.5ft, 3-3.5 ft, and 5.5-6 ft. The proposed sample depths shall reflect these intervals. Also due to the location of the proposed samples, consideration should be given to the use of these

borings as possible delineation points for the contamination detected within the Gypsum Landfill.

F. C-4 – This former boring location was not specifically mentioned within the narrative of this report however it is included in Table 2. According to figure 8 as well as Table 2, three samples (C2-5, 2-6, 2-7) appear to be proposed surrounding this location. Samples will be collected from 7.5-8 ft and analyzed for PAHs, As, and Pb.

The proposed samples are acceptable. The proposed sample depth as well as parameter list corresponds to the previous contaminated zones. These samples may serve as lateral delineation points, however vertical delineation has not been established. This shall be addressed in the revision of this RI work plan. Also due to the contamination detected in MW-4 as well as the surrounding vicinity, VOC and naphthalene analyses shall be included.

G. C-51 and 52 – These former boring locations were not specifically mentioned within the narrative of this report, however are included in Table 2. According to figure 8 and Table 2, one sample adjacent to each of these locations is proposed (C2-1 and 2-8). Samples will be collected from 7.5-8 ft and analyzed for PAHs.

These locations are actually in the vicinity of what is noted as AOC-12. AOC-12 is proposed to be excavated, however these two locations are not included within the boundaries of the remedial action. The proposal to collect additional delineation borings is an acceptable strategy. The depths shall reflect the previous depths of contamination (i.e. 5.5-6 ft, 6-6.5 ft, and 8.5-9 ft). The highest levels of PAHs were detected at C-51 at 8.5-9 ft. The proposed 7.5-8 ft depth will not address lateral delineation concerns at these depths. Vertical delineation shall also be considered if the proposed base post-ex sample does not establish a vertical clean zone. The proposal shall be modified to reflect these concerns.

H. PT-3 – This sample is part of a series of delineation and investigatory borings advanced to delineate the contamination at AOC-15 and to investigate the possible presence of a UST in the vicinity of AOC-15. This sample (PT-3) was not specifically mentioned within the narrative of this report. It is included within Table 2. One sample (C2-9) is proposed to the west of this location. The sample will be analyzed for PAHs and TPH.

It is unclear as to why only sample PT-3 is noted within Table 2, as other samples within this immediate vicinity contain higher levels of contamination. Delineation of this area as a whole shall be proposed, not just in relation to this one sample location. Additionally no depths for PT-1 to PT-5 were provided for review (refer to above comments for AOC-15), therefore comments pertaining to sample collection depth cannot be made at this time. Lastly, other contaminants besides PAHs and TPH have been detected (VOCs, As, Be, Cd, Pb, and Se) and must be delineated. As stated in comment # 1 above, this area is a RCRA regulated unit and will need to be closed pursuant to 40 CFR Part 264.197.

9. Southern Portion of the Site – Coal tar (free product) has been identified on the southern portion of the Celotex property as well as on the adjacent Quanta site. Onsite samples C-12, 13, 32, 33, 57, 58, and 59 contained evidence of this material. Borings and test pit data indicates that the free product plume extends over a three-acre area on the southern portion of the property.

   At a minimum all sources to ground water contamination shall be removed and delineation to the NJDEP most stringent criteria must be completed – extending offsite where necessary. Only after this has been accomplished will the Department review a remedial proposal for capping and the recording of a deed notice for the contamination above the Department's residential criteria.

Ecological Evaluation

10. (p. 10) It is stated in Section 5.8 that EWMA will conduct the BEE in conjunction with ESI, the remedial contractor for the Lustrelon property directly to the north, and GeoSyntec, consultants for the Allied Signal Corporation, the responsible party for the Quanta Superfund Site immediately to the south. While it is appropriate to coordinate the evaluations and to share data collection/evaluation efforts, more detail shall be provided as to the specific responsibilities of each contractor and information that each will supply (i.e., new data that will be collected or existing data that will be shared). It is noted that the aerial photograph supplied in EWMA's September 1 supplemental information includes sediment sample locations for current Geosyntec work, but it is unclear whether historical sample locations are included. No information is provided regarding previous or current locations for the Lustrelon site. Also, it is unclear which of the samples on the aerial photograph will actually be used to evaluate the Celeotex property, since the source is a map from GeoSyntec for the Quanta site.

11. The work plan shall be supported by a presentation of all existing sediment/surface water data, supported by pertinent information, such as contractor responsible, year of collection, sample depths, etc. Analytical data shall be presented in tabular summary as well as on a site map, for ease of evaluating concentration gradients, contaminant profiles, etc.

12. (p.14) It is stated in Section 6.8 that "EWMA proposes to clarify which samples will be used as reference locations and the reasons for choosing those samples." However, no further information is provided on reference samples. This is a critical component of a BEE work plan, since reference data are relied heavily upon for risk management decision-making. This information shall be supplied in a revised work plan or addendum.

13. Proposed sample locations have been presented in three locations in these documents: Figure 10 in the August 17, 1999 Work Plan, Figure 1 in the September 1, 1999 addendum, and the table in the September 1 addendum. The table lists 11 sample locations, but Figures 1 and 10 present more than 11 proposed locations. Samples 99EE-1, 2, and 3 from the table are not labeled on the aerial photograph, nor are any samples labeled on Figure 10. Additionally, the number of samples depicted on Figures 1 and 10 are not consistent; a greater number of proposed samples locations appear on Figure 10. The exact number of samples, locations, and labels shall be clarified in a revised work plan or addendum; the number and locations of reference samples shall be included.

14. No information regarding field sampling procedures, quality assurance samples, or specific sample depths has been provided. Justification for the overall sampling network design shall be included.

ADDITIONAL COMMENTS

15. Site Delineation – The currently proposed samples along the western portion of the Celotex site will aid in delineating the contamination previously detected onsite, however they do not address the need for investigation beyond new River Rd. All potential areas of concern must be addressed. The Department is aware that the original property boundary was to the west of new River Rd. As operations were likely to have been conducted within this area (original building foundations extended beyond new River Rd.) sampling should be performed at depths corresponding to all intervals in question – i.e. original fill, current grade, etc. A grid-sampling plan is advised.

16. Volatile Contamination – Historical site data as well as ground water data indicates that VOCs are a concern on the Celotex property. VOCs have not been targeted within this phase II workplan. As stated above additional investigation for VOCs is required. All sources must be clearly identified by EWMA on behalf of Edgewater Enterprises.

17. Soil from the continuing care facility on Old River Road was originally placed in piles near MW 11. I had requested that these piles be sampled prior to being moved. They were not and the piles are no longer there. It was evident to Chris Kirby and myself that the soil was graded around the area of MW 11. I had instructed Chris to include in this work plan a soil sampling plan for this area. It is missing from this plan. A soil sampling plan for this area shall be included in the revised RI work plan.

Ground Water

In general the ground water investigation proposed in the work plan is extremely deficient and unacceptable. It provides no details as to sampling locations, parameters, analytical methods, sampling techniques etc. and does not address all the issues in the Department's 12/15/97 letter. Since this is a Phase II Remedial Investigation Work Plan all work to be performed shall be discussed in detail and shown on figures in the work plan.

1. The ground water investigation states that Edgewater Enterprises agrees that another round of sampling is prudent. This is a very vague statement. It does not state which wells will be sampled, or indicate the sampling parameters. It is assumed that all wells will be sampled for Priority Pollutants + 40. EWMA needs to clarify this and needs to specify which wells will be sampled and what type of sampling techniques will be used.

2. The work plan states that Edgewater Enterprises agrees that ground water should be sampled in the areas noted. Again, this is a vague statement. This shall be clarified in the revised work plan.

3. The work plan states that the Department recommends conducting synoptic 72 hour ground water tests 30 days apart for each sample location. It is not clear what this statement means or that Edgewater Enterprises agrees to perform the work. From the use of the term "72 hours" it sounds like EWMA is discussing two tidal studies as required by the Technical Requirements for Site Remediation (N.J.A.C. 7:26E-4(h)3ii) but this is not clear. Edgewater

Enterprises shall clearly state what type of test will be done, the wells involved and the detailed procedures that will be followed.

4. The work plan states that the vertical extent of contamination will be determined by installing either wells or hydropunch in the vicinity of wells MW-2 and MW-7. This was one of the requirements in the Departments 12/15/97 letter and it is acceptable. However, since this is a work plan Edgewater Enterprises shall specify whether wells or hydropunch will be used as well as well sampling parameters. Also the exact procedures for either well or hydropunch installation shall be discussed.

5. Edgewater Enterprises recommends that since the site is being graded that alternative ground water sampling techniques be used and wells be installed later if necessary. This is unacceptable. The ground water investigation shall be conducted concurrent with the Phase II RI.

6. The Department's 12/15/97 letter approved the installation of 5 additional wells proposed by Environmental Sciences Inc. (ESI) in the June 1997 RI Report to investigate site ground water quality. This report did not address these wells. Please clarify whether or not these wells were ever constructed and if not when their construction is planned. The Departments letter of 12/15/97 asked for clarification of the locations etc. of these wells.

7. The Department's 12/15/97 letter allows the use of alternative ground water sampling techniques, but points out that since metals are a contaminant at the site, the turbidity may be too high to use this technique in all locations. Edgewater Enterprises shall address this issue in the revision of this work plan.

8. The Department's 12/15/97 letter required horizontal and vertical delineation of ground water contamination to the Ground Water Quality Standards. This is required in accordance with the Technical Requirements for Site Remediation (N.J.A.C. 7:26E-4.4(h)3i). Edgewater Enterprises discussed the issue of vertical delineation as described in comment #4 above. However, the issue of horizontal delineation has not been addressed. Edgewater Enterprises shall address this issue in the revised RI work plan.

9. The Department's 12/15/97 letter required that all boring logs and well construction diagrams be submitted for all new and existing wells. Edgewater Enterprises shall include this in the revised RI work plan.

10. The Department's 12/15/97 letter required at least two ground water elevation contour maps be developed fot the site in accordance with the Technical Requirements for Site Remediation (N.J.A.C. 7:27E-4.4(h)3ii). Edgewater Enterprises shall include these in the revised RI work plan.

11. The Department's 12/15/97 letter required a well search in accordance with the Technical Requirements for Site Remediation (N.J.A.C. 7:27E-4.4(h)3v). This shall be addressed.

On September 13, 1999 I met with Chris Kirby of EWMA at the site and discussed the following issues that still need to be addressed:

- The soil pile next to the sales area was supposed to be sampled and the analysis reviewed by the Department prior to relocating. Chris was going to find out where the soil pile was moved to and obtain any data from any analyses.

- On top of the road cut pile there was a 10' x 10' hole approximately 15 feet deep. Chris was going to send me information on this hole.

- MW 11 was to be located and determined if was still viable. If not it would have to be sealed and replaced.

- There were 4 piles of material placed on and covered with black plastic near MW 36 and the road cut piles. Chris was going to provide me with information as to where it came from and what it was contaminated with.

In general EWMA shall resubmit a much more detailed Phase II Remedial Investigation Work Plan which is prepared in accordance with the Technical Requirements for Site Remediation (N.J.A.C. 7:27E-4.2) for both the soil and ground water investigation and addresses all the above comments to the Department's satisfaction. This shall include maps showing sample locations, analytical parameters and methods and sampling methods. The figures included with this recent submittal were difficult to work with. EWMA shall submit figures that are easier to read and more clearly discern between what is proposed and what is existing. A revised work plan shall be submitted to the Department within 45 days of receipt of this letter.

If you have any questions please call me at (609) 633-0744.

Sincerely,

Robert Hayton
Bureau of Case Management

C: Mr. Christopher Kirby, EWMA
Mr. Bob Montgomery, USEPA
Chris Lacy, NJDEP
Anne Pavelka, NJDEP
Nancy Hamill, NJDEP

CE 3.2417

State of New Jersey

Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
Z456 933 283

Mr. Scott Heller, Executive Vice President
Edgewater Enterprises LLC
525 River Road
Edgewater, New Jersey 07020

April 10, 2000

RE: Celotex Industrial Park Gypsum Board Landfill

Dear Mr. Heller:

During site visits to the Celotex Industrial Park on March 16, and April 4, 2000 I observed several conditions at the gypsum board landfill that need your immediate attention. These observances may constitute violations of the landfill disruption permit issued on September 24, 1999 and if not addressed may subject Edgewater Enterprises to penalties pursuant to the Solid Waste Management Act found at N.J.A.C. 7:26-2A *et seq.* The following are conditions were observed:

1. The landfill has been expanded beyond the original boundaries depicted in your March 30, 1999 landfill disruption permit application. The permit application stated that all waste material would remain within the landfill boundary. The western boundary is at least 160 feet beyond what existed prior to the disruption.

2. The landfill is not covered with the required twenty-four (24) inches of clay thereby exposing the waste material. The only section of the landfill that is covered with clay is the detention basin, the rest of the landfill has varying thicknesses of topsoil on it. Many of the landscape plantings that have been placed on the landfill have been planted directly in waste material. This waste material has been placed on top of the topsoil at the site of each planting. Also, the northern slope of the landfill immediately adjacent to the residential pier development has no cover on it at all. Large boulders have been placed on this slope directly on the waste material. A strong H_2S (rotten egg) odor was detected in this general area.

3. The river walk is being laid directly on the waste material.

4. A pile of waste material has been left uncovered on the western portion of the landfill.

Pursuant to paragraph 28 of the April 6, 1999 Administrative Consent Order between Edgewater Enterprises and the Department, Edgewater Enterprises shall conduct the following remedial measures:

1. The current landfill western boundary needs to be established. Edgewater Enterprises shall conduct test pits and/or borings along the western face of the landfill to determine the exact boundary. This boundary shall be surveyed and permanent surveyor's markers shall be placed so that the western boundary is plainly visible. The deed notice and Edgewater Borough tax map will need to be amended to incorporate these changes.

2. As discussed with your consultant Chris Kirby and your counsel Steve Picco, the excess waste pile that is currently stored on top of the western section of the landfill shall be disposed of off-site in a registered landfill.

3. All portions of the landfill shall be covered with 24 inches of clay. This includes the new western face of the landfill in which the waste is currently exposed, all areas currently with topsoil on it and also the area under the river walk. Any slope of the landfill that does not have 24 inches of clay on it shall also be covered with clay. This includes any slope where there are boulders or riprap.

Please be advised that during my site visit on April 4, 2000 with USEPA and your consultant, Chris Kirby, approximately 12 waste samples were taken from various exposed areas of the landfill and are currently being analyzed for asbestos. The results of these analyses are expected in approximately 2 weeks. I am informing you of this because if the waste in the landfill contains asbestos then Edgewater Enterprises LLC will be required to comply with different regulations (N.J.A.C. 7: 26-2A.8 *et seq.*) pertaining to the final cap of the landfill.

Edgewater Enterprises shall have 45 days from the receipt of this letter to complete the above remedial measures. A written response documenting these actions shall be submitted to the Department within 45 days of completion. Please inform me at least ten (10) days prior to any work being done in compliance with this letter.

If you have any questions please call me at (609) 633-0744.

Sincerely,

Robert Hayton
Case Manager
Bureau of Case Management

c. Steve Picco, Reed, Smith, Shaw & McClay LLP
Chris Kirby, EWMA
John Edwards, NJDEP
Bob Montgomery, USEPA

Draft FILE COPY #200957 Edgewater Enterprises/ River Rd.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
#_____

Mr. Scott Heller, Executive Vice President
Edgewater Enterprises LLC
525 River Road
Edgewater, New Jersey 07020

July 3, 2000

RE: Celotex Industrial Park Hot Spot Removals

Dear Mr. Heller:

The New Jersey Department of Environmental Protection (Department) has reviewed the data for the hot spot removals at the Celotex Industrial Park and has the following comments:

1. C-45/47 - Elevated PAHs were detected at both locations however at levels that indicates a reduction in contamination when compared to the original results for the 5.5-6 ft depth interval. No additional sampling is necessary specific to this excavation area. This area may be backfilled. However as historically stated by the Department clean zone boundaries will need to be established in order to properly record the deed notice. (especially to the west of this area).

2. C-46 - Elevated PAHs were still detected at this location however at levels that indicate a reduction in contamination when compared to the original results for the 6.5-7 ft interval. No additional sampling is necessary specific to this excavation area. This area may be backfilled. However as historically stated by NJDEP clean zone boundaries will need to be established in order to properly record the deed notice. (especially to the west of this area).

3. C-48 –Although no additional sampling is necessary with regard to the 7-7.5 ft interval, it appears that additional lateral delineation is necessary east of PEC48-2B (8-8.5 ft) as the levels of PAHs at this location actually exhibited an increase from the original hotspot concentrations. Based on this data additional soil removal is necessary in the vicinity of PEC-48-2B.

4. C-50 - Post-ex samples were collected at two intervals at this excavation location (8.5-9 ft and 10-10.5 ft). Originally only the 10-10.5 ft interval was analyzed for PAHs. At the request of the Department PAH analysis was conducted at location PEC50-2A. Elevated PAHs were detected at this location. The levels although elevated are substantially lower than the original concentrations detected at C-50.

   PAH analysis was requested at sample locations PEC50-2A and 3A (8.5-9 ft). Only location 2A was analyzed. There is still the need to laterally delineate the 8.5-9 ft interval to the west approaching River Road. This area may be backfilled. Please also note the remaining requirements for recording a deed notice.

5. C-98 – This boring is located to the southwest of the Gypsum Landfill. Elevated PAHs were detected within this area at a depth of 7.5-8.0 ft. Soil was excavated in this area to 10 feet. Four sidewall and one base sample were collected and analyzed for PAHs. Sidewall samples were collected at 7.5-8 ft and 10-10.5 ft. The 7.5-8 ft samples were placed on hold pending a

Draft

decision by the Department as to the necessity of analysis. The Department determined that data should be generated for the 7.5 ft interval at locations PEC98-1A and 4A.

PAH data was generated for both locations. The results report a substantial reduction in PAH concentrations as compared to the original sample results for C-98. No additional sampling is necessary in this area, except as indicated below with regard to vertical delineation. This area may be backfilled.

6. C-4 - Sidewall post-ex samples were collected for arsenic analysis at 5.5-6 ft, 7.5-8 ft, and 10-10.5 ft. A base sample was also collected at 10-10.5 ft. The results indicate that a significant portion of the original arsenic contamination at this location has been removed.

   No additional analysis for arsenic was necessary for this location. This area may be backfilled.

7. C-79 – This area is still considered a hotspot and shall not be backfilled at this time.

8. Vertical Delineation – Vertical clean zones have still not been established in the majority of the excavated areas. The determination of a vertical clean zone will need to be documented. The Department agreed that a vertical clean zone will not be required to be established at every single sample location, however the clean zone depths that will eventually be utilized will need to be clearly outlined for NJDEP review.

If you have any questions please call me at (609) 633-0744.

Sincerely,

Robert Hayton
Case Manager
Bureau of Case Management

c. Steve Picco, Reed, Smith, Shaw & McClay LLP
Chris Kirby, EWMA
John Edwards, NJDEP
Bob Montgomery, USEPA

20045 1

CE 3.2421

State of New Jersey

Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
Z456933548

Mr. Scott Heller, Executive Vice President
Edgewater Enterprises LLC
525 River Road
Edgewater, New Jersey 07020

August 2, 2000

RE: Celotex Industrial Park Hot Spot Removals

Dear Mr. Heller:

The New Jersey Department of Environmental Protection (Department) has reviewed the data for the hot spot removals at the Celotex Industrial Park and has the following comments:

1. **C-45/47** - Elevated PAHs were detected at both locations however at levels that indicates a reduction in contamination when compared to the original results for the 5.5-6 ft depth interval. No additional sampling is necessary specific to this excavation area. This area may be backfilled. However as historically stated by the Department clean zone boundaries will need to be established in order to properly record the deed notice. (especially to the west of this area).

2. **C-46** - Elevated PAHs were still detected at this location however at levels that indicate a reduction in contamination when compared to the original results for the 6.5-7 ft interval. No additional sampling is necessary specific to this excavation area. This area may be backfilled. However as historically stated by NJDEP clean zone boundaries will need to be established in order to properly record the deed notice. (especially to the west of this area).

3. **C-48** –Although no additional sampling is necessary with regard to the 7-7.5 ft interval, it appears that additional lateral delineation is necessary east of PEC48-2B (8-8.5 ft) as the levels of PAHs at this location actually exhibited an increase from the original hotspot concentrations. Based on this data additional soil removal is necessary in the vicinity of PEC-48-2B.

4. **C-50** - Post-ex samples were collected at two intervals at this excavation location (8.5-9 ft and 10-10.5 ft). Originally only the 10-10.5 ft interval was analyzed for PAHs. At the request of the Department PAH analysis was conducted at location PEC50-2A. Elevated PAHs were detected at this location. The levels although elevated are substantially lower than the original concentrations detected at C-50.

   PAH analysis was requested at sample locations PEC50-2A and 3A (8.5-9 ft). Only location 2A was analyzed. Edgewater Enterprises LLC still needs to laterally delineate the 8.5-9 ft

interval to the west approaching River Road. This area may be backfilled. Please also note the remaining requirements for recording a deed notice.

5. C-98 – This boring is located to the southwest of the Gypsum Landfill. Elevated PAHs were detected within this area at a depth of 7.5-8.0 ft. Soil was excavated in this area to 10 feet. Four sidewall and one base sample were collected and analyzed for PAHs. Sidewall samples were collected at 7.5-8 ft and 10-10.5 ft. The 7.5-8 ft samples were placed on hold pending a decision by the Department as to the necessity of analysis. The Department determined that data should be generated for the 7.5 ft interval at locations PEC98-1A and 4A.

   PAH data was generated for both locations. The results report a substantial reduction in PAH concentrations as compared to the original sample results for C-98. No additional sampling is necessary in this area, except as indicated below with regard to vertical delineation. This area may be backfilled.

6. C-4 - Sidewall post-ex samples were collected for arsenic analysis at 5.5-6 ft, 7.5-8 ft, and 10-10.5 ft. A base sample was also collected at 10-10.5 ft. The results indicate that a significant portion of the original arsenic contamination at this location has been removed.

   No additional analysis for arsenic was necessary for this location. This area may be backfilled.

7. C-79 – This area is still considered a hotspot and shall not be backfilled at this time.

8. Vertical Delineation – Vertical clean zones have still not been established in the majority of the excavated areas. The determination of a vertical clean zone will need to be documented. The Department agreed that a vertical clean zone will not be required to be established at every single sample location, however the clean zone depths that will eventually be utilized will need to be clearly outlined for NJDEP review.

If you have any questions please call me at (609) 633-0744.

Sincerely,

Robert Hayton
Case Manager
Bureau of Case Management

c. Steve Picco, Reed, Smith, Shaw & McClay LLP
Chris Kirby, EWMA
Bob Montgomery, USEPA

200957

State of New Jersey

Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
Z450 933 565

CE 3.2423

FILE COPY

Mr. Scott Heller, Executive Vice President
Edgewater Enterprises LLC
525 River Road
Edgewater, New Jersey 07020

August 8, 2000

RE: Celotex Industrial Park
All County Environmental Services Corp
RCRA Closure Plan, March 2000

Dear Mr. Heller:

The New Jersey Department of Environmental Protection (Department) has reviewed the above referenced Document and has the following comments:

1. Section 2.2, page 8 - The primary closure objective is to close the units pursuant to 40 CFR 265.197.

2. Page 9, bottom of page, page 10 top of page - Reference is made to ".....contamination associated with historic fill material" and ".....same metals will be found in the historic fill....". Please be advised that most, if not all the contamination at the Celotex site in general can be attributed to past operations. Also, with respect to RCRA closure of this particular unit the Department can not rule out the possibility that metal contamination may be a result of releases from tankers or the AST's. Therefore, technical guidance for historic fill found in the Technical Requirements for Site Remediation at N.J.A.C. 7:26E does not apply.

3. Section 4.1, top of page 11 - third stage of final closure should state "ground water monitoring and remediation (if necessary)."

4. Section 4.1.1, page 11 - the bolded "Attachment 1" should read Appendix 1.

5. Section 4.4.2, page 13 - Concrete chip samples shall be taken from the foot print of each tank and from the area between tanks.

6. Section 4.4.3, first paragraph page 14 - An additional area for investigation shall include the area where the two Baker tanks were staged during the offloading of tank material in March/April 1998. This area was observed to have releases to the soil. The general location has been confirmed with your consultant, Chris Kirby of EWMA. A proposal for sampling this area shall be included with the revision of this document.

7. Section 4.4.3, third paragraph page 14 and 15 - The method detection limits can define clean zones as long as they fall below the New Jersey Soil Cleanup Criteria.

8. Section 4.4.3, page 15 - Additional wells shall be required if it is determined that ground water flow direction can not be properly determined.

9. Section 6.2.1, page 17 - If it is determined that closure will be completed with waste in place (not clean closed) then either a NJPDES Permit or an EPA order shall institute the Post Closure requirements. This will be determined after the Remedial Investigation (RI) and any necessary Remedial Action (RA) has been completed.

10. Section 7.1, page 18 - The remediation funding source shall remain in place and become part of the Post Closure permit or EPA Order whichever is used, should Post Closure become necessary.

11. Section 8, page 19 - Any cap that is proposed shall approved by the Department and EPA.

Edgewater Enterprises shall revise the above referenced Closure Plan within fifteen (15) calendar days from receipt of this letter.

If you have any question please call me at (609) 633-0744.

