

FINAL

**ENVIRONMENTAL CONDITION OF
PROPERTY UPDATE REPORT**

**FORT MONMOUTH
ENVIRONMENTAL CONDITION OF PROPERTY PARCEL 14**

Prepared For:

**U.S. Army
Base Realignment and Closure Office**

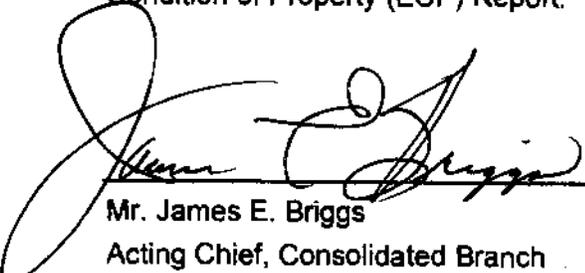
Prepared By:

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JUNE 2012

CERTIFICATION

All information/documentation provided accurately reflects the environmental condition of the property. This ECP Update Report is in general accordance with the U.S. Department of Defense (DOD) requirements for completion of an Environmental Condition of Property (ECP) Report.



Mr. James E. Briggs
Acting Chief, Consolidated Branch
BRAC Division

6/5/2012

Date

The undersigned certifies the contents of this report are in general accordance with DoD policies for the completion of an ECP.



Joseph F. Pearson
BRAC Technical Support
CALIBRE Systems, Inc.

6/5/2012

Date

EXECUTIVE SUMMARY

CALIBRE Systems, Inc., under contract to the Army, has prepared this Environmental Condition of Property (ECP) Update Report for Fort Monmouth, Environmental Condition of Property Parcel 14, hereafter referred to as the "Property." The Property is located within the Charles Wood Area of Fort Monmouth in Tinton Falls, New Jersey and encompasses approximately 77.5 acres. The purpose of this ECP Update is to update the U.S. Army 2005 BRAC Environmental Condition of Property Report, Fort Monmouth, Monmouth County New Jersey, Final, January 29, 2007. The update evaluates the current conditions relative to the original ECP and recommends a change in property category for a majority of the ECP Parcel 14 property from Category 2 to Category 1. A small part of ECP Parcel 14 will remain Category 2.

This ECP Update Report was prepared in conformance with 42 USC § 9620(h)(4), Army Regulation 200-1 (27 Dec 07), the Department of Defense's Base Redevelopment and Realignment Manual (DoD 4165.77-M (BRRM)), and in general conformance with the American Society for Testing and Materials (ASTM) Designation D 6008-96 (2005), *Standard Practice for Conducting Environmental Baseline Survey*. The land and buildings are currently owned by the Army.

The area of the site covered by this ECP Update is approximately 77.5 acres in the northeast corner of the Charles Wood Area of Fort Monmouth (see Figure 2). It should be noted that for purposes of organization and reporting in the original ECP, the property was divided into Parcels designated with numbers.

This Property has historically been used as on-base housing for the military since the 1950s. Most of the housing was demolished in 2002 to 2003.

RECOGNIZED ENVIRONMENTAL CONDITIONS

This ECP Update has revealed no evidence of recognized environmental conditions in connection with the Property. The following environmental conditions were identified which warrant mention:

- During a site investigation, a potential underground storage tank (UST) was identified in the area of former building 2116. Soil and groundwater in this area was sampled and no contamination was identified. The location of the potential tank was investigated with test pitting to determine if the tank existed but no tank was found only remnants of water, gas and sewer piping.

Table E-1 provides a Project Environmental Overview of conditions at the Property. This table provides a brief description of environmental conditions that were evaluated during the ECP update process. Detailed information associated with this overview is provided in the remaining portion of the document in the designated Section number identified.

Table E-1. Project Environmental Overview

No.	Category	Comment	Affect ECP Category?	Section No.
STORAGE				
1	Hazardous Substance UST Storage	None	No	3.3.1
2	Exterior Hazardous Substance Storage	None	No	NA
3	Interior Hazardous Substance Storage	None	No	NA
4	Petroleum UST Storage	Associated with residential heating	Yes	3.3
5	Exterior Petroleum Storage	Associated with residential heating	Yes	3.3
6	Interior Petroleum Substance Storage	None	No	3.3
7	Radiological Material Storage	None	No	7.2.5
RELEASES				
8	Hazardous Substance Release	None	No	NA
9	Petroleum Releases	None	No	3.3
10	Radiological Material Release	None	No	7.2.5
11	Surrounding Properties	No impacts to the Property	No	4.0
OTHER PROPERTY CONDITIONS				
12	Munitions & Explosives	None	No	7.2.3
13	Asbestos Containing Materials	ACM removed but some may remain	No	7.2.1

14	Lead-Based Paint	Housing constructed in the 1950 and contains Lead-Based Paint.	No	7.2.2
15	PCB Equipment	None		7.2.4
16	Radon	None	No	7.2.6
17	100-Year Floodplain	Not within	No	2.6
18	Historical Land Use	None	No	3.1
19	Coastal Zone Management	Not within	No	2.8
20	Wetlands	None	No	2.7
21	Natural Resources	None impacted	No	
22	Cultural Resources	None impacted	No	2.10
23	Other Special Resources	None	No	
ADJACENT PROPERTIES				
24	Petroleum Release	Yes at Building 2567 but remedial action has been completed. No impacts to the Property.	Yes	3.3.2
25	Hazardous Substance Release	Yes at Building 2700 but remedial action underway, no impacts to the Property.	Yes	NA

In accordance with ASTM Designation D5746-98 (2002), Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities, it is recommended that Parcel 14 be re-classified as follows. These recommended classifications do not include categorizing the Parcels based on *de minimis* conditions that generally do not present material risk of harm to the public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Parcel 14

- The majority of Parcel 14 is determined to be Category 1, defined as, “An area or parcel of real property where no release or disposal of hazardous substances or petroleum products or their derivatives has occurred (including no migration of these substances from adjacent properties).” This classification was selected based on the fact that the area was used only for housing (with historical use of heating oil) and no other indications of releases or disposal have been identified. Sampling was performed throughout the area to support the determination that there were no releases and documented in the U.S. Army BRAC 2005 Site Investigation Report Fort Monmouth, Final July 2008.

- A small portion of Parcel 14, near Building 2275 remains a Category 2, defined as, “where only the release or disposal of petroleum products or their derivatives has occurred.” This classification was selected based on the fact that there was a documented release from a former underground storage tank that was cleaned up and received a No Further Action from the New Jersey Department of Environmental Protection (NJDEP).

TABLE OF CONTENTS

SECTION & TITLE	PAGE NO.
CERTIFICATION.....	II
EXECUTIVE SUMMARY.....	III
Recognized Environmental Conditions	iii
TABLE OF CONTENTS	VII
LIST OF FIGURES.....	IX
LIST OF ACRONYMS	X
1.0 INTRODUCTION	1
1.1 Purpose of Environmental Condition of Property (ECP) Report.....	1
1.2 Scope of Services.....	1
1.3 Assumptions and Limitations	3
2.0 PROPERTY DESCRIPTION	5
2.1 Property Location	5
2.2 Previous ECP Area Type Categorization.....	5
2.3 Physical Description	6
2.3.1 Site and Vicinity Characteristics.....	6
2.3.2 Geology, Hydrogeology, and Soil	6
2.3.3 Other Facilities and Site Features.....	6
2.3.4 Site Hydrology and Geology	8
2.4 Property Utilities	9
2.5 Water Supply Wells, Dry Wells & Septic Systems	9
2.6 Floodplains	9
2.7 Wetlands	9
2.8 Coastal Zone.....	9
2.9 Biological Resources.....	10
2.10 Cultural and Historic Resources.....	10
3.0 PROPERTY HISTORY	11
3.1 History of Ownership	11
3.2 Past Uses and Operations.....	11
3.3 Use, Storage, Disposal, and Release of Petroleum.....	11
3.3.1 Underground and Above-Ground Storage Tanks (UST/AST).....	12

3.3.2 Non-UST/AST Storage, Release, or Disposal of Petroleum Products	13
3.4 Review of Previous Environmental Reports	13
4.0 ADJACENT PROPERTIES	14
5.0 REVIEW OF REGULATORY INFORMATION	15
6.0 INTERVIEWS	16
6.1 Interview with Wanda Green, Fort Monmouth Base Environmental Coordinator.	16
7.0 ENVIRONMENTAL CONDITION OVERVIEW	17
7.1 Discussion and Identification of Recognized Environmental Conditions.....	17
7.2 Discussion and Identification of Other Property Conditions	17
7.2.1 Asbestos Containing Material	17
7.2.2 Lead-Based Paint and Other Lead Sources	17
7.2.3 Munitions and Explosives of Concern (MEC).....	18
7.2.4 PCB Equipment	18
7.2.5 Radioactive Materials.....	18
7.2.6 Radon	18
8.0 FINDINGS SINCE PREVIOUS ECP	19
9.0 CONCLUSIONS.....	20
10.0 REFERENCES	21
Persons Contacted	21
Resources Consulted.....	21
11.0 DECLARATION OF ENVIRONMENTAL PROFESSIONAL.....	22
12.0 PRIOR ECP MEETS OR EXCEEDS ASTM REQUIREMENTS	23
APPENDICES	
APPENDIX A: ACM RESULTS	24
APPENDIX B: CORRESPONDENCE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION.....	25
APPENDIX C: Environmental Professional Resume – Joseph Pearson	26

LIST OF FIGURES

- Figure 1 General Site Location Map
- Figure 2 Site Layout Plan
- Figure 3 Adjacent Property Use

LIST OF ACRONYMS

ACM	Asbestos Containing Material
AIRS	Aerometric Information Retrieval System
AMSA	Area Maintenance Support Activity
AR	Army Regulation
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
BRAC	Base Realignment and Closure
C-DOCKET	Criminal Docket System
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	CERCLA Information System
CERFA	Community Environmental Response Facilitation Act
CESQGs	Conditionally Exempt Small Quantity Generators
CFR	Code of Federal Regulations
CONEX	Container Express
CSCSL	Confirmed and Suspected Contaminated Sites List
DOCKET	Enforcement Docket
DOD	Department of Defense
DRMO	Defense Reutilization Marketing Office
ECP	Environmental Condition of Property
EDR	Environmental Data Resources, Inc.
E2M	Engineering-Environmental Management, Inc.
FEMA	Federal Emergency Management Agency
FFIS	Federal Facilities Information System
FINDS	Facility Index System/Facility Registry System
FMSM	Fuller, Mossbarger, Scott and May Engineers, Inc.
FURS	Federal Underground Injection Control
HSWA	Hazardous and Solid Waste Amendments
IFR	Indoor Firing Range

kg	Kilogram
KPFF	KPFF Consulting Engineers
LQG	Large Quantity Generator
LBP	Lead Based Paint
LUST	Leaking Underground Storage Tank
MEC	Munitions and Explosives of Concern
MEP	Military Equipment Parking
NFA	No Further Action
NPL	National Priorities List
OMS	Organizational Maintenance Shop
OWS	Oil/Water Separator
PADS	PCB Activity Data System
PCB	Polychlorinated Biphenyls
PCS	Permit Compliance System
pCi/l	PicoCuries per Liter of Air
POL	Petroleum, Oil, and Lubricant
POV	Privately Owned Vehicle
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
RQ	Reportable Quantity
RRC	Regional Readiness Command
SOW	Scope of Work
SQG	Small Quantity Generator
STATE	State Environmental Laws and Statute
TSD	Treatment, Storage, or Disposal
TPH	Total Petroleum Hydrocarbons
TSCA	Toxic Substances Control Act
ug/sf	Micrograms per square foot
USACE	United States Army Corps of Engineers
USAR	United States Army Reserve

USATHAMA U.S. Army Toxic and Hazardous Materials Agency
USEPA United States Environmental Protection Agency
USFWS United States Fish and Wildlife Service
USGS United States Geological Survey
UST Underground Storage Tank
WDOE Washington Department of Ecology

1.0 INTRODUCTION

CALIBRE Systems, Inc. was authorized to prepare an Environmental Condition of Property Update Report for the Fort Monmouth, Environmental Condition of Property Parcel 14. Parcel 14 is located within the Charles Wood portion of Fort Monmouth located in the Township of Tinton Falls, in Monmouth County hereafter referred to as the "Property". In support of the ECP Update Report, a visual reconnaissance of the Property was conducted on May 30, 2012. The purpose of the visit was to perform a site reconnaissance and obtain information indicating the environmental condition of the Property and to determine if there was any change in conditions from the original ECP prepared in January of 2007, in preparation for a scheduled disposal of part of the property to the Fort Monmouth Economic Revitalization Authority (FMERA).

1.1 PURPOSE OF ENVIRONMENTAL CONDITION OF PROPERTY (ECP) REPORT

The primary purposes of the ECP Update Report were to evaluate the environmental condition of the property and to determine if conditions have changed from the original ECP or if new information was available to update the previous property category.

According to Section §4.6.1 of ASTM D 6008-96 (2005) Standard Practice for Conducting Environmental Baseline Surveys, "users and environmental professionals may use information in prior Environmental Baseline Surveys (EBSs) provided such information was generated as a result of procedures that meet or exceed the requirements of this practice or accurately state the limitations of the information presented". The original ECP (January 2007) was reviewed and found to meet the requirements set forth in §4.6.2 of ASTM D 6008-96(2005) and the narrative discussion and findings of that report are incorporated by reference into this ECP Report Update as if contained here in its entirety.

1.2 SCOPE OF SERVICES

The ECP Update scope of services for the Property includes the following activities:

- Conduct a visual inspection of the Property and any buildings, structures, equipment, pipe, pipeline, or other improvements on the Property, and a physical inspection of adjacent properties, to determine the current conditions.
- Detailed review of the prior ECP (U.S. Army 2005 BRAC Environmental Condition of Property Report, Fort Monmouth, Monmouth County New Jersey, Final, January 29, 2007) and the subsequent Site Investigation (U.S. Army BRAC 2005 Site Investigation Report, Fort Monmouth Final, July 21, 2008).
- Review of reasonably available standard Federal, state and local government records pertaining to the Property, including available maps.
- Interviews with current personnel involved in operations on the Property.
- Identification of sources of contamination on the Property and on adjacent properties which could migrate to the Property during Army ownership.
- Identification of ongoing response actions or actions that have been taken at or adjacent to the Property.

This ECP Update Report adheres to AR-200-1 (13 Dec 07), DoD 4165.66-M (March 1, 2006), and follows the American Society for Testing and Materials (ASTM) Designation D 6008-96 (2005), Standard Practice for Conducting Environmental Baseline Surveys as a guideline when not inconsistent with Army regulations and other applicable Army guidance.

This ECP Update Report covers ECP Parcel 14, approximately 77.5 acres of the Charles Wood Area of Fort Monmouth located in Tinton Falls, New Jersey, Monmouth County. This ECP Update Report re-classifies the majority of Parcel 14 into one of seven DoD Environmental ECP categories as defined by the ASTM Designation D5746-98 (2002), Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities. The property classification categories are as follows:

- ECP Area Type 1: An area or parcel of real property where no release or disposal of hazardous substances or petroleum products or their derivatives has occurred (including no migration of these substances from adjacent properties).

- ECP Area Type 2: Where only the release or disposal of petroleum products or their derivatives has occurred.
- ECP Area Type 3: An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action.
- ECP Area Type 4: An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, and all remedial actions necessary to protect human health and the environment have been taken.
- ECP Area Type 5: An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, and removal or remedial actions, or both, are under way, but all required actions have not yet been taken.
- ECP Area Type 6: An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but required response actions have not yet been initiated.
- ECP Area Type 7: An area or parcel of real property that is unevaluated or requires additional evaluation.

1.3 ASSUMPTIONS AND LIMITATIONS

The information obtained from individuals interviewed and prior environmental reports was considered to be accurate unless reasonable inquiries indicated otherwise. Conditions observed were considered representative of similar areas that were not accessible unless otherwise indicated. This ECP Update Report presents a summary of reasonably ascertainable information on the environmental conditions of, and concerns relative to, the land, facilities, and real property assets at the Property. Its findings are based on a thorough review of reasonably ascertainable documents, a visual reconnaissance of the Property conducted on May 30, 2012 and interviews with personnel knowledgeable about the Property and its history. Existing environmental investigations and reports and historical documents were reviewed in support of this

ECP Update Report. Information obtained from these other sources is reflected within this report by reference.

All Property buildings and structures were visually inspected during the site reconnaissance. However, a 100% visual reconnaissance of every single interior space within each building (e.g., attics, crawl spaces, etc.) was not practical due to accessibility restrictions. No sampling or analysis of any media was conducted during this survey.

2.0 PROPERTY DESCRIPTION

2.1 PROPERTY LOCATION

Fort Monmouth is located in the central-eastern portion of New Jersey in Monmouth County. The installation includes the Main Post, the Charles Wood Area, and the Evans Area. The Main Post encompasses an area of approximately 637 acres and is bounded by State Highway 35 to the west, Parkers Creek and Lafetra Creek to the north, the New Jersey Transit Railroad to the east and a residential neighborhood to the south. The Charles Wood Area is composed of approximately 489 acres and is located one mile west of the Main Post. It is bounded by Tinton Avenue to the north, residential development and Pine Brook Road to the south, and the Garden State Parkway to the west. The total acreage of the Main Post and Charles Wood area is 1,126. The general location of Fort Monmouth is shown on Figure 1.

The area of the site covered by this ECP Update is approximately 77.5 acres in the northeast corner of the Charles Wood Area of Fort Monmouth (see Figure 2).

2.2 PREVIOUS ECP AREA TYPE CATEGORIZATION

In accordance with ASTM Designation D5746-98 (2002), Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities, the 2007 ECP Report classified the Property as the following Types:

Parcel 14

- Category 2, defined as, “where only the release or disposal of petroleum products or their derivatives has occurred.” This classification was selected based on the fact that the area was used only for housing (with historical use of heating oil) and no other indications of releases or disposal have been identified.

2.3 PHYSICAL DESCRIPTION

2.3.1 SITE AND VICINITY CHARACTERISTICS

Parcel 14 at FTMM is located in the Charles Wood Area and consists of approximately 77.5 acres as designated in the U.S. Army Environmental Condition of Property Report Fort Monmouth, Monmouth County, New Jersey, 29 January 2007, and as shown on Figure 2. The Property is generally flat open land with some trees and brush growing in areas where housing was formerly located. Five buildings remain on the property 2241, 2275, 2469, 2901 and 2900. No other significant features remain on Parcel 14. It is bounded on the North by Tinton Avenue, on the West by Tinton Falls Public Works Way, on the South by Corregidor Road, and on the East by ECP Parcels 28 and 35. This use of this part of Fort Monmouth has not changed since the original ECP was prepared.

2.3.2 GEOLOGY, HYDROGEOLOGY, AND SOIL

Geology, hydrogeology and soil information is presented in the original ECP Report and those descriptions remain representative.

2.3.3 OTHER FACILITIES AND SITE FEATURES

There are no major site facilities or features that are of significance. No major changes have occurred on Parcel 14 since the preparation of the original ECP Report.

2.3.3.1 BULK STORAGE TANKS

Underground Storage Tanks (USTs)

No Bulk storage tank USTs were identified in the initial ECP Report. During the SI conducted after the original ECP Report, a potential UST was identified through geophysical surveys in the area of former Building 2116. It is likely that this tank was used for heating at former Building 2116. Sampling in this area did not identify any contamination of concern. The location of the potential tank at former Building 2116 was investigated with test pitting to determine if the tank existed but no tank was found and only remnants of water, gas and sewer piping were identified.

Aboveground Storage Tanks (ASTs)

There were no ASTs identified during the original ECP Report for this area and there are currently no ASTs on Parcel 14.

2.3.3.2 SITE WASTE AND WASTEWATER

Site waste and wastewater operations are discussed in the original ECP Report. There is no change to those descriptions. The property is not currently being used so waste and waste water are not being generated.

2.3.3.3 STAINED SOIL, STAINED PAVEMENT, OR STRESSED VEGETATION

No stained or discolored soil or distressed vegetation was observed during the site reconnaissance.

2.3.3.4 LIQUID DISCHARGES

No visible evidence of liquid discharges, suspected to represent an environmental concern were observed during the site reconnaissance.

2.3.3.5 POOLS OF LIQUID

No visible evidence of significant standing surface water or pools containing liquids likely to be hazardous substances or petroleum products were observed during the site reconnaissance.