Sincerely,

Robert Hayton

Robert Hayton
Case Manager
Bureau of Case Management

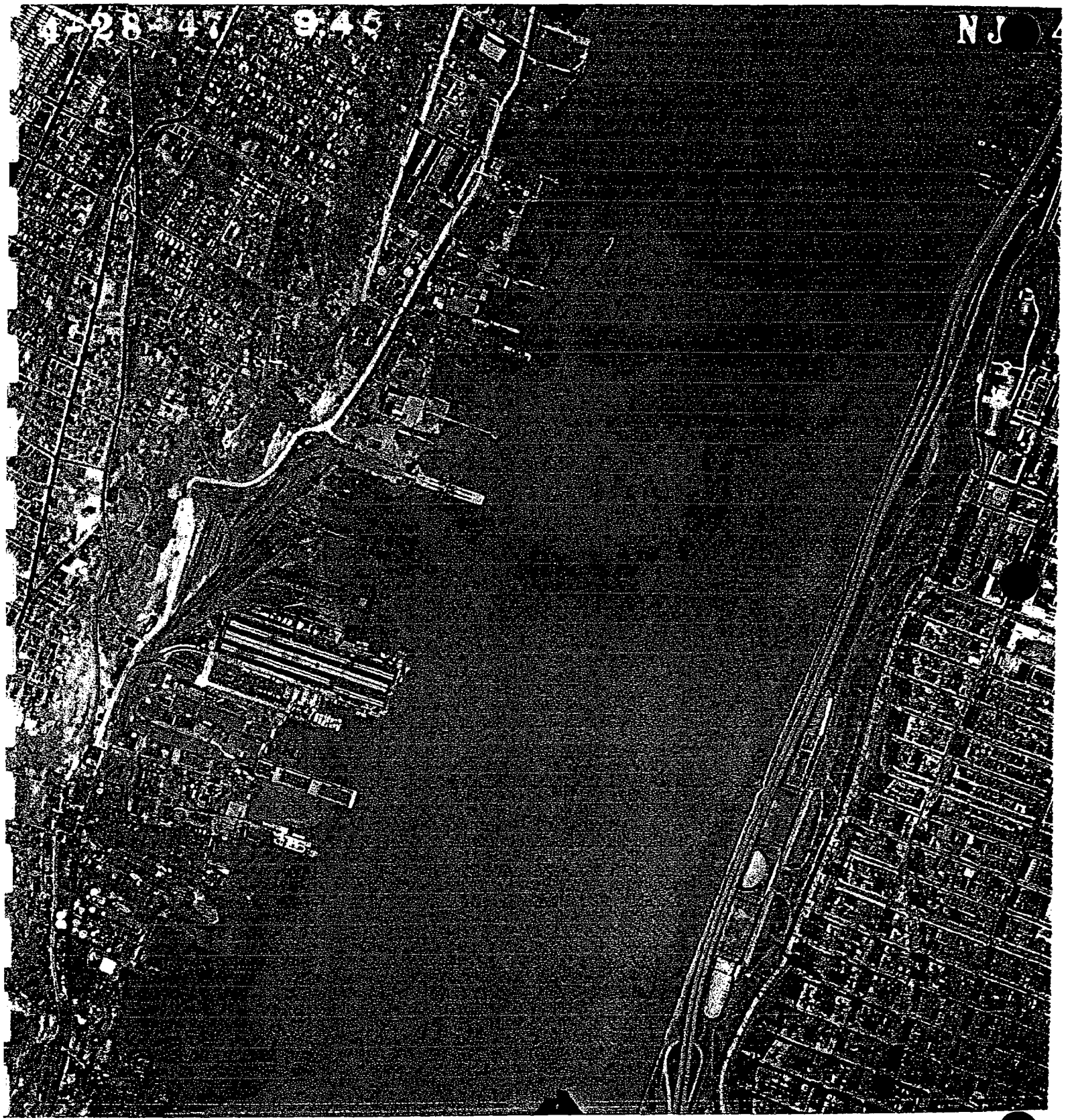
c. Steve Picco, Reed, Smith, Shaw & McClay LLP
Chris Kirby, EWMA
Bob Montgomery, USEPA
Chris Lacy, NJDEP

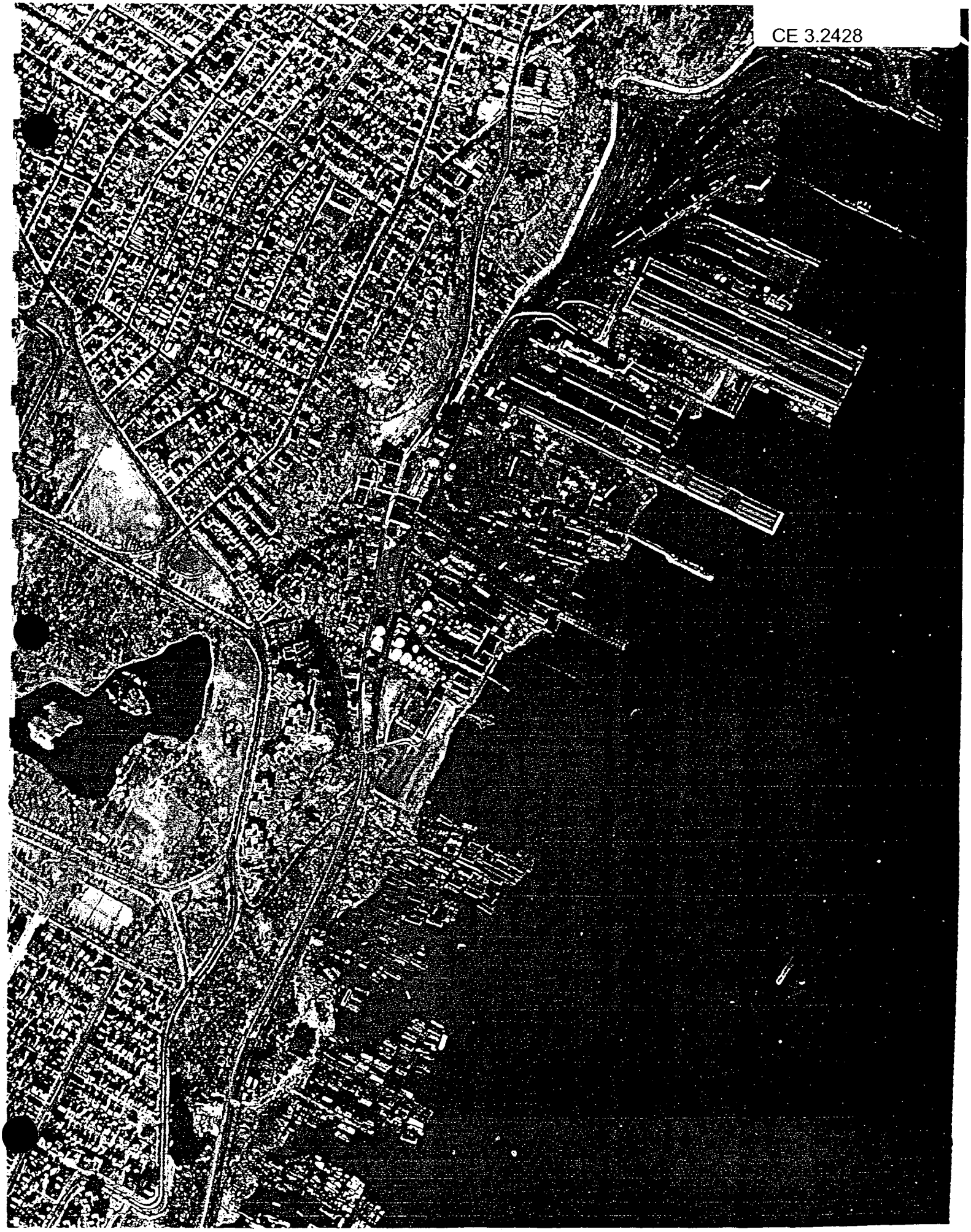
Appendix 2: AERIAL PHOTOGRAPHS

AERIAL PHOTOGRAPH INDEX

A.	4-28-47	1" = 1,000'
B.	1953	
C.	3-31-57	1" = 1,000'
D.	4-7-59	1" = 1,500'
E.	1-14-63	1" = 1,200'
F.	4-30-65	1" = 1,500'
G.	1966	
H.	8-11-68	1" = 1,200'
I.	5-30-70	1" = 1,196'
J.	1975	
K.	4-9-77	1" = 2,000'
L.	1985	
M.	7-1-86	1" = 1,400'
N.	4-15-96	1" = 1,000'
O.	10-30-96	1" = 700'
P.	10-30-97	1" = 2,000'