2.3.3.6 PITS, PONDS, OR LAGOONS

No evidence of any pits, ponds, or lagoons was observed during the site reconnaissance.

2.3.3.7 WELLS

There is one known well located on the Property MW10B which was considered a background well for purposes of groundwater evaluation.

2.3.3.8 ON-SITE FILL

Based on our observations, it does not appear that a significant amount of fill has been imported onto the subject property.

2.3.3.9 POLYCHLORINATED BIPHENYLS (PCBs)

As covered in the original ECP Report, there were no substations in the area of Parcel 14. There were transformers associated with electrical distribution in buildings 2276 (one transformer), 2281 (three transformers) and 2287 (one transformer), but no spills from any of these transformers were documented. There are no PCB items on Parcel 14.

2.3.3.10 RADIOACTIVE COMMODITIES

As covered in the original ECP Report, there were never any radioactive commodities used or stored on Parcel 14.

2.3.4 SITE HYDROLOGY AND GEOLOGY

2.3.4.1 SURFACE WATER CHARACTERISTICS

The CWA is located approximately one mile southwest of the MP. It is separated from the MP by a portion of the borough of Eatontown. The southern portion of the CWA is drained by two streams that unite at a point near the eastern boundary. Its southernmost branch originates south of the CWA; the other stream originates within a lowland wooded area in the vicinity of the old STP. These two streams become the main stem of Wampum Brook, which flows through Eatontown and forms a small fresh water pond called Wampum Lake. Wampum Lake gives rise to Mill Creek, which eventually flows into the MP.

Another stream (“northern tributary to Wampum Brook”) originates near the CWA’s western boundary and flows through the area and into the golf course. A small portion of this stream flows near the southern edge of Parcel 14 and then crosses Hope Road

and continues flow through the golf course (see Figure 3). This tributary unites with Wampum Brook at a point east of the CWA boundary.

The CWA is identified as an area of undetermined, but possible, flood hazard on the Borough of Eatontown Flood Insurance Rate Map. However, the 100-year base flood elevation for Wampum Creek at the eastern boundary of the CWA is 26 feet, while ground surface elevations at the CWA range from 27 to 60 feet amsl.

2.4 PROPERTY UTILITIES

Parcel 14 is served by the following utilities: water, sanitary sewer, storm sewer, electric and natural gas. Descriptions of the Fort Monmouth utilities are provided in the original ECP Report.

2.5 WATER SUPPLY WELLS, DRY WELLS & SEPTIC SYSTEMS

Based upon a review of available historical Property and agency records and interviews with site personnel, a water supply well, dry well, or a septic system is not or ever was located on the Parcel 14.

2.6 FLOODPLAINS

A review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map of Monmouth County, New Jersey indicates that the Property is not located within the 100-year flood zone.

2.7 WETLANDS

The original ECP Report did not identify any wetlands on Parcel 14. A recent site visit by the New Jersey Department of Environmental Protection on February 14, 2012, confirmed that there are no wetlands existing on Parcel 14.

2.8 COASTAL ZONE

The Parcel 14 is not located within a Coastal Zone Management Area.

2.9 BIOLOGICAL RESOURCES

Biological resources are discussed in the original ECP Report. There have been no changes to the property since that time that would affect the description of biological resources.

2.10 CULTURAL AND HISTORIC RESOURCES

Cultural and historic resources are discussed in the original ECP Report. There have been no changes to the property since that time that would affect the description of these resources.

3.0 PROPERTY HISTORY

3.1 HISTORY OF OWNERSHIP

The original ECP Report describes the history of the Charles Wood Area (which includes Parcel 14) as follows: “The Charles Wood Area was acquired by the Army in 1941. The Charles Wood Area tract included the former Monmouth County Country Club (originally Sun Eagles Country Club), Olmstead Gardens, and areas currently occupied by the golf course and Myer Center. The Sun Eagles Country Club was constructed in the 1920s and included a clubhouse (currently Gibbs Hall), an eighteen-hole golf course, a polo field, and an airfield (6). A 7,000 troop cantonment area was immediately built on the land, including barracks, mess halls, a school building, an office building, a recreation hall, a Post Exchange, an infirmary, and a Chapel. Historical Army uses of the Fort Monmouth Charles Wood Area property are well documented in “A Concise History of the U.S. Army Communications-Electronics Life Cycle Management Command and Fort Monmouth, New Jersey” (5) and “Fort Monmouth: Landmarks and Place Names” (6).”

The majority of the Charles Wood Area was purchased in 1942 from Philrush Realty and Allenhurst National Bank & Trust Company and in 1952 from the Department of the Air Force. A full summary of deeds can be found in the original ECP.

3.2 PAST USES AND OPERATIONS

Parcel 14 was originally open space and farmland and then was developed as a residential area for military housing. This parcel includes the area identified in a 1947 aerial photograph as a vehicle wash rack and vehicle storage area. No other uses of the property were identified.

3.3 USE, STORAGE, DISPOSAL, AND RELEASE OF PETROLEUM

Parcel 14 was formerly occupied primarily by residential housing. Based on the time at which these buildings existed, it is likely that fuel oil was the primary heating fuel and individual USTs were likely utilized for the storage of fuel oil at each individual building. It was originally not known if all of the USTs associated with the buildings were

completely removed. In order to determine the absence/presence of formerly utilized USTs and the potential release from the USTs, geophysical surveys, soil sampling, and groundwater sampling were conducted in Parcel 14 throughout the northwest corner of the Charles Wood Area (see U.S. Army BRAC 2005 Site Investigation Report, Final July 21, 2008).

One suspected UST, near former Building 2116, was identified from the geophysical investigation conducted at Parcel 14. No COCs were identified above applicable NJDEP criteria in soil or ground water. Soil and groundwater analytical results indicated that no release had occurred. The location of the potential tank at former Building 2116 was investigated with test pitting to determine if the tank existed but no tank was found and only remnants of water, gas and sewer piping were identified.

In light of the absence of evidence of a release to the environment, NFA for soil, groundwater, and the suspected UST in Parcel 14 was recommended.

3.3.1 UNDERGROUND AND ABOVE-GROUND STORAGE TANKS (UST/AST)

Current Underground and Above-Ground Storage Tanks

There are currently no known Above-ground Storage Tanks (ASTs) on Parcel 14. During the Environmental Condition of Property (ECP) Phase 2 Study (Site Investigation) areas of Parcel 14 were subject to geophysical surveys and one potential Underground Storage Tank (UST) was identified at Parcel 14. The potential location was at the former Building 2116, see Figure 2. This area was included as part of the site investigation and soil and groundwater samples from this area did not indicate any contamination. The location of the potential tank at former Building 2116 was investigated with test pitting to determine if the tank existed but no tank was found and only remnants of water, gas and sewer piping were identified.

Former Underground and Above-Ground Storage Tanks

There was a former UST associated with Building 2775 that was removed and an NFA received from the NJDEP.

There is no evidence of petroleum releases on Parcel 14 except at the location of former tank at Building 2275 that was removed and cleaned up and NFA received.

3.3.2 NON-UST/AST STORAGE, RELEASE, OR DISPOSAL OF PETROLEUM PRODUCTS

There is no evidence that non-UST/AST petroleum products in excess of 55 gallons were stored for one year or more on the property.

3.4 REVIEW OF PREVIOUS ENVIRONMENTAL REPORTS

A thorough review of environmental documentation was performed for the original ECP Report and was documented in that report. The only new documentation with information relevant to this ECP Update Report is the U.S. Army BRAC 2005 Site Investigation Report Fort Monmouth, Final July 2008. That report documented evaluation of Parcel 14, and presented results of sampling performed in the area of the former housing located in Parcel 14. The results of that investigation did not indicate any release or disposal in that area.

4.0 ADJACENT PROPERTIES

Adjacent property includes residential properties off the installation and across Tinton Avenue. There are also adjacent properties that are on the installation but are not part of Parcel 14. These properties were used for a variety of uses including residential and industrial and commercial uses. There are no conditions adjacent to the Property that present an unacceptable risk to human health and the environment. The following is information on three sites on the installation that are adjacent to Parcel 14:

- Investigation will be performed near Building 2525 to evaluate a former septic tank that was associated with Building 2525. Initial sample results from the U.S. Army BRAC 2005 Site Investigation Report Fort Monmouth, Final, 21 July 2008 do not indicate contamination above NJDEP criteria, however the full area required by the NJDEP Technical Regulations was not covered in the initial investigation.
- A former neutralization pit associated with Building 2700 (Site FTMM-22) has residual volatile organic contamination. This site is currently undergoing remediation. Based on the level of contamination remaining and the distance between this site and Parcel 14 there is no impact anticipated on Parcel 14.
- A former underground storage tank at Building 2567 (Site FTMM-58) was previously contaminated with volatile organic contamination. A remedial action was performed and the site is now within NJDEP criteria. The groundwater under the Property may have the potential to be affected by other FTMM ground water contamination should the ground water beneath Parcel 14 be significantly drawn down.

5.0 REVIEW OF REGULATORY INFORMATION

A component of the ECP is the review of all reasonably obtainable federal, state, and local government records for the Property and surrounding properties, where there has been a release or likely release of any hazardous substance or any petroleum product, which is likely to cause or contribute to a release or threatened release of any hazardous substance or any petroleum product on the federal real property. A regulatory database summary was acquired from EDR in August 2006. The regulatory database summary consolidates standard federal, state, local, and tribal environmental record sources based on ASTM D 6008-96 (2005) recommended minimum search distances from the Property. A copy of the complete EDR report is included in the original ECP Report.

An EDR regulatory data base search was performed for the Charles Wood Area and is documented in the original ECP Report. There were no significant findings from the records that indicate a potential impact to Charles Wood Area, including Parcel 14. An update of that records search is not warranted at this time due to the fact that properties directly adjacent to Parcel 14 were at the time residential and continue to remain residential so no new sources of potential impact near Parcel 14 are anticipated. The regulatory information for sites further away from Parcel 14 as discussed in the original ECP Report were not expected to impact the Charles Wood area as they were either at a large distance or were down-gradient of the Charles Wood Area and that continues to be the case.

6.0 INTERVIEWS

6.1 INTERVIEW WITH WANDA GREEN, FORT MONMOUTH BASE ENVIRONMENTAL COORDINATOR.

Ms. Green is the Base Environmental Coordinator for Fort Monmouth. She provided CALIBRE Systems, Inc. with copies of supplemental findings, assessments and regulatory correspondence that have been conducted on Parcel 14 since the January 2007 ECP Report. Ms. Green confirmed that environmental conditions on Parcel 14 have not changed since the January 2007 ECP Report.

7.0 ENVIRONMENTAL CONDITION OVERVIEW

7.1 DISCUSSION AND IDENTIFICATION OF RECOGNIZED ENVIRONMENTAL CONDITIONS

There are no Recognized Environmental Conditions identified for Parcel 14.

7.2 DISCUSSION AND IDENTIFICATION OF OTHER PROPERTY CONDITIONS

7.2.1 ASBESTOS CONTAINING MATERIAL

There are only 5 buildings remaining on Parcel 14 (Buildings 2241, 2275, 2469, 2900 and 2901). Buildings 2900 and 2901 are newer buildings and therefore do not contain any asbestos. An asbestos survey was performed by Weston in September of 1992 on Building 2275 and indicated no ACM was present in the building (See Appendix A). An asbestos survey was also performed by Weston in December of 1990 on Building 2251 (See Appendix A), which is presumed to be similar to Building 2241, and indicated ACM was present in floor tiles. A walk through of Building 2469 by Mr. Joseph Fallon on May 25, 2012 did not indicate any ACM present in the building (it is a meter house mainly constructed of concrete block). Based on the age of the buildings the roofing shingles on Buildings 2275, 2241 and 2469 may contain ACM. None of the buildings contains friable asbestos.

7.2.2 LEAD-BASED PAINT AND OTHER LEAD SOURCES

Lead-based paint is a hazard in residential properties that were constructed prior to 1978. Lead accumulates in the body and can cause significant health problems in small children when ingested. Most facilities and buildings at FTMM were constructed before the DoD ban on the use of lead based paint (LBP) in 1978 and are likely to contain one or more coats of such paint. In addition, some facilities constructed immediately after the ban may also contain LBP, because inventories of such paints that were in the supply network were likely to have been used up at these facilities.

Existing buildings (2275, 2241, and 2469) on Parcel 14 were constructed prior to 1978 and are presumed to contain lead-based paint (LBP). Building 2900 and 2901 were constructed after 1978 and are assumed to not contain LBP.

7.2.3 MUNITIONS AND EXPLOSIVES OF CONCERN (MEC)

Based on a review of existing records and available information, there is no evidence that Munitions and Explosives of Concern (MEC) are present on the Property. In addition, the Property was historically used as a housing area and there is no record of MEC being discovered or that munitions-related activities occurred on Parcel 14. The term "MEC" means military munitions that may pose unique explosives safety risks, including (A) unexploded ordinance (UXO), as defined in 10 U.S.C. § 101(e)(5); (B) discarded military munitions (DMM), as defined in 10 U.S.C. § 2710(e)(2); or (C) munitions constituents (e.g., TNT, RDX), as defined in 10 U.S.C. § 2710(e)(3), present in high enough concentrations to pose an explosive hazard.

7.2.4 PCB EQUIPMENT

As covered in the original ECP Report, there were no substations in the area of Parcel 14. There were transformers associated with electrical distribution in buildings 2276 (one transformer), 2281 (three transformers) and 2287 (one transformer), but no spills from any of these transformers were documented. There are no PCB items currently located on Parcel 14.

7.2.5 RADIOACTIVE MATERIALS

There is no evidence that radioactive material or sources were stored or used on the Property.

7.2.6 RADON

Radon surveys were conducted in 1991 by the Directorate of Engineering and Housing's Environmental Office as part of the Army's Radon Reduction Program. The survey was conducted for all of Fort Monmouth. Radon detectors were deployed in all structures designated as priority one buildings (daycare centers, hospitals, schools and living areas). Radon was not detected above the EPA residential action level of 4 pico-Curies per liter (pCi/L) in these structures. Radon levels at FTMM do not pose a health risk and no further action was deemed required for radon.

8.0 FINDINGS SINCE PREVIOUS ECP

This section documents supplemental investigations and/or findings associated with the Property since the January 2007 ECP Report.

- U.S. Army BRAC 2005 Site Investigation Report Fort Monmouth, Final July 2008. That report documented evaluation of Parcel 14, and presented results of sampling performed in the area of the former housing. The results of that investigation did not indicate any release or disposal in that area.
- Army letter to NJDEP dated 22 May 2012 requesting concurrence on the re-classification of most of Parcel 14 from a Category 2 to a Category 1 based on the results of the 2008 SI (See Appendix B).
- Concurrence Letter from NJDEP, dated 30 May 2012 regarding re-categorization of a portion of Parcel 14 (See Appendix B).

9.0 CONCLUSIONS

CALIBRE Systems, Inc. has performed this Environmental Condition of Property Report Update in conformance with the scope and limitations of Army Reserve 200-1 (27 Dec 07), DoD 4165.66-M (March 1, 2006), and ASTM Designation D6008-96 (2005), *Standard Practice for Conducting Environmental Baseline Surveys*. The following components were completed: interviews, government record reviews, visual inspections of the Property and adjoining properties, and the declaration by the environmental professional responsible for the assessment.

This ECP Report Update did not identify any new recognized environmental conditions at the Property during the visual site inspection or interviews with personnel knowledgeable about operations at the Property. The previous ECP Report (January 2007) classified Parcel 14 as an ECP Category Type 2 which, in accordance with ASTM D5746-98 (2002), is defined as an area or parcel of real property where only the release or disposal of petroleum products or their derivatives has occurred. Based on the components of this ECP Report Update and our review of supplemental findings/investigations (refer to Section 8.0), it is the opinion of this ECP Report Update that the majority of Parcel 14 be re-categorized as an ECP Category Type 1 property, which, in accordance with ASTM D5746-98 (2002), Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities, is defined as an area or parcel of real property where no release, or disposal of hazardous substances or petroleum products or their derivatives has occurred (including no migration of these substances from adjacent properties). This classification was selected based on the fact that the area was used primarily for housing and open space. The area was sampled and no indication of release or spill was identified. Additionally, a letter from NJDEP, dated 30 May 2012 concurred that this area can be re-categorized as an ECP Category Type 1 property (refer to Appendix C).

10.0 REFERENCES

PERSONS CONTACTED

- Ms. Wanda Green, BRAC Environmental Coordinator, Fort Monmouth (732-380-7064)

RESOURCES CONSULTED

- U.S. Army 2005 BRAC Environmental Condition of Property Report, Fort Monmouth, Monmouth County New Jersey, Final, January 29, 2007.
- Site Investigation (U.S. Army BRAC 2005 Site Investigation Report, Fort Monmouth Final, July 21, 2008)

11.0 DECLARATION OF ENVIRONMENTAL PROFESSIONAL

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312 and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject Property. A copy of my resume is provided in Appendix D.



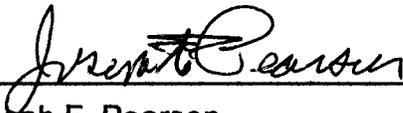
Joseph F. Pearson
BRAC Technical Support
CALIBRE Systems, Inc.

6/5/2012

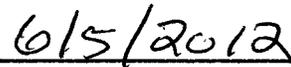
Date

12.0 PRIOR ECP MEETS OR EXCEEDS ASTM REQUIREMENTS

The original ECP Report (January 2007) was reviewed and found to meet the requirements set forth in §4.6.2 of ASTM D 6008-96(2005) and the narrative discussion and findings of that report are incorporated by reference into this ECP Update Report as if contained here in its entirety.



Joseph F. Pearson
BRAC Technical Support
CALIBRE Systems, Inc.

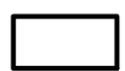


Date



Date: 1/25/07
ArcGIS File: FTMON_018_Fig01_Facility.mxd

LEGEND

 Installation Boundary



Scale:
0 2 4 8 Miles



Base Realignment and Closure 2005



U.S. Army Corps of Engineers



Shaw Shaw Environmental, Inc.



FIGURE 1
FACILITY LOCATION MAP
FORT MONMOUTH
NEW JERSEY

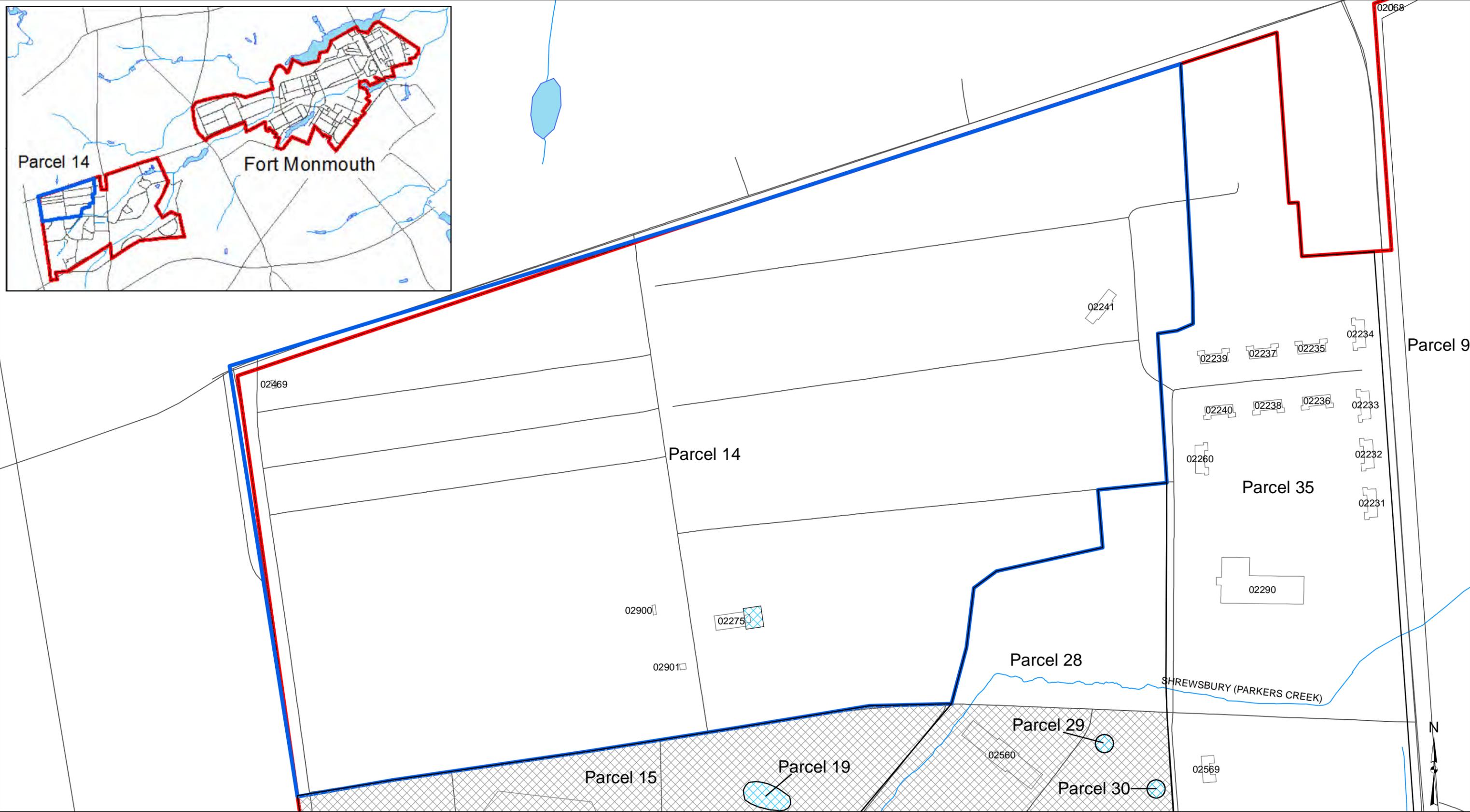
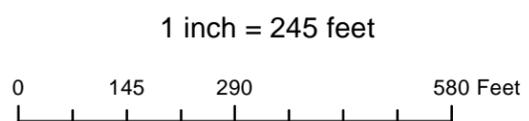
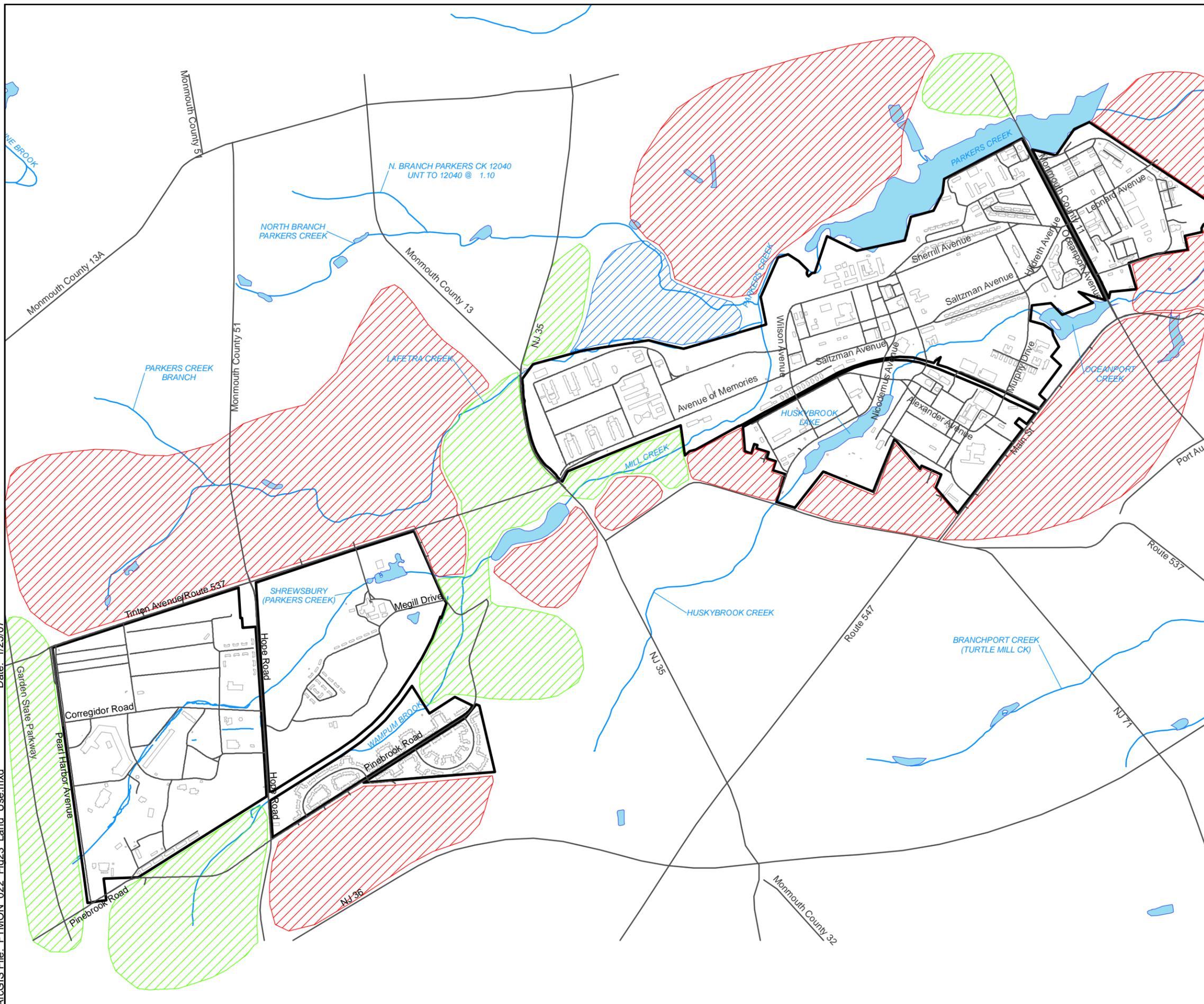


FIGURE 2
Environmental Condition of Property
Parcel 14
Updated Property Categories

Publication Date: 22 MAY 2012
 Spheroid: WGS 1984
 Projection: UTM Zone 18
 Prepared by: Marc Thompson, CALIBRE GIS Team



- Parcel 14
- Installation
- Road Centerline
- Building
- Water Feature
- Water Body
- Category 1: Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).
- Category 2: Areas where only release or disposal of petroleum products has occurred.
- Category 7: Areas that are not evaluated or require additional evaluation.

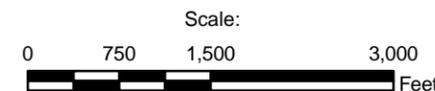


LEGEND

- Road Centerline
- Water Feature
- Building
- Water Body
- Installation Boundary

Land Use

- Industrial/Commercial
- Residential/Recreational
- Undeveloped



Note: Schematic representation of prevalent surrounding land use only. Boundaries of surrounding land use designations are not exact.



Base Realignment and Closure 2005



U.S. Army Corps of Engineers



Shaw Shaw Environmental, Inc.



FIGURE 23
ADJACENT LAND USE MAP
FORT MONMOUTH
NEW JERSEY

APPENDIX A

ASBESTOS CONTAINING MATERIAL RESULTS FOR BUILDINGS 2275 AND 2241

2275
CHAPEL

2275.1 GENERAL

Building 2275 was surveyed by WESTON's inspection team on 9 and 11 September 1992.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze one sample of suspect material collected from the building. This sample was found to be nonasbestos-containing material (non-ACM).

The location, description, and analytical results for the bulk sample from Building 2275 are presented in Table 2275.1.

2275.2 CONCLUSION

Based on the survey and the laboratory results of the sample collected in Building 2275, WESTON concludes that no ACM was detected in Building 2275.

TABLE 2275.1
 BULK SAMPLE ANALYSIS RESULTS - BUILDING 2275, CHAPEL

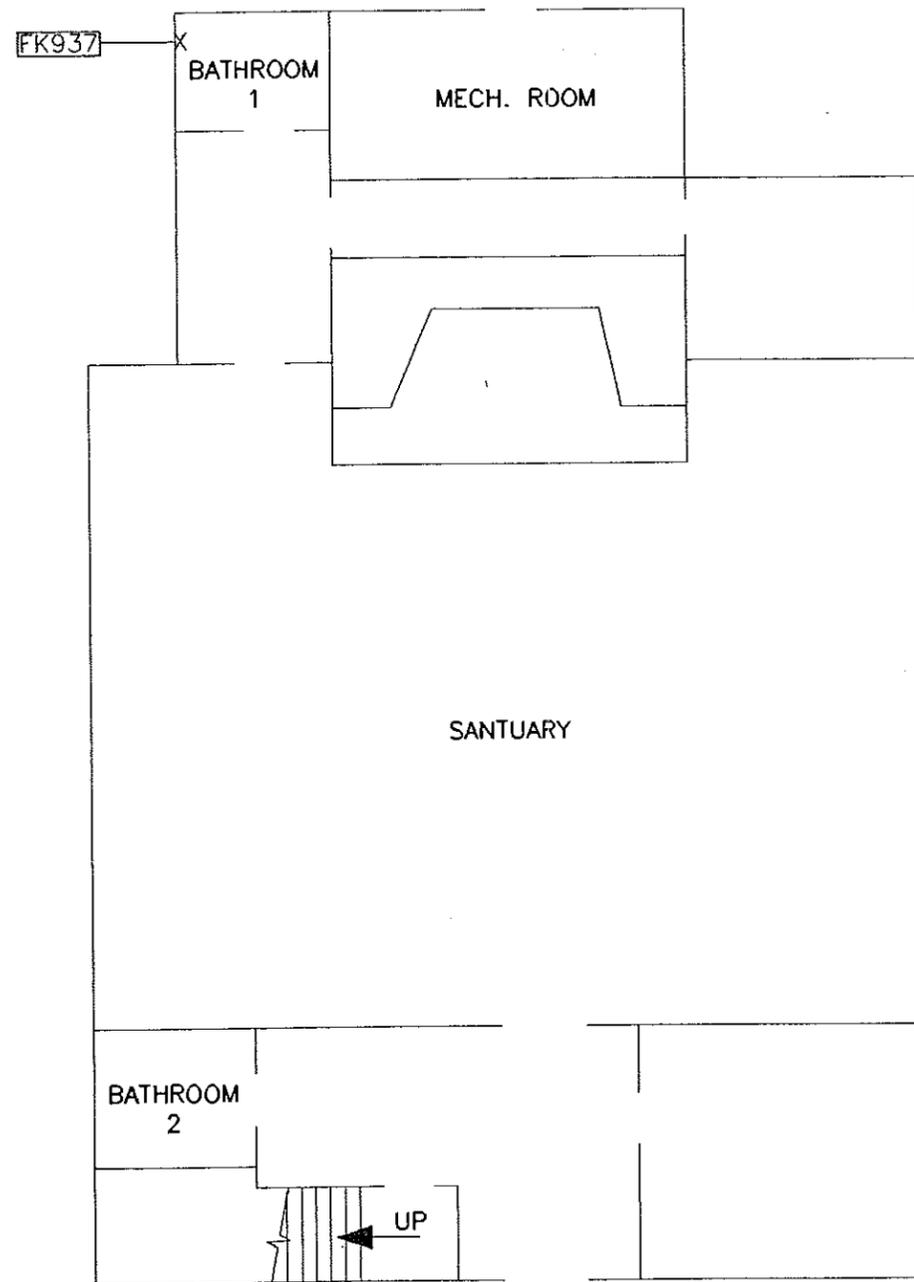
SAMPLE NO.	LOCATION	ITEM	DESCRIPTION	PERCENT ASBESTOS			LAYERED ^a
				CH	AM	OT	
FK937	BATHROOM 1	FLOOR TILE	GRAY, OTH, FLOOR TILE	-	-	-	NO

^a Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes
 C = Center
 N = North
 E = East
 S = South
 W = West
 NE = Northeast
 NW = Northwest
 SE = Southeast
 SW = Southwest

System Codes
 STM = Steam
 CHW = Chilled Water
 HHW = Heating Hot Water
 DOM = Domestic Water
 OTH = Other
 UNK = Unknown

Asbestos Types
 CH = Chrysotile
 AM = Amosite
 OT = Other



BLDG. 2275
 NOT TO SCALE



2251

FAMILY HOUSING

2251.1 GENERAL

Building 2251 was surveyed by WESTON technicians on 5 December 1990. Complete inspections (CI) for ACM were performed in Units 43 and 45 of this building. The rest of the units in Building 2251, Units 41 and 47, were assumed to have type and quantity of ACM similar to that found in Units 43 and 45 and are designated as similar units (S).

No actual inspection or sampling for ACM was performed in the similar units. Refer to the guide document for further discussions on complete inspections (CI) and similar units (S).

The first three portions of this facility report summarize the results of this inspection. Photographs of some sample locations are provided in Section 2251.4.

Polarized Light Microscopy (PLM) with dispersion staining was used to analyze 4 samples of suspect material collected from the building. Of these samples, all 4 were found to be asbestos-containing materials (ACM). Table 2251.1 lists the analytical results for the bulk samples.

2251.2 ACM AND EXPOSURE ASSESSMENT

The location, description, and analytical results for each bulk sample from Building 2251 are presented in Table 2251.1. An area-by-area inventory of ACM is provided in Tables 2251.2 and 2251.3. "Other Asbestos-Containing Materials," listed in Table 2251.3, are materials that do not correspond to the standard caption categories listed in Table 2251.2. A prioritized listing of exposure assessments is presented in Table 2251.4. An itemized area-by-area cost estimate for removal and replacement is provided in Table 2251.5. The method by which removal/replacement costs are calculated is described in the ISSUES COMMON TO ALL

BUILDINGS Section of this report. Building floor plans (see attachment) indicate sample locations and building area names as they are listed in Tables 2251.2 and 2251.5.

2251.3 RECOMMENDATIONS/CONCLUSIONS

WESTON recommends:

- Asbestos-containing floor tile should be labeled under the O&M Program.

TABLE 2251.1

BULK SAMPLE ANALYSIS RESULTS - BUILDING 2251, FAMILY HOUSING

SAMPLE NO.	LOCATION	ITEM	DESCRIPTION	PERCENT ASBESTOS			LAYERED ^a
				CH	AM	OT	
FH289	UNIT 43 - KITCHEN, BELOW CEILING	FLOOR TILE	GREEN, OTH, 9X9 FL TL	7	-	-	NO
FH290	UNIT 43 - LVG. RM., BELOW CEILING	FLOOR TILE	GRAY, OTH, 9X9 FL TL	7	-	-	YES
FH291	UNIT 45 - KITCHEN, BELOW CEILING	FLOOR TILE	GREEN, OTH, 9X9 FL TL	5	-	-	NO
FH292	UNIT 45 - LVG. RM., BELOW CEILING	FLOOR TILE	BROWN, OTH, 9X9 FL TL	7	-	-	YES

^a Asbestos content presented for layered samples represents the highest concentration layer.

Quadrant Codes

C = Center
 N = North
 E = East
 S = South
 W = West
 NE = Northeast
 NW = Northwest
 SE = Southeast
 SW = Southwest

System Codes

STM = Steam
 CHW = Chilled Water
 HHW = Heating Hot Water
 DOM = Domestic Water
 OTH = Other
 UNK = Unknown

Asbestos Types

CH = Chrysotile
 AM = Amosite
 OT = Other

TABLE 2251.2
 ASBESTOS-CONTAINING MATERIALS - BUILDING 2251, FAMILY HOUSING

AREA	PIPE FITTINGS (EA)			PIPE RUNS (LF)			SPRAY/TROMELED CEILINGS (MSF)	FLOOR TILE (MSF)	BOILERS/ TANKS (MSF)	AIR HANDLING EQUIPMENT (MSF)	OTHER
	<4"	4-8"	9-14"	<4"	4-8"	9-14"					
UNIT 41 (S)	-	-	-	-	-	-	-	0.60	-	-	-
UNIT 47 (S)	-	-	-	-	-	-	-	0.60	-	-	-
Unit 43 (C1)	-	-	-	-	-	-	-	0.60	-	-	-
Unit 45 (C1)	-	-	-	-	-	-	-	0.60	-	-	-
TOTALS	-	-	-	-	-	-	-	2.40	-	-	-

* Other Material Present In Various Units Of Measure

EA - Each
 LF - Linear Feet
 MSF - Thousand Square Feet

Table 2251.3

**Other Asbestos-Containing Material - Building 2251, Family Housing
Type Occupancy: Adults (Public)**

Area	Material Type	Quantity (Unit)
No Other Asbestos-Containing Material Found in this Building		

EA - Each

LF - Linear Feet

MSF - Thousand Square Feet

TABLE 2251.4
 EXPOSURE ASSESSMENTS (PRIORITY ORDER) - BUILDING 2251, FAMILY HOUSING

SAMPLE NO.	AREA	MATERIAL TYPE	PRIOR. INDEX CODE	PRIORITY INDEX NUMBER	EXPOSURE FACTORS					AVG. EXP. HOURS	% ASB.
					1	2	3	4	5		

Only Non-Friable Material Was Detected In This Building
 Exposure Assessments Are Not Available

Priority Index Codes

- A [=] Long Term Corrective Measure
- B [=] Review Management Special Considerations/Remarks
- C [=] Army Asbestos Deficiency Abatement Project

Priority Index Numbers Are In Scientific Notation

Exposure Factors

- 1 [=] Material Friability
- 2 [=] Occupant Accessibility
- 3 [=] Material Condition
- 4 [=] Level Of Activity
- 5 [=] Number Of Assigned Occupants

TABLE 2251.5

COST ESTIMATE* - BUILDING 2251, FAMILY HOUSING

DESCRIPTION	UNIT COST (\$)	AREA 1	AREA 2	AREA 3	AREA 4	TOTAL
Pipe Fittings (EA)						
4"	70.30	-	-	-	-	-
6-8"	62.80	-	-	-	-	-
6-9"	177.00	-	-	-	-	-
>14"	216.00	-	-	-	-	-
Pipe Runs (LF)						
4"	26.50	-	-	-	-	-
6-8"	29.20	-	-	-	-	-
6-9"	46.20	-	-	-	-	-
>14"	60.80	-	-	-	-	-
Sprayed/Troweled Ceilings (SF)	9.60	-	-	-	-	-
Floor Tile (SF)	5.60	3.4	3.4	3.4	3.4	13.4
Boilers/Tanks (SF)	37.90	-	-	-	-	-
Air Handling Equipment (SF)	20.00	-	-	-	-	-
Other						
SUBTOTAL		3.4	3.4	3.4	3.4	13.4
Difficulty Allowance		-	-	-	-	-
SUBTOTAL		3.4	3.4	3.4	3.4	13.4
Decontamination Units Mobilization		1.5	1.5	1.5	1.5	6.0
SUBTOTAL		5.4	5.4	5.4	5.4	21.4
Contingency @ 15.00%		0.8	0.8	0.8	0.8	3.2
SUBTOTAL		6.2	6.2	6.2	6.2	24.7
Design Fee @ 10.00%		0.6	0.6	0.6	0.6	2.5
SUBTOTAL		6.8	6.8	6.8	6.8	27.1
Air Monitoring @ 10.00%***		0.7	0.7	0.7	0.7	2.7
TOTAL		7.5	7.5	7.5	7.5	29.8

* Amounts Are In Thousands Of Dollars

** Less Than \$100 For The Area; Amount Not Printed But Included In Total(s)

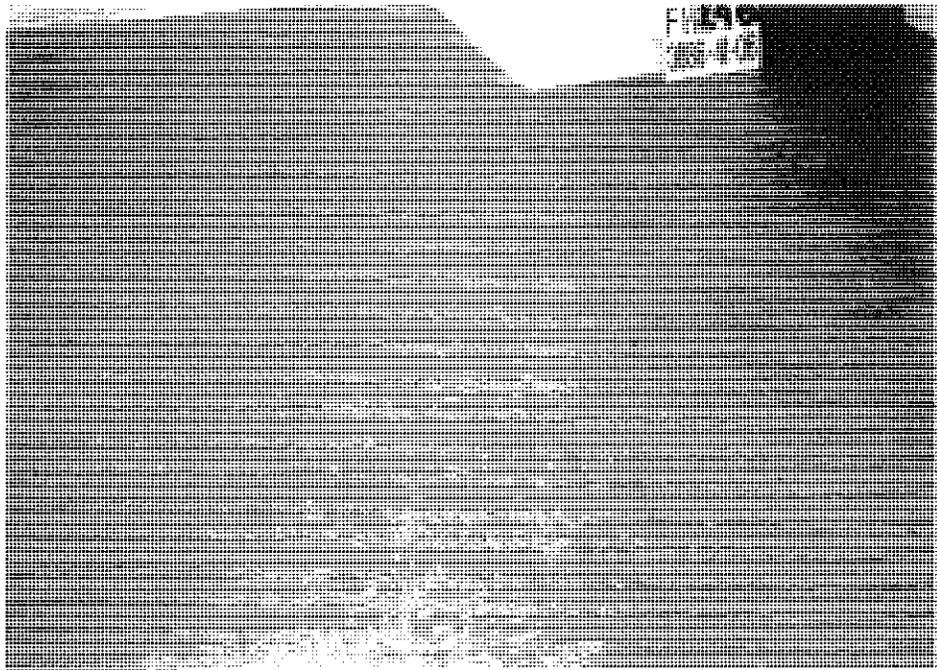
***The Minimum Air Monitoring Fee is \$500.00 Per Building