CE 3.2427

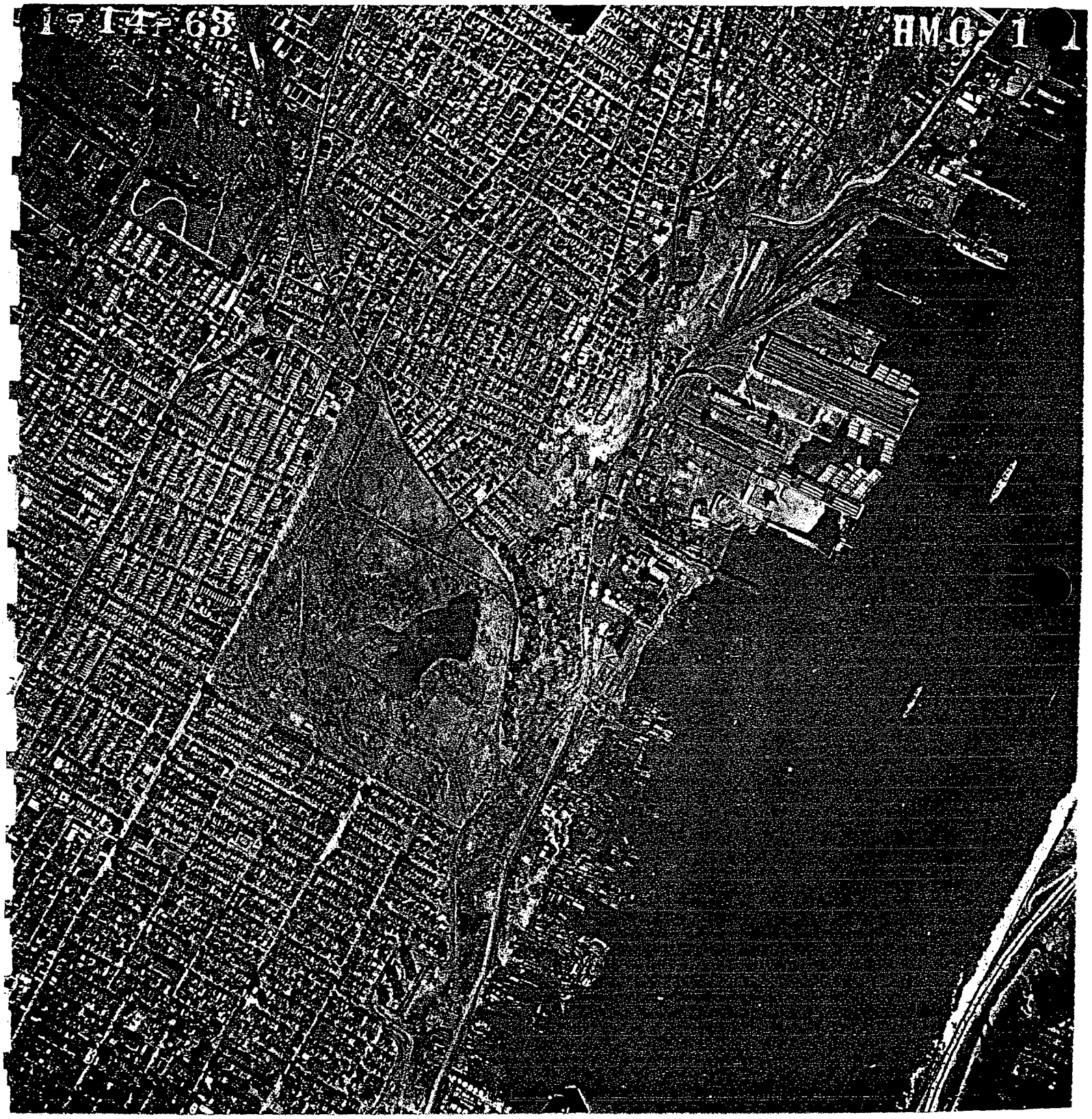




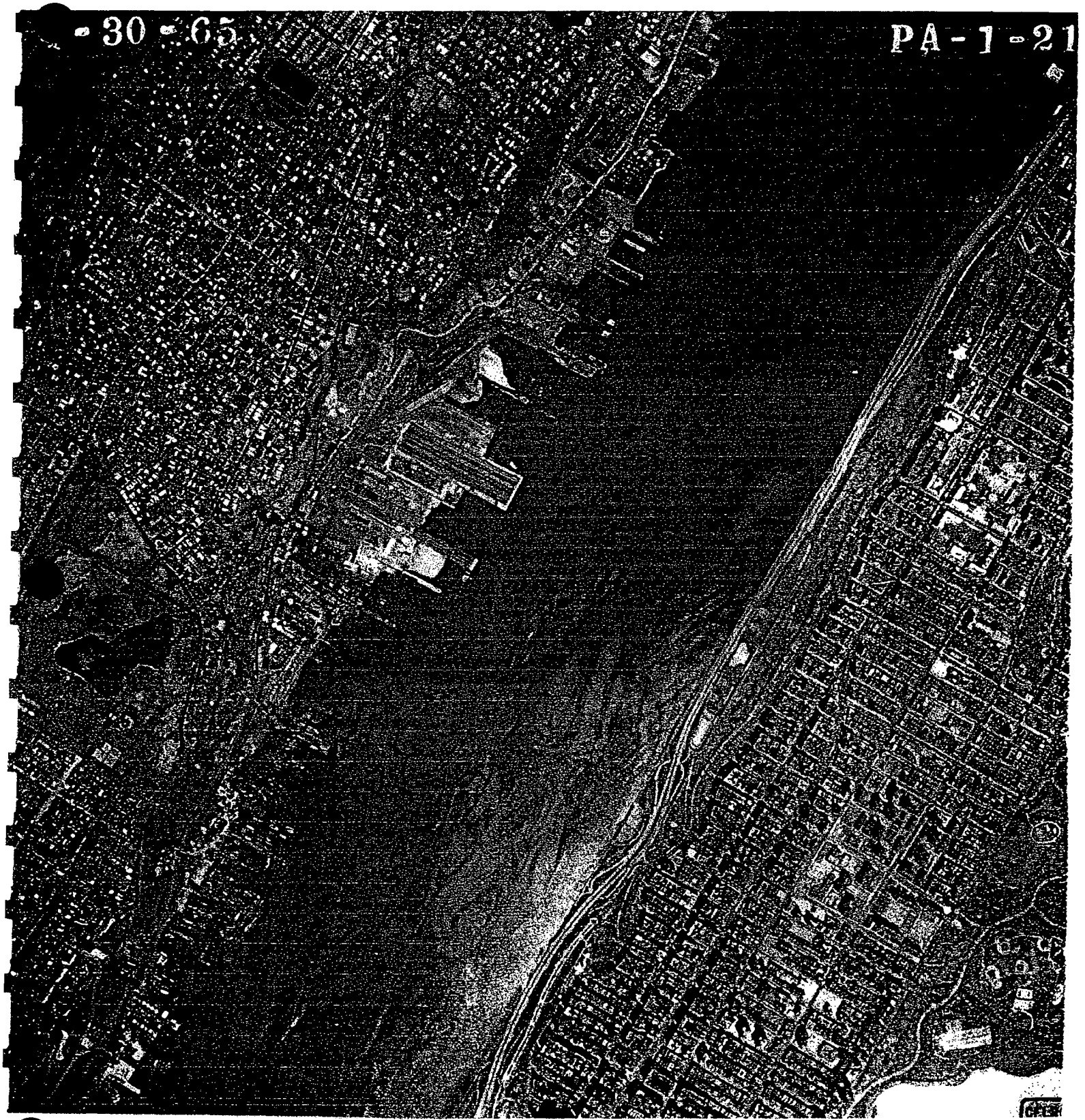
CE 3.2429

CE 3.2430

CE 3.2431



CE 3.2432



CE 3.2433

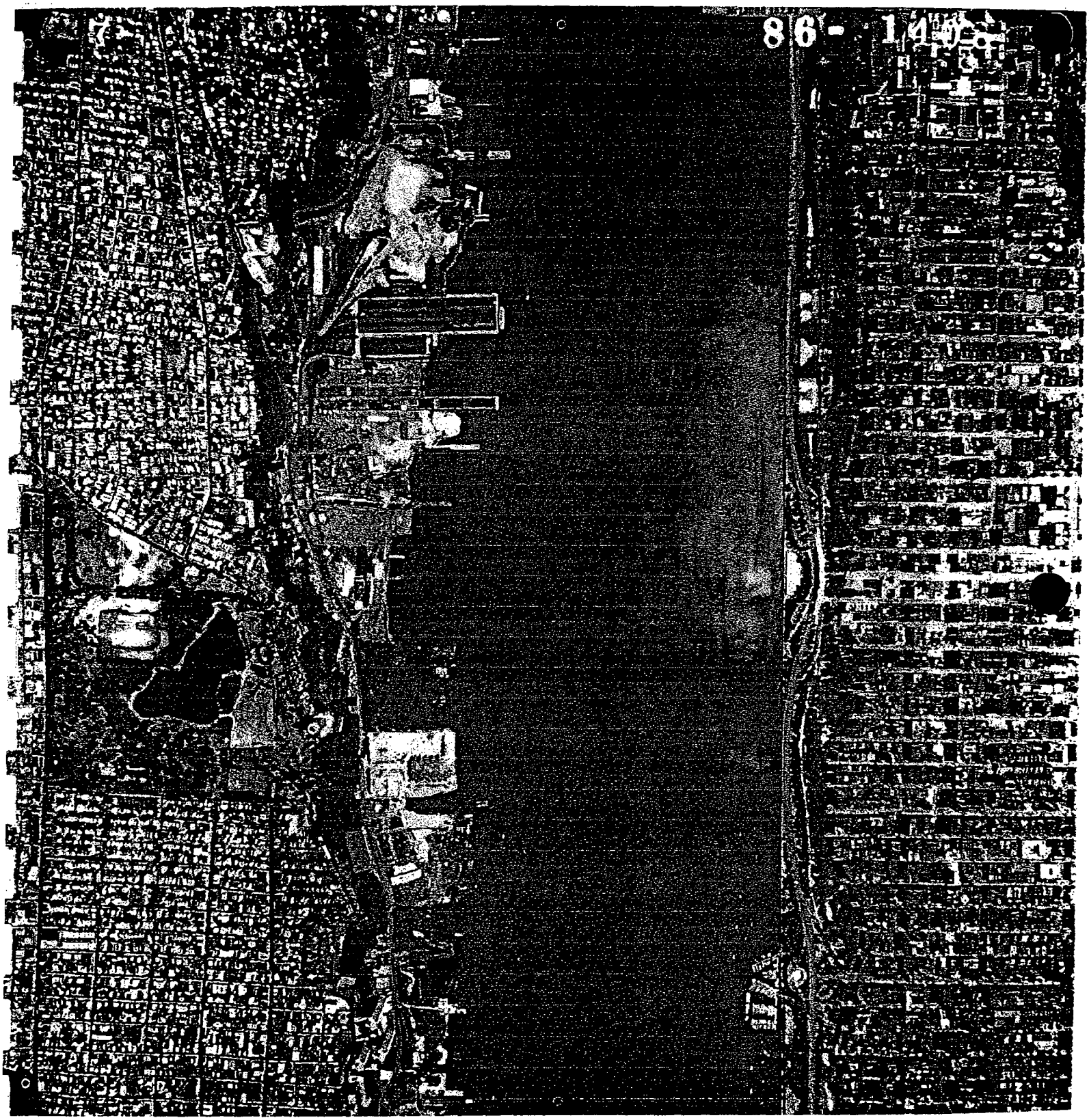
CE 3.2434

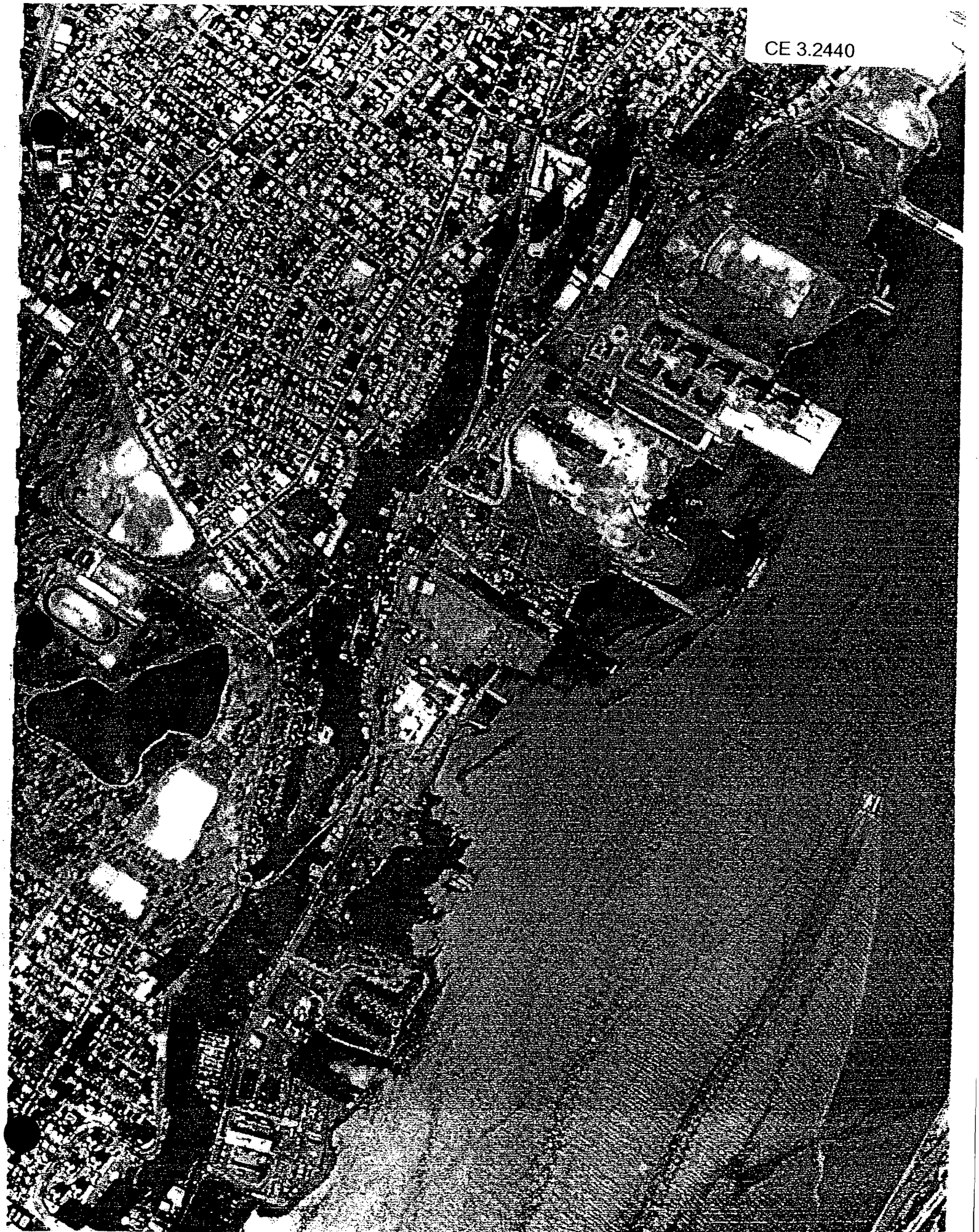
HMC - S

CE 3.2436

CE 3.2437

CE 3.2439

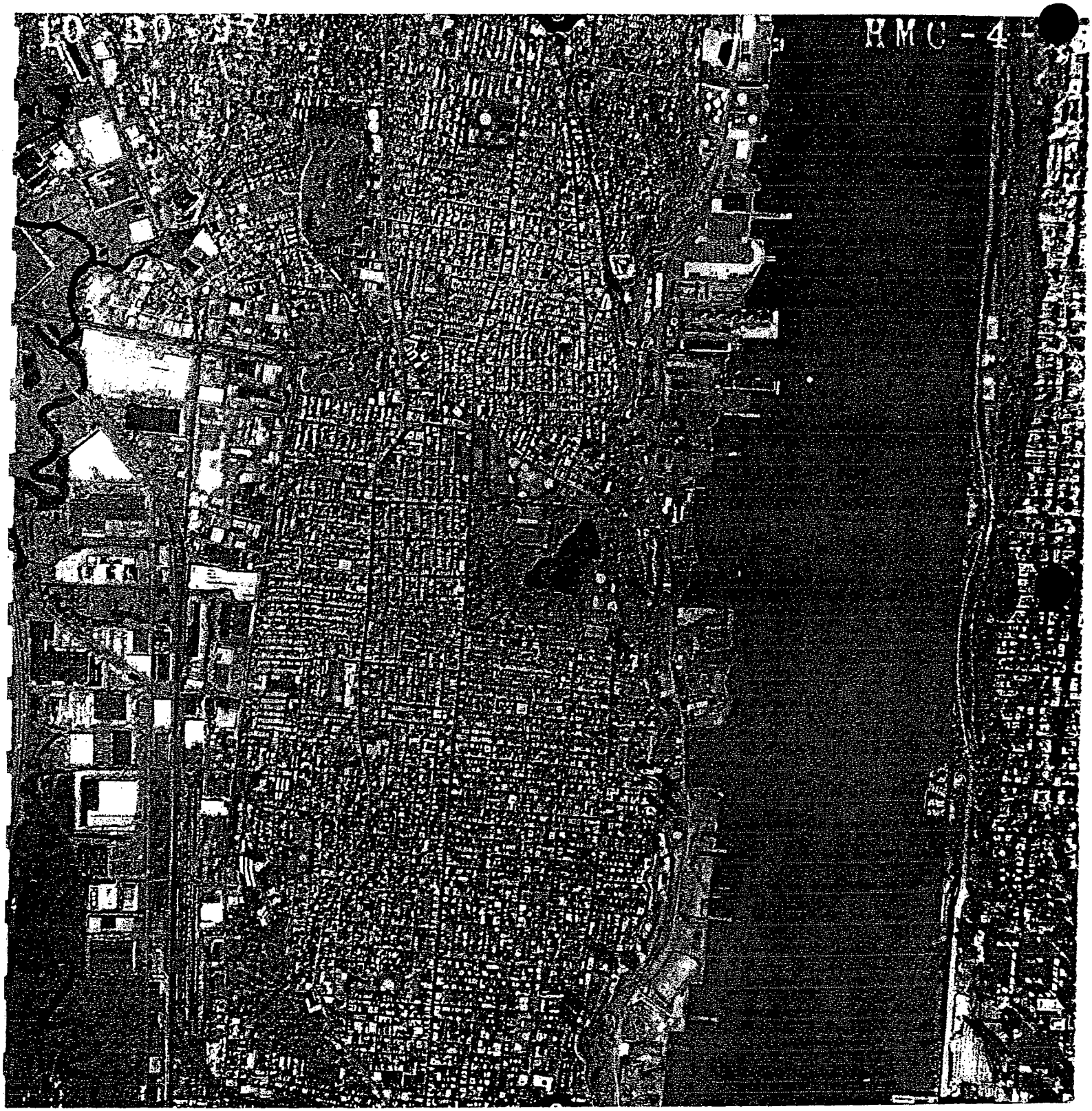




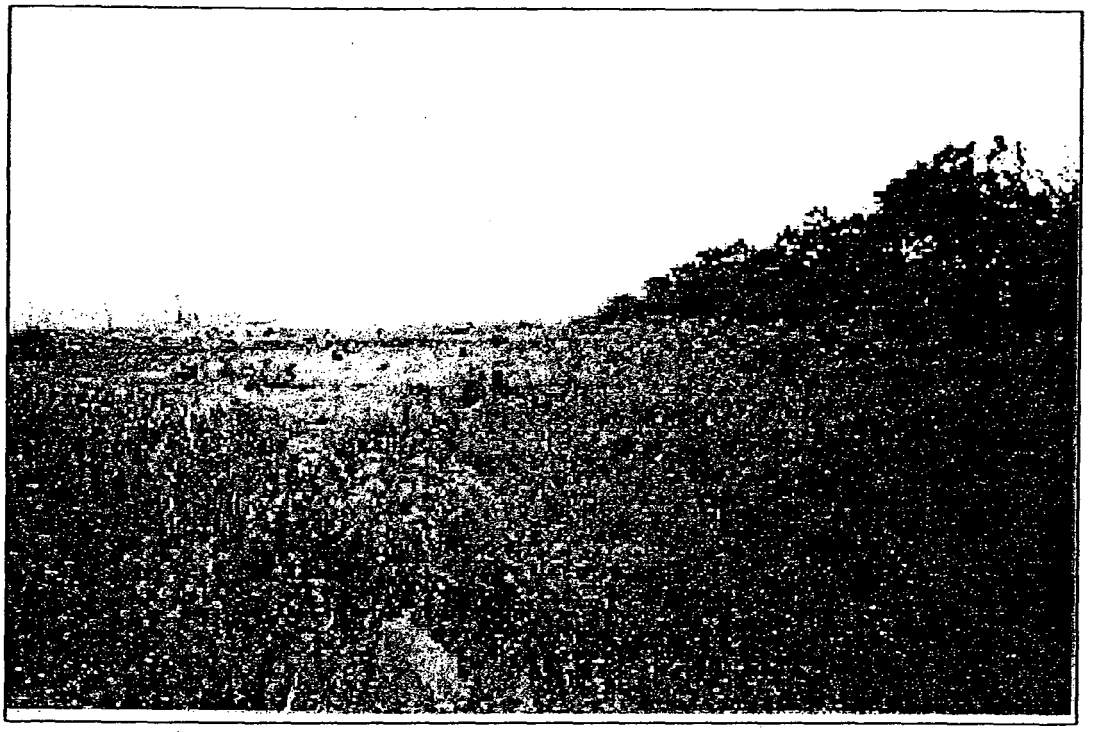
CE 3.2441

CE 3.2442

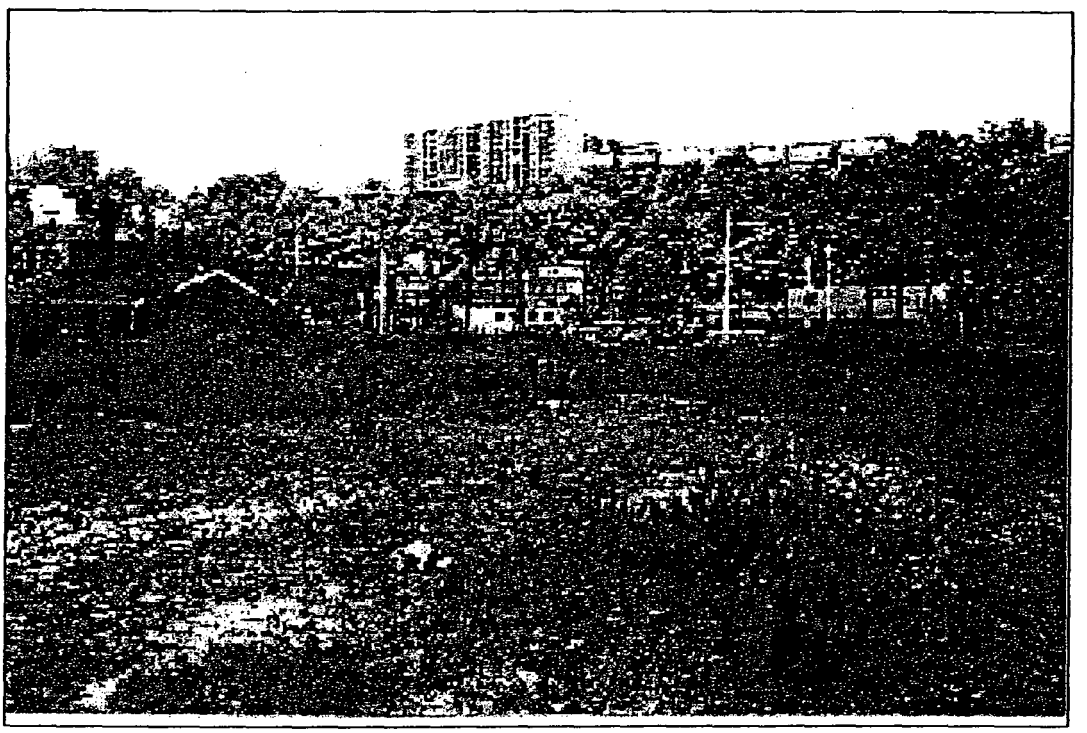
CE 3.2443



Appendix 3: PHOTOGRAPHIC LOG



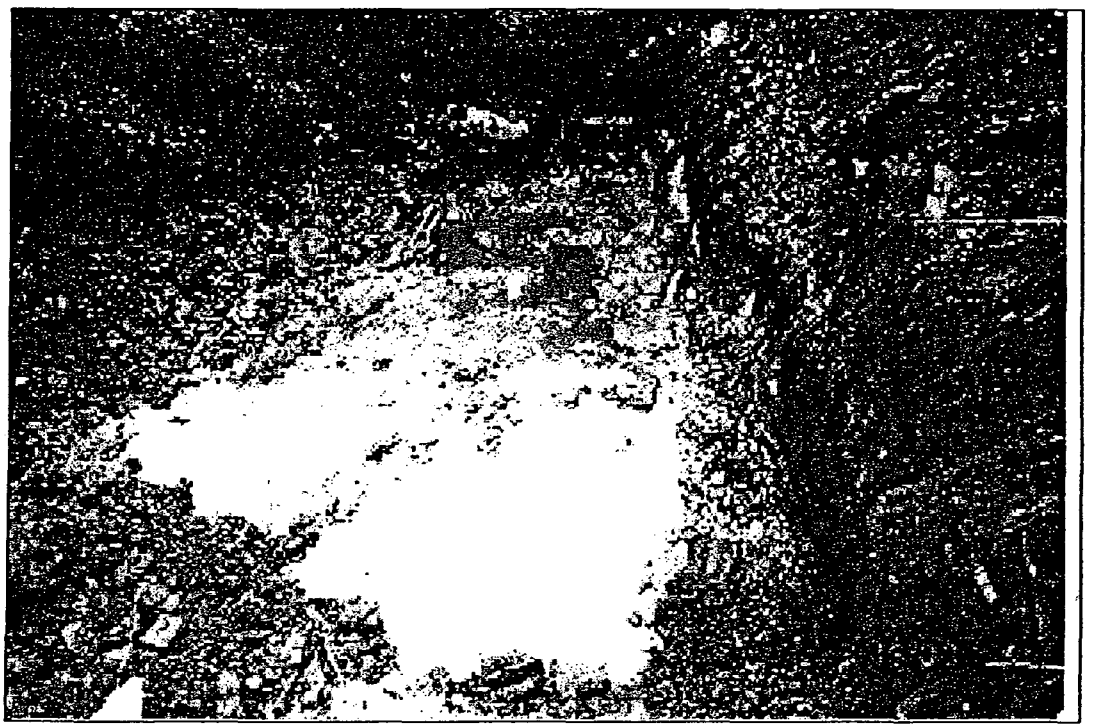
VIEW OF MW-6 AND C-79 AREA (FACING EAST)



VIEW OF MW-6 AND C-79 AREA (FACING WEST)

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: N.T.S. DATE: 9/15/00 DRAWN BY: RR CHECKED BY: CK	PROJECT# 200957
PHOTOGRAPHIC LOG FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		APPEN 3-1

VIEW OF ALL COUNTY AST CONTAINMENT AREA (FACING WEST)



VIEW OF C-79 EXCAVATION (IN PROGRESS ON MARCH 19, 2000)

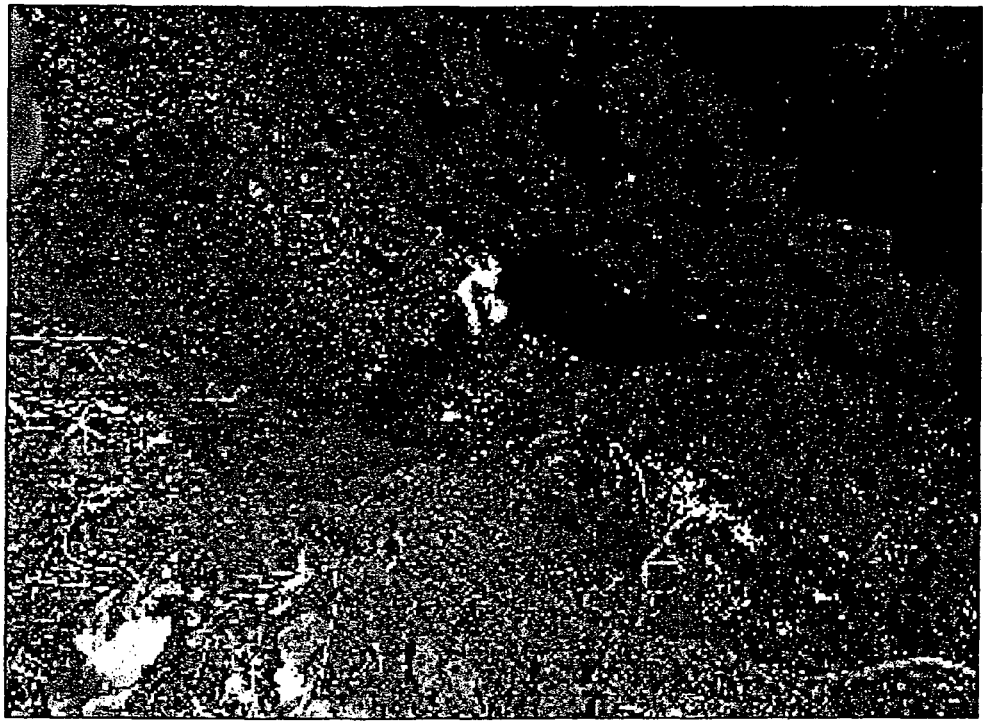
Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: N.T.S. DATE: 9/15/00 DRAWN BY: RR CHECKED BY: CK	PROJECT# 200957
PHOTOGRAPHIC LOG FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		APPENDIX: 3-2

CE 3.2447

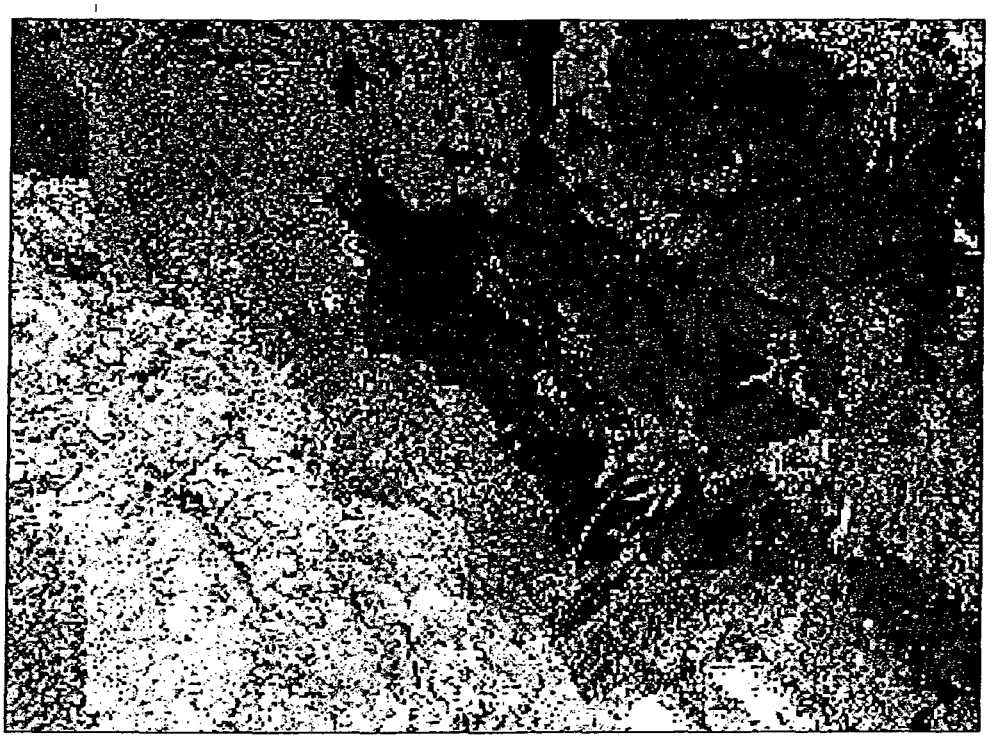
VIEW OF C-11-REDDISH PURPLE LAYER IS VISIBLE
IMMEDIATELY BELOW HISTORICAL SURFACE OF PROPERTY

VIEW OF C3-13-REDDISH PURPLE LAYER IS VISIBLE
IMMEDIATELY BELOW HISTORICAL SURFACE OF THE PROPERTY

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: N.T.S. DATE: 9/15/00 DRAWN BY: RR CHECKED BY: CK	PROJECT# 200957
PHOTOGRAPHIC LOG FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		APPEND 3-3

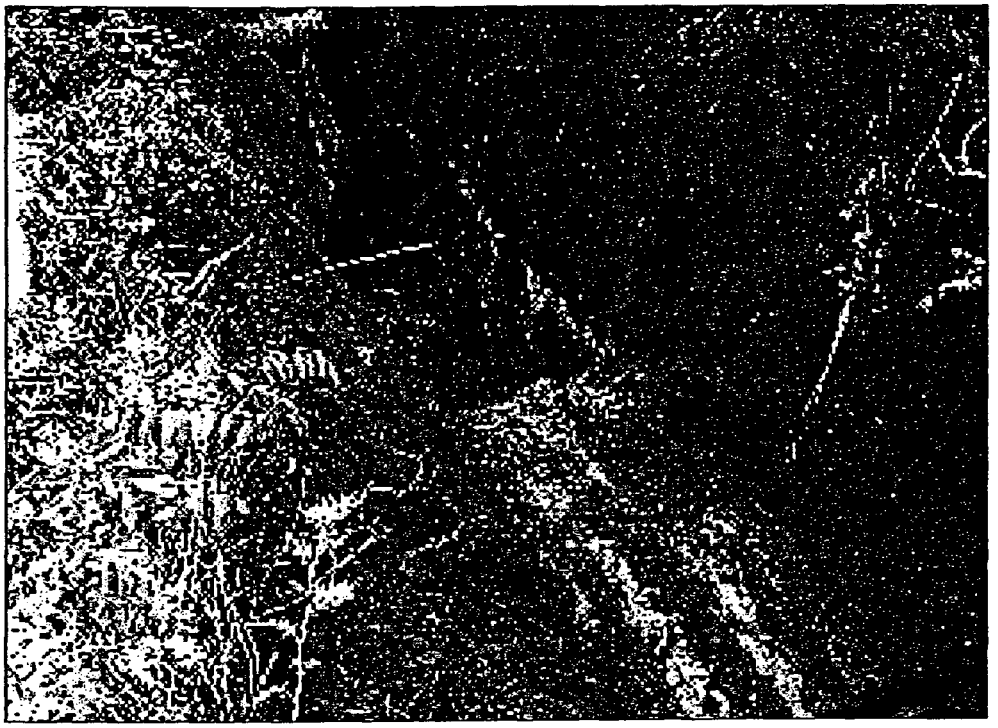


VIEW OF C3-14-REDDISH PURPLE MATERIAL VISIBLE IMMEDIATELY BELOW HISTORICAL SURFACE OF PROPERTY

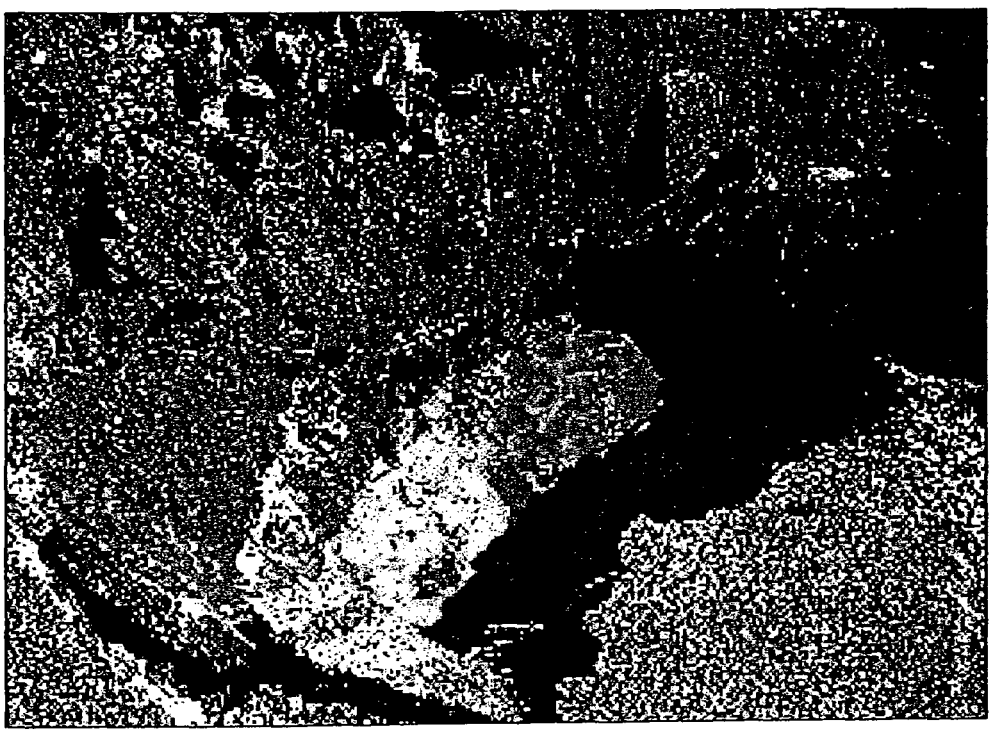


VIEW OF C3-15 DRAINAGE PIPE VISIBLE IN REDDISH-PURPLE LAYER IMMEDIATELY BELOW FORMER SURFACE

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: N.T.S. DATE: 9/15/00 DRAWN BY: RR CHECKED BY: CK	PROJECT# 200957
PHOTOGRAPHIC LOG FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		APPENDIX: 3-4



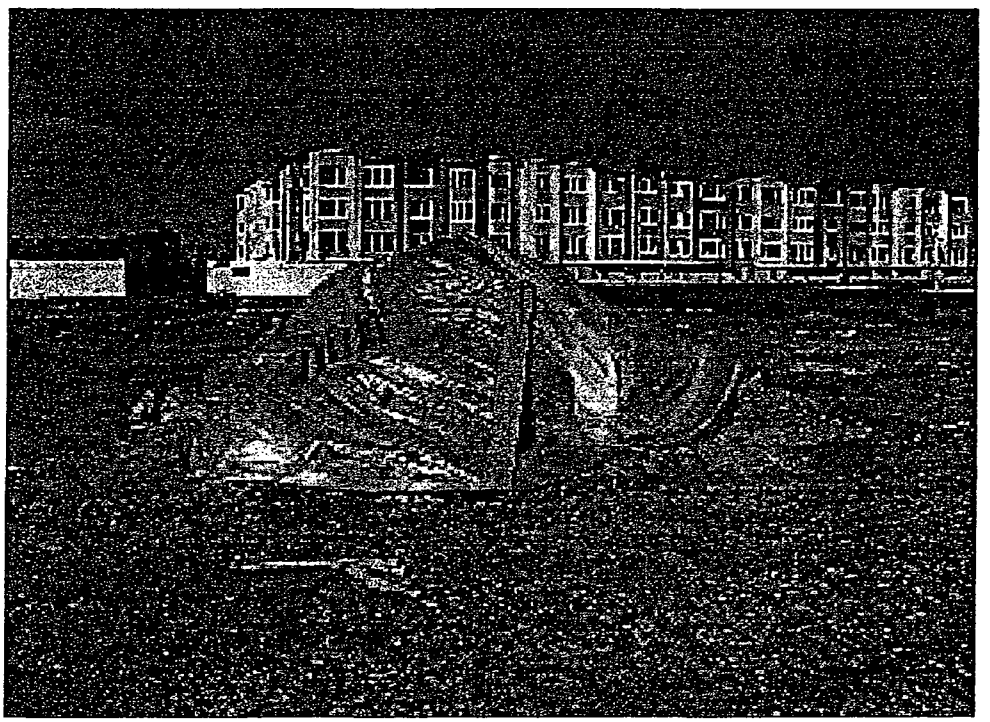
VIEW OF E3-16-REDDISH-PURPLE LAYER VISIBLE BENEATH HISTORICAL PROPERTY SURFACE (INDICATED BY CONCRETE AND ASPHALT)



VIEW OF C-77 EXCAVATION

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: N.T.S. DATE: 9/15/00 DRAWN BY: RR CHECKED BY: CK	PROJECT# 200957
PHOTOGRAPHIC LOG FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		APPEND 3-5

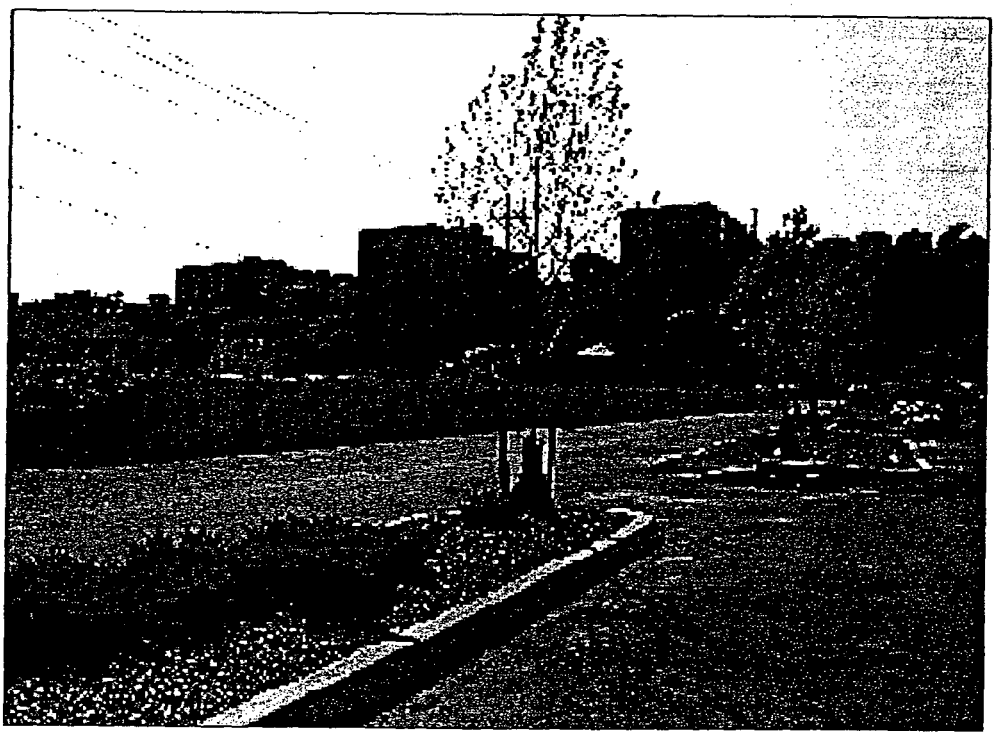
VIEW OF C-79 EXCAVATION (FACING NORTHEAST)



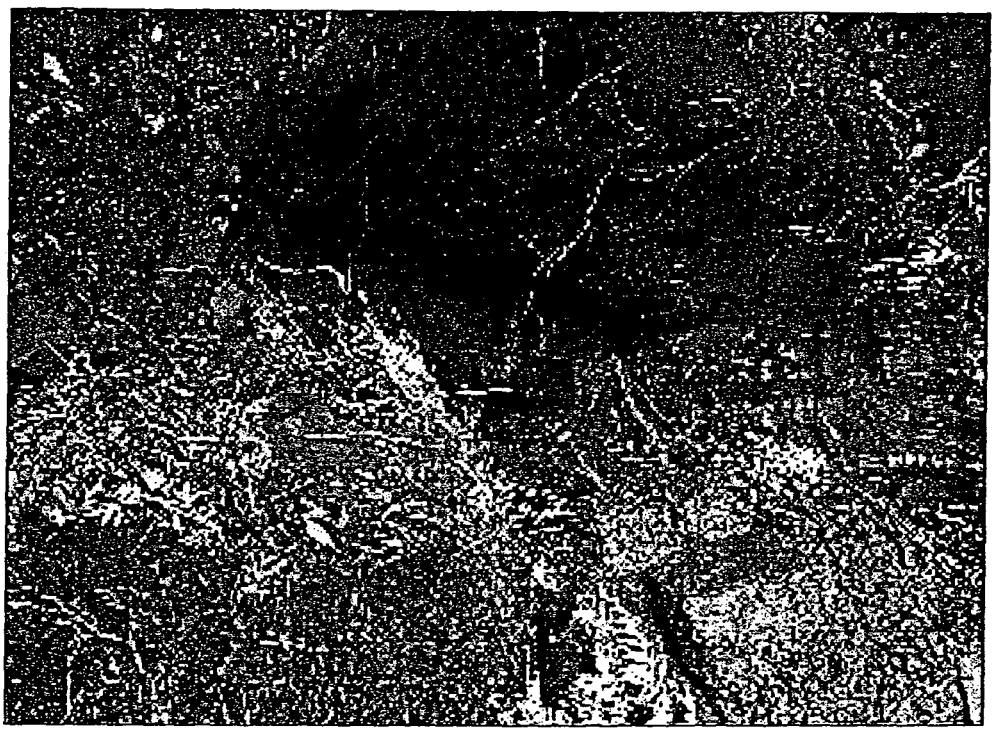
VIEW OF EXCESS GYPSUM PILE (FACING NORTH)

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: N.T.S. DATE: 9/15/00 DRAWN BY: RR CHECKED BY: CK	PROJECT# 200957
PHOTOGRAPHIC LOG FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		APPENDIX: 3-6

CE 3.2451



VIEW OF ACCESS ROAD WITH HUDSON TOWERS (AKA CONTINUING CARE FACILITY) IN BACKGROUND (FACING SOUTHWEST)



VIEW OF C3-4-REDDISH PURPLE MATERIAL FOUND BELOW THE HISTORICAL SURFACE (EXCAVATION SMEARED SOME OF THE COLOR ON THE UPPER FILL)

Environmental Waste Management Associates, LLC P.O. Box 5430 Parsippany, NJ 07054 Tel: (973) 560-1400	SCALE: N.T.S. DATE: 9/15/00 DRAWN BY: RR CHECKED BY: CK	PROJECT# 200957
PHOTOGRAPHIC LOG FORMER CELOTEX INDUSTRIAL PARK 1 RIVER ROAD EDGEWATER, NEW JERSEY		APPEN 3-7

Appendix 4: BORING LOGS

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-1 — **SHEET 1 of 1**

EWMA CASE #: 200754	**CLIENT:** Edgewater Enterprises, LLC		**PROJECT:** Remedial Investigation
LOCATION: 525 River Road, Edgewater, New Jersey			**TOPO SETTING:** Flat
DRILLING CONTRACTOR: Summit Drilling Co.	**DRILLER:** Todd Naugley	**SAMPLER:** Greg Steinman	**INSPECTOR:** Greg Steinman
DRILLING RIG TYPE: Air Drill and Auger Drill	**SIZE & TYPE OF BIT:** N/A	**DATE STARTED:** 6/28/99	**DATE COMPLETED:** 6/30/99
SAMPLE TYPE: Stainless steel split spoon	**HAMMER WT.:** 130 lbs / **DROP:** N/A	**TOTAL DEPTH:** 9.0'	**WATER LEVEL:** ENCOUNTER N/A / PID

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	PID
			1	SW	0.0-8.5 Miscellaneous, FILL, including coarse to medium SAND, gravel , and boulders	0
C2-1	1.0'	16-18-21-17	9	SW	8.5-9.0 Brown Fine to medium SAND, some gravel Sample taken at 8.5-9.0'	0
			10		Boring Ends @ 9.0'	