AREA 1: UNIT 41 (S)
AREA 3: UNIT 43 (CI)

AREA 2: UNIT 42 (S)
AREA 4: UNIT 45 (CI)

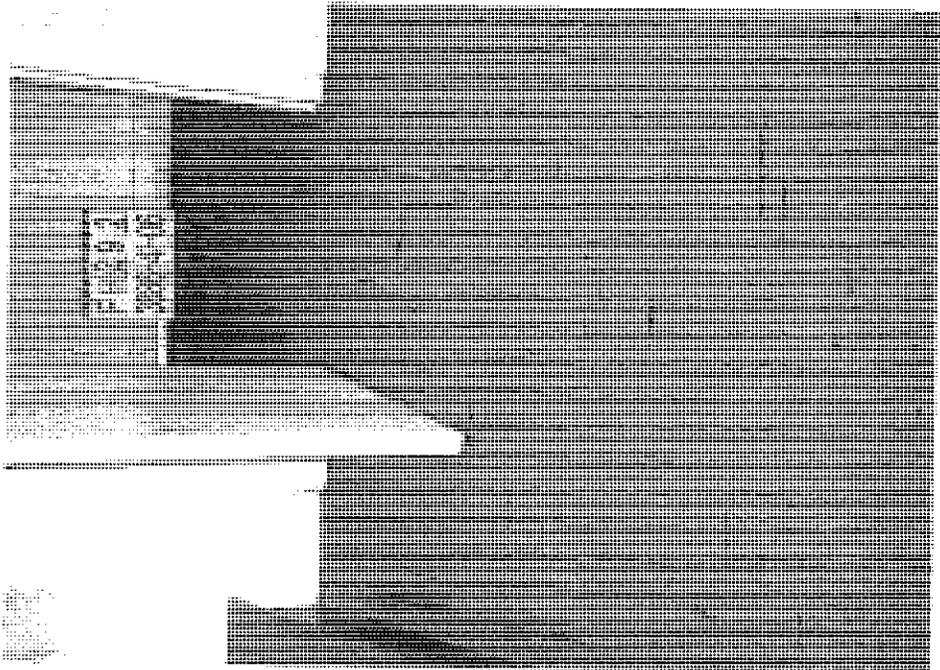
SECTION 2251.4

PHOTOGRAPHS



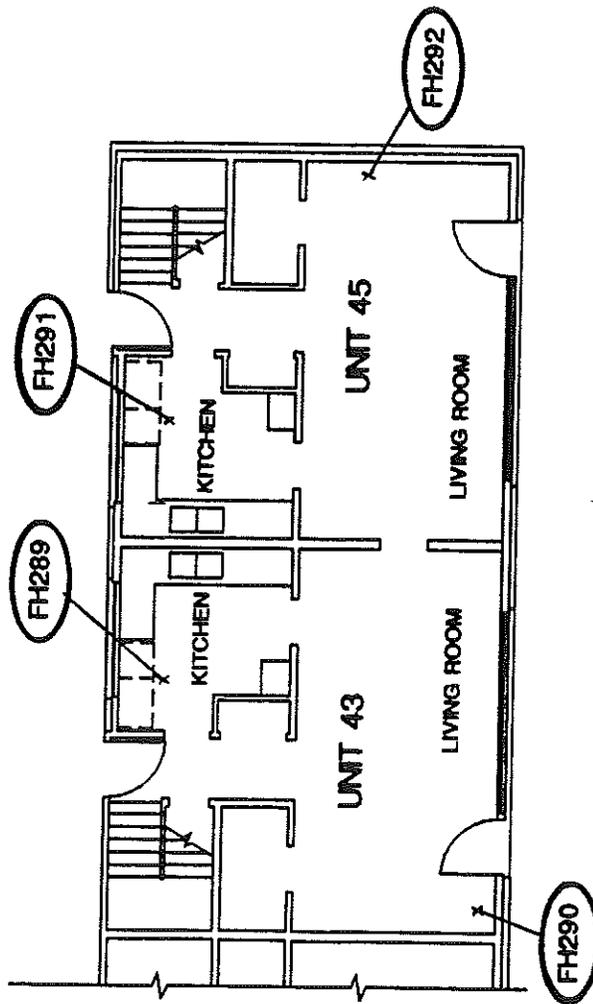
Bldg. 2251

Unit 43, Living Room: (Sample FH290) (9 In. x 9 In.) Gray Floor Tile Tested Positive. Floor Tile In The Kitchen (Brown, 9 In. x 9 In.) Also Tested Positive (Sample FH281).



Bldg. 2251

Unit 45, Living Room: (Sample FH292): (9 In. x 9 In.) Brown Floor Tile Tested Positive. Floor Tile In The Kitchen (Green, 9 In. x 9 In.) Also Tested Positive (Sample FH291).



LEGEND

 POSITIVE SAMPLE

 NEGATIVE SAMPLE



BLDG. 2251

APPENDIX B

**CORRESPONDENCE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL
PROTECTION**

May 22, 2012

Ms. Linda Range
New Jersey Department of Environmental Protection
Case Manager
Bureau of Southern Field Operations
411 East State Street (5th Floor)
PO Box 413
Trenton, NJ 08625

**Subject: Fort Monmouth, NJ
Parcel 14 Property Category Determination**

Dear Ms. Range:

The Army is in the process of preparing the required documentation to support the transfer of a portion of Fort Monmouth Charles Wood Area (CWA) known as Parcel E to the Fort Monmouth Economic Revitalization Authority (FMERA). As part of that process, the Army has determined, based on further investigation, that re-categorization of the Environmental Condition of Property (ECP) Parcel 14, a portion of which lies within the Parcel E property, is necessary¹. Per the Army's request and pursuant to 42 U.S.C. § 9620(h)(4)(B)², CALIBRE Systems, Inc. (CALIBRE) has prepared this letter to provide the New Jersey Department of Environmental Protection (NJDEP) with a request for concurrence on the determination that the majority of the ECP Parcel 14, previously categorized as Category 2, should now be categorized as Category 1. Attachment 1, Figure 1 shows the proposed change in category with all of Parcel 14 as Category 1 (except for a small area near Building 2275 where there was a documented release of petroleum (that release having been cleaned up and NFA received from the NJDEP)).

The property was initially categorized as a Category 2 in 2007 based on the potential for petroleum releases from former heating oil tanks that *may* have been present in the former barracks that occupied most of Parcel 14 and also a documented tank removal at Building 2275. Subsequently, the potential for release was evaluated in the U.S. Army BRAC 2005 Site Investigation Report Fort Monmouth, Final July 21, 2008. Section 3.2 of that report contains the

¹ The Army has an obligation under 42 U.S.C. § 9620(h)(4)(A) to "identify real property on which no hazardous substances and no petroleum products or their derivatives were known to have been released or disposed of." Army's determination is based on an investigation of the real property to determine or discover the obviousness of a release including, a review of federal government records, recorded chain of title documents and aerial photographs and reasonably obtainable federal, state and local government records of each adjacent facility where there has been a release; a visual inspection of the real property; a physical inspection of adjacent property; and interviews with current and former employees involved in operations on the real property. See 42 U.S.C. § 9620(h)(4)(A).

² 42 U.S.C. § 9620(h)(4)(B) states that the Army's identification "is not complete until concurrence in the results of the identification is obtained, in the case of real property that is not part of a facility on the National Priorities List, from the appropriate State official."

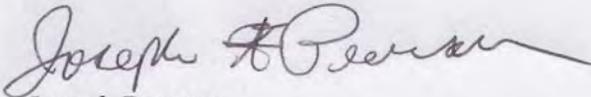
information on the additional evaluation that was performed to determine the condition of Parcel 14 (see Attachment 2). That evaluation did not identify any petroleum releases in this parcel in the soil or groundwater. However, geophysical studies in the area did indicate the potential for an underground storage tank (UST) to be present near the former Building 2116. Fort Monmouth personnel investigated that potential UST location and did not locate any tank, however some metallic piping associated with water, natural gas and sewer lines was found in the area, which likely produced the anomaly detected during the geophysical survey of the area (documentation from the installation is provided in Attachment 3).

In order to support the property transfer the Army is proposing to change the property classification for the majority of Parcel 14 from a Category 2, "Areas where only release or disposal of petroleum products has occurred" to a Category 1, "Areas in which no release or disposal of hazardous substances or petroleum products have occurred (including no migration of such substances from adjacent areas) and a visual inspection indicates that both the land and the buildings are uncontaminated." The one small area where the UST was removed from Building 2275 will remain a Category 2. The Army requests NJDEP's concurrence in the Category 1 designation for this area.

The Army and FMERA are working to transfer Parcel E by June 15, 2012. In order to achieve this goal the Army is requesting that the NJDEP provide an expedited evaluation of this issue so that we can complete our Finding of Suitability to Transfer and prepare the deed for transfer.

Should you require additional information, have any questions or wish to meet in person to help resolve this item please contact me at 215-699-4490.

Sincerely,



Joseph Pearson
BRAC Contract Support
Fort Monmouth
CALIBRE Systems, Inc.

Cc: James Briggs, BRAC HQ
Wanda Green, BEC

ATTACHMENT 1

FIGURE 1
Environmental Condition of Property
Parcel 14
Updated Property Categories

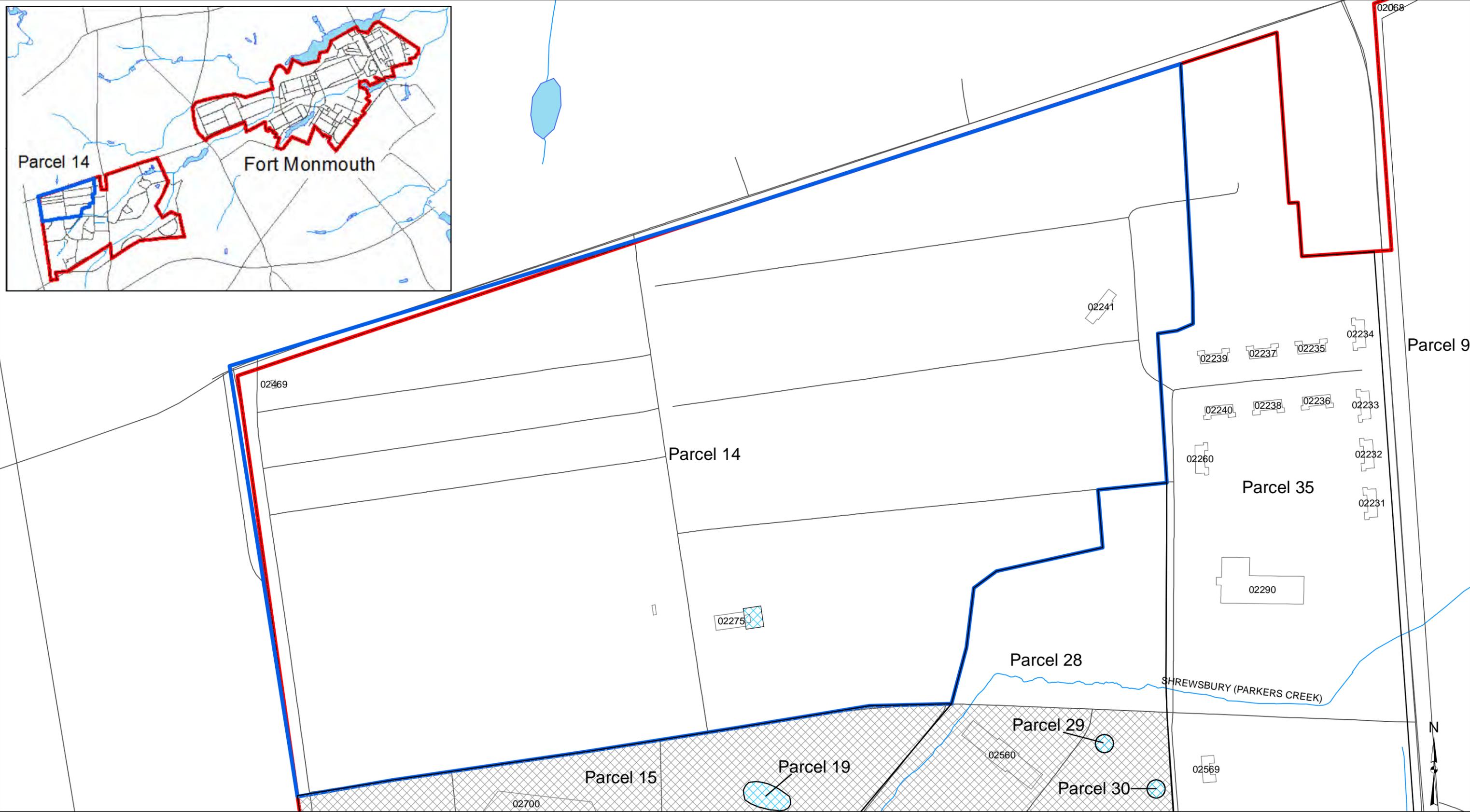
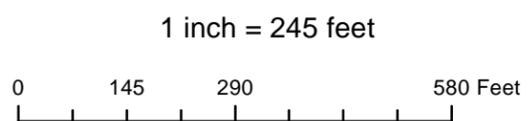


FIGURE 1
Environmental Condition of Property
Parcel 14
Updated Property Categories

Publication Date: 22 MAY 2012
 Spheroid: WGS 1984
 Projection: UTM Zone 18
 Prepared by: Marc Thompson, CALIBRE GIS Team



- Parcel 14
- Installation
- Road Centerline
- Building
- Water Feature
- Water Body
- Category 1: Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).
- Category 2: Areas where only release or disposal of petroleum products has occurred.
- Category 7: Areas that are not evaluated or require additional evaluation.

ATTACHMENT 2

U.S. Army BRAC 2005 Site Investigation Report Fort Monmouth,

Final July 21, 2008

Section 3.2

3.2 Parcel 14 – Former Buildings and Former Residential Housing Area in Northwest Portion of CWA

3.2.1 Site Description

Parcel 14 is located in the northwest portion of CWA and is currently undeveloped. This area was identified on historic aerial photographs as formerly occupied by buildings and residential housing. The buildings identified within this parcel were in place in aerial photographs from 1947 and 1957 (**Appendix G**). Based on the time at which these previous buildings existed, it is likely that fuel oil was the primary heating fuel and individual USTs were likely utilized for the storage of fuel oil at each individual building. It is not known if the USTs associated with the buildings were ever removed. Housing had replaced the original buildings within the parcel by 1963 (14). The housing was in place until 2002 and was identified on Plan No. 520, “Gas Distribution, Gasoline and Fuel Storage, CWA,” dated January 16, 1956 (**Appendix G**), as being supplied by gas distribution lines. The housing was demolished between 2001 and 2003, and the area has been undeveloped since 2004. Additional information pertaining to this parcel can be found in Section 3.3, Section 5.4, and Appendix G of the Phase I ECP (1).

3.2.2 Previous Investigations

No previous investigations have been conducted to investigate possible fuel oil USTs associated with the former buildings.

3.2.3 Site Investigation Sampling

A review of documented UST removal locations versus the location of former buildings within Parcel 14 was conducted. Based on this review, it was determined that few UST removals have been documented at the locations of the former buildings that existed within Parcel 14 in the 1940s and early 1950s. In order to determine the absence/presence of formerly utilized USTs and the potential release from the USTs, geophysical surveys, soil sampling, and groundwater sampling were conducted throughout Parcel 14.

Geophysical Survey Investigation

An EM survey was conducted throughout the area of the parcel where former buildings were identified to determine if USTs are present. Follow-up GPR surveys were conducted at anomalies identified from the EM surveys. **Section 2.1** summarizes the methodologies utilized during the geophysical surveys.

Geoprobe® Investigation

Geoprobe® soil samples were collected in September and October 2007 in Parcel 14, and groundwater samples were collected in October 2007 to investigate potential releases from historic heating oil USTs potentially associated with the former buildings

area. Groundwater samples were collected from temporary wells (and two existing monitoring wells) installed along the downgradient boundary of the soil boring grid. A total of 150 surface soil samples, 165 subsurface soil samples (including 14 duplicate samples), and 22 groundwater samples (including three duplicate samples) were collected from 150 distinct Geoprobe® borings. Soil boring locations were spaced on 100-ft centers. Surface soil samples for non-VO analysis were collected from the 0- to 6-inch interval bgs. For borings located in paved areas, non-VO surface soil samples were collected from the 0- to 6-inch interval directly below the pavement sub-base. Surface soil samples collected for VO analysis were collected from the 18- to 24-inch interval bgs. Subsurface soil samples were collected from the 6-inch interval directly above the water table from each boring. Field screening of the soil boring core was conducted using a PID/FID meter. Visible staining and olfactory evidence of impacted soil was noted at the 18- to 24-inch interval bgs at boring location P14-F5, and one additional subsurface soil sample was collected based on the results of field screening.

A total of 22 groundwater samples (including three duplicate samples) were collected from 19 distinct temporary wells that were installed with the Geoprobe® rig. Temporary wells were installed along the downgradient boundary of the soil boring grid conducted on 200-ft centers and were constructed of PVC and 5 to 10 ft of factory-slotted screen. Two existing FTMM monitoring wells (B9MW09B; B10MW10B) were also sampled.

Table 3.2-1 presents a summary of field activities, and sample locations are provided on **Figure 3.2-1**. An analytical summary of soil and groundwater sampling activities, including sample IDs, collection dates, analytical parameters, and methods of analysis, are provided in **Table 3.2-2**.

**Table 3.2-1
Parcel 14 Sampling Location, Rationale and Analytical**

Sample Location	Sample Media	Sample Location Rationale	Analytical Suite
Entire Parcel (approximately 77 acres)	A geophysical survey was conducted over the entire parcel. The geophysical investigation consisted of an EM survey followed by targeted GPR of anomalies identified by the EM survey.		
P14-A1 through P14-O23 (150 samples)	Surface soil	Soil samples were collected from the 0- to 6-inch bgs interval from Geoprobe® soil borings in a grid configuration (conducted on 100-ft centers) to investigate the potential release from former heating oil USTs associated with the former buildings. If the sample location was paved, the sample was collected from the 0- to 6-inch interval below the pavement sub-base.	TPHC, VO+10 (25% of TPHC > 1,000 mg/kg)
P14-A1 through P14-O23 (165 samples – includes 14 duplicate samples)	Subsurface soil	Soil samples were collected from the 6-inch interval directly above the water table (ranging from 2.5 to 12 ft bgs) from each Geoprobe® soil boring in the grid (conducted on 100-ft centers) to investigate the potential release from former heating oil USTs associated with the former buildings. Field screening of the entire Geoprobe® soil core was conducted using PID/FID meters.	TPHC, VO+10 (25% of TPHC > 1,000 mg/kg)

Sample Location	Sample Media	Sample Location Rationale	Analytical Suite
14GW-B22, D14, D16, D18, D20, D22, L19, L21, L23, M17, O2, O4, O6, O8, O10, O11, O13, O15, O17 (19 samples – includes 3 duplicate samples)	Groundwater	Groundwater samples were collected from the specified Geoprobe® soil borings in the grid to investigate the potential release from former heating oil USTs associated with the former buildings. Where applicable, groundwater samples were collected on 200-ft centers in the downgradient portion of the sampling grid.	VO+10, B/N+15
B10MW10B, B9MW09B (2 samples)	Groundwater	Groundwater samples were collected from existing monitoring wells to investigate the potential release from former heating oil USTs associated with the former buildings.	VO+10, B/N+15

3.2.4 Site Investigation Results

Geophysical Survey Results

The EM survey identified a total of 137 target EM anomalies. The inphase and terrain conductivity results are depicted in Figures 14B and 14C, respectively, of the Enviroscan report (**Appendix A**). The survey area is presented on **Figure 3.2-2**. The majority of the area was scanned with the EM-31. The entrance road, security checkpoint, and adjacent areas were scanned with the EM-61 due to the amount of surface metal and tight confines. This parcel of FTMM has been previously developed and the land surface reworked multiple times throughout its history. The findings of the geophysical survey (the density and small size of anomalies) are consistent with the site history. One suspected UST was identified; the location of the suspected UST is presented on **Figure 3.2-2**. The results of the GPR/TW-6 follow-up scanning are listed in **Table 3.2-3** and full results of the geophysical surveys are included in **Appendix A**. In summary, GPR scanning of these 137 targets revealed:

- Ninety-four targets that were associated with surface metal/debris (previously unaccounted for).
- Nine targets that could not be relocated with the TW-6 because the targets were too small to be re-occupied, and therefore are most likely scrap metallic debris, not USTs.
- Six targets with the characteristics of an abandoned-in-place utility.

- Nine targets with moderate-amplitude scattered reflections indicative of areas containing numerous small pieces of scattered buried debris; not indicative of a UST.
- Eighteen targets with small TW-6 footprints and no associated GPR anomalies; not indicative of a UST.
- One target with the low-amplitude parabolic reflections that could be a possible UST. The location of the suspected UST matches up with former Bldg 2116. Bldg 2116 served as a mess hall, a non-housing structure, until the end of its life cycle. Supporting real property records are included in **Appendix I**.

Geoprobe® Investigation Results

Surface and subsurface soil samples were analyzed for TPHC. Corresponding surface and subsurface soil samples were collected for contingent VO+10 analysis. If TPHC results were greater than 1,000 mg/kg, VO+10 analysis was conducted. In addition to the subsurface soil samples collected from the interval directly above the water table, one supplementary subsurface soil sample, P14-F5-B, was collected for TPHC analysis based on an elevated field screening measurement with a PID (7.1 ppm). No additional VO sample was collected as the elevated PID measurement was collocated with the 18- to 24-inch bgs interval collected for surface soil VO analysis. Groundwater samples were analyzed for VO+10 and B/N+15.

Soil

As shown in **Table 3.2-4**, TPHC were detected in four surface soil samples and in three subsurface soil samples. Only one sample, subsurface soil sample P14-F5-B (the supplementary soil sample collected based on field screening), exceeded a concentration of 1,000 mg/kg for contingency VO analysis. Two VOs (ethylbenzene and methylene chloride) were detected in sample P14-F5-B (**Table 3.2-5**). There were no exceedances of NJDEP NRDCSCC or RDCSCC in any of the surface soil or subsurface soil samples collected at Parcel 14. No COCs were identified in soil at Parcel 14.

Groundwater

A total of four VOs were detected in Parcel 14 groundwater samples. As shown in **Table 3.2-6**, all four VOs (acetone, MTBE, toluene, and trichlorofluoromethane) were detected at concentrations below the respective GWQC.

A total of two B/Ns were detected in Parcel 14 groundwater samples (bis[2-ethylhexyl] phthalate and diethyl phthalate). As shown in **Table 3.2-6**, bis(2-ethylhexyl)phthalate was detected in P14-O10 at a concentration of 16.67 micrograms per liter ($\mu\text{g/L}$), which exceeds the NJDEP GWQC of 3 $\mu\text{g/L}$. A commonly used plasticizer, bis(2-ethylhexyl) phthalate, is present in a wide variety of plastic products, is commonly detected in field and laboratory QC samples, and was detected at a low concentration in the method and

field blanks associated with P14-O10. Therefore, it is not considered a COC in groundwater at Parcel 14. Diethyl phthalate was detected below the respective NJDEP GWQC. No COCs were identified in groundwater for Parcel 14.

3.2.5 Summary and Conclusions

One suspected UST was identified from the geophysical investigation conducted at Parcel 14. No COCs were identified above applicable NJDEP criteria in soil or groundwater.

Soil and groundwater analytical results suggest that a release has not occurred. In light of the absence of evidence of a release to the environment, NFA for soil, groundwater, and the suspected UST in Parcel 14 is recommended.

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VOC+15	BIN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-O2-A	29-Sep-07	7:26	0.5	1.0	X								
SOIL	GEOPROBE	P14-O2-B	29-Sep-07	7:26	1.5	2.0	NA								
SOIL	GEOPROBE	P14-O2-C	29-Sep-07	7:50	9.0	9.5	X								Sample depth in field documentation was recorded from top of soil. Reported bgs depths adjusted to account for surface asphalt and sub-base.
SOIL	GEOPROBE	P14-O4-A	29-Sep-07	8:15	0.5	1.0	X								
SOIL	GEOPROBE	P14-O4-B	29-Sep-07	8:15	1.5	2.0	NA								
SOIL	GEOPROBE	P14-O4-C	29-Sep-07	8:35	9.5	10.0	X								
SOIL	GEOPROBE	P14-O6-A	29-Sep-07	9:05	0.5	1.0	X								
SOIL	GEOPROBE	P14-O6-B	29-Sep-07	9:05	1.5	2.0	NA								
SOIL	GEOPROBE	P14-O6-C	29-Sep-07	9:20	10.5	11.0	X								Sample depth in field documentation was recorded from top of soil. Reported bgs depths adjusted to account for surface asphalt and sub-base.
SOIL	GEOPROBE	P14-O8-A	29-Sep-07	9:43	0.5	1.0	X								
SOIL	GEOPROBE	P14-O8-B	29-Sep-07	9:43	1.5	2.0	NA								
SOIL	GEOPROBE	P14-O8-C	29-Sep-07	10:00	9.5	10.0	X								Sample depth in field documentation was recorded from top of soil. Reported bgs depths adjusted to account for surface asphalt and sub-base.
SOIL	GEOPROBE	P14-O10-A	29-Sep-07	10:20	0.0	0.5	X								
SOIL	GEOPROBE	P14-O10-B	29-Sep-07	10:20	1.5	2.0	NA								
SOIL	GEOPROBE	P14-O10-C	29-Sep-07	10:55	12.0	12.5	X								
SOIL	GEOPROBE	P14-O10-C DUPLICATE	29-Sep-07	10:55	12.0	12.5	X								
BLANK	FIELD	RINSE BLANK	29-Sep-07	11:05	--	--	X								Analyzed out of holding time.
SOIL	GEOPROBE	P14-O9-A	29-Sep-07	11:52	0.0	0.5	X								
SOIL	GEOPROBE	P14-O9-B	29-Sep-07	11:52	1.5	2.0	NA								
SOIL	GEOPROBE	P14-O9-C	29-Sep-07	12:10	9.0	9.5	X								
SOIL	GEOPROBE	P14-O7-A	29-Sep-07	12:30	0.5	1.0	X								
SOIL	GEOPROBE	P14-O7-B	29-Sep-07	12:30	1.5	2.0	NA								
SOIL	GEOPROBE	P14-O7-C	29-Sep-07	12:40	9.0	9.5	X								Sample depth in field documentation was recorded from top of soil. Reported bgs depths adjusted to account for surface asphalt and sub-base.
SOIL	GEOPROBE	P14-O5-A	29-Sep-07	13:05	0.5	1.0	X								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VOC+15	BIN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-O5-B	29-Sep-07	13:05	1.5	2.0	NA								Sample depth in field documentation was recorded from top of soil. Reported bgs depths adjusted to account for surface asphalt and sub-base.
SOIL	GEOPROBE	P14-O5-C	29-Sep-07	13:15	9.0	9.5	X								
SOIL	GEOPROBE	P14-O3-A	29-Sep-07	13:30	0.5	1.0	X								
SOIL	GEOPROBE	P14-O3-B	29-Sep-07	13:30	1.5	2.0	NA								Sample depth in field documentation was recorded from top of soil. Reported bgs depths adjusted to account for surface asphalt and sub-base.
SOIL	GEOPROBE	P14-O3-C	29-Sep-07	13:40	9.5	10.0	X								
BLANK	TRIP	TRIP BLANK	29-Sep-07	14:00	--	--	NA								
BLANK	TRIP	TRIP BLANK-SO	1-Oct-07	16:05	--	--	NA								
SOIL	GEOPROBE	P14-E1-A	1-Oct-07	8:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-E1-B	1-Oct-07	8:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-E1-C	1-Oct-07	8:50	7.5	8.0	X								
SOIL	GEOPROBE	P14-E2-A	1-Oct-07	9:15	0.0	0.5	X								
SOIL	GEOPROBE	P14-E2-B	1-Oct-07	9:15	1.5	2.0	NA								
SOIL	GEOPROBE	P14-E2-C	1-Oct-07	9:30	9.5	10.0	X								
SOIL	GEOPROBE	P14-E3-A	1-Oct-07	9:55	0.5	1.0	X								
SOIL	GEOPROBE	P14-E3-B	1-Oct-07	9:55	1.5	2.0	NA								
SOIL	GEOPROBE	P14-E3-C	1-Oct-07	10:25	9.5	10.0	X								
SOIL	GEOPROBE	P14-E3-C DUPLICATE	1-Oct-07	10:25	9.5	10	X								
SOIL	GEOPROBE	P14-E4-A	1-Oct-07	10:42	0.5	1.0	X								
SOIL	GEOPROBE	P14-E4-B	1-Oct-07	10:42	1.5	2.0	NA								
SOIL	GEOPROBE	P14-E4-C	1-Oct-07	11:20	9.5	10.0	X								
BLANK	FIELD	RINSE BLANK-SO	1-Oct-07	12:45	--	--	X								Analyzed out of holding time.
SOIL	GEOPROBE	P14-E5-A	1-Oct-07	13:10	0.0	0.5	X								
SOIL	GEOPROBE	P14-E5-B	1-Oct-07	13:10	1.5	2.0	NA								
SOIL	GEOPROBE	P14-E5-C	1-Oct-07	13:30	8.0	8.5	X								
SOIL	GEOPROBE	P14-E6-A	1-Oct-07	13:50	0.0	0.5	X								
SOIL	GEOPROBE	P14-E6-B	1-Oct-07	13:50	1.5	2.0	NA								
SOIL	GEOPROBE	P14-E6-C	1-Oct-07	14:05	7.5	8.0	X								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BIN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-E7-A	1-Oct-07	14:35	0.5	1.0	X								
SOIL	GEOPROBE	P14-E7-B	1-Oct-07	14:35	1.5	2.0	NA								
SOIL	GEOPROBE	P14-E7-C	1-Oct-07	14:45	5.5	6.0	X								
SOIL	GEOPROBE	P14-E8-A	1-Oct-07	15:05	0.0	0.5	X								
SOIL	GEOPROBE	P14-E8-B	1-Oct-07	15:05	1.5	2.0	NA								
SOIL	GEOPROBE	P14-E8-C	1-Oct-07	15:25	9.5	10.0	X								
SOIL	GEOPROBE	P14-E9-A	1-Oct-07	15:50	0.0	0.5	X								
SOIL	GEOPROBE	P14-E9-B	1-Oct-07	15:50	1.5	2.0	NA								
SOIL	GEOPROBE	P14-E9-C	1-Oct-07	16:00	5.5	6.0	X								
BLANK	TRIP	TRIP BLANK-AQ	1-Oct-07	8:30	NA	NA									Blank cancelled.
BLANK	FIELD	FIELD BLANK-AQ	1-Oct-07	10:00	NA	NA									Blank cancelled.
GW	GEOPROBE	DUPLICATE-AQ	1-Oct-07	-	-	-									Sample cancelled for matrix interference and high sediment levels. Recollected 10/22/07.
GW	GEOPROBE	P14-O-2	1-Oct-07	14:30	9.0	14.0									Sample cancelled for matrix interference and high sediment levels. Recollected 10/22/07.
GW	GEOPROBE	P14-O-4	1-Oct-07	14:00	9.0	14.0									Sample cancelled for matrix interference and high sediment levels. Recollected 10/22/07.
GW	GEOPROBE	P14-O-6	1-Oct-07	15:00	10.0	15.0									Sample cancelled for matrix interference and high sediment levels. Recollected 10/22/07.
GW	GEOPROBE	P14-O-8	1-Oct-07	12:30	9.0	14.0									Sample cancelled for matrix interference and high sediment levels. Recollected 10/22/07.
GW	GEOPROBE	P14-O-10	1-Oct-07	11:30	11.0	16.0									Sample cancelled for matrix interference and high sediment levels. Recollected 10/22/07.
SOIL	GEOPROBE	P14-E10-A	2-Oct-07	8:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-E10-B	2-Oct-07	8:00	1.5	2.0	NA								
SOIL	GEOPROBE	P14-E10-C	2-Oct-07	8:15	6.0	6.5	X								
SOIL	GEOPROBE	P14-D3-A	2-Oct-07	8:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-D3-B	2-Oct-07	8:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D3-C	2-Oct-07	8:45	7.0	7.5	X								
SOIL	GEOPROBE	P14-D4-A	2-Oct-07	9:05	0.0	0.5	X								
SOIL	GEOPROBE	P14-D4-B	2-Oct-07	9:05	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D4-C	2-Oct-07	9:30	7.5	8.0	X								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-D5-A	2-Oct-07	10:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-D5-B	2-Oct-07	10:00	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D5-C	2-Oct-07	10:05	7.0	7.5	X								
SOIL	GEOPROBE	P14-D6-A	2-Oct-07	10:30	0.0	0.5	X								
SOIL	GEOPROBE	P14-D6-B	2-Oct-07	10:30	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D6-C	2-Oct-07	10:40	4.5	5.0	X								
SOIL	GEOPROBE	P14-D7-A	2-Oct-07	11:15	0.0	0.5	X								
SOIL	GEOPROBE	P14-D7-B	2-Oct-07	11:15	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D7-C	2-Oct-07	11:25	6.0	6.5	X								
SOIL	GEOPROBE	P14-D7-C DUPLICATE	2-Oct-07	11:25	6.0	6.5	X								
BLANK	FIELD	FIELD BLANK	2-Oct-07	13:00	--	--	X								Analyzed out of holding time.
SOIL	GEOPROBE	P14-D8-A	2-Oct-07	13:20	0.0	0.5	X								
SOIL	GEOPROBE	P14-D8-B	2-Oct-07	13:20	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D8-C	2-Oct-07	13:45	6.0	6.5	X								
SOIL	GEOPROBE	P14-D9-A	2-Oct-07	14:05	0.0	0.5	X								
SOIL	GEOPROBE	P14-D9-B	2-Oct-07	14:05	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D9-C	2-Oct-07	14:20	7.0	7.5	X								
SOIL	GEOPROBE	P14-D10-A	2-Oct-07	14:35	0.0	0.5	X								
SOIL	GEOPROBE	P14-D10-B	2-Oct-07	14:35	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D10-C	2-Oct-07	14:55	5.0	5.5	X								
SOIL	GEOPROBE	P14-C10-A	2-Oct-07	15:15	0.0	0.5	X								
SOIL	GEOPROBE	P14-C10-B	2-Oct-07	15:15	1.5	2.0	NA								
SOIL	GEOPROBE	P14-C10-C	2-Oct-07	15:20	5.5	6.0	X								
SOIL	GEOPROBE	P14-C9-A	2-Oct-07	15:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-C9-B	2-Oct-07	15:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-C9-C	2-Oct-07	15:45	5.0	5.5	X								
BLANK	TRIP	TRIP BLANK	2-Oct-07	15:50	--	--	NA								
SOIL	GEOPROBE	P14-F1-A	3-Oct-07	8:50	0.0	0.5	X								
SOIL	GEOPROBE	P14-F1-B	3-Oct-07	8:50	1.5	2.0	NA								
SOIL	GEOPROBE	P14-F1-C	3-Oct-07	9:15	6.5	7.0	X								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-F2-A	3-Oct-07	9:30	0.0	0.5	X								
SOIL	GEOPROBE	P14-F2-B	3-Oct-07	9:30	1.5	2.0	NA								
SOIL	GEOPROBE	P14-F2-C	3-Oct-07	10:05	7.0	7.5	X								
SOIL	GEOPROBE	P14-F3-A	3-Oct-07	10:30	0.0	0.5	X								
SOIL	GEOPROBE	P14-F3-B	3-Oct-07	10:30	1.5	2.0	NA								
SOIL	GEOPROBE	P14-F3-C	3-Oct-07	10:40	5.5	6.0	X								
SOIL	GEOPROBE	P14-F4-A	3-Oct-07	10:55	0.0	0.5	X								
SOIL	GEOPROBE	P14-F4-B	3-Oct-07	10:55	1.5	2.0	NA								
SOIL	GEOPROBE	P14-F4-C	3-Oct-07	11:05	7.0	7.5	X								
SOIL	GEOPROBE	P14-F5-A	3-Oct-07	11:20	0.0	0.5	X								
SOIL	GEOPROBE	P14-F5-B	3-Oct-07	11:20	1.5	2.0	X	X							TPHC collected due to elevated field screening results.
SOIL	GEOPROBE	P14-F5-C	3-Oct-07	11:40	5.0	5.5	X								
SOIL	GEOPROBE	P14-F6-A	3-Oct-07	13:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-F6-B	3-Oct-07	13:00	1.5	2.0	NA								
SOIL	GEOPROBE	P14-F6-C	3-Oct-07	13:20	6.0	6.5	X								
SOIL	GEOPROBE	P14-F6-C DUPLICATE	3-Oct-07	13:20	6.0	6.5	X								
BLANK	FIELD	RINSE BLANK	3-Oct-07	12:40	--	--	X	X							Analyzed out of holding time.
SOIL	GEOPROBE	P14-F7-A	3-Oct-07	13:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-F7-B	3-Oct-07	13:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-F7-C	3-Oct-07	13:50	5.5	6.0	X								
SOIL	GEOPROBE	P14-F8-A	3-Oct-07	14:25	0.0	0.5	X								
SOIL	GEOPROBE	P14-F8-B	3-Oct-07	14:25	1.5	2.0	NA								
SOIL	GEOPROBE	P14-F8-C	3-Oct-07	14:40	5.0	5.5	X								
SOIL	GEOPROBE	P14-F9-A	3-Oct-07	14:55	0.0	0.5	X								
SOIL	GEOPROBE	P14-F9-B	3-Oct-07	14:55	1.5	2.0	NA								
SOIL	GEOPROBE	P14-F9-C	3-Oct-07	15:00	5.5	6.0	X								
SOIL	GEOPROBE	P14-F10-A	3-Oct-07	15:25	0.0	0.5	X								
SOIL	GEOPROBE	P14-F10-B	3-Oct-07	15:25	1.5	2.0	NA								
SOIL	GEOPROBE	P14-F10-C	3-Oct-07	15:30	5.0	5.5	X								
BLANK	TRIP	TRIP BLANK	3-Oct-07	15:40	--	--		X							