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-2

EWMA CASE #:	CLIENT:		PROJECT:
200754	Edgewater Enterprises, LLC		Remedial Investigati
LOCATION:			**TOPO SETTING:**
525 River Road, Edgewater, New Jersey			Flat
DRILLING CONTRACTOR:	**DRILLER:**	**SAMPLER:**	**INSPECTOR:**
Summit Drilling Co.	Todd Naugley	Greg Steinman	Greg Steinman
DRILLING RIG TYPE:	**SIZE & TYPE OF BIT:**	**DATE STARTED:**	**DATE COMPLET**
Air Drill and Auger Drill	N/A	6/28/99	6/30/99
SAMPLE TYPE:	**HAMMER WT.** / **DROP**	**TOTAL DEPTH:**	**WATER ENCOUNTERED**
Stainless steel split spoon	130 lbs / N/A	7.0'	N/A

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS
			0	SW	0.0-4.0 Miscellaneous FILL, including coarse to medium SAND, gravel, and boulders
C2-2A	.5'	10-15-19-13	4	SW	4.0-6.5 Brown fine to medium SAND, some gravel and boulders Sample taken at 4.5-5.0'
C2-2B	1.0'	11-16-19-13	6	SW	6.5-7.0 Brown Coarse to medium SAND, some gravel and boulders Sample taken at 6.5-7.0'
			7		Boring Ends @ 7.0'

ENVIRONMENTAL WASTE
MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-3 — **SHEET 1 of 1**

EWMA CASE #: 200754	**CLIENT:** Edgewater Enterprises, LLC		**PROJECT:** Remedial Investigation
LOCATION: 525 River Road, Edgewater, New Jersey			**TOPO SETTING:** Flat
DRILLING CONTRACTOR: Summit Drilling Co.	**DRILLER:** Todd Naugley	**SAMPLER:** Greg Steinman	**INSPECTOR:** Greg Steinman
DRILLING RIG TYPE: Air Drill and Auger Drill	**SIZE & TYPE OF BIT:** N/A	**DATE STARTED:** 6/28/99	**DATE COMPLETED:** 6/30/99
SAMPLE TYPE: 2' Stainless Steel Split Spoon	**HAMMER WT.:** 130 lbs / **DROP:** N/A	**TOTAL DEPTH:** 5.0'	**WATER LEVEL:** ENCOUNTER N/A / PID

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	PID
			1	FILL	0.0-4.0 Miscellaneous FILL, including coarse to medium SAND, gravel, and boulders	0
			2			
			3			
			4			
C2-3	1.0'	15-12-16-22	5	FILL	4.5-5.0 Brown fine to medium SAND, some gravel and boulders Sample taken at 4.5-5.0'	0
			6		Boring Ends @ 5.0'	
			7			
			8			
			9			
			10			
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE
MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-4 — **SHEET 1 of 1**

EWMA CASE #:	CLIENT:	PROJECT:
200754	Edgewater Enterprises, LLC	Remedial Investigation

LOCATION:	TOPO SETTING:
525 River Road, Edgewater, New Jersey	Flat

DRILLING CONTRACTOR:	DRILLER:	SAMPLER:	INSPECTOR:
Summit Drilling Co.	Todd Naugley	Greg Steinman	Greg Steinman

DRILLING RIG TYPE:	SIZE & TYPE OF BIT:	DATE STARTED:	DATE COMPLETED:
Air Drill and Auger Drill	N/A	6/28/99	6/30/99

SAMPLE TYPE:	HAMMER WT.	DROP	TOTAL DEPTH:	WATER LEVEL: ENCOUNTER	WATER LEVEL: PID
2' Stainless Steel Split Spoon	130 lbs	N/A	5.0'	N/A	

SAMPLES #	SAMPLES Recovery	SAMPLES Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	PID
			1	SW	0.0-4.0 Miscellaneous FILL, including coarse to medium SAND, gravel, and boulders	0
			2			
			3			
			4			
					Sample taken at 4.5-5.0'	
C2-4	1.0'	16-11-22-15	5	SW	4.5-5.0 Brown fine to medium SAND, some gravel and boulders	0
			6			
					Boring Ends @ 5.0'	
			7			
			8			
			9			
			10			
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-5 — **SHEET 1 of 1**

EWMA CASE #: 200754	**CLIENT:** Edgewater Enterprises, LLC	**PROJECT:** Remedial Investigation
LOCATION: 525 River Road, Edgewater, New Jersey		**TOPO SETTING:** Flat

DRILLING CONTRACTOR: Summit Drilling Co.	**DRILLER:** Todd Naugley		**SAMPLER:** Greg Steinman	**INSPECTOR:** Greg Steinman
DRILLING RIG TYPE: Air Drill and Auger Drill	**SIZE & TYPE OF BIT:** N/A		**DATE STARTED:** 6/28/99	**DATE COMPLETED:** 6/30/99
SAMPLE TYPE: Stainless steel split spoon	**HAMMER WT.** 130 lbs	**DROP** N/A	**TOTAL DEPTH:** 8.0'	**WATER LEVEL:** ENCOUNTER N/A / PID

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	
			1	SW	0.0-7.5 Miscellaneous FILL, including coarse to medium SAND, gravel, and boulders	0
			2			
			3			
			4			
			5			
			6			
			7			
C2-5	1.0'	12-16-15-21	8	SW	7.5-8.0 Brown fine to medium SAND, some gravel and boulders Sample taken at 7.5-8.0'	0
			9			
			10		Boring Ends @ 8.0'	
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-6 — **SHEET 1 of 1**

EWMA CASE #: 200754	**CLIENT:** Edgewater Enterprises, LLC	**PROJECT:** Remedial Investigation
LOCATION: 525 River Road, Edgewater, New Jersey		**TOPO SETTING:** Flat

DRILLING CONTRACTOR: Summit Drilling Co.	**DRILLER:** Todd Naugley	**SAMPLER:** Greg Steinman	**INSPECTOR:** Greg Steinman
DRILLING RIG TYPE: Air Drill and Auger Drill	**SIZE & TYPE OF BIT:** N/A	**DATE STARTED:** 6/28/99	**DATE COMPLETED:** 6/30/99
SAMPLE TYPE: Stainless steel split spoon	**HAMMER WT.:** 130 lbs / **DROP:** N/A	**TOTAL DEPTH:** 8.0'	**WATER LEVEL:** ENCOUNTER N/A / PID

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	
			1	SW	0.0-7.5 Miscellaneous FILL, including coarse to medium SAND, gravel, and boulders	0
			2			
			3			
			4			
			5			
			6			
			7			
C2-6	1.0'	10-14-14-18	8	SW	7.5-8.0 Brown fine to medium SAND, some gravel and boulders Sample taken at 7.5-8.0'	0
			9			
			10		Boring Ends @ 8.0'	
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE
MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-7 — **SHEET 1 of 1**

EWMA CASE #: 200754	**CLIENT:** Edgewater Enterprises, LLC		**PROJECT:** Remedial Investigation
LOCATION: 525 River Road, Edgewater, New Jersey			**TOPO SETTING:** Flat
DRILLING CONTRACTOR: Summit Drilling Co.	**DRILLER:** Todd Naugley	**SAMPLER:** Greg Steinman	**INSPECTOR:** Greg Steinman
DRILLING RIG TYPE: Air Drill and Auger Drill	**SIZE & TYPE OF BIT:** N/A	**DATE STARTED:** 6/28/99	**DATE COMPLETED:** 6/30/99
SAMPLE TYPE: Stainless steel split spoon	**HAMMER WT.:** 130 lbs / **DROP:** N/A	**TOTAL DEPTH:** 8.0'	**WATER LEVEL:** ENCOUNTER N/A / PID

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	
			1	SW	0.0-7.5 Miscellaneous FILL, including coarse to medium SAND, gravel, and boulders	0
			2			
			3			
			4			
			5			
			6			
			7			
C2-7	1.0'	13-16-20-18	8	SW	7.5-8.0 Brown fine to medium SAND, some gravel and boulders Sample taken at 7.5-8.0'	0
			9			
			10		Boring Ends @ 8.0'	
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-8 — **SHEET 1 of 1**

EWMA CASE #: 200754	**CLIENT:** Edgewater Enterprises, LLC		**PROJECT:** Remedial Investigation
LOCATION: 525 River Road, Edgewater, New Jersey			**TOPO SETTING:** Flat
DRILLING CONTRACTOR: Summit Drilling Co.	**DRILLER:** Todd Naugley	**SAMPLER:** Greg Steinman	**INSPECTOR:** Greg Steinman
DRILLING RIG TYPE: Air Drill and Auger Drill	**SIZE & TYPE OF BIT:** N/A	**DATE STARTED:** 6/28/99	**DATE COMPLETED:** 6/30/99
SAMPLE TYPE: Stainless steel split spoon	**HAMMER WT.:** 130 lbs / **DROP:** N/A	**TOTAL DEPTH:** 8.0'	**WATER LEVEL:** ENCOUNTER N/A / PID

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	PID
			1	FILL	0.0-7.5 Miscellaneous FILL, including coarse to medium SAND, gravel, and boulders	0
			2			
			3			
			4			
			5			
			6			
			7			
C2-8	1.0'	13-16-20-18	8	FILL	7.5-8.0 Brown fine to medium SAND, some gravel and boulders Sample taken at 7.5-8.0'	0
			9			
			10		Boring Ends @ 8.0'	
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE
MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-10 — **SHEET 1 of 1**

EWMA CASE #: 200754	**CLIENT:** Edgewater Enterprises, LLC		**PROJECT:** Remedial Investigation
LOCATION: 525 River Road, Edgewater, New Jersey			**TOPO SETTING:** Flat
DRILLING CONTRACTOR: Summit Drilling Co.	**DRILLER:** Todd Naugley	**SAMPLER:** Greg Steinman	**INSPECTOR:** Greg Steinman
DRILLING RIG TYPE: Air Drill and Auger Drill	**SIZE & TYPE OF BIT:** N/A	**DATE STARTED:** 6/28/99	**DATE COMPLETED:** 6/30/99
SAMPLE TYPE: Stainless steel split spoon	**HAMMER WT.:** 130 lbs / **DROP:** N/A	**TOTAL DEPTH:** 8.0'	**WATER LEVEL:** ENCOUNTER N/A / PID

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	
			1	SW	0.0-7.5 Miscellaneous FILL, including coarse to medium SAND, gravel, and boulders	0
			2			
			3			
			4			
			5			
			6			
			7			
C2-10	1.0'	10-16-20-22	8	SW	7.5-8.0 Brown fine to medium SAND, some gravel and boulders Sample taken at 7.5-8.0'	0
			9			
			10		Boring Ends @ 8.0'	
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE
MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-11 — **SHEET 1 of 1**

EWMA CASE #: 200754	**CLIENT:** Edgewater Enterprises, LLC		**PROJECT:** Remedial Investigation
LOCATION: 525 River Road, Edgewater, New Jersey			**TOPO SETTING:** Flat
DRILLING CONTRACTOR: Summit Drilling Co.	**DRILLER:** Todd Naugley	**SAMPLER:** Greg Steinman	**INSPECTOR:** Greg Steinman
DRILLING RIG TYPE: Air Drill and Auger Drill	**SIZE & TYPE OF BIT:** N/A	**DATE STARTED:** 6/28/99	**DATE COMPLETED:** 6/30/99
SAMPLE TYPE: Stainless steel split spoon	**HAMMER WT.:** 130 lbs / **DROP:** N/A	**TOTAL DEPTH:** 8.0'	**WATER LEVEL:** ENCOUNTER N/A / PID

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	PID
			1	SW	0.0-7.5 Miscellaneous FILL, including coarse to medium SAND, gravel, and boulders	0
			2			
			3			
			4			
			5			
			6			
			7			
C2-11	1.0'	12-16-14-13	8	SW	7.5-8.0 Brown fine to medium SAND, some gravel and boulders Sample taken at 7.5-8.0'	0
			9			
			10		Boring Ends @ 8.0'	
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE
MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-12 — **SHEET 1 of 1**

EWMA CASE #: 200754	**CLIENT:** Edgewater Enterprises, LLC		**PROJECT:** Remedial Investigation
LOCATION: 525 River Road, Edgewater, New Jersey			**TOPO SETTING:** Flat
DRILLING CONTRACTOR: Summit Drilling Co.	**DRILLER:** Todd Naugley	**SAMPLER:** Greg Steinman	**INSPECTOR:** Greg Steinman
DRILLING RIG TYPE: Air Drill and Auger Drill	**SIZE & TYPE OF BIT:** N/A	**DATE STARTED:** 6/28/99	**DATE COMPLETED:** 6/30/99
SAMPLE TYPE: Stainless steel split spoon	**HAMMER WT.:** 130 lbs / **DROP:** N/A	**TOTAL DEPTH:** 8.0'	**WATER LEVEL:** ENCOUNTER N/A / PID

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	
			1	SW	0.0-7.5 Miscellaneous FILL, including coarse to medium SAND, gravel, and boulders	0
			2			
			3			
			4			
			5			
			6			
			7			
C2-12	1.5'	14-18-14-22	8	SW	7.5-8.0 Brown fine to medium SAND, some gravel and boulders Sample taken at 7.5-8.0'	0
			9			
			10		Boring Ends @ 8.0'	
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE
MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-13 — **SHEET 1 of 1**

EWMA CASE #: 200754	**CLIENT:** Edgewater Enterprises, LLC		**PROJECT:** Remedial Investigation
LOCATION: 525 River Road, Edgewater, New Jersey			**TOPO SETTING:** Flat
DRILLING CONTRACTOR: Summit Drilling Co.	**DRILLER:** Todd Naugley	**SAMPLER:** Greg Steinman	**INSPECTOR:** Greg Steinman
DRILLING RIG TYPE: Air Drill and Auger Drill	**SIZE & TYPE OF BIT:** N/A	**DATE STARTED:** 6/28/99	**DATE COMPLETED:** 6/30/99
SAMPLE TYPE: Stainless steel split spoon	**HAMMER WT.:** 130 lbs / **DROP:** N/A	**TOTAL DEPTH:** 8.0'	**WATER LEVEL:** ENCOUNTER N/A / PID

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	
			1	SW	0.0-7.5 Miscellaneous FILL, including coarse to medium SAND, gravel, and boulders	0
			2			
			3			
			4			
			5			
			6			
			7			
C2-13	1.0'	12-16-14-18	8	SW	7.5-8.0 Brown fine to medium SAND, some gravel and boulders Sample taken at 7.5-8.0'	0
			9			
			10		Boring Ends @ 8.0'	
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-14 — **SHEET 1 of 1**

EWMA CASE #: 200754	**CLIENT:** Edgewater Enterprises, LLC		**PROJECT:** Remedial Investigation
LOCATION: 525 River Road, Edgewater, New Jersey			**TOPO SETTING:** Flat
DRILLING CONTRACTOR: Summit Drilling Co.	**DRILLER:** Todd Naugley	**SAMPLER:** Greg Steinman	**INSPECTOR:** Greg Steinman
DRILLING RIG TYPE: Air Drill and Auger Drill	**SIZE & TYPE OF BIT:** N/A	**DATE STARTED:** 6/28/99	**DATE COMPLETED:** 6/30/99
SAMPLE TYPE: Stainless steel split spoon	**HAMMER WT.:** 130 lbs / **DROP:** N/A	**TOTAL DEPTH:** 8.0'	**WATER LEVEL:** ENCOUNTER N/A / PID

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	
			1	SW	0.0-7.5 Miscellaneous FILL, including coarse to medium SAND, gravel, and boulders	0
			2			
			3			
			4			
			5			
			6			
			7			
C2-14	1.0'	14-13-18-16	8	SW	7.5-8.0 Brown fine to medium SAND, some gravel and boulders Sample taken at 7.5-8.0'	0
			9			
			10		Boring Ends @ 8.0'	
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE
MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-15 — **SHEET 1 of 1**

EWMA CASE #: 200754	**CLIENT:** Edgewater Enterprises, LLC			**PROJECT:** Remedial Investigation	
LOCATION: 525 River Road, Edgewater, New Jersey				**TOPO SETTING:** Flat	
DRILLING CONTRACTOR: Summit Drilling Co.	**DRILLER:** Todd Naugley		**SAMPLER:** Greg Steinman	**INSPECTOR:** Greg Steinman	
DRILLING RIG TYPE: Air Drill and Auger Drill	**SIZE & TYPE OF BIT:** N/A		**DATE STARTED:** 6/28/99	**DATE COMPLETED:** 6/30/99	
SAMPLE TYPE: Stainless steel split spoon	**HAMMER WT.** 130 lbs	**DROP** N/A	**TOTAL DEPTH:** 8.0'	**WATER LEVEL:** ENCOUNTER N/A	PID

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	
			1	SW	0.0-7.5 Miscellaneous FILL, including coarse to medium SAND, gravel, and boulders	0
			2			
			3			
			4			
			5			
			6			
			7			
C2-15	1.0'	10-18-22-17	8	SW	7.5-8.0 Brown fine to medium SAND, some gravel and boulders Sample taken at 7.5-8.0'	0
			9			
			10		Boring Ends @ 8.0'	
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE
MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-16 — **SHEET 1 of 1**

EWMA CASE #: 200754	**CLIENT:** Edgewater Enterprises, LLC		**PROJECT:** Remedial Investigation
LOCATION: 525 River Road, Edgewater, New Jersey			**TOPO SETTING:** Flat
DRILLING CONTRACTOR: Summit Drilling Co.	**DRILLER:** Todd Naugley	**SAMPLER:** Greg Steinman	**INSPECTOR:** Greg Steinman
DRILLING RIG TYPE: Air Drill and Auger Drill	**SIZE & TYPE OF BIT:** N/A	**DATE STARTED:** 6/28/99	**DATE COMPLETED:** 6/30/99
SAMPLE TYPE: Stainless steel split spoon	**HAMMER WT.:** 130 lbs / **DROP:** N/A	**TOTAL DEPTH:** 3.0'	**WATER LEVEL:** ENCOUNTER N/A / PID

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	
			1	SW	0.0-2.5 Brown fine to medium SAND, some gravel	0
			2			
C2-16	1.0'	8-10-12-6	3	SW	2.5-3.0 Brown fine to medium SAND, some gravel	0
			4		Boring Ends @ 3.0'	
			5			
			6			
			7			
			8			
			9			
			10			
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE
MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-17 — **SHEET 1 of 1**

EWMA CASE #: 200754	**CLIENT:** Edgewater Enterprises, LLC		**PROJECT:** Remedial Investigation
LOCATION: 525 River Road, Edgewater, New Jersey			**TOPO SETTING:** Flat
DRILLING CONTRACTOR: Summit Drilling Co.	**DRILLER:** Todd Naugley	**SAMPLER:** Greg Steinman	**INSPECTOR:** Greg Steinman
DRILLING RIG TYPE: Air Drill and Auger Drill	**SIZE & TYPE OF BIT:** N/A	**DATE STARTED:** 6/28/99	**DATE COMPLETED:** 6/30/99
SAMPLE TYPE: Stainless steel split spoon	**HAMMER WT.:** 130 lbs / **DROP:** N/A	**TOTAL DEPTH:** 3.0'	**WATER LEVEL:** ENCOUNTER N/A / PID

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	PID
			1	SW	0.0-2.5 Brown fine to medium SAND, some gravel	0
			2			
C2-17	1.0'	6-10-8-7	3	SW	2.5-3.0 Brown fine to medium SAND, some gravel	0
			4		Boring Ends @ 3.0'	
			5			
			6			
			7			
			8			
			9			
			10			
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC
Lanidex Center, PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # C2-18

EWMA CASE #:	CLIENT:		PROJECT:
200754	Edgewater Enterprises, LLC		Remedial Investigat
LOCATION:			**TOPO SETTING:**
525 River Road, Edgewater, New Jersey			Flat
DRILLING CONTRACTOR:	**DRILLER:**	**SAMPLER:**	**INSPECTOR:**
Summit Drilling Co.	Todd Naugley	Greg Steinman	Greg Steinman
DRILLING RIG TYPE:	**SIZE & TYPE OF BIT:**	**DATE STARTED:**	**DATE COMPLET**
Air Drill and Auger Drill	N/A	6/28/99	6/30/99
SAMPLE TYPE:	**HAMMER WT.** / **DROP**	**TOTAL DEPTH:**	**WATER**
Stainless steel split spoon	130 lbs / N/A	3.0'	ENCOUNTERED N/A

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS
			1	SW	0.0-2.5 Brown fine to medium SAND, some gravel
			2		
C2-18	1.0'	7-10-4-6	3	SW	2.5-3.0 Brown fine to medium SAND, some gravel
			4		Boring Ends @ 3.0'
			5		
			6		
			7		
			8		
			9		
			10		
			11		
			12		
			13		
			14		
			15		
			16		
			17		
			18		
			19		
			20		

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC

Koll Center, 100 Misty Lane, PO Box 5430, Parsippany, NJ 07054 Phone: (973) 560-1400 Fax: (973) 560-0400

CE 3.2470

BORING LOG

BORING # CC2-19 well permit # SHEET 1 Of 1

EMA CASE #:	CLIENT:	PROJECT:
200754	Edgewater Enterprises, LLC	Remedial Investigation
LOCATION: 525 River Road Edgewater, NJ		**TOPO SETTING:** flat

DRILLING CONTRACTOR:	DRILLER:	SAMPLER:	INSPECTOR:
Summit	Mike C.	G. Stienman	Greg Steinman
DRILL RIG TYPE: Geo-probe	**SIZE & TYPE OF BIT:** na	**DATE STARTED:** 11/4/99	**DATE COMPLETED:** 11/4/99
SAMPLE METHOD: 2.0" diam/ 4' long macrocore with dedicated acetate liners	**HAMMER WT.:** na / **DROP:** na	**TOTAL DEPTH:** 8'	**WATER LEVEL:** ENCOUNTERED 4' / STABILIZED

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS		PID/FID (MU)
			1		0-3'	Brown, coarse-medium Sand, some silt, gravel. (moist)	0
			2	SW			
			3				
			4	SP	3'-4'	Black, coarse Sand/Gravel (moist)	
					4'	GW (saturated)	0
			5		4'-6.5'	Black, fine-medium Sand, some gravel (wet)	
			6				
			7	SP	6.5'-7'	Black, coarse Sand, some gravel. (wet)	0
			8		7'-8'	Black, fine-medium Sand (wet) (Sample CC2-19@7.5-8)	
			9		8'	End of Boring	
			10				
			11				
			12				
			13				
			14				
			15				
			16				
			17				
			18				
			19				
			20				

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC CE 3.2471

Koll Center, 100 Misty Lane, PO Box 5430, Parsippany, NJ 07054 Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # CC2-20 well permit # SHEET 1 Of 1

EWMA CASE #:	CLIENT:	PROJECT:
200754	Edgewter Enterprise, LCC	Remedial Investigation
LOCATION:		**TOPO SETTING:**
525 River Rd. Edgewater NJ		flat

DRILLING CONTRACTOR:	DRILLER:	SAMPLER:	INSPECTOR:
Summit	Mike C.	G. Stienman	G. Steinman
DRILLING RIG TYPE:	**SIZE & TYPE OF BIT:**	**DATE STARTED:**	**DATE COMPLETED:**
	na	11/4/99	11/4/99
SAMPLE METHOD:	**HAMMER WT.** / **DROP**	**TOTAL DEPTH:**	**WATER LEVEL:** ENCOUNTERED / STABILIZED
	na / na	8'	4' /

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	PID/FID (MU)
			1	SW	0-2' Brown, coarse-medium Sand, some silt, brick. Moist	0
			2			
			3	SW	2'-3.5' Dark Brown, fine-medium Sand, some rock, organic matter. Moist	0
			4	SM	3.5'-4' Black, fine-medium Sand, some silt. Moist, GW @ 4'	
			5	SP	4'-5' Black/Brown coarse Sand/Gravel. Moist	
			6	SP	5'-6' Black, coarse-medium Sand. Wet	
			7	SC	6'-7' Black, fine-medium Sand/Clay.Moist	0
			8	SM	7'-8' Dark Brown, fine-medium Sand. Wet (Sample CC2-20@7.5-8)	
			9		8' End of Boring	
			10			
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC

Koll Center, 100 Misty Lane, PO Box 5430, Parsippany, NJ 07054 Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # CC2-21 well permit # SHEET 1 Of 1

EMA CASE #: 200754	CLIENT: Edgewater Enterprises, LLC		PROJECT: Remedial Investigation
LOCATION: 525 River Rd. Edgewater Enterprises, LLC			TOPO SETTING: flat
DRILLING CONTRACTOR: Summit	DRILLER: Mike C.	SAMPLER: G. Stienman	INSPECTOR: G. Stienman
DRILLING RIG TYPE: Geo-probe	SIZE & TYPE OF BIT: na	DATE STARTED: 11/4/99	DATE COMPLETED: 11/4/99
SAMPLE METHOD:	HAMMER WT.: na / DROP: na	TOTAL DEPTH: 8'	WATER LEVEL: ENCOUNTERED 4' / STABILIZED

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	PID/FID (MU)
			1	SP	0-2' Brown, coarse-medium Sand, some rock. Moist	0
			2			
			3	SP	2'-3' Black, coarse Sand. Moist	0
						0
			4	SW	3'-3.5' Dark Brown, coarse-medium Sand, some silt. Moist	
				SW	3.5'-4' Light Brown, coarse-medium Sand/Gravel. Moist	
			5		4'-8' Light Brown, coarse-medium Sand, some grevel. Wet (Sample CC2-21@7.5-8)	0
			6	SW		0
			7			
			8			
			9		8' End of Boring	
			10			
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

CC2-21

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC CE 3.2473

Koll Center, 100 Misty Lane, PO Box 5430, Parsippany, NJ 07054 Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # CC2-22 well permit # SHEET 1 Of 1

EWMA CASE #:	CLIENT:	PROJECT:
200754	Edgewater Enterprises, LLC	Renedial Investigation
LOCATION:		**TOPO SETTING:**
525 River Rd. Edgewater NJ		flat

DRILLING CONTRACTOR:	DRILLER:	SAMPLER:	INSPECTOR:
Summit	Mike C.	G. Stienman	G. Steinman
DRILLING RIG TYPE:	**SIZE & TYPE OF BIT:**	**DATE STARTED:**	**DATE COMPLETED:**
Geo-probe	na	11/4/99	11/4/99
SAMPLE METHOD:	**HAMMER WT.** / **DROP**	**TOTAL DEPTH:**	**WATER LEVEL:** ENCOUNTERED / STABILIZED
	na / na	8'	4' /

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	PID/FID (MU)
			1–2	SW	0-2.5' Dark Brown, coarse-medium Sand, some silt, gravel, rock. moist	0
			3	SW	2.5'-3.5' Light Brown, coarse-medium Sand, some silt. Moist	0
			4–5	SW	3.5'-4' Deep Red, coarse-medium Sand, some silt. Wet, GW @ 4'	0
			6–8	SW	4'-8' Deep Red, coarse-medium Sand, some silt. Wet (Sample CC2-22@ 7.5-8)	0
			9–20		8' End of Boring	

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC CE 3.2474

Koll Center, 100 Misty Lane, PO Box 5430, Parsippany, NJ 07054 Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # CC2-24 well permit # SHEET 1 Of 1

MA CASE #:	CLIENT:	PROJECT:
200754	Edgewater Enterprise, LLC	Remedial Investigation

LOCATION:	TOPO SETTING:
525 River Rd. Edgewater, NJ	flat

DRILLING CONTRACTOR:	DRILLER:	SAMPLER:	INSPECTOR:
Summit	Mike C.	G. Stienman	G. Steinman
DRILLING RIG TYPE:	**SIZE & TYPE OF BIT:**	**DATE STARTED:**	**DATE COMPLETED:**
Geo-probe	na	11/4/99	11/4/99
SAMPLE METHOD:	**HAMMER WT.** / **DROP**	**TOTAL DEPTH:**	**WATER LEVEL:** ENCOUNTERED / STABILIZED
	na / na	8'	4' /

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	PID/FID (MU)
			1	SP	0-2' Black Sand, some organic matter	0
			2	SW	2'-3' Brown, coarse-medium Sand, some rock. Moist	
			3	SW	3'-4' Brown, coarse-medium Sand, some silt, organic matter. Wet	
			4	SW	4'-6' Brown, coarse-medium Sand, some silt. Wet	0
			5			
			6			
			7	SW	6'-8' Brown, coarse-medium Sand, some rock, silt. Wet (Sample CC2-24@7.5-8)	
			8			
			9		8' End of Boring	
			10			
			11			
			12			
			13			
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC

Koll Center, 100 Misty Lane, PO Box 5430, Parsippany, NJ 07054 Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # CC2-25 well permit # SHEET 1 Of 1

EWMA CASE #:	CLIENT:	PROJECT:
200754	Edgewater Enterprises, LLC	Remedial Investigation
LOCATION:		**TOPO SETTING:**
525 River Rd. Edgewater, NJ		flat

DRILLING CONTRACTOR:	DRILLER:	SAMPLER:	INSPECTOR:
Summit	Mike C.	G. Stienman	G. Steinman
DRILLING RIG TYPE:	**SIZE & TYPE OF BIT:**	**DATE STARTED:**	
Geo-probe	na	11/4/99	11/4/99

SAMPLE METHOD:	HAMMER WT.	DROP	TOTAL DEPTH:	WATER LEVEL: ENCOUNTERED	WATER LEVEL: STABILIZED
	na	na	8'	4'	

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	PID/FID (MU)
			1–2	SP	0-2' Black Sand, some organic matter	
			3–4	SW	2'-4' Dark Brown, coarse-medium Sand, some rock. Moist	0
			5–6	SW	4'-6' Dark Brown, coarse-medium Sand, some rock, silt. Moist GW @ 4'	0 0
			7–8	SW	6'-8' Brown, coarse-medium Sand, some rock, silt. Wet (Sample CC2-25@7.5-8)	
			9–20		8' End of Boring	

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC

Koll Center, 100 Misty Lane, PO Box 5430, Parsippany, NJ 07054 Phone: (973) 560-1400 Fax: (973) 560-0400

CE 3.2476

BORING LOG

BORING # CC2-26 well permit # SHEET 1 Of 1

EMA CASE #:	CLIENT:	PROJECT:
200754	Edgewater Enterprise,LLC	Remedial Investigation
LOCATION:		**TOPO SETTING:**
525 River Rd. Edgewater , NJ		flat

DRILLING CONTRACTOR:	DRILLER:	SAMPLER:	INSPECTOR:
Summit	Mike C.	G. Stienman	G. Steinman
DRILLING RIG TYPE:	**SIZE & TYPE OF BIT:**	**DATE STARTED:**	**DATE COMPLETED:**
Geo-probe	na	11/4/99	11/4/99
SAMPLE METHOD:	**HAMMER WT.** / **DROP**	**TOTAL DEPTH:**	**WATER LEVEL:** ENCOUNTERED / STABILIZED
	na / na	8'	4' /

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	PID/FID (MU)
			1–2	SP	0-2' Black Sand, some organic matter	0
			3–4	SW	2'-4' Dark Brown, coarse-medium Sand, some rock. Moist	
			5–6	SW	4'-6.5' Brown, coarse-medium Sand, some rock. Moist	0
			7–8	SW	6.5'-8' Dark Brown, coarse-medium Sand, some rock. Moist (Sample CC2-26@ 7.5-8)	0
			9–20		8' End of Boring	

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC

Koll Center, 100 Misty Lane, PO Box 5430, Parsippany, NJ 07054 Phone: (973) 560-1400 Fax: (973) 560-0400

CE 3.2477

BORING LOG

BORING # CC2-27 0 well permit # SHEET 1 Of 1

EWMA CASE #:	CLIENT:	PROJECT:
200754	Edgewater Enterprise, LLC	Remedial Investigation

LOCATION:	TOPO SETTING:
525 River Rd. Edgewater, NJ	flat

DRILLING CONTRACTOR:	DRILLER:	SAMPLER:	INSPECTOR:
Summit	Mike C.	G. Steinman	G. Steinman

DRILLING RIG TYPE:	SIZE & TYPE OF BIT:	DATE STARTED:	DATE COMPLETED:
Geo-probe	na	11/4/99	11/4/99

SAMPLE METHOD:	HAMMER WT.	DROP	TOTAL DEPTH:	WATER LEVEL: ENCOUNTERED	WATER LEVEL: STABILIZED
	na	na	12	4	

SAMPLES #	SAMPLES Recovery	SAMPLES Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS	PID/FID (MU)
			1	SP	0-2' Black Sand, some organic matter	0
			2			
			3	SW	2'-4' Dark Brown, coarse-medium Sand, some rock. Moist	0
			4			
			5	SW	4'-6' Dark Brown, coarse-medium Sand, some rock, silt. Moist	0
			6			0
			7	SW	6'-8' Brown, coarse-medium Sand, some rock, silt. Moist (Sample CC2-27 @ 7.5-8)	
			8			
			9	SW	8'-9.5' Dark Brown, coarse-medium Sand, some clay, rock, silt. moist	0
			10	SC	9.5'-10' Red/Dark Brown, medium Sand/Clay, some silt. Moist	0
			11	SW	10'-12' Black, coarse Sand, some gravel, silt. Moist	
			12			
			13		12' End of Boring	
			14			
			15			
			16			
			17			
			18			
			19			
			20			

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC

Koll Center, 100 Misty Lane, PO Box 5430, Parsippany, NJ 07054 Phone: (973) 560-1400 Fax: (973) 560-0400

BORING LOG

BORING # CC2-28 well permit # SHEET 1 Of 1

VMA CASE #:	CLIENT:	PROJECT:
200754	Edgewater Enterprises,LLC	Remedial Investigation
LOCATION:		**TOPO SETTING:**
525 River Rd. Edgewater, NJ		flat

DRILLING CONTRACTOR:	DRILLER:	SAMPLER:	INSPECTOR:
Summit	Mike c.	G. Stienman	G. Steinman
DRILLING RIG TYPE:	**SIZE & TYPE OF BIT:**	**DATE STARTED:**	**DATE COMPLETED:**
Geo-Probe	na	11/4/99	11/4/99

SAMPLE METHOD:	HAMMER WT.	DROP	TOTAL DEPTH:	WATER LEVEL:	
				ENCOUNTERED	STABILIZED
	na	na	8.5"	4'-4.5'	

SAMPLES #	Recovery	Blows	DEPTH	SOIL TYPE	IDENTIFICATION OF SOIL / REMARKS		PID/FID (MU)
			1		0-1'	Asphalt and gray stone.	
			2	SW	1'-4'	Dark Brown, coarse-medium Sand, some silt, gravel, brick. Moist	0
			3				
			4	SW	3.5'-7.5'	Dark Brown, coarse-medium Sand, some silt, gravel. Wet	
			5				0
			6				
			7				
			8	SW	7.5'-8'	Dark Brown, coasre-medium Sand, some gravel. Moist (Sample CC2-28 @ 7.5-8)	0
			9		8.5'	End of Boring	
			10				
			11				
			12				
			13				
			14				
			15				
			16				
			17				
			18				
			19				
			20				

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: PEC79 (A, B, C)

Site Name: Edgewater	EWMA Job #: 200957	Test Pit Depth: 14'
Owner: Edgewater Enterprises, LLC	Test Pit Install Date: 3/17/2000	Test Pit Length: 35'
Location: River Road, Edgewater, New Jersey	Test Pit Completion Date: 3/17/2000	Test Pit Width: 15'
	Contractor: ROC Enterprises	G.W. Encountered: 4.5'
Type of Excavator: Track Loader	Operator: Todd	Static Water: NA
Sampling Method: Poly Scoop	Geologist: Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1			SP	0-5' Brown coarse to medium SAND, some rocks, wet	1
2					2
3					3
4					4
5	PEC79-A	0.0		GW Encountered	5
6		0.0	SP	5'-6' Black coarse SAND, strong odor, wet	6
7	PEC79-B	0.0	SP	6'-7' Red/brown coarse SAND, strong odor, some sheen, wet	7
8		0.0	SP	7'-8' Red SAND, some odor and sheens, wet	8
9			SP	8'-12' Black/brown coarse to medium SAND, some odor and sheen, wet	9
10					10
11	PEC79-C*				11
12		0.0			12
13			OH	12'-14' Meadow mat, native material	13
14	PEC79-C-79	0.0			14
15				Test Pit Ends @ 14.0'	15
16				*PEC79-3 was also taken at the 10.5 interval.	16
17					17
18					18
19					19
20					20

Note: Samples were collected from all side walls (4) at the A, B, & C intervals.

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: PEC4 (A, B, C)

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 10.5'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/17/2000	**Test Pit Length:** 20'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/17/2000	**Test Pit Width:** 20'
	Contractor: ROC Enterprises	**G.W. Encountered:** 5.5'
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1			SP	0-6' Brown coarse SAND, some rock, moist	1
2					2
3					3
4					4
5					5
6	PEC4-A	0.0		GW Encountered	6
7		0.0		6'-7' Asphalt layer	7
8	PEC4-B	0.0	SP	7'-8' Lite brown/orange coarse SAND, some rocks, wet	8
9			SP	8'-10.5' Brown coarse SAND, some rock, some black coarse gravel like sand, wet	9
10	PEC4-C*	0.0			10
11				Test Pit Ends @ 10.5'	11
12				*PEC4-5 was also taken at the 10.5 interval.	12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

Note: Samples were collected from all side walls (4) at the A, B, & C intervals.

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: PEC98 (A, B)

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 10.5'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/17/2000	**Test Pit Length:** 14'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/17/2000	**Test Pit Width:** 10'
	Contractor: ROC Enterprises	**G.W. Encountered:** 6.5'
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1			SP	0-7' Brown coarse to medium SAND, some rocks, wet	1
2					2
3					3
4					4
5					5
6				GW Encountered	6
7		0.0			7
8	PEC98-A	0.0	SP	7'-8.5' Black coarse SAND, some odors and sheens, wet	8
9			SP	8.5-10.5 Lite brown/orange coarse SAND, some odor, wet	9
10	PEC98-B*	0.0			10
11				Test Pit Ends @ 10.5'	11
12				*PEC98-5 was also taken at the 10.5 interval.	12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

Note: Samples were collected from all side walls (4) at the A and B intervals.

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: PEC50 (A, B)

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 10.5'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/17/2000	**Test Pit Length:** 10'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/17/2000	**Test Pit Width:** 10'
	Contractor: ROC Enterprises	**G.W. Encountered:** 6.5'
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1			SP	0-7' Brown coarse to medium SAND, some odors, wet	1
2					2
3					3
4					4
5					5
6					6
				GW Encountered	
7		0.0			7
				7.5'-8' Concrete Pad	
8					8
			SP	8'-10.5' Black coarse SAND, some sheens, wet	
9	PEC50-A				9
10	PEC50-B*	0.0			10
11				Test Pit Ends @ 10.5'	11
12				*PEC50-5 was also taken at the 10.5 interval.	12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

Note: Samples were collected from all side walls (4) at the A and B intervals.

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: PEC48 (A, B, C)

Site Name: Edgewater	EWMA Job #: 200957	Test Pit Depth: 10.5'
Owner: Edgewater Enterprises, LLC	Test Pit Install Date: 3/17/2000	Test Pit Length: 10'
Location: River Road, Edgewater, New Jersey	Test Pit Completion Date: 3/17/2000	Test Pit Width: 10'
	Contractor: ROC Enterprises	G.W. Encountered: 6.5'
Type of Excavator: Track Loader	Operator: Todd	Static Water: NA
Sampling Method: Poly Scoop	Geologist: Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1			SP	0-7' Brown coarse to medium SAND, some odors, wet	1
2					2
3					3
4					4
5					5
6					6
7		0.0		GW Encountered	7
8	PEC48-A		SP	7.5'-8' Concrete Pad	8
9	PEC48-B		SP	8'-10.5' Brown coarse SAND, some odors, wet	9
10	PEC48-C*	0.0			10
11				Test Pit Ends @ 10.5'	11
12				* PEC48-5 was also taken at the 10.5 interval.	12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					

Note: Samples were collected from all side walls (4) at the A, B & C intervals.

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: PEC45-47 (A, B,C)

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 10.5'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/18/2000	**Test Pit Length:** 30'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/18/2000	**Test Pit Width:** 10'
	Contractor: ROC Enterprises	**G.W. Encountered:** 8.0'
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0.0	SP	0-1' Dark brown coarse SAND, some rocks, debris, dry	1
2			SP	1'-6' Brown coarse to medium SAND, some rocks, dry	2
3					3
4					4
5					5
6	PEC45-47-A	0.0			6
7		0.0		6'-7' Black coal	7
8			SP	7'-10.5' Red/brown coarse SAND, some rock and gravel, wet GW Encountered	8
9	PEC45-47-B	0.0			9
10					10
	PEC45-47-C*	0.0			
11				Test Pit Ends @ 10.5'	11
12				* PEC45, PEC47, and PEC-C2-10 were all taken at the 10.5 interval	12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

Note: Samples were collected from all side walls (4) at the A, B & C intervals.

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: PEC46 (A, B)

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 10.5'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/18/2000	**Test Pit Length:** 14'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/18/2000	**Test Pit Width:** 10'
	Contractor: ROC Enterprises	**G.W. Encountered:** 8.0'
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0.0	SP	0-1' Dark brown coarse SAND, some rocks, debris, dry	1
2			SP	1'-7' Brown coarse to medium SAND, some rocks and debris, wet	2
3					3
4					4
5					5
6					6
7	PEC46-A	0.0			7
8				GW Encountered 7.5'-8' Concrete Pad	8
9			SP	8-10.5 Red/brown, black coarse SAND, wet	9
10	PEC48-B*	0.0			10
11				Test Pit Ends @ 10.5'	11
12				* PEC46 was also taken at the 10.5 interval.	12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

Note: Samples were collected from all side walls (4) at the A and B intervals.

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: CCF-11 (A & B)

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 4.5'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/16/2000	**Test Pit Length:** 8'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/16/2000	**Test Pit Width:** 5'
	Contractor: ROC Enterprises	**G.W. Encountered:** No
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1	CCF-11B	0.0	SP	0-1' Dark brown coarse to medium SAND, some rock, brick, concrete, dry	1
2			SP	1'-4.5' Brown coarse to medium SAND, some rock and debris, dry	2
3					3
4	CCF-11A	0.0			4
5				Test Pit Ends @ 4.5'	5
6					6
7					7
8					8
9					9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: CCF-10

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 4.5'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/16/2000	**Test Pit Length:** 8'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/16/2000	**Test Pit Width:** 5'
	Contractor: ROC Enterprises	**G.W. Encountered:** No
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0.0	SP	0-1' Brown coarse to medium SAND, some rock and concrete, dry	1
2			SP	1'-4.5' Brown coarse to medium SAND, some rock, dry	2
3					3
4	CCF-10	0.0			4
5				Test Pit Ends @ 4.5'	5
6					6
7					7
8					8
9					9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: CCF-9 (A & B)

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 5.0'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/16/2000	**Test Pit Length:** 8'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/16/2000	**Test Pit Width:** 5'
	Contractor: ROC Enterprises	**G.W. Encountered:** No
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1	CCF-9B	0.0	SP	0-1' Brown fine to medium SAND, some rock, concrete, wood, dry	1
2		0.0	SP	1'-2' Brown fine to medium SAND, some rock, dry	2
3			SP	2'-5' Brown coarse to medium SAND, some rock, moist	3
4					4
5	CCF-9A	0.0			5
6				Test Pit Ends @ 5.0'	6
7					7
8					8
9					9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: CCF-8

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 5.0'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/16/2000	**Test Pit Length:** 8'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/16/2000	**Test Pit Width:** 5'
	Contractor: ROC Enterprises	**G.W. Encountered:** No
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0.0	SP	0-1 Brown coarse to medium SAND, some rock, dry	1
2			SP	1-5 Brown coarse to medium SAND, some rock, moist	2
3					3
4					4
5	CCF-8	0.0			
6				Test Pit Ends @ 5.0'	6
7					7
8					8
9					9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: CCF-7

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 5.0'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/16/2000	**Test Pit Length:** 8'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/16/2000	**Test Pit Width:** 5'
	Contractor: ROC Enterprises	**G.W. Encountered:** No
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0.0	SP	0-1' Brown coarse to medium SAND, some rock and concrete, dry	1
2			SP	1'-5' Brown coarse to medium SAND, some rock, moist	2
3					3
4					4
5	CCF-7	0.0			5
6				Test Pit Ends @ 5.0'	6
7					7
8					8
9					9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: CCF-6 (A & B)

Site Name: Edgewater	EWMA Job #: 200957	Test Pit Depth: 5.0'
Owner: Edgewater Enterprises, LLC	Test Pit Install Date: 3/16/2000	Test Pit Length: 8'
Location: River Road, Edgewater, New Jersey	Test Pit Completion Date: 3/16/2000	Test Pit Width: 5'
	Contractor: ROC Enterprises	G.W. Encountered: No
Type of Excavator: Track Loader	Operator: Todd	Static Water: NA
Sampling Method: Poly Scoop	Geologist: Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1	CCF-6B	0.0	SP	0-1' Brown coarse to medium SAND, some rock and concrete, dry	1
2			SP	1'-5' Brown coarse to medium SAND, some rock, moist	2
3					3
4					4
5	CCF-6A	0.0			
6				Test Pit Ends @ 5.0'	6
7					7
8					8
9					9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: CCF-5

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 5.0'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/16/2000	**Test Pit Length:** 8'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/16/2000	**Test Pit Width:** 5'
	Contractor: ROC Enterprises	**G.W. Encountered:** No
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1			SP	0-2' Red/brown coarse to medium SAND, some rock and concrete, dry	1
2		0.0			2
3			SP	2'-5' Brown coarse to medium SAND, some rock and concrete, moist	3
4					4
5		0.0			5
6	CCF-5			Test Pit Ends @ 5.0'	6
7					7
8					8
9					9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: CCF-4 (A & B)

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 5.5'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/16/2000	**Test Pit Length:** 8'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/16/2000	**Test Pit Width:** 5'
	Contractor: ROC Enterprises	**G.W. Encountered:** No
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0.0	SP	0-1 Dark brown coarse to medium SAND, some rock and debris, dry	1
2	CCF-4B		SP	1-4 Brown coarse to medium SAND, some rock and debris, dry	2
3					3
4		0.0			4
5			SP	4-5.5 Brown coarse to medium SAND, some rock and asphalt, dry	
	CCF-4A	0.0			
6				Test Pit Ends @ 5.5'	6
7					7
8					8
9					9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: CCF-3

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 5.0'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/16/2000	**Test Pit Length:** 8'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/16/2000	**Test Pit Width:** 5'
	Contractor: ROC Enterprises	**G.W. Encountered:** No
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0.0	SP	0-1' Dark brown coarse to medium SAND, some red brick, concrete, and rock, dry	1
2		0.0	SP	1'-2' Brown coarse to medium SAND, some rock, dry	2
3			SW	2'-5' Brown coarse to medium SAND, some rock and gravel, moist	3
4					4
5	CCF-3	0.0			5
6				Test Pit Ends @ 5.0'	6
7					7
8					8
9					9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: CCF-2

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 5.5'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/16/2000	**Test Pit Length:** 8'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/16/2000	**Test Pit Width:** 5'
	Contractor: ROC Enterprises	**G.W. Encountered:** No
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0.0	SW	0-1 Brown coarse to medium SAND, some big rocks, gravel, dry	1
2			SW	1'-4' Brown coarse to medium SAND, some gravel and rock, some scrap metal, moist	2
3					3
4		0.0			4
5			SW	4'-5.5' Brown coarse to medium SAND, some rock and gravel, moist	5
6	CCF-2	0.0		Test Pit Ends @ 5.5'	6
7					7
8					8
9					9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: CCF-1 (A & B)

Site Name: Edgewater	**EWMA Job #:** 200957	**Test Pit Depth:** 6'
Owner: Edgewater Enterprises, LLC	**Test Pit Install Date:** 3/16/2000	**Test Pit Length:** 8'
Location: River Road, Edgewater, New Jersey	**Test Pit Completion Date:** 3/16/2000	**Test Pit Width:** 5'
	Contractor: ROC Enterprises	**G.W. Encountered:** No
Type of Excavator: Track Loader	**Operator:** Todd	**Static Water:** NA
Sampling Method: Poly Scoop	**Geologist:** Greg Steinman	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0.0	SW	0-1' Brown coarse to medium SAND, some big rocks, gravel, dry	1
2	CCF-1B		SW	1'-6' Brown coarse to medium SAND, some rock and gravel, moist	2
3					3
4					4
5					5
6	CCF-1a	0.0			6
7				Test Pit Ends @ 6.0'	7
8					8
9					9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-1

Site Name: Edgewater	**EWMA Job #:** 200754	**Test Pit Depth:** 14'
Owner: Scott Heller	**NJDEP Program #:**	**Test Pit Length:** 10'
Location: 1 River Rd. Edgewater, NJ	**Test Pit Install Date:** June 8,2000	**Test Pit Width:** 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	**Contractor:** EWMA	**G.W. Encountered:** 9'
Sampling Method: Disposable Scoop	**Operator:** John	**Static Water:**
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description		Depth (ft.)
1		0	SM	0-4'	dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0				2
3		0				3
4	C3-1A	0				4
	C3-1B	0		4'-4.5'	3-inch gravel with asphalt/tar	
5		0	Fill	4.5'-10'	reddish-purple fine to coarse SAND with black product @ 7.0'	5
6		0				6
7		0				7
8		0				8
9		0				9
10	C3-1C	25				10
11		0	OL	10'-14'	grey SILT with trace meadow mat	11
12		0				12
13		0				13
14	C3-1D	0				14
15				Pit Ends @ 14.0'		15
16						16
17						17
18						18
19						19
20						20
21						21
22						22
23						23
24						

EWMA ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-1

Site Name: Edgewater	EWMA Job #: 200754	Test Pit Depth: 14'
Owner: Scott Heller	NJDEP Program #:	Test Pit Length: 10'
Location: 1 River Rd. Edgewater, NJ	Test Pit Install Date: June 8,2000	Test Pit Width: 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	Contractor: EWMA	G.W. Encountered: 9'
Sampling Method: Disposable Scoop	Operator: John	Static Water:
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type		Soil/Geologic Description
1		0	SM	0-4'	dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments
2		0			
3		0			
4	C3-1A	0			
	C3-1B	0		4'-4.5'	3-inch gravel with asphalt/tar
5		0	Fill	4.5'-10'	reddish-purple fine to coarse SAND with black product @ 7.0'
6		0			
7		0			
8		0			
9		0			
10	C3-1C	25			
11		0	OL	10'-14'	grey SILT with trace meadow mat
12		0			
13		0			
14	C3-1D	0			
15					Pit Ends @ 14.0'
16					
17					
18					
19					
20					
21					
22					
23					
24					

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-2

Site Name: Edgewater	EWMA Job #: 200754	Test Pit Depth: 12'
Owner: Scott Heller	NJDEP Program #:	Test Pit Length: 10'
Location: 1 River Rd. Edgewater, NJ	Test Pit Install Date: June 8,2000	Test Pit Width: 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	Contractor: EWMA	G.W. Encountered: 9'
Sampling Method: Disposable Scoop	Operator: John	Static Water:
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type		Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6'	dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0				2
3		0				3
4		0				4
5		0				5
6	C3-2A	0				6
7		0	CL	6'-8'	grayish CLAY fill, trace cobble, brick, cement, trace black tar	7
8	C3-2B	0				8
9		0	CL	8'-10'	greyish CLAY and blackish-purple silt and medium sand fill	9
10	C3-2C	0				10
11		0	OL	10'-12'	grey SILT with trace meadow mat	11
12	C3-2D	0				12
13					Pit Ends @ 12.0'	13
14						14
15						15
16						16
17						17
18						18
19						19
20						20
21						21
22						22
23						23
24						

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-3

Site Name: Edgewater	**EWMA Job #:** 200754	**Test Pit Depth:** 15'
Owner: Scott Heller	**NJDEP Program #:**	**Test Pit Length:** 10'
Location: 1 River Rd. Edgewater, NJ	**Test Pit Install Date:** June 8,2000	**Test Pit Width:** 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	**Contractor:** EWMA	**G.W. Encountered:** 9'
Sampling Method: Disposable Scoop	**Operator:** John	**Static Water:**
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6' dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0			2
3		0			3
4		0			4
5		0			5
6	C3-3A	0			6
7		0	SP	6'-8' black medium to coarse SAND and SILT fill, some cobbles, trace grey clay and black staining	7
8	C3-3B	0			8
9		0	OL	8'-15' grey SILT with trace meadow mat	9
10		0			10
11		0			11
12		0			12
13		0			13
14		0			14
15	C3-3C	0			15
16				Pit Ends @ 15.0'	16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-4

Site Name: Edgewater	EWMA Job #: 200754	Test Pit Depth: 15'
Owner: Scott Heller	NJDEP Program #:	Test Pit Length: 10'
Location: 1 River Rd. Edgewater, NJ	Test Pit Install Date: June 8,2000	Test Pit Width: 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	Contractor: EWMA	G.W. Encountered: 9'
Sampling Method: Disposable Scoop	Operator: John	Static Water:
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6' dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0			2
3		0			3
4		0			4
5		0			5
6	C3-4A	0			6
7	C3-4B	0	SP	6'-7' medium to coarse black SAND, trace black staining	7
8		0	Fill	7'-10' reddish-purple SAND with some black staining	8
9		0			9
10	C3-4C	0			10
11		0	OL	10'-15' grey SILT with trace meadow mat	11
12		0			12
13		0			13
14		0			14
15	C3-4D	0			15
16				Pit Ends @ 15.0'	16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-5

Site Name: Edgewater	EWMA Job #: 200754	Test Pit Depth: 16'
Owner: Scott Heller	NJDEP Program #:	Test Pit Length: 10'
Location: 1 River Rd. Edgewater, NJ	Test Pit Install Date: June 8,2000	Test Pit Width: 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	Contractor: EWMA	G.W. Encountered: 9'
Sampling Method: Disposable Scoop	Operator: John	Static Water:
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type		Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6'	dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0				2
3		0				3
4		0				4
5		0				5
6	C3-5A	0				6
7		0	SP	6'-8'	black medium to coarse SAND, some fine gravel	7
8	C3-5B	0				8
9		0	SP	8'-16'	dark reddish-purple fine to coarse SAND	9
10		0				10
11		0				11
12		0				12
13		0				13
14		0				14
15	C3-5C	0				15
16	C3-5D	0				16
17					Pit Ends @ 16.0'	17
18						18
19						19
20						20
21						21
22						22
23						23
24						