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
BLANK	TRIP	TRIP BLANK	4-Oct-07	7:00	--	--	NA								
SOIL	GEOPROBE	P14-G1-A	4-Oct-07	9:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-G1-B	4-Oct-07	9:00	1.5	2.0	NA								
SOIL	GEOPROBE	P14-G1-C	4-Oct-07	9:20	8.0	8.5	X								
SOIL	GEOPROBE	P14-G2-A	4-Oct-07	9:35	0.0	0.5	X								
SOIL	GEOPROBE	P14-G2-B	4-Oct-07	9:35	1.5	2.0	NA								
SOIL	GEOPROBE	P14-G2-C	4-Oct-07	9:45	6.5	7.0	X								
SOIL	GEOPROBE	P14-G3-A	4-Oct-07	9:55	0.0	0.5	X								
SOIL	GEOPROBE	P14-G3-B	4-Oct-07	9:55	1.5	2.0	NA								
SOIL	GEOPROBE	P14-G3-C	4-Oct-07	10:05	5.5	6.0	X								
SOIL	GEOPROBE	P14-G4-A	4-Oct-07	11:15	0.0	0.5	X								
SOIL	GEOPROBE	P14-G4-B	4-Oct-07	11:15	1.5	2.0	NA								
SOIL	GEOPROBE	P14-G4-C	4-Oct-07	11:30	5.5	6.0	X								
SOIL	GEOPROBE	P14-G5-A	4-Oct-07	11:45	0.0	0.5	X								
SOIL	GEOPROBE	P14-G5-B	4-Oct-07	11:45	1.5	2.0	NA								
SOIL	GEOPROBE	P14-G5-C	4-Oct-07	11:45	3.5	4.0	X								
SOIL	GEOPROBE	P14-G5-C DUPLICATE	4-Oct-07	11:45	3.5	4.0	X								
SOIL	GEOPROBE	P14-G6-A	4-Oct-07	13:10	0.5	1.0	X								
SOIL	GEOPROBE	P14-G6-B	4-Oct-07	13:10	1.5	2.0	NA								
SOIL	GEOPROBE	P14-G6-C	4-Oct-07	13:10	3.0	3.5	X								
SOIL	GEOPROBE	P14-G7-A	4-Oct-07	13:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-G7-B	4-Oct-07	13:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-G7-C	4-Oct-07	13:40	2.5	3.0	X								
SOIL	GEOPROBE	P14-G8-A	4-Oct-07	14:15	0.0	0.5	X								
SOIL	GEOPROBE	P14-G8-B	4-Oct-07	14:15	1.5	2.0	NA								
SOIL	GEOPROBE	P14-G8-C	4-Oct-07	14:15	2.5	3.0	X								
SOIL	GEOPROBE	P14-G9-A	4-Oct-07	14:30	0.0	0.5	X								
SOIL	GEOPROBE	P14-G9-B	4-Oct-07	14:30	1.5	2.0	NA								
SOIL	GEOPROBE	P14-G9-C	4-Oct-07	14:30	3.5	4.0	X								
SOIL	GEOPROBE	P14-G10-A	4-Oct-07	14:50	0.0	0.5	X								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-G10-B	4-Oct-07	14:50	1.5	2.0	NA								
SOIL	GEOPROBE	P14-G10-C	4-Oct-07	14:50	3.5	4.0	X								
BLANK	FIELD	RINSE BLANK	4-Oct-07	15:00	--	--	X								
BLANK	TRIP	TRIP BLANK	5-Oct-07	7:00	--	--	NA								
SOIL	GEOPROBE	P14-H1-A	5-Oct-07	7:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-H1-B	5-Oct-07	7:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-H1-C	5-Oct-07	7:55	10.0	10.5	X								
SOIL	GEOPROBE	P14-H2-A	5-Oct-07	8:10	0.0	0.5	X								
SOIL	GEOPROBE	P14-H2-B	5-Oct-07	8:10	1.5	2.0	NA								
SOIL	GEOPROBE	P14-H2-C	5-Oct-07	8:15	5.5	6.0	X								
SOIL	GEOPROBE	P14-H3-A	5-Oct-07	8:35	0.0	0.5	X								
SOIL	GEOPROBE	P14-H3-B	5-Oct-07	8:35	1.5	2.0	NA								
SOIL	GEOPROBE	P14-H3-C	5-Oct-07	8:45	7.0	7.5	X								
SOIL	GEOPROBE	P14-H4-A	5-Oct-07	9:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-H4-B	5-Oct-07	9:00	1.5	2.0	NA								
SOIL	GEOPROBE	P14-H4-C	5-Oct-07	9:10	5.0	5.5	X								
SOIL	GEOPROBE	P14-H5-A	5-Oct-07	9:35	0.0	0.5	X								
SOIL	GEOPROBE	P14-H5-B	5-Oct-07	9:35	1.5	2.0	NA								
SOIL	GEOPROBE	P14-H5-C	5-Oct-07	9:45	5.0	5.5	X								
SOIL	GEOPROBE	P14-H6-A	5-Oct-07	10:15	0.0	0.5	X								
SOIL	GEOPROBE	P14-H6-B	5-Oct-07	10:15	1.5	2.0	NA								
SOIL	GEOPROBE	P14-H6-C	5-Oct-07	10:25	3.5	4.0	X								
SOIL	GEOPROBE	P14-H7-A	5-Oct-07	10:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-H7-B	5-Oct-07	10:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-H7-C	5-Oct-07	10:40	3.5	4.0	X								
SOIL	GEOPROBE	P14-H8-A	5-Oct-07	11:05	0.0	0.5	X								
SOIL	GEOPROBE	P14-H8-B	5-Oct-07	11:05	1.5	2.0	NA								
SOIL	GEOPROBE	P14-H8-C	5-Oct-07	11:20	2.5	3.0	X								
SOIL	GEOPROBE	P14-H8-C DUPLICATE	5-Oct-07	11:20	2.5	3.5	X								
SOIL	GEOPROBE	P14-H9-A	5-Oct-07	11:40	0.0	0.5	X								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-H9-B	5-Oct-07	11:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-H9-C	5-Oct-07	11:50	4.0	4.5	X								
SOIL	GEOPROBE	P14-H10-A	5-Oct-07	13:05	0.0	0.5	X								
SOIL	GEOPROBE	P14-H10-B	5-Oct-07	13:05	1.5	2.0	NA								
SOIL	GEOPROBE	P14-H10-C	5-Oct-07	13:05	3.5	4.0	X								
BLANK	FIELD	RINSE BLANK	5-Oct-07	13:15	--	--	X								
SOIL	GEOPROBE	P14-I1-A	9-Oct-07	8:10	0.0	0.5	X								
SOIL	GEOPROBE	P14-I1-B	9-Oct-07	8:10	1.5	2.0	NA								
SOIL	GEOPROBE	P14-I1-C	9-Oct-07	8:20	7.0	7.5	X								
SOIL	GEOPROBE	P14-I2-A	9-Oct-07	8:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-I2-B	9-Oct-07	8:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-I2-C	9-Oct-07	9:00	0.5	7.0	X								
SOIL	GEOPROBE	P14-I3-A	9-Oct-07	9:25	0.0	0.5	X								
SOIL	GEOPROBE	P14-I3-B	9-Oct-07	9:25	1.5	2.0	NA								
SOIL	GEOPROBE	P14-I3-C	9-Oct-07	9:30	5.5	6.0	X								
SOIL	GEOPROBE	P14-I4-A	9-Oct-07	10:35	0.0	0.5	X								
SOIL	GEOPROBE	P14-I4-B	9-Oct-07	10:35	1.5	2.0	NA								
SOIL	GEOPROBE	P14-I4-C	9-Oct-07	10:40	5.5	6.0	X								
SOIL	GEOPROBE	P14-I5-A	9-Oct-07	11:10	0.0	0.5	X								
SOIL	GEOPROBE	P14-I5-B	9-Oct-07	11:10	1.5	2.0	NA								
SOIL	GEOPROBE	P14-I5-C	9-Oct-07	11:25	2.5	3.0	X								
SOIL	GEOPROBE	P14-I6-A	9-Oct-07	11:50	0.0	0.5	X								
SOIL	GEOPROBE	P14-I6-B	9-Oct-07	11:50	1.5	2.0	NA								
SOIL	GEOPROBE	P14-I6-C	9-Oct-07	12:00	0.0	6.5	X								
SOIL	GEOPROBE	P14-I7-A	9-Oct-07	13:10	0.0	0.5	X								
SOIL	GEOPROBE	P14-I7-B	9-Oct-07	13:10	1.5	2.0	NA								
SOIL	GEOPROBE	P14-I7-C	9-Oct-07	13:25	4.5	5.0	X								
BLANK	FIELD	FIELD BLANK	9-Oct-07	13:30	--	--	X								
BLANK	TRIP	TRIP BLANK	9-Oct-07	13:30	--	--	NA								
SOIL	GEOPROBE	P14-I8-A	9-Oct-07	13:55	0.0	0.5	X								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-I8-B	9-Oct-07	13:55	1.5	2.0	NA								
SOIL	GEOPROBE	P14-I8-C	9-Oct-07	14:10	6.0	6.5	X								
SOIL	GEOPROBE	P14-I9-A	9-Oct-07	15:20	0.0	0.5	X								
SOIL	GEOPROBE	P14-I9-B	9-Oct-07	15:20	1.5	2.0	NA								
SOIL	GEOPROBE	P14-I9-C	9-Oct-07	15:30	5.0	5.5	X								
SOIL	GEOPROBE	P14-I10-A	9-Oct-07	15:50	0.0	0.5	X								
SOIL	GEOPROBE	P14-I10-B	9-Oct-07	15:50	1.5	2.0	NA								
SOIL	GEOPROBE	P14-I10-C	9-Oct-07	14:00	4.5	5.0	X								
SOIL	GEOPROBE	P14-I10-C DUPLICATE	9-Oct-07	14:00	4.5	5.0	X								
BLANK	TRIP	TRIP BLANK	10-Oct-07	8:00	--	--	NA								
SOIL	GEOPROBE	P14-C11-A	10-Oct-07	8:20	0.0	0.5	X								
SOIL	GEOPROBE	P14-C11-B	10-Oct-07	8:20	1.5	2.0	NA								
SOIL	GEOPROBE	P14-C11-C	10-Oct-07	8:35	7.0	7.5	X								
SOIL	GEOPROBE	P14-C12-A	10-Oct-07	9:20	0.0	0.5	X								
SOIL	GEOPROBE	P14-C12-B	10-Oct-07	9:20	1.5	2.0	NA								
SOIL	GEOPROBE	P14-C12-C	10-Oct-07	9:40	8.0	8.5	X								
SOIL	GEOPROBE	P14-C13-A	10-Oct-07	10:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-C13-B	10-Oct-07	10:00	1.5	2.0	NA								
SOIL	GEOPROBE	P14-C13-C	10-Oct-07	10:10	7.5	8.0	X								
SOIL	GEOPROBE	P14-C14-A	10-Oct-07	11:20	0.0	0.5	X								
SOIL	GEOPROBE	P14-C14-B	10-Oct-07	11:20	1.5	2.0	NA								
SOIL	GEOPROBE	P14-C14-C	10-Oct-07	11:30	5.5	6.0	X								
SOIL	GEOPROBE	P14-C15-A	10-Oct-07	11:45	0.0	0.5	X								
SOIL	GEOPROBE	P14-C15-B	10-Oct-07	11:45	1.5	2.0	NA								
SOIL	GEOPROBE	P14-C15-C	10-Oct-07	11:55	6.0	6.5	X								
SOIL	GEOPROBE	P14-C16-A	10-Oct-07	13:50	0.0	0.5	X								
SOIL	GEOPROBE	P14-C16-B	10-Oct-07	13:50	1.5	2.0	NA								
SOIL	GEOPROBE	P14-C16-C	10-Oct-07	14:00	4.5	5.0	X								
SOIL	GEOPROBE	P14-C17-A	10-Oct-07	14:15	0.0	0.5	X								
SOIL	GEOPROBE	P14-C17-B	10-Oct-07	14:15	1.5	2.0	NA								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-C17-C	10-Oct-07	14:25	6.5	7.0	X								
BLANK	FIELD	FIELD BLANK	10-Oct-07	14:20	--	--	X								
SOIL	GEOPROBE	P14-C18-A	10-Oct-07	14:50	0.0	0.5	X								
SOIL	GEOPROBE	P14-C18-B	10-Oct-07	14:50	1.5	2.0	NA								
SOIL	GEOPROBE	P14-C18-C	10-Oct-07	15:10	5.5	6.0	X								
SOIL	GEOPROBE	P14-C19-A	10-Oct-07	15:35	0.0	0.5	X								
SOIL	GEOPROBE	P14-C19-B	10-Oct-07	15:35	1.5	2.0	NA								
SOIL	GEOPROBE	P14-C19-C	10-Oct-07	15:45	4.5	5.0	X								
SOIL	GEOPROBE	P14-C20-A	10-Oct-07	16:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-C20-B	10-Oct-07	16:00	1.5	2.0	NA								
SOIL	GEOPROBE	P14-C20-C	10-Oct-07	16:10	6.5	7.0	X								
SOIL	GEOPROBE	P14-C20-C DUPLICATE	10-Oct-07	16:10	6.5	7.0	X								
BLANK	TRIP	TRIP BLANK	11-Oct-07	7:45	--	--	NA								
SOIL	GEOPROBE	P14-C21-A	11-Oct-07	7:55	0.0	0.5	X								
SOIL	GEOPROBE	P14-C21-B	11-Oct-07	7:55	1.5	2.0	NA								
SOIL	GEOPROBE	P14-C21-C	11-Oct-07	8:20	5.0	5.5	X								
SOIL	GEOPROBE	P14-C22-A	11-Oct-07	8:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-C22-B	11-Oct-07	8:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-C22-C	11-Oct-07	8:50	7.5	8.0	X								
SOIL	GEOPROBE	P14-B14-A	11-Oct-07	9:15	0.0	0.5	X								
SOIL	GEOPROBE	P14-B14-B	11-Oct-07	9:15	1.5	2.0	NA								
SOIL	GEOPROBE	P14-B14-C	11-Oct-07	9:40	9.0	9.5	X								
SOIL	GEOPROBE	P14-B15-A	11-Oct-07	10:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-B15-B	11-Oct-07	10:00	1.5	2.0	NA								
SOIL	GEOPROBE	P14-B15-C	11-Oct-07	10:10	6.0	6.5	X								
SOIL	GEOPROBE	P14-B16-A	11-Oct-07	10:50	0.0	0.5	X								
SOIL	GEOPROBE	P14-B16-B	11-Oct-07	10:50	1.5	2.0	NA								
SOIL	GEOPROBE	P14-B16-C	11-Oct-07	11:00	6.0	6.5	X								
SOIL	GEOPROBE	P14-B17-A	11-Oct-07	11:15	0.0	0.5	X								
SOIL	GEOPROBE	P14-B17-B	11-Oct-07	11:15	1.5	2.0	NA								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-B17-C	11-Oct-07	11:30	7.0	7.5	X								
SOIL	GEOPROBE	P14-B18-A	11-Oct-07	13:25	0.0	0.5	X								
SOIL	GEOPROBE	P14-B18-B	11-Oct-07	13:25	1.5	2.0	NA								
SOIL	GEOPROBE	P14-B18-C	11-Oct-07	13:35	5.5	6.0	X								
BLANK	FIELD	FIELD BLANK	11-Oct-07	13:40	--	--	X								
SOIL	GEOPROBE	P14-B19-A	11-Oct-07	14:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-B19-B	11-Oct-07	14:00	1.5	2.0	NA								
SOIL	GEOPROBE	P14-B19-C	11-Oct-07	14:15	4.0	4.5	X								
SOIL	GEOPROBE	P14-B20-A	11-Oct-07	14:30	0.0	0.5	X								
SOIL	GEOPROBE	P14-B20-B	11-Oct-07	14:30	1.5	2.0	NA								
SOIL	GEOPROBE	P14-B20-C	11-Oct-07	14:35	3.5	4.0	X								
SOIL	GEOPROBE	P14-B21-A	11-Oct-07	14:55	0.0	0.5	X								
SOIL	GEOPROBE	P14-B21-B	11-Oct-07	14:55	1.5	2.0	NA								
SOIL	GEOPROBE	P14-B21-C	11-Oct-07	15:05	5.5	6.0	X								
SOIL	GEOPROBE	P14-B21-C DUPLICATE	11-Oct-07	15:05	5.5	6.0	X								
BLANK	TRIP	TRIP BLANK	12-Oct-07	7:45	--	--	NA								
SOIL	GEOPROBE	P14-A20-A	12-Oct-07	7:50	0.0	0.5	X								
SOIL	GEOPROBE	P14-A20-B	12-Oct-07	7:50	1.5	2.0	NA								
SOIL	GEOPROBE	P14-A20-C	12-Oct-07	8:15	8.0	8.5	X								
SOIL	GEOPROBE	P14-A21-A	12-Oct-07	8:45	0.0	0.5	X								
SOIL	GEOPROBE	P14-A21-B	12-Oct-07	8:45	1.5	2.0	NA								
SOIL	GEOPROBE	P14-A21-C	12-Oct-07	9:05	10.0	10.5	X								
SOIL	GEOPROBE	P14-A22-A	12-Oct-07	9:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-A22-B	12-Oct-07	9:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-A22-C	12-Oct-07	10:00	8.5	9.0	X								
SOIL	GEOPROBE	P14-B22-A	12-Oct-07	10:15	0.0	0.5	X								
SOIL	GEOPROBE	P14-B22-B	12-Oct-07	10:15	1.5	2.0	NA								
SOIL	GEOPROBE	P14-B22-C	12-Oct-07	10:25	7.0	7.5	X								
SOIL	GEOPROBE	P14-D22-A	12-Oct-07	11:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-D22-B	12-Oct-07	11:00	1.5	2.0	NA								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-D22-C	12-Oct-07	11:15	5.0	5.5	X								
SOIL	GEOPROBE	P14-D20-A	12-Oct-07	13:35	0.0	0.5	X								
SOIL	GEOPROBE	P14-D20-B	12-Oct-07	13:35	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D20-C	12-Oct-07	13:50	9.0	9.5	X								
SOIL	GEOPROBE	P14-D18-A	12-Oct-07	14:20	0.0	0.5	X								
SOIL	GEOPROBE	P14-D18-B	12-Oct-07	14:20	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D18-C	12-Oct-07	14:45	9.5	10.0	X								
SOIL	GEOPROBE	P14-D16-A	12-Oct-07	15:10	0.0	0.5	X								
SOIL	GEOPROBE	P14-D16-B	12-Oct-07	15:10	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D16-C	12-Oct-07	15:20	8.5	9.0	X								
SOIL	GEOPROBE	P14-D16-C DUPLICATE	12-Oct-07	15:20	8.5	9.0	X								
BLANK	FIELD	FIELD BLANK	12-Oct-07	15:30	--	--	X								
SOIL	GEOPROBE	P14-D14-A	13-Oct-07	7:50	0.0	0.5	X								
SOIL	GEOPROBE	P14-D14-B	13-Oct-07	7:50	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D14-C	13-Oct-07	8:05	7.0	7.5	X								
SOIL	GEOPROBE	P14-D14-C DUPLICATE	13-Oct-07	8:05	7.0	7.5	X								
BLANK	TRIP	TRIP BLANK-SO	13-Oct-07	8:00	--	--	NA								
BLANK	FIELD	FIELD BLANK-SO	13-Oct-07	8:30	--	--	X								
BLANK	TRIP	TRIP BLANK-AQ	13-Oct-07	7:30	--	--		X							
BLANK	FIELD	FIELD BLANK-AQ	13-Oct-07	9:20	--	--		X	X						
GW	GEOPROBE	P14-B22	13-Oct-07	9:30	7.0	12.0		X	X						
GW	GEOPROBE	P14-D22	13-Oct-07	10:00	5.0	10.0		X	X						
GW	GEOPROBE	P14-D20	13-Oct-07	10:30	7.0	12.0		X	X						
GW	GEOPROBE	P14-D18	13-Oct-07	12:00	10.0	15.0		X	X						
GW	GEOPROBE	P14-D16	13-Oct-07	12:30	7.0	12.0		X	X						
GW	GEOPROBE	P14-D16 DUPLICATE	13-Oct-07	12:30	7.0	12.0		X	X						
GW	GEOPROBE	P14-D14	13-Oct-07	14:00	7.0	12.0		X	X						
BLANK	TRIP	TRIP BLANK-SO	15-Oct-07	7:00	--	--	NA								
SOIL	GEOPROBE	P14-D11-A	15-Oct-07	7:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-D11-B	15-Oct-07	9:00	1.5	2.0	NA								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-D11-C	15-Oct-07	9:10	6.5	7.0	X								
SOIL	GEOPROBE	P14-D12-A	15-Oct-07	9:25	0.0	0.5	X								
SOIL	GEOPROBE	P14-D12-B	15-Oct-07	9:25	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D12-C	15-Oct-07	9:35	6.0	6.5	X								
SOIL	GEOPROBE	P14-D13-A	15-Oct-07	10:15	0.0	0.5	X								
SOIL	GEOPROBE	P14-D13-B	15-Oct-07	10:15	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D13-C	15-Oct-07	10:25	7.0	7.5	X								
SOIL	GEOPROBE	P14-D15-A	15-Oct-07	10:45	0.0	0.5	X								
SOIL	GEOPROBE	P14-D15-B	15-Oct-07	10:45	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D15-C	15-Oct-07	10:50	6.0	6.5	X								
SOIL	GEOPROBE	P14-D17-A	15-Oct-07	11:15	0.0	0.5	X								
SOIL	GEOPROBE	P14-D17-B	15-Oct-07	11:15	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D17-C	15-Oct-07	11:25	6.0	6.5	X								
SOIL	GEOPROBE	P14-D17-C DUPLICATE	15-Oct-07	11:25	6.0	6.5	X								
SOIL	GEOPROBE	P14-D19-A	15-Oct-07	11:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-D19-B	15-Oct-07	11:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D19-C	15-Oct-07	11:45	7.0	7.5	X								
SOIL	GEOPROBE	P14-D21-A	15-Oct-07	13:10	0.0	0.5	X								
SOIL	GEOPROBE	P14-D21-B	15-Oct-07	13:10	1.5	2.0	NA								
SOIL	GEOPROBE	P14-D21-C	15-Oct-07	13:25	6.5	7.0	X								
BLANK	FIELD	FIELD BLANK-SO	15-Oct-07	13:15	--	--	X								
SOIL	GEOPROBE	P14-E11-A	15-Oct-07	13:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-E11-B	15-Oct-07	13:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-E11-C	15-Oct-07	13:50	7.5	8.0	X								
SOIL	GEOPROBE	P14-F11-A	15-Oct-07	14:10	0.0	0.5	X								
SOIL	GEOPROBE	P14-F11-B	15-Oct-07	14:10	1.5	2.0	NA								
SOIL	GEOPROBE	P14-F11-C	15-Oct-07	14:20	7.5	8.0	X								
SOIL	GEOPROBE	P14-G11-A	15-Oct-07	14:50	0.0	0.5	X								
SOIL	GEOPROBE	P14-G11-B	15-Oct-07	14:50	1.5	2.0	NA								
SOIL	GEOPROBE	P14-G11-C	15-Oct-07	15:00	7.0	7.5	X								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
BLANK	TRIP	TRIP BLANK	16-Oct-07	7:00	--	--	NA								
SOIL	GEOPROBE	P14-H11-A	16-Oct-07	7:35	0.0	0.5	X								
SOIL	GEOPROBE	P14-H11-B	16-Oct-07	7:35	1.5	2.0	NA								
SOIL	GEOPROBE	P14-H11-C	16-Oct-07	7:50	7.5	8.0	X								
SOIL	GEOPROBE	P14-I11-A	16-Oct-07	8:05	0.0	0.5	X								
SOIL	GEOPROBE	P14-I11-B	16-Oct-07	8:05	1.5	2.0	NA								
SOIL	GEOPROBE	P14-I11-C	16-Oct-07	8:15	5.5	6.0	X								
SOIL	GEOPROBE	P14-J11-A	16-Oct-07	8:30	0.0	0.5	X								
SOIL	GEOPROBE	P14-J11-B	16-Oct-07	8:30	1.5	2.0	NA								
SOIL	GEOPROBE	P14-J11-C	16-Oct-07	8:40	5.5	6.0	X								
SOIL	GEOPROBE	P14-K11-A	16-Oct-07	8:55	0.0	0.5	X								
SOIL	GEOPROBE	P14-K11-B	16-Oct-07	8:55	1.5	2.0	NA								
SOIL	GEOPROBE	P14-K11-C	16-Oct-07	9:10	5.0	5.5	X								
SOIL	GEOPROBE	P14-K12-A	16-Oct-07	9:20	0.0	0.5	X								
SOIL	GEOPROBE	P14-K12-B	16-Oct-07	9:20	1.5	2.0	NA								
SOIL	GEOPROBE	P14-K12-C	16-Oct-07	9:30	6.0	6.5	X								
SOIL	GEOPROBE	P14-K13-A	16-Oct-07	10:25	0.0	0.5	X								
SOIL	GEOPROBE	P14-K13-B	16-Oct-07	10:25	1.5	2.0	NA								
SOIL	GEOPROBE	P14-K13-C	16-Oct-07	10:45	9.5	10.0	X								
SOIL	GEOPROBE	P14-K13-C DUPLICATE	16-Oct-07	10:45	9.5	10.0	X								
SOIL	GEOPROBE	P14-K14-A	16-Oct-07	11:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-K14-B	16-Oct-07	11:00	1.5	2.0	NA								
SOIL	GEOPROBE	P14-K14-C	16-Oct-07	11:10	5.5	6.0	X								
SOIL	GEOPROBE	P14-K15-A	16-Oct-07	13:35	0.0	0.5	X								
SOIL	GEOPROBE	P14-K15-B	16-Oct-07	13:35	1.5	2.0	NA								
SOIL	GEOPROBE	P14-K15-C	16-Oct-07	13:45	7.5	8.0	X								
SOIL	GEOPROBE	P14-K16-A	16-Oct-07	14:10	0.0	0.5	X								
SOIL	GEOPROBE	P14-K16-B	16-Oct-07	14:10	1.5	2.0	NA								
SOIL	GEOPROBE	P14-K16-C	16-Oct-07	14:20	6.5	7.0	X								
BLANK	FIELD	FIELD BLANK	16-Oct-07	10:05	--	--	X								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-L11-A	16-Oct-07	14:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-L11-B	16-Oct-07	14:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-L11-C	16-Oct-07	14:50	6.0	6.5	X								
BLANK	TRIP	TRIP BLANK	17-Oct-07	7:00	--	--	NA								
SOIL	GEOPROBE	P14-L12-A	17-Oct-07	8:15	0.0	0.5	X								
SOIL	GEOPROBE	P14-L12-B	17-Oct-07	8:15	1.5	2.0	NA								
SOIL	GEOPROBE	P14-L12-C	17-Oct-07	8:35	5.5	6.0	X								
SOIL	GEOPROBE	P14-L13-A	17-Oct-07	9:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-L13-B	17-Oct-07	9:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-L13-C	17-Oct-07	9:50	6.0	6.5	X								
SOIL	GEOPROBE	P14-L14-A	17-Oct-07	10:50	0.0	0.5	X								
SOIL	GEOPROBE	P14-L14-B	17-Oct-07	10:50	1.5	2.0	NA								
SOIL	GEOPROBE	P14-L14-C	17-Oct-07	11:00	5.5	6.0	X								
SOIL	GEOPROBE	P14-L15-A	17-Oct-07	11:20	0.0	0.5	X								
SOIL	GEOPROBE	P14-L15-B	17-Oct-07	11:20	1.5	2.0	NA								
SOIL	GEOPROBE	P14-L15-C	17-Oct-07	11:25	5.5	6.0	X								
SOIL	GEOPROBE	P14-L16-A	17-Oct-07	11:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-L16-B	17-Oct-07	11:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-L16-C	17-Oct-07	11:50	5.0	5.5	X								
SOIL	GEOPROBE	P14-L17-A	17-Oct-07	13:05	0.0	0.5	X								
SOIL	GEOPROBE	P14-L17-B	17-Oct-07	13:05	1.5	2.0	NA								
SOIL	GEOPROBE	P14-L17-C	17-Oct-07	13:10	7.0	7.5	X								
SOIL	GEOPROBE	P14-L17-C DUPLICATE	17-Oct-07	13:10	7.0	7.5	X								
SOIL	GEOPROBE	P14-L18-A	17-Oct-07	13:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-L18-B	17-Oct-07	13:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-L18-C	17-Oct-07	13:45	4.5	5.0	X								
BLANK	FIELD	FIELD BLANK	17-Oct-07	13:20	--	--	X								
SOIL	GEOPROBE	P14-L20-A	17-Oct-07	14:05	0.0	0.5	X								
SOIL	GEOPROBE	P14-L20-B	17-Oct-07	14:05	1.5	2.0	NA								
SOIL	GEOPROBE	P14-L20-C	17-Oct-07	14:15	6.0	6.5	X								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-L22-A	17-Oct-07	14:35	0.0	0.5	X								
SOIL	GEOPROBE	P14-L22-B	17-Oct-07	14:35	1.5	2.0	NA								
SOIL	GEOPROBE	P14-L22-C	17-Oct-07	14:45	7.5	8.0	X								
SOIL	GEOPROBE	P14-M12-A	17-Oct-07	15:05	0.0	0.5	X								
SOIL	GEOPROBE	P14-M12-B	17-Oct-07	15:05	1.5	2.0	NA								
SOIL	GEOPROBE	P14-M12-C	17-Oct-07	15:15	6.0	6.5	X								
BLANK	TRIP	TRIP BLANK	18-Oct-07	7:00	--	--	NA								
SOIL	GEOPROBE	P14-L19-A	18-Oct-07	8:30	0.0	0.5	X								
SOIL	GEOPROBE	P14-L19-B	18-Oct-07	8:30	1.5	2.0	NA								
SOIL	GEOPROBE	P14-L19-C	18-Oct-07	8:50	8.0	8.5	X								
SOIL	GEOPROBE	P14-L21-A	18-Oct-07	9:10	0.0	0.5	X								
SOIL	GEOPROBE	P14-L21-B	18-Oct-07	9:10	1.5	2.0	NA								
SOIL	GEOPROBE	P14-L21-C	18-Oct-07	9:20	6.0	6.5	X								
SOIL	GEOPROBE	P14-L23-A	18-Oct-07	10:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-L23-B	18-Oct-07	10:00	1.5	2.0	NA								
SOIL	GEOPROBE	P14-L23-C	18-Oct-07	10:25	11.5	12.0	X								
SOIL	GEOPROBE	P14-M17-A	18-Oct-07	10:45	0.0	0.5	X								
SOIL	GEOPROBE	P14-M17-B	18-Oct-07	10:45	1.5	2.0	NA								
SOIL	GEOPROBE	P14-M17-C	18-Oct-07	10:55	6.0	6.5	X								
SOIL	GEOPROBE	P14-O11-A	18-Oct-07	11:20	0.0	0.5	X								
SOIL	GEOPROBE	P14-O11-B	18-Oct-07	11:20	1.5	2.0	NA								
SOIL	GEOPROBE	P14-O11-C	18-Oct-07	11:30	6.5	7.0	X								
SOIL	GEOPROBE	P14-O13-A	18-Oct-07	11:50	0.5	1.0	X								
SOIL	GEOPROBE	P14-O13-B	18-Oct-07	11:55	1.5	2.0	NA								
SOIL	GEOPROBE	P14-O13-C	18-Oct-07	14:05	3.0	3.5	X								
SOIL	GEOPROBE	P14-O13-C DUPLICATE	18-Oct-07	11:55	3.0	3.5	X								
SOIL	GEOPROBE	P14-O15-A	18-Oct-07	14:05	0.0	0.5	X								
SOIL	GEOPROBE	P14-O15-B	18-Oct-07	14:15	1.5	2.0	NA								
SOIL	GEOPROBE	P14-O15-C	18-Oct-07	14:35	5.5	6.0	X								
SOIL	GEOPROBE	P14-O17-A	18-Oct-07	14:35	0.0	0.5	X								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VOC+15	BIN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-O17-B	18-Oct-07	14:45	1.5	2.0	NA								
SOIL	GEOPROBE	P14-O17-C	18-Oct-07	12:50	7.0	7.5	X								
BLANK	FIELD	FIELD BLANK	18-Oct-07	15:15	--	--	X								
SOIL	GEOPROBE	P14-M13-A	18-Oct-07	15:15	0.0	0.5	X								
SOIL	GEOPROBE	P14-M13-B	18-Oct-07	15:15	1.5	2.0	NA								
SOIL	GEOPROBE	P14-M13-C	18-Oct-07	15:20	6.5	7.0	X								
SOIL	GEOPROBE	P14-M14-A	18-Oct-07	15:30	0.0	0.5	X								
SOIL	GEOPROBE	P14-M14-B	18-Oct-07	15:30	1.5	2.0	NA								
SOIL	GEOPROBE	P14-M14-C	18-Oct-07	15:40	4.5	5.0	X								
BLANK	TRIP	TRIP BLANK-SO	19-Oct-07	7:00	--	--	NA								
SOIL	GEOPROBE	P14-M15-A	19-Oct-07	8:05	0.0	0.5	X								
SOIL	GEOPROBE	P14-M15-B	19-Oct-07	8:05	1.5	2.0	NA								
SOIL	GEOPROBE	P14-M15-C	19-Oct-07	8:10	3.0	3.5	X								
SOIL	GEOPROBE	P14-M16-A	19-Oct-07	8:25	0.0	0.5	X								
SOIL	GEOPROBE	P14-M16-B	19-Oct-07	8:25	1.5	2.0	NA								
SOIL	GEOPROBE	P14-M16-C	19-Oct-07	8:35	5.5	6.0	X								
SOIL	GEOPROBE	P14-N11-A	19-Oct-07	8:55	0.0	0.5	X								
SOIL	GEOPROBE	P14-N11-B	19-Oct-07	8:55	1.5	2.0	NA								
SOIL	GEOPROBE	P14-N11-C	19-Oct-07	9:15	9.5	10.0	X								
SOIL	GEOPROBE	P14-N12-A	19-Oct-07	9:35	0.0	0.5	X								
SOIL	GEOPROBE	P14-N12-B	19-Oct-07	9:35	1.5	2.0	NA								
SOIL	GEOPROBE	P14-N12-C	19-Oct-07	9:55	7.0	7.5	X								
SOIL	GEOPROBE	P14-N12-C DUPLICATE	19-Oct-07	9:55	7.0	7.5	X								
SOIL	GEOPROBE	P14-N13-A	19-Oct-07	10:40	0.0	0.5	X								
SOIL	GEOPROBE	P14-N13-B	19-Oct-07	10:40	1.5	2.0	NA								
SOIL	GEOPROBE	P14-N13-C	19-Oct-07	10:40	3.0	3.5	X								
SOIL	GEOPROBE	P14-N14-A	19-Oct-07	11:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-N14-B	19-Oct-07	11:00	1.5	2.0	NA								
SOIL	GEOPROBE	P14-N14-C	19-Oct-07	11:30	5.0	5.5	X								
SOIL	GEOPROBE	P14-N15-A	19-Oct-07	11:50	0.0	0.5	X								