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-6

Site Name: Edgewater	**EWMA Job #:** 200754	**Test Pit Depth:** 14'
Owner: Scott Heller	**NJDEP Program #:**	**Test Pit Length:** 10'
Location: 1 River Rd. Edgewater, NJ	**Test Pit Install Date:** June 8,2000	**Test Pit Width:** 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	**Contractor:** EWMA	**G.W. Encountered:** 9'
Sampling Method: Disposable Scoop	**Operator:** John	**Static Water:**
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6' dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0			2
3		0			3
4		0			4
5		0			5
6	C3-6A	0			6
7		0	SP	6'-8' black medium to coarse SAND, some fine gravel	7
8	C3-6B	0			8
9		0	SP	8'-12' reddish-purple fine to coarse SAND, trace grey clay	9
10		0			10
11		0			11
12	C3-6C	0			12
13		0	OL	12'-14' grey SILT with trace meadow mat	13
14	C3-6D	0			14
15				Pit Ends @ 14.0'	15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-7

Site Name: Edgewater	EWMA Job #: 200754	Test Pit Depth: 14'
Owner: Scott Heller	NJDEP Program #:	Test Pit Length: 10'
Location: 1 River Rd. Edgewater, NJ	Test Pit Install Date: June 8,2000	Test Pit Width: 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	Contractor: EWMA	G.W. Encountered: 9'
Sampling Method: Disposable Scoop	Operator: John	Static Water:
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type		Soil/Geologic Description
1		0	SM	0-6'	dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments
2		0			
3		0			
4		0			
5		0			
6	C3-7A	0			
7		0	SP	6'-8'	black medium to coarse SAND, some fine gravel, trace light brown medium sand
8	C3-7B	0			
9		0	SP	8'-12"	reddish-purple fine to coarse SAND
10		0			
11		0			
12	C3-7C	0			
13		0	OL	12'-14'	grey SILT with trace meadow mat
14	C3-7D	0			
15					Pit Ends @ 14.0'
16					
17					
18					
19					
20					
21					
22					
23					
24					

EWMA
ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-8

Site Name: Edgewater	EWMA Job #: 200754	Test Pit Depth: 13'
Owner: Scott Heller	NJDEP Program #:	Test Pit Length: 10'
Location: 1 River Rd. Edgewater, NJ	Test Pit Install Date: June 8,2000	Test Pit Width: 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	Contractor: EWMA	G.W. Encountered: 9'
Sampling Method: Disposable Scoop	Operator: John	Static Water:
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6' dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0			2
3		0			3
4		0			4
5		0			5
6	C3-8A	0			6
7		0	SP	6'-8' black medium to coarse SAND, some fine gravel	7
8	C3-8B	0			8
9		0	SP	8'-12 reddish-purple fine to coarse SAND	9
10		0			10
11		0			11
12	C3-8C	0			12
13	C3-8D	0	OL	12'-13' grey SILT with trace meadow mat	13
14				Pit Ends @ 13.0'	14
15					15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-9

Site Name: Edgewater	**EWMA Job #:** 200754	**Test Pit Depth:** 13'
Owner: Scott Heller	**NJDEP Program #:**	**Test Pit Length:** 10'
Location: 1 River Rd. Edgewater, NJ	**Test Pit Install Date:** June 8,2000	**Test Pit Width:** 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	**Contractor:** EWMA	**G.W. Encountered:** 9'
Sampling Method: Disposable Scoop	**Operator:** John	**Static Water:**
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6' dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0			2
3		0			3
4		0			4
5		0			5
6	C3-9A	0			6
7		0	SP	6'-8' black medium to coarse SAND, some fine gravel	7
8	C3-9B	0			8
9		0	SP	8'-12' reddish-purple fine to coarse SAND	9
10		0			10
11		0			11
12	C3-9C	0			12
13	C3-9D	0	OL	12'-13' grey SILT with trace meadow mat	13
14				Pit Ends @ 13.0'	14
15					15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					

EWMA
ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-10

Site Name: Edgewater	**EWMA Job #:** 200754	**Test Pit Depth:** 8'
Owner: Scott Heller	**NJDEP Program #:**	**Test Pit Length:** 10'
Location: 1 River Rd. Edgewater, NJ	**Test Pit Install Date:** June 8,2000	**Test Pit Width:** 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	**Contractor:** EWMA	**G.W. Encountered:** N/A
Sampling Method: Disposable Scoop	**Operator:** John	**Static Water:**
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6' dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0			2
3		0			3
4		0			4
5		0			5
6	C3-10A	0			6
7	C3-10B	0	SP	6'-7' black medium to coarse SAND, some fine gravel	7
8	C3-10C	0	SP	7'-8' reddish-purple fine to coarse SAND	8
9				Refusal @ 8.0', solid concrete encountered	9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					

EWMA
ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-11

Site Name: Edgewater	EWMA Job #: 200754	Test Pit Depth: 12.'
Owner: Scott Heller	NJDEP Program #:	Test Pit Length: 10'
Location: 1 River Rd. Edgewater, NJ	Test Pit Install Date: June 8,2000	Test Pit Width: 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	Contractor: EWMA	G.W. Encountered: 9'
Sampling Method: Disposable Scoop	Operator: John	Static Water:
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type		Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6'	dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0				2
3		0				3
4		0				4
5		0				5
6	C3-11A	0				6
7	C3-11B	0	SP	6'-7'	black medium to coarse SAND, some fine gravel	7
8		0	SP	7'-12'	reddish-purple fine to coarse SAND	8
9		0				9
10		0				10
11		0				11
12	C3-11C	0				12
	C3-11Y	0	CL	12'-12.5'	yellow-grey CLAY	
13		0	OL	12.5'-14'	grey SILT with trace meadow mat	13
14	C3-11D	0				14
15					Pit Ends @ 14.0'	15
16						16
17						17
18						18
19						19
20						20
21						21
22						22
23						23
24						

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-12

Site Name: Edgewater	**EWMA Job #:** 200754	**Test Pit Depth:** 13'
Owner: Scott Heller	**NJDEP Program #:**	**Test Pit Length:** 10'
Location: 1 River Rd. Edgewater, NJ	**Test Pit Install Date:** June 8,2000	**Test Pit Width:** 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	**Contractor:** EWMA	**G.W. Encountered:** 9'
Sampling Method: Disposable Scoop	**Operator:** John	**Static Water:**
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type		Soil/Geologic Description	Depth (ft.)
1		0	SM	0-5'	dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0				2
3		0				3
4		0				4
5	C3-12A	0				5
6	C3-12B	0	SP	5'-6'	black medium to coarse SAND, some fine gravel	6
7		0	SP	6'-12'	purple fine to coarse SAND	7
8		0				8
9		0				9
10		0				10
11		0				11
12		0				12
13	C3-12C	0	OL	12'-13'	grey SILT with trace meadow mat	13
14					Pit Ends @ 13.0'	14
15						15
16						16
17						17
18						18
19						19
20						20
21						21
22						22
23						23
24						

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
O Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-13

Site Name: Edgewater	EWMA Job #: 200754	Test Pit Depth: 13'
Owner: Scott Heller	NJDEP Program #:	Test Pit Length: 10'
Location: 1 River Rd. Edgewater, NJ	Test Pit Install Date: June 8,2000	Test Pit Width: 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	Contractor: EWMA	G.W. Encountered: 9'
Sampling Method: Disposable Scoop	Operator: John	Static Water:
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6' dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2					2
3					3
4					4
5					5
6	C3-13A				6
7	C3-13B	0	SP	6'-7' reddish-purple fine to coarse SAND	7
8		0	SP	7'-12' wood	8
9					9
10					10
11					11
12	C3-13C				12
13	C3-13D	0	OL	12'-13' grey SILT with trace meadow mat	13
14				Pit Ends @ 13.0'	14
15					15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					

EWMA
ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: C3-14

Site Name: Edgewater	**EWMA Job #:** 200754	**Test Pit Depth:** 9'
Owner: Scott Heller	**NJDEP Program #:**	**Test Pit Length:** 10'
Location: 1 River Rd. Edgewater, NJ	**Test Pit Install Date:** June 8,2000	**Test Pit Width:** 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	**Contractor:** EWMA	**G.W. Encountered:** 9'
Sampling Method: Disposable Scoop	**Operator:** John	**Static Water:**
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6' dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0			2
3		0			3
4		0			4
5		0			5
6	C3-14A	0			6
7	C3-14B	0	SP	6'-7' black medium to coarse SAND, some fine gravel	7
8		0	SP	7'-9' reddish-purple fine to coarse sand	8
9	C3-14C	0			9
10				Refusal @ 9.0', solid concrete encountered	10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					

EWMA ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: 3- 15

Site Name: Edgewater	EWMA Job #: 200754	Test Pit Depth: 14'
Owner: Scott Heller	NJDEP Program #:	Test Pit Length: 10'
Location: 1 River Rd. Edgewater, NJ	Test Pit Install Date: June 8,2000	Test Pit Width: 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	Contractor: EWMA	G.W. Encountered: 9'
Sampling Method: Disposable Scoop	Operator: John	Static Water:
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6' dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0			2
3		0			3
4		0			4
5		0			5
6	C3-15A	0			6
7		0	SP	6'-8' black medium to coarse SAND, some fine gravel	7
8	C3-15B	0			8
9		0	SP	8'-11' reddish-purple fine to coarse SAND	9
10		0			10
11	C3-15C	0			11
12		0	OL	11'-14' grey SILT with trace meadow mat	12
13		0			13
14	C3-15D	0			14
15				Pit Ends @ 14.0'	15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					

EWMA ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: E3-16

Site Name: Edgewater	EWMA Job #: 200754	Test Pit Depth: 11'
Owner: Scott Heller	NJDEP Program #:	Test Pit Length: 10'
Location: 1 River Rd. Edgewater, NJ	Test Pit Install Date: June 8,2000	Test Pit Width: 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	Contractor: EWMA	G.W. Encountered: 9'
Sampling Method: Disposable Scoop	Operator: John	Static Water:
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type		Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6'	dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0				2
3		0				3
4		0				4
5		0				5
6	E3-16A	0				6
7	E3-16B	0	SP	6'-7'	black medium to coarse SAND, some fine gravel	7
8		0	SP	7'-7.5'		8
9		0	CL	7.5'-8'	Yellow-grey CLAY and coarse SAND	9
10		0	SP	8'-11'	reddish-purple fine to coarse SAND	10
11	E3-16C	0				11
12					Refusal @ 11.0', brick and concrete encountered	12
13						13
14						14
15						15
16						16
17						17
18						18
19						19
20						20
21						21
22						22
23						23
24						

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: E3-17

Site Name: Edgewater	EWMA Job #: 200754	Test Pit Depth: 14'
Owner: Scott Heller	NJDEP Program #:	Test Pit Length: 10'
Location: 1 River Rd. Edgewater, NJ	Test Pit Install Date: June 8,2000	Test Pit Width: 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	Contractor: EWMA	G.W. Encountered: 9'
Sampling Method: Disposable Scoop	Operator: John	Static Water:
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6' dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0			2
3		0			3
4		0			4
5		0			5
6	E3-17A	0			6
7	E3-17B	0	SP	6'-7' black medium to coarse SAND, some fine gravel	7
8		0	SP	7'-11' reddish-purple fine to coarse SAND	8
9		0			9
10		0			10
11	E3-17C	0			11
12		0	SC	11'-14' grey medium SAND and CLAY, little fine gravel	12
13		0			13
14	E3-17D	0			14
15				Pit Ends @ 14.0'	15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: E3-18

Site Name: Edgewater	**EWMA Job #:** 200754	**Test Pit Depth:** 14'
Owner: Scott Heller	**NJDEP Program #:**	**Test Pit Length:** 10'
Location: 1 River Rd. Edgewater, NJ	**Test Pit Install Date:** June 8,2000	**Test Pit Width:** 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	**Contractor:** EWMA	**G.W. Encountered:** 9'
Sampling Method: Disposable Scoop	**Operator:** John	**Static Water:**
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6' dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0			2
3		0			3
4		0			4
5		0			5
6	E3-18A	0			6
7	E3-18B	0	SP	6'-7' black medium to coarse SAND, some fine gravel	7
8		0	SP	7'-12' reddish-purple fine to coarse SAND	8
9		0			9
10		0			10
11		0			11
12	E3-18C	0			12
13		0	OL	12'-14' grey SILT with trace meadow mat	13
14	E3-18D	0			14
15				Pit Ends @ 14.0'	15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: E3-19

Site Name: Edgewater	**EWMA Job #:** 200754	**Test Pit Depth:** 8'
Owner: Scott Heller	**NJDEP Program #:**	**Test Pit Length:** 10'
Location: 1 River Rd. Edgewater, NJ	**Test Pit Install Date:** June 8,2000	**Test Pit Width:** 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	**Contractor:** EWMA	**G.W. Encountered:** N/A
Sampling Method: Disposable Scoop	**Operator:** John	**Static Water:**
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type	Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6' dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0			2
3		0			3
4		0			4
5		0			5
6	E3-19A	0			6
7	E3-19B	0	SP	6'-7' black medium to coarse SAND, some fine gravel	7
8	E3-19C	0	SP	7'-8' reddish-purple fine to coarse SAND	8
9				Refusal @ 8.0', solid concrete encountered	9
10					10
11					11
12					12
13					13
14					14
15					15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: E3-20

Site Name: Edgewater	EWMA Job #: 200754	Test Pit Depth: 14'
Owner: Scott Heller	NJDEP Program #:	Test Pit Length: 10'
Location: 1 River Rd. Edgewater, NJ	Test Pit Install Date: June 8,2000	Test Pit Width: 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	Contractor: EWMA	G.W. Encountered: 9'
Sampling Method: Disposable Scoop	Operator: John	Static Water:
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type		Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6'	dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0				2
3		0				3
4		0				4
5		0				5
6	E3-20A	0				6
7	E3-20B	0	SP	6'-7'	black medium to coarse SAND, some fine gravel	7
8		0	SP	7'-12'	reddish-purple fine to coarse SAND	8
9		0				9
10		0				10
11		0				11
12	E3-20C	0				12
13		0	OL	12'-14'	grey SILT with trace meadow mat	13
14	E3-20D	0				14
15					Pit Ends @ 14.0'	15
16						16
17						17
18						18
19						19
20						20
21						21
22						22
23						23
24						

EWMA
ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, INC.
PO Box 5430, Parsippany, NJ, 07054
Phone: (973) 560-1400 Fax: (973) 560-0400

Test Pit Excavation Log for: E3-21

Site Name: Edgewater	EWMA Job #: 200754	Test Pit Depth: 13'
Owner: Scott Heller	NJDEP Program #:	Test Pit Length: 10'
Location: 1 River Rd. Edgewater, NJ	Test Pit Install Date: June 8,2000	Test Pit Width: 10'
	Test Pit Completion Date: June 8, 2000	
Type of Excavator: Trackhoe	Contractor: EWMA	G.W. Encountered: 9'
Sampling Method: Disposable Scoop	Operator: John	Static Water:
	Geologist: Scott Bisbort	

Depth (ft.)	Sample ID and Depth	PID (Meter Units)	Soil Type		Soil/Geologic Description	Depth (ft.)
1		0	SM	0-6'	dark brown fine to coarse SAND and SILT, some rocks, wood, brick and cement fragments	1
2		0				2
3		0				3
4		0				4
5		0				5
6	E3-21A	0				6
7	E3-21B	0	SP	6'-7'	black medium to coarse SAND, some fine gravel	7
8		0	SP	7'-12'	reddish-purple fine to coarse SAND	8
9		0				9
10		0				10
11		0				11
12	E3-21C	0				12
13	E3-21D	0		12'-13'	grey-white medium SAND	13
14				Pit Ends @ 13.0'		14
15						15
16						16
17						17
18						18
19						19
20						20
21						21
22						22
23						23
24						

Appendix 5: MONITORING WELL ABANDONMENT FORMS

200457

DWR-020
8/97

New Jersey Department of Environmental Protection
Water Supply Element - Bureau of Water Allocation

WELL ABANDONMENT REPORT

CE 3.2520

MAIL TO: Bureau of Water Allocation
PO Box 426
Trenton, NJ 08625-0426

WELL PERMIT # 26-4714 of well sealed

DATE WELL SEALED 3-3-00

PROPERTY OWNER EDGEWATER ENTERPRISES, LLC

ADDRESS 1 RIVER ROAD, EDGEWATER NJ, 07020

WELL LOCATION (SAME) BERGEN COUNTY
Street & No., Township, County

MW4 (Well No.) 3+4 (Lot No.) 91+92 (Block No.)

USE OF WELL PRIOR TO ABANDONMENT: MONITORING

REASON FOR ABANDONMENT: NOT IN USE

WAS A NEW WELL DRILLED? ☐ YES ☒ NO PERMIT # OF NEW WELL —

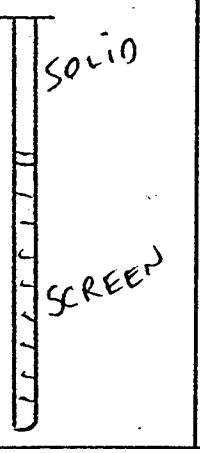
TOTAL DEPTH OF WELL 16'
DIAMETER 4"
CASING LENGTH 10
SCREEN LENGTH 6
NUMBER OF CASINGS 1

MATERIAL USED TO DECOMMISSION WELL:

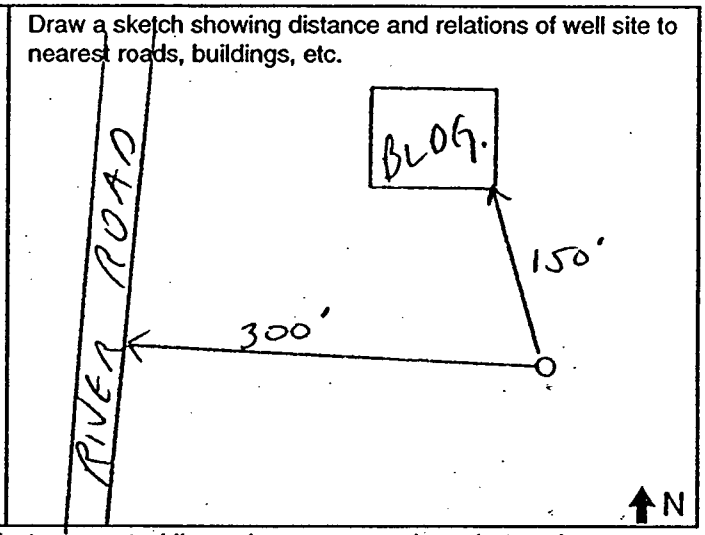
14 Gallons of Water
188 Lbs. of Cement
10 Lbs. of Bentonite
— Lbs. of Sand/Gravel
(none if well is contaminated)

FORMATION: ___ Consolidated X Unconsolidated

Cross-section of sealed well



Draw a sketch showing distance and relations of well site to nearest roads, buildings, etc.



To permit adequate grouting, the casing should remain in place, but ungrouted liner pipes or any other obstructions must be removed. Pressure grouting is the only accepted method.

WAS CASING LEFT IN PLACE? ☒ YES ☐ NO CASING MATERIAL: PVC

WERE OTHER OBSTRUCTIONS LEFT IN WELL? ☐ YES ☒ NO WHAT WERE THE OBSTRUCTIONS: ___

IF "YES", AUTHORIZATION GRANTED BY ___ (NJDEP Official) ON ___ (Date)

Was an alternative decommissioning method used? ☐ YES ☒ NO

IF "YES", authorization granted by ___ (NJDEP Official) ON ___ (Date)

I certify that this well was sealed in accordance with N.J.A.C. 7:9-9.1 et seq.

JOHN VOGT — Performing Work (Print or Type) Name of NJ Certified Well Sealer
BOUND BROOK NJ — Address
6-2-00 — Mailing Date
John Vogt — Signature of NJ Certified Well Sealer Performing Work
J1544 — Registration #

COPIES: White - Water Allocation Yellow - Owner Pink - Health Dept. Goldenrod - Driller

20095 7

DWR-020
8/97

New Jersey Department of Environmental Protection
Water Supply Element - Bureau of Water Allocation

WELL ABANDONMENT REPORT

CE 3.2521

MAIL TO: **Bureau of Water Allocation**
PO Box 426
Trenton, NJ 08625-0426

WELL PERMIT # 26-47[illegible] of well sealed

DATE WELL SEALED 3-3-00

PROPERTY OWNER EDGEWATER ENTERPRISES LLC

ADDRESS 1 RIVER ROAD, EDGEWATER NJ 07020

WELL LOCATION (SAME) BERGEN COUNTY
Street & No., Township, County

MW6	3+4	91+92
Well No.	Lot No.	Block No.

USE OF WELL PRIOR TO ABANDONMENT: MONITORING

REASON FOR ABANDONMENT: NO LONGER IN USE

WAS A NEW WELL DRILLED? ☐ YES ☒ NO PERMIT # OF NEW WELL —

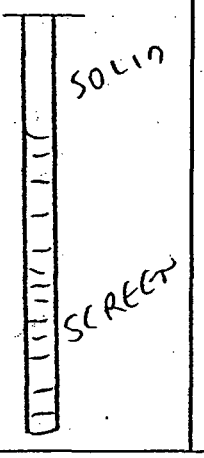
TOTAL DEPTH OF WELL 16 4
DIAMETER
CASING LENGTH 10
SCREEN LENGTH 6
NUMBER OF CASINGS 1

MATERIAL USED TO DECOMMISSION WELL:

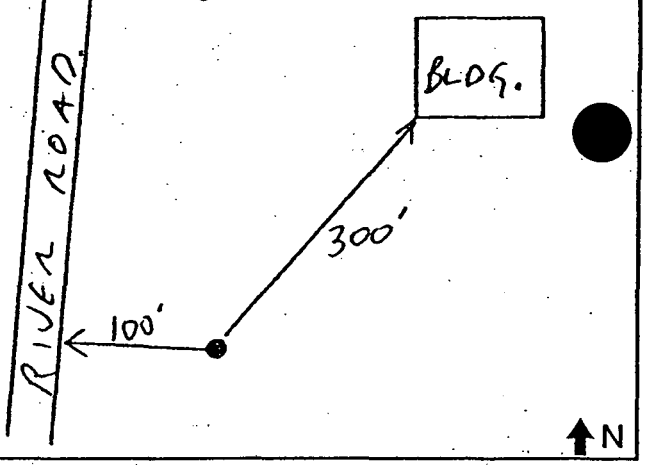
14 Gallons of Water
188 Lbs. of Cement
10 Lbs. of Bentonite
— Lbs. of Sand/Gravel
(none if well is contaminated)

FORMATION: ___ Consolidated
X Unconsolidated

Cross-section of sealed well



Draw a sketch showing distance and relations of well site to nearest roads, buildings, etc.



To permit adequate grouting, the casing should remain in place, but ungrouted liner pipes or any other obstructions must be removed. Pressure grouting is the only accepted method.

WAS CASING LEFT IN PLACE? ☒ YES ☐ NO CASING MATERIAL: PVC

WERE OTHER OBSTRUCTIONS LEFT IN WELL? ☐ YES ☒ NO WHAT WERE THE OBSTRUCTIONS: ___

IF "YES", AUTHORIZATION GRANTED BY ___ (NJDEP Official) ON ___ (Date)

Was an alternative decommissioning method used? ☐ YES ☒ NO

IF "YES", authorization granted by ___ (NJDEP Official) ON ___ (Date)

I certify that this well was sealed in accordance with N.J.A.C. 7:9-9.1 et seq.

JOHN VOGT	BOUND BROOK NJ	6-2-00
Performing Work (Print or Type) Name of NJ Certified Well Sealer	Address	Mailing Date
John Vogt		J1544
Signature of NJ Certified Well Sealer Performing Work		Registration #

COPIES: *White - Water Allocation* *Yellow - Owner* *Pink - Health Dept.* *Goldenrod - Driller*

Appendix 6: December 1999 Sampling Event Purge Guide

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC							
	100 Misty Lane		JOB NAME:	Former Celotex Site			
	Parsippany, NJ		JOB NUMBER:	200957			
	(973) 560-1400		PERSONNEL:	G. Stienman, R. Hodgson			
	DATE:	12/20/99	WEATHER:	41 F, Raining			
		12/21/99					
WELL #	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
PRE - PURGE DATA							
PID (ppm):	~	~	~	~	~	~	~
Depth of Well (feet):	21.95	21.18	22.4	18.8	27.17	22	26.1
Depth to Water (feet):	11.33	13.08	11.15	10.25	15.66	8.6	11.06
Well Diameter (inches):	4	4	4	4	4	4	4
Purge Start Time:	11:55	2:32	1:20	11:05	8:20	10:49	2:30
Temperature (°C):	15	15	14	13	15	13	14
pH:	5.6	7.2	7.5	7.4	7.9	5.8	7.7
Specific Conductivity (µS):	3.2	0.5	0.54	0.28	0.27	3.3	0.54
Dissolved Oxygen (mg/l):	2.2	1	3.8	2.9	4	4.6	0.6
POST PURGE DATA:							
Purge Stop Time:	12:35	3:01	4:00	11:37	9:10	11:47	3:00
Depth to Water (feet):	11.36	14.11	11.25	10.85	16.05	9.4	12.35
Initial Volume	6.93	5.29	7.35	5.58	7.52	8.75	9.82
Total Volume Purged (gal):	20.80	15.87	22.04	16.75	22.55	26.25	29.46
Purge Method:	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic
Purge Rate (gal/min):	0.5	0.5	0.5	0.5	0.5	0.5	1
Temperature (°C):	15	14	14	14	15	14	15
pH:	6.7	7.6	7.8	7.5	7.3	5.3	7.6
Specific Conductivity (µS):	0.48	4.6	0.5	0.26	1.3	3.4	2.9
Dissolved Oxygen (mg/l):	3.6	3.8	1.3	1.6	2.5	1.1	2.7
SAMPLING DATA:							
Time of Sampling:	11:23	2:01	1:20	11:01	9:20	10:43	1:50
Depth Before Sampling (feet):	11.56	13.37	11.38	10.48	15.87	9.1	11.52
Temperature (°C):	15	14	14	14	15	14	15
pH:	6.7	7.6	7.8	7.6	7.5	5.3	7.6
Specific Conductivity (µS):	0.46	4.5	0.5	0.26	1.4	3.5	2.9
Dissolved Oxygen (mg/l):	3.5	3.7	1.6	1.8	2.6	1.3	2.8
Recharge	0.23	0.29	0.23	0.23	0.21	0.5	0.46
Odor:	Slight	Moderate	None	Slight	Slight	Strong	None
Turbidity:	Clear	Clear	Clear	Clear	Clear	Clear	Clear
Sampling Method:	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
NOTES:							
N/A= Not Applicable							
~ = PID malfunction due to rain.							