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VO+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
SOIL	GEOPROBE	P14-N15-B	19-Oct-07	11:50	1.5	2.0	NA								
SOIL	GEOPROBE	P14-N15-C	19-Oct-07	12:00	5.0	5.5	X								
SOIL	GEOPROBE	P14-N16-A	19-Oct-07	14:30	0.0	0.5	X								
SOIL	GEOPROBE	P14-N16-B	19-Oct-07	14:30	1.5	2.0	NA								
SOIL	GEOPROBE	P14-N16-C	19-Oct-07	14:50	8.5	9.0	X								
BLANK	FIELD	FIELD BLANK-SO	19-Oct-07	14:30	--	--	X								
SOIL	GEOPROBE	P14-N17-A	19-Oct-07	15:10	0.0	0.5	X								
SOIL	GEOPROBE	P14-N17-B	19-Oct-07	15:10	1.5	2.0	NA								
SOIL	GEOPROBE	P14-N17-C	19-Oct-07	15:20	4.5	5.0	X								
SOIL	GEOPROBE	P14-O12-A	19-Oct-07	15:45	0.0	0.5	X								
SOIL	GEOPROBE	P14-O12-B	19-Oct-07	15:45	1.5	2.0	NA								
SOIL	GEOPROBE	P14-O12-C	19-Oct-07	15:50	7.0	7.5	X								
SOIL	GEOPROBE	P14-O14-A	19-Oct-07	16:00	0.0	0.5	X								
SOIL	GEOPROBE	P14-O14-B	19-Oct-07	16:00	1.5	2.0	NA								
SOIL	GEOPROBE	P14-O14-C	19-Oct-07	16:10	4.5	5.0	X								
SOIL	GEOPROBE	P14-O16-A	19-Oct-07	16:25	0.0	0.5	X								
SOIL	GEOPROBE	P14-O16-B	19-Oct-07	16:25	1.5	2.0	NA								
SOIL	GEOPROBE	P14-O16-C	19-Oct-07	16:35	5.0	5.5	X								
BLANK	TRIP	TRIP BLANK-AQ	19-Oct-07	10:00	--	--		X							
BLANK	FIELD	FIELD BLANK-AQ	19-Oct-07	10:30	--	--		X	X						
GW	GEOPROBE	P14-L23	19-Oct-07	11:00	11.0	16.0		X	X						
GW	GEOPROBE	P14-L21	19-Oct-07	11:30	7.0	12.0		X	X						
GW	GEOPROBE	P14-L19	19-Oct-07	12:00	7.0	12.0		X	X						
GW	GEOPROBE	P14-M17	19-Oct-07	12:30	7.0	12.0		X	X						
GW	GEOPROBE	P14-O17	19-Oct-07	13:00	7.0	12.0		X	X						
GW	GEOPROBE	P14-O17 DUPLICATE	19-Oct-07	13:00	7.0	12.0		X	X						
GW	GEOPROBE	P14-O15	19-Oct-07	13:30	5.0	10.0		X	X						
GW	GEOPROBE	P14-O13	19-Oct-07	14:00	3.0	8.0		X	X						
GW	GEOPROBE	P14-O11	19-Oct-07	14:30	7.0	12.0		X	X						
GW	MONITORING WELL	P14-B9MW09B	19-Oct-07	15:30	3.9	13.9		X	X						

**Table 3.2-2
Parcel 14 Sample and Analytical Summary**

Media	Type	Field Sample #	Sample Date	Sample Time	Begin Depth	End Depth	TPHC	VOC+15	BN+15	PCBs	TAL Metals	Cyanide	Mercury	Ammonia/ Nitrate/ Nitrite	COMMENTS/VARIANCES
BLANK	TRIP	TRIP BLANK-AQ	22-Oct-07	12:00	--	--	X								
BLANK	FIELD	FIELD BLANK-AQ	22-Oct-07	14:00	--	--	X	X							
GW	GEOPROBE	P14-O2	22-Oct-07	14:30	14.0	19.0	X	X							
GW	GEOPROBE	P14-O4	22-Oct-07	15:00	11.0	16.0	X	X							
GW	GEOPROBE	P14-O6	22-Oct-07	15:30	14.0	19.0	X	X							
GW	GEOPROBE	P14-O6 DUPLICATE	22-Oct-07	15:30	14.0	19.0	X	X							
GW	GEOPROBE	P14-O8	22-Oct-07	16:00	14.0	19.0	X	X							
GW	GEOPROBE	P14-O10	22-Oct-07	16:30	15.0	20.0	X	X							
GW	MONITORING WELL	P14-B10MW10B	22-Oct-07	17:00	6.7	16.7	X	X							

NA = Not Analyzed. Sample was collected for VOC analysis in the event TPHC results in the 0.0-0.5 ft bgs interval exceeded 1,000 mg/kg. TPHC results were less than 1,000 mg/kg in the 0.0-0.5 ft bgs interval, therefore no VOC analysis was required.