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC							
EWMA	100 Misty Lane		JOB NAME:	Former Celotex Site			
	Parsippany, NJ		JOB NUMBER:	200957			
	(973) 560-1400		PERSONNEL:	G. Stienman, R. Hodgson			
	DATE:	12/20/99	WEATHER:	41 F, Raining			
		12/21/99					
WELL #	MW-10	MW-12	MW-13a	MW-14a	MW-19	MW-20	MW-21
PRE - PURGE DATA							
PID (ppm):	~	~	~	~	~	~	~
Depth of Well (feet):	21.56	22.43	19.66	20.52	18.6	20.3	20.5
Depth to Water (feet):	9.38	16.05	17.1	17.55	11.75	11.5	11.1
Well Diameter (inches):	4"	4"	4"	4"	4"	4"	4"
Purge Start Time:	9:39	1:42	9:05	8:30	12:06	12:45	12:50
Temperature (°C):	14	15	13	15	14	14	14
pH:	7.2	6.7	7.4	7.5	6.5	5.9	6.6
Specific Conductivity (µS):	0.9	0.34	4.2	0.49	2.3	0.36	0.89
Dissolved Oxygen (mg/l):	0.8	1.6	1.7	4.1	3.5	3	3.1
POST PURGE DATA:							
Purge Stop Time:	10:26	2:06	9:25	8:53	12:32	1:15	1:27
Depth to Water (feet):	9.87	16.88	17.4	18.4	12.09	11.88	11.96
Initial Volume	7.95	4.17	1.67	1.94	4.47	5.75	6.14
Total Volume Purged (gal):	23.86	12.50	5.02	5.82	13.42	17.24	18.41
Purge Method:	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic
Purge Rate (gal/min):	0.5	0.5	0.25	0.25	0.5	0.5	0.5
Temperature (°C):	14	15	14	15	14	14	15
pH:	6.8	6.8	7.4	7.3	6.3	5.9	6.1
Specific Conductivity (µS):	1	2.6	0.49	0.42	2.4	0.62	2.6
Dissolved Oxygen (mg/l):	2.6	1.1	5.1	3.6	3.6	5.3	0.5
SAMPLING DATA:							
Time of Sampling:	12:37	2:15	9:00	9:10	11:57	12:33	12:42
Depth Before Sampling (feet):	9.41	16.25	17.2	17.85	12.08	11.67	11.48
Temperature (°C):	14	15	14	14	14	14	15
pH:	6.8	6.8	6.9	7	6.4	5.9	6.1
Specific Conductivity (µS):	1.2	2.7	0.69	3.4	2.6	0.61	2.6
Dissolved Oxygen (mg/l):	2.4	1.1	4.4	3.6	3.4	5.4	0.51
Recharge	0.03	0.2	0.1	0.3	0.33	0.17	0.38
Odor:	Moderate	None	Moderate	Moderate	None	None	None
Turbidity:	Clear	Clear	Clear	Clear	Clear	Clear	Clear
Sampling Method:	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
NOTES:							
N/A= Not Applicable							
~ = PID malfunction due to rain							

ENVIRONMENTAL WASTE MANAGEMENT ASSOCIATES, LLC							
EWMA	100 Misty Lane		JOB NAME:	Former Celotex Site			
	Parsippany, NJ		JOB NUMBER:	200957			
	(973) 560-1400		PERSONNEL:	G. Stienman, R. Hodgson			
	DATE:	12/20/99	WEATHER:	41 F, Raining			
		12/21/99					
WELL #	MW-22	MW-31	MW-34	MW-35	MW-36		
PRE - PURGE DATA							
PID (ppm):	~	~	~	~	~		
Depth of Well (feet):	18	41.45	20.47	20.55	19.25		
Depth to Water (feet):	10.26	12.15	17.71	15.75	17.33		
Well Diameter (inches):	4"	2"	4"	4"	4"		
Purge Start Time:	10:58	11:55	10:12	9:59	9:53		
Temperature (°C):	15	14	17	15	15		
pH:	6.8	4.2	6.7	7.2	7.5		
Specific Conductivity (µS):	0.47	5.4	0.78	0.41	0.42		
Dissolved Oxygen (mg/l):	1.5	1	1.3	5	5.1		
POST PURGE DATA:							
Purge Stop Time:	11:28	12:24	10:41	10:17	10:08		
Depth to Water (feet):	11.5	16.23	19.1	16.1	17.75		
Initial Volume	5.05	4.78	1.80	3.13	1.25		
Total Volume Purged (gal):	15.16	14.33	5.41	9.40	3.76		
Purge Method:	Peristaltic	Peristaltic	Peristaltic	Peristaltic	Peristaltic		
Purge Rate (gal/min):	0.5	0.5	0.5	0.5	0.25		
Temperature (°C):	14	15	17	15	14		
pH:	7.2	4.7	6.8	7.1	7.2		
Specific Conductivity (µS):	1.2	0	0.63	0.36	0.01		
Dissolved Oxygen (mg/l):	2.7	3.9	1.5	4.6	5		
SAMPLING DATA:							
Time of Sampling:	10:52	11:48	9:50	9:58	10:03		
Depth Before Sampling (feet):	10.78	12.34	18.05	15.83	17.39		
Temperature (°C):	14	15	16	15	14		
pH:	7.2	4.6	6.8	7.1	7.2		
Specific Conductivity (µS):	1.2	5.1	0.62	0.38	0.31		
Dissolved Oxygen (mg/l):	2.7	3.8	2.1	4.7	4.9		
Recharge	0.52	0.19	0.34	0.08	0.06		
Odor:	Slight	None	Slight	Slight	Slight		
Turbidity:	Clear	Clear	Clear	Clear	Clear		
Sampling Method:	Bailer	Bailer	Bailer	Bailer	Bailer		
NOTES:							
N/A= Not Applicable							
~ = PID malfunction							

Appendix 7: HAZSITE DATA PACKAGE

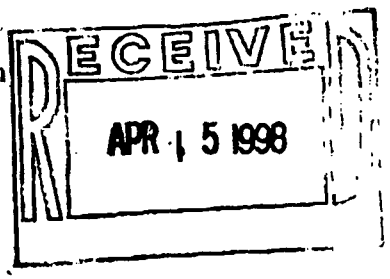
THIS PAGE INTENTIONALLY LEFT BLANK

ENVIRO-SCIENCES, INC.
HEADQUARTERS
111 HOWARD BOULEVARD, SUITE 108
MOUNT ARLINGTON, NJ 07856
(973) 398-8183 • FAX (973) 398-8037

CE 3.3001

April 14, 1998

Mr. Robert Hayton
New Jersey Department of Environmental Protection
Bureau of Federal Case Management (BFCM)
101 East State Street
CN 028
Trenton, New Jersey 08625



Mrs. Sharon Bruder
New Jersey Department of Environmental Protection
Bureau of Environmental Evaluation, Cleanup, and Responsibility Assessment (BEECRA)
101 East State Street
CN 028
Trenton, New Jersey 08625

Re:	Edgewater Associates Former Celotex Property MOA Case #96-05-1722-24	Edgewater Associates Former Lustrelon Property ISRA Case #91278

ECOLOGICAL ASSESSEMENT (EA) – REMEDIAL ACTION WORK PLAN (RAW)

Dear Mr. Hayton and Mrs. Bruder

As discussed with Mrs. Bruder last week, the EA would be transmitted to you when the laboratory data become available. The report and data are now complete and attached. Please note that only one copy of the laboratory data is being sent, as it is anticipated that the EA for both sites will be undertaken by one group within NJDEP. This copy is being sent to Mrs. Bruder's attention.

If there are any questions or comments, please direct them to John Gear (973/398-8183 x1222) or me (973/398-8183 x1210). We both can also be reached by e-mail at Jgear@enviro-sciences.com or Mlondon@enviro-sciences.com, respectively.

Very truly yours,
Enviro-Sciences, Inc.

Mark London
Vice President / CIO

Attachment

cc: James Demetrakis
Irving Cohen
Scott Heller
Craig Bruening

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 26

To Bob Montgomery	From Bob Hayton
Co. EPA	Co. DEP
Dept.	Phone # 609 633-0744
Fax # 732-906-6182	Fax # 609-633-1454

ECOLOGICAL EVALUATION (Revised April 14, 1998[1])

This document is part of the Edgewater Associates Remedial Action Work Plan (RAW). In accordance with NJDEP regulations (Section 7:26E-3.11 Site investigation—ecological evaluation), a sampling plan was devised to evaluate the ecological circumstances for the entire Edgewater site, which includes both the Lustrelon (Northern) and Celotex (Southern) properties. From the mid-1800s through the mid-1980s, the site was used for a variety of industrial activities. Consequently, it contains areas with elevated concentrations of Priority Pollutant Metals (PPM), Polychlorinated Biphenals (PCB), and Polynuclear Aromatic Hydrocarbons (PAH) which exceed both NJDEP Residential and Non-residential direct contact soil cleanup criteria.

Based on correspondence received from the NJDEP, they have classified the Hudson River as an environmentally sensitive area (ESA). All ESAs are subject to an ecological evaluation per N.J.A.C. 7:1E-1.8. Due to known contamination within the Site's soil and groundwater, an evaluation of ecological receptors and contamination migration pathways was mandated.

Sediment Sampling Program

Program Design

In consideration of the depth at which groundwater is entering the Hudson River, a sediment sampling program was designed. Enviro-Sciences collected four sediment samples from the depositional areas in Hudson River. The number of samples was derived from the NJDEP sampling guidance (N.J.A.C. 7:26E-3.9 – Area specific requirement), which requires one sample for each 900 ft^2 of surface area to characterize soils below staging areas on permeable cover. The specification was converted to linear feet of shoreline and used for the estimated 3,000 ft of shoreline present on the site.

Based on NJDEP guidance, the proposed sampling locations were biased toward the southern portion of the Celotex property, where there is a potential for contamination originating from the property. This area is also the site of a release from the adjacent property (just to the south). The samples were collected from the following locations:

- one from the boomed area in the south-eastern corner of the property (1SED);
- one sample approximately 100 ft east of the boomed area (2SED);
- one sample collected offshore, in the Hudson River, equal to the end of the "Pier Building" (3SED). This location represented the control or background sample; and
- a sample collected in the cove north of the "Pier Building," approximately 20 ft offshore (4SED).

Based on correspondence provided by the NJDEP (Attachment 1), the Department continues to use a revised draft guidance document for the evaluation of marine/estuarine sediments. Table 1 presents a set of "Marine/Estuarine Sediment Screening Guidelines." It was prepared by NJDEP staff from the references cited in N.J.A.C. 7:26E-3.11. It was also

[1] As of this date, PCB and pesticide information was added to this report.

used by the EPA Region II Biological and Technical Assistance Group. The table provides guidelines for screening of marine/estuarine sediments in two broad groups:

- Effects Range-Low (ER-L): These guidelines represent concentrations at which adverse benthic impacts are found in approximately 10 percent of the studies conducted. Water column species and wildlife are at potential risk via biomagnification (food chain toxicity) if site-related sediment concentrations are at or above these values.
- Effects Range-Medium (ER-M): Contamination greater than the ER-M values indicate adverse benthic impacts in more than 50 percent of studies conducted.

These sediment screening guidelines formed the basis for the analytical parameters selected to be examined and were used to evaluate the analytical results. These guidelines are provided as the lead columns in Table 2, which also display the data discussed below. The ER-M values are used for comparison.

Program Implementation

The sediment samples were collected from the Hudson River on March 30, 1998, at locations specified in Figure 1. Samples were collected from a JohnBoat at mid-tide, employing a series of plastic Collwassas. After the boat was over the targeted sampling location, a Collwassa was capped and pushed though the overlying water column. When the sediment was encountered, the cap was removed and the sampler pushed into the sediment to a depth of approximately two feet. The Collwassa was then capped and extracted. Once on-board the boat, the sample was transferred to sample jars. The jars were then labeled, recorded on an appropriate chain-of-custody form, and stored in a cooler. The samples were subsequently sent to an NJDEP approved laboratory for the following analyses:

- VOA+15
- BNs
- TOC
- PP Metals
- Particle Size Distribution
- PCBs
- Pesticides

Results

The results of the March 30 sampling event are provided in Table 2. Based on laboratory results (attached), it is evident that samples collected within the "boomed" area in the southern portion of the Celotex site have AE and BN concentrations in excess of both sets NOAA guidelines. This is an area of known concern and its issues are being addressed.

Samples taken at all four sampling locations had analyte concentrations well below the NOAA guidelines, except for Mercury and Silver analytes. Silver concentrations exceeded the NOAA guidelines in all four locations sampled. Mercury concentrations were also in excess of their respective guideline at all sampling locations except in the North Cove area.

Surface Water Samples:

Program Design

In consideration of the Site's overland runoff and its potential impact on the Hudson River, a series of surface water samples were collected from the depositional areas in the River, immediately adjacent to the site. In addition, an offshore sample was collected as a control or background sample. Based on N.J.A.C. 7:26E-3.8, surface water samples are required to be collected at low, high, and slack tides from these locations.

Enviro-Sciences collected a series of water samples from the depositional areas in Hudson River adjacent to the Site, biased toward the areas of highest potential contamination. Again, the area containing the highest potential for contamination originating from the property is in the southern portion of the Celotex site. Samples were planned and collected from:

- A location within the boomed area in the southern portion of the Celotex site. The samples were designated 1HT, 1ST, and 1LT;
- 100 feet east of the sample specified above, designated 2HT, 2ST, and 2LT; and
- An area in the Hudson River, equal to the end of the "Pier Building." This location was the control area, and designated 3HT, 3ST, and 3LT.

Program Implementation

Each of the stations noted above was occupied three times. Samples were collected at Low Tide, Slack Tide, and High Tide. The samples were collected with a drum bailer, from a depth of approximately three feet below the surface. Once the bailer was operational, the sample was distributed to waiting sampling jars. The jars were labeled, recorded on an appropriate chain-of-custody, and stored in a cooler. The samples were subsequently sent to an NJDEP approved laboratory, and analyzed for the following parameters:

- VOA+15
- BNs
- TOC
- PP Metals
- PCBs
- Pesticides

Results

The surface water sample results were compared with NJDEP Surface Water Quality Standards for the Hudson River, obtained from N.J.A.C. 7:9B-1.14(c). These criteria were converted to parts per billion (ppb) and provided in Table 2, along with the sample results. The analytical results indicated that none of samples had analyte concentrations in excess of the referenced standards.

CONCLUSIONS

The site was inspected on several occasions and samples were collected on March 30, 1998. The following observations can be made based on these observations and sample results, pursuant to NJAC 7:26E-3.11:

- There are no apparent or designated environmentally sensitive areas within the boundaries of the Edgewater Site. There is no evidence of stressed or dead vegetation, nor are there any surface areas of the site containing discolored soils.
- The Hudson River is adjacent to the Site and it is classified by NJDEP as an environmentally sensitive area.
- Based on the results of the limited number of sediment and surface water samples collected from the Hudson River, it appears that there is one area of concern (AOC) within the River. This AOC is located on the shoreline in the southern portion of the site, demarcated by a set of oil collection booms. This AOC may represent a potential migration pathway of contaminated material from the site into the Hudson River. However, the known contaminant seep originates from the property immediately to the south of the Celotex site.
- An assessment of presence or absence of biota specific to this region of the Hudson River was not undertaken. The site occupies only a very small portion of the Hudson River's shoreline and is minor contributor to any impact on the River's environs.
- Mercury concentrations in excess of the NOAA guidelines were found in three of four sediment samples, including the control sample. Silver concentrations were also found to exceed their guideline in all samples, including the control.

Based on the above information, further ecological investigations are not required, although contaminants of concern do exist in very limited concentrations on the project site. Therefore, it is believed that no further studies are required pursuant to NJAC 7:26-E-4.7.

Table 1
Edgewater Associates Property
Ecological Series Analytical Results
Marine/Estuarine Sediment Screening Guidelines
Sampling Report - April 1, 1998

Sample ID #			1SED	2SED	3SED	4SED
Location #	Effective Range	Effects Range	Boomed Area	100' off Boomed Area	Offshore Control Area	North Cove Area
Depth (feet)	Low (ER-L)	Medium (ER-M)	2.0	2.0	2.0	2.0
Sample Date	(mg/kg, dry wt)	(mg/kg, dry wt)	3/30/98	3/30/98	3/30/98	3/30/98
Screening Guidelines Last Revised: October 24, 1995						
PPM (mg/kg)						
Analysis Date	--	--	--	--	--	--
Arsenic	8.2	70	18.500	12.900	13.200	34.000
Cadmium	1.2	9.6	1.400	<1.0	<1.1	<1.1
Chromium	81	370	98.500	86.100	92.000	88.900
Copper	34	270	130.000	110.000	112.000	113.000
Lead	47	218	127.000	113.000	122.000	116.000
Mercury	0.15	0.71	1.400	1.200	1.400	1.300
Nickel	21	52	34.200	33.600	33.300	34.000
Silver	1	3.7	5.100	4.300	4.500	4.200
Zinc	150	410	256.000	223.000	214.000	236.000
Priority Pollutant AE & BN						
Naphthalene	0.16	2.1	ND	ND	ND	ND
Dimethylphthalate	0.07	0.67	ND	ND	ND	ND
Acenaphthylene	0.044	0.064	ND	ND	ND	ND
Acenaphthene	0.016	0.5	ND	ND	ND	ND
Fluorene	0.019	0.54	ND	ND	ND	ND
Phenanthrene	0.24	1.5	0.459	ND	0.373 J	ND
Anthracene	0.085	1.1	ND	ND	ND	ND
Fluoranthene	0.6	5.1	1.340	ND	0.442	0.292 J
Pyrene	0.665	2.6	1.860	ND	0.506	0.461
Benzo(a)anthracene	0.261	1.6	1.010	ND	ND	0.239 J
Chrysene	0.38	2.8	0.846	ND	ND	0.347 J
Benzo(k)fluoranthene	0.24	1340	0.534	ND	ND	ND
Benzo(a)pyrene	0.43	1.6	1.110	ND	ND	0.283 J
Indano(1,2,3-cd)pyrene	0.2	320	0.450	ND	ND	ND
Dibenzo(a,h)anthracene	0.63	0.26	ND	ND	ND	ND
Benzo(g,h,i)perylene	0.17	320	0.459	ND	ND	ND
PCB (mg/kg)	0.023	0.18	ND	ND	ND	ND
PARTICLE SIZE (%)						
on 3/8" screen	--	--	0	0	0	0
on #4 screen	--	--	0	0	26.39	13.41
on #10 screen	--	--	49.96	40.92	34.53	45.11
on #40 screen	--	--	18.55	30.46	18.1	23.84
on #200 screen	--	--	8.92	14.09	8.15	7.87
% fines	--	--	16.81	10.3	8.65	3.16
PARTICLE SIZE (%)						
Gravel	--	--	0	0	26.39	13.41
Coarse Sand	--	--	49.96	40.92	34.53	45.11
Medium Sand	--	--	18.55	30.46	18.1	23.84
Fine Clay	--	--	8.92	14.09	8.15	7.87
Silt & Clay	--	--	16.81	10.3	8.65	3.16

CE 3.3006

Edgewater Associates Property
Ecological Series Analytical Results
Marine/Estuarine Sediment Screening Guidelines
Sampling Report - April 1, 1998

Sample ID #			1SED	2SED	3SED	4SED
Location #	Effective Range	Effects Range	Boomed Area	100' off Boomed Area	Offshore Control Area	North Cove Area
Depth (feet)			2.0	2.0	2.0	2.0
Sample Date	Low (ER-L) (mg/kg, dry wt)	Medium (ER-M) (mg/kg, dry wt)	3/30/98	3/30/98	3/30/98	3/30/98
Screening Guidelines Last Revised: October 24, 1995						
Total Organic Carbon (ppm)	--	--	20000	17000	15000	19000

CE 3.3007

TABLE 2
Edgewater Associates Property
Surface Water Quality Results
cological Series Analytical Results
Sampling Report - April 1, 1998

Sample ID #			1LT	2LT	3LT	1ST	2ST
Sample Location Sample Date	Surface Water Criteria (ppb)		Low Tide Station 1 3/30/98	Low Tide Station 2 3/30/98	Low Tide Station 3 3/30/98	Slack Tide Station 1 3/30/98	Slack Tide Station 2 3/30/98
PP METALS (ug/l)							
Analysis Date	--		--	--	--	--	--
Continued	--		--	--	--	--	--
Antimony	12,200.0	(H)	<5.0	<5.0	<5.0	<5.0	<5.0
Arsenic (Total)	17.0	(HC)	<5.0	<5.0	<5.0	<5.0	<5.0
Beryllium	31.0	(HC)	<5.0	<5.0	<5.0	<5.0	<5.0
Chromium (Total)	3,230,000.0	(H)	<10.0	<10.0	<10.0	<10.0	<10.0
Copper	7,900.0	(C)	<25.0	<25.0	<25.0	<25.0	<25.0
Lead (Total)	NLE		8.000	11.400	7.200	5.300	6.100
Mercury (Total)	146.0	(H)	<0.20	<0.20	<0.20	0.220	<0.20
Nickel (Soluble salts)	39,000,000.0	(H)	<40.0	<40.0	<40.0	<40.0	<40.0
Thallium	4,290.0	(HC)	<15.0	<5.0	<10.0	<10.0	<10.0
Zinc	NLE		26.400	27.000	28.000	32.600	27.600
VO+15 (ug/l)							
Analysis Date	--		--	--	--	--	--
Priority Pollutant VO Detected							
Vinyl Chloride	525,000.0	(HC)	ND	ND	ND	ND	ND
Chloroform	470,000.0	(HC)	ND	ND	ND	ND	ND
Carbon Tetrachloride	6,000.0	(HC)	ND	ND	ND	ND	ND
1,3-Dichloropropene (cis & trans)	193.0	(HC)	ND	ND	ND	ND	ND
Trichloroethylene	81,000.0	(HC)	ND	ND	ND	ND	ND
Bromoform	360,000.0	(HC)	ND	ND	ND	ND	ND
Toluene	200,000,000.0	(H)	ND	ND	ND	ND	ND
Chlorobenzene	13,000.0	(A)	ND	ND	ND	ND	ND
Ethylbenzene	27,900,000.0	(H)	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	15,700,000.0	(h)	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3,159,000.0	(H)	ND	ND	ND	ND	ND
Library VO Compounds with a Proposed Limit Detected							
Acrylonitrile	320,000.0	(H)	ND	ND	ND	ND	ND
1,2-Dichloroethene (cis)	99,000.0	(HC)	ND	ND	ND	ND	ND
AEBN+25 (ug/l)							
Extraction Date	--		--	--	--	--	--
Priority Pollutant AE & BN Detected							
Phenol	20,900,000.0	(H)	ND	ND	ND	ND	ND
2-Chlorophenol	122,000.0	(H)	ND	ND	ND	ND	ND
2,4-Dichlorophenol	794,000.0	(H)	ND	ND	ND	ND	ND
2,4-Dinitrophenol	14,000,000.0	(H)	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	765,000.0	(H)	ND	ND	ND	ND	ND

TABLE 2
Edgewater Associates Property
Surface Water Quality Results
cological Series Analytical Results
Sampling Report - April 1, 1998

Sample ID #			1LT	2LT	3LT	1ST	2ST
Sample Location Sample Date	Surface Water Criteria (ppb)		Low Tide Station 1 3/30/98	Low Tide Station 2 3/30/98	Low Tide Station 3 3/30/98	Slack Tide Station 1 3/30/98	Slack Tide Station 2 3/30/98
bis(2-Chloroethyl)Ether	170,000,000.0	(H)	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	8,100.0	(H)	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	1,400.0	(HC)	ND	ND	ND	ND	ND
Hexachloroethane	12,000.0	(H)	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	113,000.0	(H)	ND	ND	ND	ND	ND
Dimethylphthalate	2,900,000,000.0	(H)	ND	ND	ND	ND	ND
Acenaphthylene	320,000.0	(H)	ND	ND	ND	ND	ND
Benzidine	0.5	(HC)	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	9,100.0	(HC)	ND	ND	ND	ND	ND
Diethylphthalate	111,000,000.0	(H)	ND	ND	ND	ND	ND
Hexachlorobenzene	0.8	(HC)	ND	ND	ND	ND	ND
Fluoranthene	393,000.0	(H)	ND	ND	ND	ND	ND
Butylbenzylphthalate	416,000.0	(H)	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	7.7	(HC)	ND	ND	ND	ND	ND
Benzo(a)pyrene	31.0	(HC)	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	2.8	(HC)	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	31.0	(HC)	ND	ND	ND	ND	ND
TOTAL PRIORITY POLLUTANT AEBN	--		ND	ND	ND	ND	ND
Library AE & BN Compounds with a Proposed Limit Detected							
1,2-Diphenylhyrazine	541.0	(HC)	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	9,790,000.0	(HC)	ND	ND	ND	ND	ND
PCB (ppb)			ND	ND	ND	ND	ND
Aroclor 1260	30.000		ND	ND	ND	0.685	ND
Pesticides (ppb)			ND	ND	ND	ND	ND
Total Organic Carbon (ppb)			2.23	2.34	2.39	2.27	2.32

CE 3.3009

TABLE 2
Edgewater Associates Property
Surface Water Quality Results
cological Series Analytical Results
Sampling Report - April 1, 1998

Sample ID #			3ST	1HT	2HT	3HT
Sample Location Sample Date	Surface Water Criteria (ppb)		Slack Tide Station 3 3/30/98	High Tide Station 1 3/30/98	High Tide Station 2 3/30/98	High Tide Station 3 3/30/98
PP METALS (ug/l)						
Analysis Date	--		--	--	--	--
Continued	--		--	--	--	--
Antimony	12,200.0	(H)	<5.0	<5.0	<5.0	<5.0
Arsenic (Total)	17.0	(HC)	<5.0	<5.0	<5.0	<5.0
Beryllium	31.0	(HC)	<5.0	<5.0	<5.0	<5.0
Chromium (Total)	3,230,000.0	(H)	<10.0	<10.0	<10.0	<10.0
Copper	7,900.0	(C)	<25.0	<25.0	<25.0	<25.0
Lead (Total)	NLE		5.200	6.100	5.500	8.600
Mercury (Total)	146.0	(H)	<0.20	<0.20	<0.20	<.20
Nickel (Soluble salts)	39,000,000.0	(H)	<40.0	<40.0	<40	<40.0
Thallium	4,290.0	(HC)	<10.0	<5.0	<5.0	<5.0
Zinc	NLE		27.400	28.500	27.200	40.800
VO+15 (ug/l)						
Analysis Date	--		--	--	--	--
Priority Pollutant VO Detected						
Vinyl Chloride	525,000.0	(HC)	ND	ND	ND	ND
Chloroform	470,000.0	(HC)	ND	ND	ND	ND
Carbon Tetrachloride	6,000.0	(HC)	ND	ND	ND	ND
1,3-Dichloropropene (cis & trans)	193.0	(HC)	ND	ND	ND	ND
Trichloroethylene	81,000.0	(HC)	ND	ND	ND	ND
Bromoform	360,000.0	(HC)	ND	ND	ND	ND
Toluene	200,000,000.0	(H)	ND	ND	ND	ND
Chlorobenzene	13,000.0	(A)	ND	ND	ND	ND
Ethylbenzene	27,900,000.0	(H)	ND	ND	ND	ND
1,2-Dichlorobenzene	15,700,000.0	(h)	ND	ND	ND	ND
1,4-Dichlorobenzene	3,159,000.0	(H)	ND	ND	ND	ND
Library VO Compounds with a Proposed Limit Detected						
Acrylonitrile	320,000.0	(H)	ND	ND	ND	ND
1,2-Dichloroethene (cis)	99,000.0	(HC)	ND	ND	ND	ND
AEBN+25 (ug/l)						
Extraction Date	--		--	--	--	--
Priority Pollutant AE & BN Detected						
Phenol	20,900,000.0	(H)	ND	ND	ND	ND
2-Chlorophenol	122,000.0	(H)	ND	ND	ND	ND
2,4-Dichlorophenol	794,000.0	(H)	ND	ND	ND	ND
2,4-Dinitrophenol	14,000,000.0	(H)	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	765,000.0	(H)	ND	ND	ND	ND

CE 3.3010

TABLE 2
Edgewater Associates Property
Surface Water Quality Results
cological Series Analytical Results
Sampling Report - April 1, 1998

Sample ID #			3ST	1HT	2HT	3HT
Sample Location Sample Date	Surface Water Criteria (ppb)		Slack Tide Station 3 3/30/98	High Tide Station 1 3/30/98	High Tide Station 2 3/30/98	High Tide Station 3 3/30/98
bis(2-Chloroethyl)Ether	170,000,000.0	(H)	ND	ND	ND	ND
N-Nitrosodimethylamine	8,100.0	(H)	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	1,400.0	(HC)	ND	ND	ND	ND
Hexachloroethane	12,000.0	(H)	ND	ND	ND	ND
1,2,4-Trichlorobenzene	113,000.0	(H)	ND	ND	ND	ND
Dimethylphthalate	2,900,000,000.0	(H)	ND	ND	ND	ND
Acenaphthylene	320,000.0	(H)	ND	ND	ND	ND
Benzidine	0.5	(HC)	ND	ND	ND	ND
2,4-Dinitrotoluene	9,100.0	(HC)	ND	ND	ND	ND
Diethylphthalate	111,000,000.0	(H)	ND	ND	ND	ND
Hexachlorobenzene	0.8	(HC)	ND	ND	ND	ND
Fluoranthene	393,000.0	(H)	ND	ND	ND	ND
Butylbenzylphthalate	416,000.0	(H)	ND	ND	ND	ND
3,3'-Dichlorobenzidine	7.7	(HC)	ND	ND	ND	ND
Benzo(a)pyrene	31.0	(HC)	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	2.8	(HC)	ND	ND	ND	ND
Dibenzo(a,h)anthracene	31.0	(HC)	ND	ND	ND	ND
TOTAL PRIORITY POLLUTANT ABBN	--		ND	ND	ND	ND
Library AE & BN Compounds with a Proposed Limit Detected						
1,2-Diphenylhyrazine	541.0	(HC)	ND	ND	ND	ND
2,4,5-Trichlorophenol	9,790,000.0	(HC)	ND	ND	ND	ND
PCB (ppb)			ND	ND	ND	ND
Aroclor 1260	30.000		ND	ND	17.6	0.79
Pesticides (ppb)			ND	ND	ND	ND
Total Organic Carbon (ppb)			2.2	2.79	2.66	2.64

CE 3.3011

State of New Jersey
Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

OCT 24 1997

BEERA/ETRA Directive: 10/97.1

MEMORANDUM

TO: Distribution

FROM: Barry Frasco, Ph.D., Assistant Director, Hazardous Site Science Element BF
Division of Publicly Funded Site Remediation

SUBJECT: PRESENT USE OF DRAFT 1991 NJDEP GUIDANCE FOR SEDIMENT QUALITY EVALUATIONS (October 1997 Update)

Until revision of the referenced guidance document is completed (expected early in 1998), the Environmental Toxicology and Risk Assessment Unit (ETRA) recommends continued use of the Bureau of Environmental Evaluation and Risk Assessment (BEERA) Draft Guidance for Sediment Quality Evaluations (1991) for conducting sediment investigations. However, the National Oceanic and Atmospheric Administration (NOAA, Long and Morgan 1990) and United States Environmental Protection Agency (USEPA, 1988/1989) screening schemes contained therein are no longer in general use by BEERA/ETRA. BEERA/ETRA currently recommends the use of the sediment screening values on the two (2) attached tables for the purpose of identifying sediment contaminants of concern for Baseline Ecological Evaluations (BEE). These values supersede the values provided in both the 1991 Draft document and the BEERA/ETRA Memo of 5 April, 1995 entitled **"Present Use of Draft 1991 NJ Guidance for Sediment Quality Evaluations."**

The current values presented in Tables 1. and 2. (attached) are extracted from references cited in the amended Technical Regulations (7:26E-3.11) and are used by EPA's Region II Biological and Technical Assistance Group (BTAG) for EPA Screening Level Ecological Risk Assessments (equivalent of NJDEP's BEE). **Freshwater sediment screening values used for the BEE are the Ontario Lowest Effects Levels (LEL) (Persaud, et al. 1993), and marine/estuarine sediment screening values used for the BEE are the "NOAA" Effects Range-Low (ER-L) values (Long et al. 1995).**

Following are several points to consider when comparing data from potentially impacted samples

1. "NOAA's" marine/estuarine ER-L (Effects Range-Low) screens represent a concentration at which adverse benthic impacts are found in approximately 10% of studies. A level greater then the ER-M (Effects Range-Median) indicates a greater than 50% incidence of adverse effects to sensitive species and/or life stages. A concentration between the ER-L and ER-M therefore indicates an impact frequency between 10% and 50%.

Ontario's freshwater LEL (Lowest Effects Level) screen is generally comparable to NOAA's ER-Ls. Ontario has no ER-M, but does provide an SEL (Severe Effect Level) indicating severe benthic impacts in 95% of studies. For non-polar organics, the SEL is calculated via site specific Total Organic Carbon (TOC). See Table 1. Footnotes for details on SEL calculations.

The ER-L and LEL screens were developed based on benthic community studies and do not directly address biomagnification (food chain toxicity) to water column species (fishes), birds, and mammals. However, values found to be protective of the food chain are generally similar (within an order of magnitude) to ER-L/LEL values. When PCBs, organochlorine pesticides, and mercury (Hg) are found in sediments at or above these screens, potential wildlife risks exist and case-by-case evaluation is warranted. Other known biomagnifiers without Ontario or NOAA screening numbers that warrant case-by-case evaluation are dioxins, furans, other chlorinated organics, and selenium (Se).

2. The attached ER-L and LEL values are not cleanup standards but screening guidelines for use in the BEE. An exceedence indicates a potential risk (adverse impact) to the benthic community. Further investigations (to reduce uncertainty) such as toxicity testing, macroinvertebrate community surveys, and tissue bioassay, etc., may be needed to determine the presence of adverse impacts or impact severity.

Further investigations need not be triggered by BEE screening exceedences if local reference (upgradient) sediments display similar contaminant concentration ranges (upgradient source, diffuse anthropogenic contamination). However, a justification for no further action must be provided in the BEE for Department review.

Risk assessment and risk management should be clearly distinguished. Reference/background contaminant levels comparable to site levels do not indicate absence of site risk but reference area and site risks that are similar. Therefore, a risk management decision to forego further action is based on no additional site generated risk.

3. A number of screening values for Polynuclear Aromatic Hydrocarbons (PAHs) are below Practical Quantitation Limits (PQLs) and Contract Required Detection Limits (CRQLs). To screen site data that is below the CRQL, the estimated values (indicated by a "J" data qualifier) are to be compared with the screening criteria. Where analytical results indicate nondetectable levels of contaminants (indicated by the "U" data qualifier or "ND"), those contaminants are not considered to be of ecological concern.

4. Particle/grain size and Total Organic Carbon (TOC) analyses are required for all sediment investigations. These data confirm whether samples were collected in depositional zones, as indicated by relatively higher TOC values and a higher percentage of fine-grained particles, and provide a qualitative indication of bioavailability. Depositional zones are areas of highest potential contamination and must be targeted during sampling events.

TOC results may be used to interpret borderline screening exceedences in a "weight of evidence"/professional judgement decision, or via site specific screening values from an Equilibrium Partitioning (EP) approach (non-polar organics only, e.g., PCBs, PAHs, organochlorine pesticides). Some EPA sediment screening numbers, and some Ontario SELs, are generated via this approach; however, ETRA and the EPA Region II BTAG (Biological and Technical Assistance Group) no longer use the EP approach for general screening purposes due to uncertainties regarding some of the assumptions used. Please consult ETRA if a consultant bases a No Further Action (NFA) remedial decision on an EP approach or considers an EP approach to have site specific utility.

References for TOC (Kahn 1988) and particle/grain size (ASTM 1992) analyses are provided below. At a minimum, particle size analysis results must include the percent clay, silt, sand and gravel.

5. If contaminant levels are marginally higher than screens or background, consult BEERA/ETRA (633-1348) prior to requiring additional studies, as a "weight of evidence"/professional judgment approach may preclude the need for the studies.

6. If a screening value is not provided for a specific contaminant, contact ETRA prior to requiring a literature search to be performed, as ETRA may be able to provide a value.

Please distribute this guidance to your staff for use in directing and reviewing Baseline Ecological Evaluations.

REFERENCES

ASTM. 1992. Standard Guide for Selection of Methods of Particle Size Analysis of Fluvial Sediments (Manual Methods). Method D4822-88. American Society for Testing and Materials. 1916 Race Street, Philadelphia, PA. Volume 11.02, pg. 622-624.

Kahn, L. 1988. Determination of Total Organic Carbon in Sediment. U.S. Environmental Protection Agency, Region II. Environmental Services Division, Monitoring Management Branch, Edison, New Jersey 08837.

Long, E.R., MacDonald, D.D., Smith, S.L., and Calder, F.D. 1995. Incidence of Adverse Biological Effects Within Ranges of Chemical Concentrations in Marine and Estuarine Sediments. Environmental Management Vol.19, No.1. pp. 81-97

Persaud, D., Jaagumagi, R., and Hayton, A. 1993. Guidelines for the protection and management of aquatic sediment quality in Ontario. ISBN 0-7729-9248-7. Ontario Ministry of the Environment, Ottawa. 23p.

TABLE 1.

FRESHWATER SEDIMENT SCREENING GUIDELINES

Ontario (Persaud et al. 1993)

Metals	Lowest Effects Level (LEL)[1] (mg/kg, dry weight)	Severe Effects Level (SEL)[2] (mg/kg, dry weight)
Arsenic	6	33
Cadmium	0.6	10
Chromium	26	110
Copper	16	110
Lead	31	250
Mercury	0.2	2
Nickel	16	75
Silver	(see Table 2.)[3]	–
Zinc	120	820

Organics
Polynuclear Aromatic Hydrocarbons (PAHs)

	Lowest Effects Level (LEL)[1] (mg/kg, dry weight)	Severe Effects Level (SEL)[2] (mg/kg organic carbon, dry weight)
Acenaphthene	(see Table 2)[3]	–
Acenaphthylene	(see Table 2)[3]	–
Anthracene	0.220	370
Benzo (a) anthracene	0.320	1480
Benzo (k) fluoranthene	0.240	1340
Benzo (g,h,i) perylene	0.170	320
Benzo (a) pyrene	0.370	1440
Chrysene	0.340	460
Dibenzo (a,h) anthracene	0.060	130
Fluoranthene	0.750	1020
Fluorene	0.190	160
Indeno (1,2,3-cd) pyrene	0.200	320
2-methylnaphthalene	(see Table 2)[3]	–
Naphthalene	(see Table 2)[3]	–
Phenanthrene	0.560	950
Pyrene	0.490	850
Total PAH	4.0	10000

Table 1. (con't)

Pesticides	Lowest Effects Level (LEL)[1] (mg/kg, dry weight)	Severe Effects Level (SEL)[2] (mg/kg organic carbon, dry weight)
Aldrin	0.002	8
Benzohexachloride	0.003	12
a-BHC	0.006	10
b-BHC	0.005	21
y-BHC (Lindane)	0.003	1
Chlordane	0.007	6
DDT (Total)	0.007	12
op+pp+DDD	0.008	71
pp-DDD	0.008	6
pp-DDE	0.005	19
Dieldrin	0.002	91
Endrin	0.003	130
Hexachlorobenzene (HCB)	0.020	24
Heptachlor epoxide	0.005	5
Mirex	0.007	130

Table 1. (con't)

Polychlorinated Biphenyls (PCBs)	Lowest Effects Level (LEL)[1] (mg/kg dry weight)	Severe Effects Level (SEL)[2] (mg/kg organic carbon, dry weight)
PCB Aroclor 1016	0.007	53
PCB Aroclor 1248	0.030	150
PCB Aroclor 1254	0.060	34
PCB Aroclor 1260	0.005	24
PCB (total)	0.070	530

BOLD TYPE IN TABLE INDICATES ECOLOGICAL SCREENING VALUES TO BE USED IN THE BASELINE ECOLOGICAL EVALUATION (BEE).

FOOTNOTES:

1. Lowest Effects Levels (LELs) indicate concentrations at which adverse benthic impact may begin to occur (level tolerated by most benthic organisms). Water column species and wildlife are at potential risk via biomagnification (food chain toxicity) if site-related sediment concentrations of PCBs, organochlorine pesticides, or mercury are at or above the LEL. Other known biomagnifiers without Ontario screening numbers (dioxins, furans, other chlorinated organics, and selenium) warrant case-by-case evaluation.

2. Severe Effects Levels (SELs) are also provided, but the SEL is not a BEE screening value. Contamination at this level indicates severe pollution with adverse impacts to the benthic community in most cases studied. For non-polar organics (PAHs, organochlorine pesticides, PCBs), the SEL is calculated from a site-specific Total Organic Carbon level. Since the table SEL is based on 100% organic carbon, the calculated site-specific number is much lower.

   To calculate a site specific SEL, Total Organic Carbon (TOC) is multiplied times the table SEL. For TOC at 1% (10,000 ppm) the SEL is multiplied by 0.01. If the table SEL is 360 ppm, 360 x 0.01 = a 3.6 ppm SEL. A default value of 1% is used when a TOC value is not available. 10% TOC is upper limit for SEL calculation. 1% and 10% TOC represents the average range over which this approach has been examined (USEPA, 1988).

3. Refer to Table 2. (Estuarine/Marine Screening Criteria) when a Table 1. parameter has no corresponding value. Since the biological activity of non-polar organics is not expected to be greatly different in the estuarine/marine environment, Table 2. screens can be used as surrogates. While uncertainty associated with the use of estuarine/marine metal screens as freshwater surrogates is greater than with non-polar organics, one Table 2. surrogate metal (silver) is provided.

REFERENCES

Persaud, D., Jaagumagi, R., and Hayton, A. 1993. Guidelines for the protection and management of aquatic sediment quality in Ontario. ISBN 0-7729-9248-7. Ontario Ministry of the Environment, Ottawa. 23p.

United States Environmental Protection Agency. 1988. Office of Water Regulations and Standards, Criteria and Standards Division. SCD #17.

TABLE 2

MARINE/ESTUARINE SEDIMENT SCREENING GUIDELINES

"NOAA" (Long et al., 1995)

Metals	Effects Range – Low (ER-L)[1] (mg/kg, dry weight)	Effects Range – Medium (ER-M)[2] (mg/kg, dry weight)
Arsenic	8.2	70
Cadmium	1.2	9.6
Chromium	81	370
Copper	34	270
Lead	47	218
Mercury	0.15	0.71
Nickel	21	52
Silver	1.0	3.7
Zinc	150	410

Organics
Polynuclear Aromatic Hydrocarbons (PAHs)

	Effects Range–Low (ER-L)[1] (mg/kg, dry weight)	Effects Range–Medium (ER-M)[2] (mg/kg dry weight)
Acenaphthene	0.016	0.500
Acenaphthylene	0.044	0.640
Anthracene	0.085	1.1
Benzo (a) anthracene	0.261	1.6
Benzo (k) fluoranthene	(see Table 1.)[3]	–
Benzo (g,h,i) perylene	(see Table 1.)[3]	–
Benzo (a) pyrene	0.430	1.6
Chrysene	0.384	2.8
Dibenzo (a,h) anthracene	0.063	0.26
Fluoranthene	0.600	5.1
Fluorene	0.019	0.54
Ideno (1,2,3-cd) pyrene	(see Table 1.)[3]	–
2-methylnaphthalene	0.070	0.67
Naphthalene	0.16	2.1
Phenanthrene	0.240	1.5
Pyrene	0.665	2.6
Total PAH	4.0	45.0

Table 2 (con't)

Pesticides	Effects Range-Low (ER-L)[1] (mg/kg dry weight)	Effects Range-Medium (ER-M)[2] (mg/kg dry weight)
Aldrin	(see Table 1.)[3]	–
Benzohexachloride	(see Table 1.)[3]	–
Chordane	(see Table 1.)[3]	–
DDT (total)	0.0016	0.046
pp'-DDE	0.0022	0.027
Dieldrin	(see Table 1.)[3]	–
Endrin	(see Table 1.)[3]	–
Hexachlorobenzene (HCB)	(see Table 1.)[3]	–
Heptachlor epoxide	(see Table 1.)[3]	–
Mirex	(see Table 1.)[3]	–

Polychlorinated Biphenyls (PCBs)	Effects Range – Low (ER-M)[1] (mg/kg dry weight)	Effects Range – Medium (ER-M)[2] (mg/kg, dry weight)
PCB (total)	0.023	0.180

BOLD TYPE IN TABLE INDICATES ECOLOGICAL SCREENING VALUES TO BE USED IN THE BASELINE ECOLOGICAL EVALUATION (BEE).

FOOTNOTES:

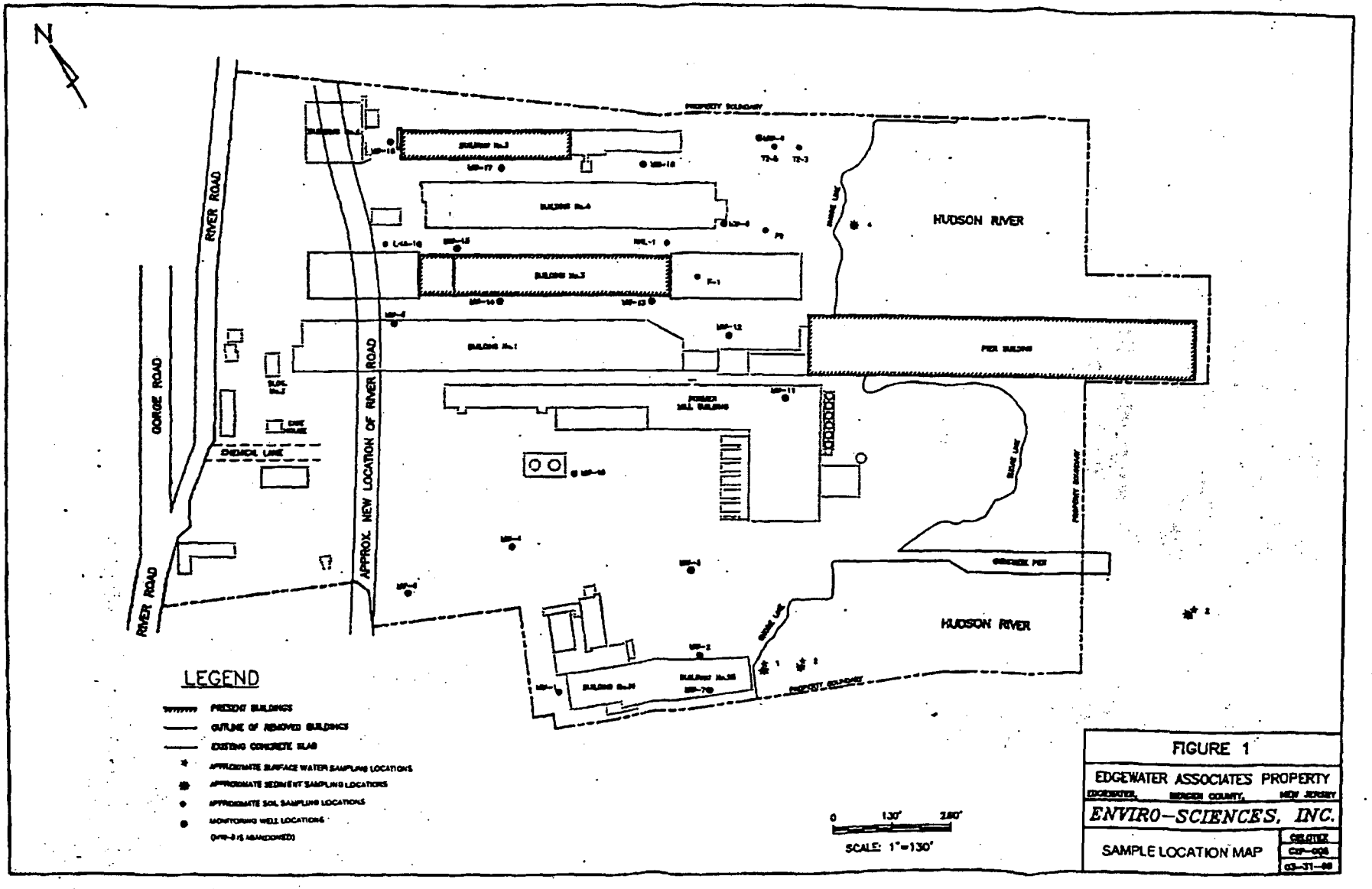
1. "NOAA" Effects Range-Low (ER-L) represent a concentration at which adverse benthic impacts are found in approximately 10% of studies. Water column species and wildlife are at potential risk via biomagnification (food chain toxicity) if site-related sediment concentrations of PCBs, organochlorine pesticides, or mercury are at or above the ER-L. Other known biomagnifers without NOAA screening numbers (dioxins, furans, other chlorinated organics, and selenium) warrant case-by-case evaluation.

2. "The Effects Range-Median (ER-M) is also provided. The ER-M is not a BEE screening value. Contamination greater than the ER-M value indicates adverse benthic impacts in more than 50% of cases studied.

3. Refer to Table 1. (Freshwater Sediment Screening Criteria) when a Table 2. parameter has no corresponding value. Since the biological activity of non-polar organics is not expected to be greatly different in the fresh water environment, Table 1. screens can be used as surrogates.

REFERENCES

Long, E.R., MacDonald, D.D., Smith, S.L., and Calder, F.D. 1995. Incidence of Adverse Biological Effects Within Ranges of Chemical Concentrations in Marine and Estuarine Sediments. Environmental Management Vol. 19, No.1, pp. 81-97.


N
RIVER ROAD
GORGE ROAD
RIVER ROAD
APPROX. NEW LOCATION OF RIVER ROAD
PROPERTY BOUNDARY
HUDSON RIVER
HUDSON RIVER
PIER BUILDING
BULKHEAD LINE
CHEMICAL LINE
LEGEND
PRESENT BUILDINGS
OUTLINE OF REMOVED BUILDINGS
EXISTING CONCRETE SLAB
APPROXIMATE SURFACE WATER SAMPLING LOCATIONS
APPROXIMATE SEDIMENT SAMPLING LOCATIONS
APPROXIMATE SOIL SAMPLING LOCATIONS
MONITORING WELL LOCATIONS
0 130' 260'
SCALE: 1"=130'
FIGURE 1
EDGEWATER ASSOCIATES PROPERTY
EDGEWATER, BERGEN COUNTY, NEW JERSEY
ENVIRO-SCIENCES, INC.
SAMPLE LOCATION MAP

CE 3.3025

THIS PAGE INTENTIONALLY LEFT BLANK

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

CE 8.3001

DATE: JAN 2 2 1998

SUBJECT: Celotex Park Property

FROM: Mindy J. Pensak, Environmental Scientist
Hazardous Waste Support Branch (DESA-HWSB)

TO: Robert Montgomery, On Scene Coordinator
Response and Prevention Branch (ERRD-RAB-EMT)

As per your request we have reviewed the sediment and surface water data which were collected from a "seep" into the Hudson River and are associated with the Celotex Property, which is adjacent to the Quanta Edgewater Site, located in Bergen County, New Jersey. Data were screened against ecological screening values, to determine whether there is a potential for ecological risk associated with this seep. It should be noted that ecological VOC screening values are not readily available for sediment and surface water, and ecological SVOC screening values are not readily available for surface water.

Sediment data were screened against the Lowest Effect Levels (LELs) and Severe Effect Levels (SELs) from the "Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario," (Persaud et. al., Ontario Ministry of Environment and Energy, August 1993). An LEL is a level of sediment contamination that can be tolerated by the majority of the benthic organisms. An SEL indicates the level at which pronounced disturbance of the sediment-dwelling community can be expected. This is the sediment concentration of a compound that would be detrimental to the majority of benthic species. In general, the BTAG recommends that sediment samples be collected from the top 6" in depositional areas, and that analysis includes physicochemical parameters, such as sediment grain size, TOC, and pH, to assist in determining if the contaminants are bioavailable to biota. It is unclear at what depth these samples were collected from. TOC values (3.9% for Soil 3 & 2.1% for Soil 4) were used to calculate SELs for the SVOCs and pesticides. The data indicate SEL exceedances of several SVOCs (fluorene, benzo[a]pyrene, phenanthrene, anthracene, fluoranthene, pyrene, chrysene, indeno[1,2,3-cd]pyrene, and benzo[g,h,i]perylene) and inorganics (copper).

Surface water data were screened against the chronic values of the New Jersey Surface Water Standards, which reflect the New Jersey adopted criteria (25 N.J.R. 5569, December 6, 1993 and 28 N.J.R. 3782, August 5, 1996) and the USEPA adopted criteria (Fed. Reg. Vol. 57.No. 246-60848, December 22, 1992, Fed. Reg. Vol. 60, No. 86-22228, May 4, 1995, and Fed. Reg. Vol. 60, No. 164-44120, August 24, 1995). In the event that screening values were not available from the New Jersey criteria, New York State Department of Environmental Conservation "Ambient Water Quality Standards and Guidance Values" screening values were employed. Several of the inorganics (cadmium, chromium III, copper, lead, nickel, silver and zinc) are hardness dependent. As hardness data were not available, an average hardness of 100 mg/l were used to calculate the ambient chronic freshwater criteria. Surface water exceedances included pesticides (heptachlor, endosulfan II, 4,4'-DDT) and numerous inorganics (aluminum, cadmium, chromium, cobalt, copper, iron, lead, mercury, selenium, silver, vanadium and zinc). However it is important to note that the method detection limit for the pesticides which are noted as exceeding screening values, are greater than the screening values themselves. Similarly, the instrument detection limit for mercury was greater than the screening value.

Additional Concerns

1) Definitions should be provided for the "JP" and "E" data qualifiers.

2) It should be noted whether surface water data are for total or dissolved metals.

These data indicate that there is a potential risk to ecological receptors from SVOCs and inorganics in sediment, and pesticides and inorganics in surface water. In order to gain a better understanding of the risk to ecological receptors further would need to be collected. The BTAG is available to provide further assistance, as necessary. If you have any questions, comments, or require further information, please contact me at (732) 321-6705.

cc: Richard Salkie, ERRD-RAB
John Witkowski, ERRD-EMT