X = Sample analyzed for the indicated analytical parameter suite

**Table 3.2-3
Parcel 14 - Ground Penetrating Radar and Metal Detection Follow-up Survey Results**

Anomaly	Anomaly Type: Inphase, Conductivity, Both	Anomaly Re-Acquired by Small Area Metal Detection	Metal Detection (MD) Anomaly Size (feet)	GPR Anomaly Size (feet)	Description	Easting	Northing
P14_1	Inphase	N/A	N/A	N/A	Surface metal.	606500	534229
P14_2	Both	N/A	N/A	N/A	Surface metal.	606508	534024
P14_3	Inphase	No	N/A	N/A	No MD anomaly found associated with EM anomaly.	606508	534463
P14_4	Both	No	N/A	N/A	No MD anomaly found associated with EM anomaly.	606509	534138
P14_5	Both	No	N/A	N/A	No MD anomaly found associated with EM anomaly.	606519	534410
P14_6	Both	N/A	N/A	N/A	Surface metal.	606685	534447
P14_7	Inphase	Yes	< 3 X 3	< 3 X 3	Moderate-amplitude scattered anomalies, possible debris.	606727	534352
P14_8	Inphase	No	N/A	N/A	No MD anomaly found associated with EM anomaly.	606768	534051
P14_9	Inphase	N/A	N/A	N/A	Surface metal.	606816	534138
P14_10	Inphase	N/A	N/A	N/A	Surface metal.	606823	534188
P14_11	Both	Yes	N/A	N/A	Possible abandoned utility.	606826	534270
P14_12	Both	N/A	N/A	N/A	Surface metal.	606849	534508
P14_13	Both	Yes	N/A	N/A	Possible abandoned utility.	606868	534274
P14_14	Inphase	N/A	N/A	N/A	Surface metal.	606960	534353
P14_15	Inphase	N/A	N/A	N/A	Surface metal.	606960	534335
P14_16	Inphase	N/A	N/A	N/A	Surface metal.	606965	534339
P14_17	Both	No	N/A	N/A	No MD anomaly found associated with EM anomaly.	607011	534017
P14_18	Inphase	N/A	N/A	N/A	Surface metal.	607017	533929
P14_19	Both	N/A	N/A	N/A	Surface metal.	607057	534528
P14_20	Inphase	N/A	N/A	N/A	Surface metal.	607062	534494
P14_21	Inphase	N/A	N/A	N/A	Surface metal.	607077	534367

Final Site Investigation Report – Fort Monmouth – July 2008

Anomaly	Anomaly Type: Inphase, Conductivity, Both	Anomaly Re-Acquired by Small Area Metal Detection	Metal Detection (MD) Anomaly Size (feet)	GPR Anomaly Size (feet)	Description	Easting	Northing
P14_22	Both	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	607091	534326
P14_23	Inphase	N/A	N/A	N/A	Surface metal.	607102	534223
P14_24	Both	N/A	N/A	N/A	Surface metal.	607107	534544
P14_25	Both	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	607119	534310
P14_26	Inphase	N/A	N/A	N/A	Surface metal.	607123	534174
P14_27	Both	Yes	N/A	N/A	Possible abandoned utility.	607147	534505
P14_28	Both	N/A	N/A	N/A	Surface metal.	607169	534320
P14_29	Both	N/A	N/A	N/A	Surface metal.	607181	534554
P14_30	Both	N/A	N/A	N/A	Surface metal.	607186	534384
P14_31	Both	N/A	N/A	N/A	Surface metal.	607187	534373
P14_32	Both	N/A	N/A	N/A	Surface metal.	607188	534364
P14_33	Inphase	N/A	N/A	N/A	Surface metal.	607194	534519
P14_34	Inphase	N/A	N/A	N/A	Surface metal.	607212	534688
P14_35	Inphase	N/A	N/A	N/A	Surface metal.	607218	534632
P14_36	Both	N/A	N/A	N/A	Surface metal.	607225	534553
P14_37	Both	No	N/A	N/A	No MD anomaly found associated with EM anomaly.	607256	534567
P14_38	Both	Yes	N/A	N/A	Possible abandoned utility.	607283	534535
P14_39	Inphase	N/A	N/A	N/A	Surface metal.	607307	534666
P14_40	Both	N/A	N/A	N/A	Surface metal.	607307	534575
P14_41	Inphase	N/A	N/A	N/A	Surface metal.	607333	534647
P14_42	Both	N/A	N/A	N/A	Surface metal.	607341	534348
P14_43	Both	Yes	N/A	N/A	Possible abandoned utility.	607360	534241
P14_44	Inphase	Yes	N/A	N/A	Possible abandoned utility.	607411	534284
P14_45	EM-61	N/A	N/A	N/A	Surface metal.	607452	534588
P14_46	EM-61	N/A	N/A	N/A	Surface metal.	607455	534549
P14_47	EM-61	N/A	N/A	N/A	Surface metal.	607462	534463

Anomaly	Anomaly Type: Inphase, Conductivity, Both	Anomaly Re-Acquired by Small Area Metal Detection	Metal Detection (MD) Anomaly Size (feet)	GPR Anomaly Size (feet)	Description	Easting	Northing
P14_48	EM-61	N/A	N/A	N/A	Surface metal.	607481	534390
P14_49	Inphase	N/A	N/A	N/A	Surface metal.	607598	534422
P14_50	Inphase	N/A	N/A	N/A	Surface metal.	607620	533744
P14_51	Inphase	N/A	N/A	N/A	Surface metal.	607702	533653
P14_52	Both	N/A	N/A	N/A	Surface metal.	607829	534592
P14_53	Inphase	N/A	N/A	N/A	Surface metal.	607851	534450
P14_54	Inphase	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	607877	534561
P14_55	Inphase	Yes	< 1 X 2	see notes	No associated GPR anomaly, possible debris.	607886	534166
P14_56	Both	N/A	N/A	N/A	Surface metal.	607888	534133
P14_57	Inphase	N/A	N/A	N/A	Surface metal.	607891	534106
P14_58	Inphase	N/A	N/A	N/A	Surface metal.	607893	534032
P14_59	Both	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	607931	534470
P14_60	Inphase	Yes	2 X 2	2 X 2	Possible buried catch basin.	607940	533643
P14_61	Both	N/A	N/A	N/A	Surface metal.	607969	534347
P14_62	Inphase	Yes	< 3 X 3	< 3 X 3	Moderate-amplitude scattered anomalies, possible debris.	607973	534422
P14_63	Inphase	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	608125	534836
P14_64	Both	N/A	N/A	N/A	Surface metal.	608165	534161
P14_65	Both	Yes	< 1 X 1	see notes	No associated GPR anomaly, possible debris.	608170	534213
P14_66	Both	N/A	N/A	N/A	Surface metal.	608175	534134
P14_67	Both	N/A	N/A	N/A	Surface metal.	608190	534166
P14_68	Inphase	Yes	< 3 X 3	< 3 X 3	Moderate-amplitude scattered anomalies, possible debris.	608197	534810
P14_69	Both	N/A	N/A	N/A	Surface metal.	608203	534888

Final Site Investigation Report – Fort Monmouth – July 2008

Anomaly	Anomaly Type: Inphase, Conductivity, Both	Anomaly Re-Acquired by Small Area Metal Detection	Metal Detection (MD) Anomaly Size (feet)	GPR Anomaly Size (feet)	Description	Easting	Northing
P14_70	Inphase	No	N/A	N/A	No MD anomaly found associated with EM anomaly.	608213	533729
P14_71	Inphase	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	608213	534129
P14_72	Inphase	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	608223	534133
P14_73	Inphase	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	608242	534813
P14_74	Inphase	Yes	< 3 X 3	< 3 X 3	Moderate-amplitude scattered anomalies, possible debris.	608255	534475
P14_75	Inphase	N/A	N/A	N/A	Surface metal.	608297	534902
P14_76	Inphase	N/A	N/A	N/A	Surface metal.	608304	534826
P14_77	Both	N/A	N/A	N/A	Surface metal.	608329	534405
P14_78	Both	N/A	N/A	N/A	Surface metal.	608335	534163
P14_79	Inphase	N/A	N/A	N/A	Surface metal.	608356	534524
P14_80	Inphase	Yes	< 3 X 3	< 3 X 3	Moderate-amplitude scattered anomalies, possible debris.	608372	534848
P14_81	Inphase	N/A	N/A	N/A	Surface metal.	608379	534052
P14_82	Both	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	608384	534923
P14_83	Inphase	Yes	< 3 X 3	< 3 X 3	Moderate-amplitude scattered anomalies, possible debris.	608391	534469
P14_84	Inphase	See P14_84				608411	534855
P14_85	Inphase	Yes	5 X 5	4 X 6	Possible UST	608412	534855
P14_86	Inphase	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	608429	534855
P14_87	Inphase	N/A	N/A	N/A	Surface metal.	608436	534086
P14_88	Inphase	N/A	N/A	N/A	Surface metal.	608437	534189
P14_89	Inphase	N/A	N/A	N/A	Surface metal.	608442	534163
P14_90	Both	Yes	< 3 X 3	< 3 X 3	Moderate-amplitude scattered anomalies, possible debris.	608456	534430

Final Site Investigation Report – Fort Monmouth – July 2008

Anomaly	Anomaly Type: Inphase, Conductivity, Both	Anomaly Re-Acquired by Small Area Metal Detection	Metal Detection (MD) Anomaly Size (feet)	GPR Anomaly Size (feet)	Description	Easting	Northing
P14_91	Inphase	No	N/A	N/A	No MD anomaly found associated with EM anomaly.	608478	534320
P14_92	Inphase	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	608494	534542
P14_93	Inphase	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	608613	534257
P14_94	Both	N/A	N/A	N/A	Surface metal.	608628	534685
P14_95	Inphase	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	608628	534389
P14_96	Both	N/A	N/A	N/A	Surface metal.	608638	534708
P14_97	Inphase	N/A	N/A	N/A	Surface metal.	608649	534564
P14_98	Both	N/A	N/A	N/A	Surface metal.	608658	534962
P14_99	Inphase	Yes	< 3 X 3	< 3 X 3	Moderate-amplitude scattered anomalies, possible debris.	608675	533946
P14_100	Inphase	N/A	N/A	N/A	Surface metal.	608681	534567
P14_101	Both	N/A	N/A	N/A	Surface metal.	608697	534630
P14_102	Inphase	No	N/A	N/A	No MD anomaly found associated with EM anomaly.	608702	534282
P14_103	Inphase	N/A	N/A	N/A	Surface metal.	608719	534140
P14_104	Inphase	N/A	N/A	N/A	Surface metal.	608808	534222
P14_105	Inphase	N/A	N/A	N/A	Surface metal.	608824	534999
P14_106	Inphase	Yes	< 3 X 3	< 3 X 3	Moderate-amplitude scattered anomalies, possible debris.	608831	535109
P14_107	Inphase	N/A	N/A	N/A	Surface metal.	608856	534281
P14_108	Inphase	N/A	N/A	N/A	Surface metal.	608865	534944
P14_109	Inphase	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	608956	534626
P14_110	Inphase	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	608983	534667
P14_111	Inphase	Yes	< 2 X 2	see notes	No associated GPR anomaly, possible debris.	608995	534617

Final Site Investigation Report – Fort Monmouth – July 2008

Anomaly	Anomaly Type: Inphase, Conductivity, Both	Anomaly Re-Acquired by Small Area Metal Detection	Metal Detection (MD) Anomaly Size (feet)	GPR Anomaly Size (feet)	Description	Easting	Northing
P14_112	EM-61	N/A	N/A	N/A	Surface metal.	607418	534816
P14_113	EM-61	N/A	N/A	N/A	Surface metal.	607422	534783
P14_114	EM-61	N/A	N/A	N/A	Surface metal.	607449	534746
P14_115	EM-61	N/A	N/A	N/A	Surface metal.	607455	534603
P14_116	EM-61	N/A	N/A	N/A	Surface metal.	607461	534538
P14_117	EM-61	N/A	N/A	N/A	Surface metal.	607467	534466
P14_118	EM-61	N/A	N/A	N/A	Surface metal.	607487	534439
P14_119	EM-61	N/A	N/A	N/A	Surface metal.	607482	534390
P14_120	EM-61	N/A	N/A	N/A	Surface metal.	607493	534326
P14_121	EM-61	N/A	N/A	N/A	Surface metal.	607512	534295
P14_122	EM-61	N/A	N/A	N/A	Surface metal.	607538	534291
P14_123	EM-61	N/A	N/A	N/A	Surface metal.	607514	534265
P14_124	EM-61	N/A	N/A	N/A	Surface metal.	607512	534242
P14_125	EM-61	N/A	N/A	N/A	Surface metal.	607512	534202
P14_126	EM-61	N/A	N/A	N/A	Surface metal.	607553	534212
P14_127	EM-61	N/A	N/A	N/A	Surface metal.	607519	534111
P14_128	EM-61	N/A	N/A	N/A	Surface metal.	607540	534100
P14_129	EM-61	N/A	N/A	N/A	Surface metal.	607530	534048
P14_130	EM-61	N/A	N/A	N/A	Surface metal.	607547	533969
P14_131	EM-61	N/A	N/A	N/A	Surface metal.	607479	533863
P14_132	EM-61	N/A	N/A	N/A	Surface metal.	607537	533863
P14_133	EM-61	N/A	N/A	N/A	Surface metal.	607542	533939
P14_134	EM-61	N/A	N/A	N/A	Surface metal.	607557	533939
P14_135	EM-61	N/A	N/A	N/A	Surface metal.	607570	533781
P14_136	EM-61	N/A	N/A	N/A	Surface metal.	607572	533701
P14_137	EM-61	N/A	N/A	N/A	Surface metal.	607522	533781

Table 3.2-4
Fort Monmouth Phase II Site Investigation, Parcel 14
Summary of TPHC Detected in Soil (mg/kg)

Sample ID	Lab ID	Sample Date	Depth (ft. bgs)	Result	MDL	NJDEP RDCSCC ¹ (mg/kg)	NJDEP NRDCSCC ² (mg/kg)	NJDEP IGWSCC ³ (mg/kg)
P14-B22-A	7038912	10/12/07	0.0-0.5	676	73	10000	10000	10000
P14-C9-A	7036633	10/02/07	0.0-0.5	84	73	10000	10000	10000
P14-F5-B	7037014	10/03/07	1.5-2.0	4050	69	10000	10000	10000
P14-G1-A	7037203	10/04/07	0.0-0.5	79	68	10000	10000	10000
P14-I2-A	7037504	10/09/07	0.0-0.5	284	66	10000	10000	10000
P14-I10-C	7037532	10/09/07	4.5-5.0	258	83	10000	10000	10000
P14-O2-C	7036103	09/29/07	9.0-9.5	142	71	10000	10000	10000

¹ NJDEP Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) per NJAC 7:26D, 1999.

² NJDEP Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) per NJAC 7:26D, 1999.

³ NJDEP Impact to Groundwater Soil Cleanup Criteria (IGWSCC) per NJAC 7:26D, 1999.

DUP = Duplicate sample.

ft. bgs = Feet below ground surface.

MDL = Method detection limit

mg/kg = milligram per kilogram.

**Table 3.2-5
Fort Monmouth Phase II Site Investigation, Parcel 14
Summary of Analytical Parameters Detected in Soil (mg/kg)**

Chemical				Analytical Results
	RDCSCC ¹	NRDCSCC ²	IGWSCC ³	Result
Volatiles				
Ethylbenzene	1,000	1,000	100	0.330 J
Methylene Chloride	49	210	1	0.170 JB

¹ NJDEP Residential Direct Contact Soil Cleanup Criteria per NJAC 7:26D, 1999.

² NJDEP Non-Residential Direct Contact Soil Cleanup Criteria per NJAC 7:26D, 1999.

³ NJDEP Impact to Groundwater Soil Cleanup Criteria per NJAC 7:26D, 1999.

DUP = Duplicate Sample.

ft. bgs = Feet below ground surface.

B = The compound was found in the associated method blank as well as in the sample.

D = Sample was diluted.

E = The compound's concentration exceeds the calibration range of the instrument for that specific analysis.

J = Mass spec and retention time data indicate the presence of a compound however the result is less than the MDL but greater than zero.

U = The compound was analyzed for but not detected.

NT = Not tested.

NLE = No limit established.

mg/kg = milligram per kilogram.

Bold = Analyte was detected.

Shaded = Concentration exceeds level of concern.

(Surface soil compared to NRDCSCC. Subsurface soil compared to IGWSCC when available, otherwise compared to NRDCSCC).

**Table 3.2-6
Fort Monmouth Phase II Site Investigation, Parcel 14
Summary of Analytical Parameters Detected in Groundwater (µg/L)**

Chemical	Sample ID: Lab ID: Date Sampled: Screened Interval (ft. bgs): Quality Criteria ¹	Analytical Results						
		B10MW10B	B9MW09B	P14-D16	P14-D16 DUP	P14-D22	P14-L21	P14-L23
		7041909	7040712	7039108	7039103	7039105	7040705	7040704
		10/22/2007	10/19/2007	10/13/2007	10/13/2007	10/13/2007	10/19/2007	10/19/2007
		6.7-16.7	3.9-13.9	7-12	7-12	5-10	7-12	11-16
		Results	Results	Results	Results	Results	Results	Results
Volatiles								
Acetone	6000	0.85 U	0.85 U	0.85 U	0.85 U	14.39	0.85 U	0.85 U
Methyl tertiary butyl ether (MTBE)	70	0.23 U	0.23 U	0.88	1.34	0.23 U	0.23 U	0.23 U
Toluene	600	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Trichlorofluoromethane	2000	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Semi-Volatiles								
bis(2-Ethylhexyl)phthalate	3	1.67 B	1.04 JB	1.28 U	1.28 U	1.28 U	1.41 B	0.81 JB
Diethyl phthalate	6000	0.96 U	0.96 U	0.96 U	0.96 U	0.96 U	0.60 J	0.62 J

¹ Higher of Practical Quantitation Limits (PQLs) & Groundwater Quality Criterion (GWQC) per NJAC 7:9-6, 2005.

DUP = Duplicate Sample.

ft. bgs = Feet below ground surface.

B = The compound was found in the associated method blank as well as in the sample.

D = Sample was diluted.

E = The compound's concentration exceeds the calibration range of the instrument for that specific analysis.

J = Mass spec and retention time data indicate the presence of a compound however the result is less than the MDL but greater than zero.

U = The compound was analyzed for but not detected.

NT = Not tested.

NLE = No limit established.

Bold = Analyte was detected.

Shaded = Concentration exceeds Quality Criteria.

µg/L = micrograms per liter.

**Table 3.2-6
Fort Monmouth Phase II Site Investigation, Parcel 14
Summary of Analytical Parameters Detected in Groundwater (µg/L)**

Chemical	Sample ID: Lab ID: Date Sampled: Depth (ft. bgs): Quality Criteria ¹	Analytical Results						
		P14-M17	P14-O10	P14-O11	P14-O13	P14-O15	P14-O17	P14-O17 DUP
		7040707	7041908	7040711	7040710	7040709	7040708	7040703
		10/19/2007	10/22/2007	10/19/2007	10/19/2007	10/19/2007	10/19/2007	10/19/2007
		7-12	15-20	7-12	3-8	5-10	7-12	7-12
		Results	Results	Results	Results	Results	Results	Results
Volatiles								
Acetone	6000	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U
Methyl tertiary butyl ether (MTBE)	70	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	2.12	1.83
Toluene	600	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.30	0.52
Trichlorofluoromethane	2000	2.34	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Semi-Volatiles								
bis(2-Ethylhexyl)phthalate	3	1.39 B	16.67 B	1.03 JB	0.89 JB	1.36 B	1.70 B	1.37 B
Diethyl phthalate	6000	0.96 U	0.96 U	0.81 J	0.96 U	0.96 U	0.96 U	0.96 U

¹ Higher of Practical Quantitation Limits (PQLs) & Groundwater Quality Criterion (GWQC) per NJAC 7:9-6, 2005.

DUP = Duplicate Sample.

ft. bgs = Feet below ground surface.

B = The compound was found in the associated method blank as well as in the sample.

D = Sample was diluted.

E = The compound's concentration exceeds the calibration range of the instrument for that specific analysis.

J = Mass spec and retention time data indicate the presence of a compound however the result is less than the MDL but greater than zero.

U = The compound was analyzed for but not detected.

NT = Not tested.

NLE = No limit established.

Bold = Analyte was detected.

Shaded = Concentration exceeds Quality Criteria.

µg/L = micrograms per liter.

**Table 3.2-6
Fort Monmouth Phase II Site Investigation, Parcel 14
Summary of Analytical Parameters Detected in Groundwater (µg/L)**

Chemical	Sample ID: Lab ID: Date Sampled: Depth (ft. bgs):	Analytical Results			
		P14-O2	P14-O6	P14-O6 DUP	P14-O8
		P14-O2	P14-O6	P14-O6 DUP	P14-O8
	Lab ID:	7041904	7041906	7041903	7041907
	Date Sampled:	10/22/2007	10/22/2007	10/22/2007	10/22/2007
	Depth (ft. bgs):	14-19	14-19	14-19	14-19
Quality Criteria ¹		Results	Results	Results	Results
Volatiles					
Acetone	6000	0.85 U	0.85 U	0.85 U	0.85 U
Methyl tertiary butyl ether (MTBE)	70	0.23 U	4.41	4.17	0.23 U
Toluene	600	0.55	0.67	0.54	0.56
Trichlorofluoromethane	2000	0.50 U	0.50 U	0.50 U	0.50 U
Semi-Volatiles					
bis(2-Ethylhexyl)phthalate	3	0.83 JB	1.28 U	0.70 JB	0.96 JB
Diethyl phthalate	6000	5.07	0.96 U	0.96 U	0.96 U

¹ Higher of Practical Quantitation Limits (PQLs) & Groundwater Quality Criterion (GWQC) per NJAC 7:9-6, 2005.

DUP = Duplicate Sample.

ft. bgs = Feet below ground surface.

B = The compound was found in the associated method blank as well as in the sample.

D = Sample was diluted.

E = The compound's concentration exceeds the calibration range of the instrument for that specific analysis.

J = Mass spec and retention time data indicate the presence of a compound however the result is less than the MDL but greater than zero.

U = The compound was analyzed for but not detected.

NT = Not tested.

NLE = No limit established.

Bold = Analyte was detected.

Shaded = Concentration exceeds Quality Criteria.

µg/L = micrograms per liter.



LEGEND

- Geoprobe Soil Sample Location
- Geoprobe Soil & Groundwater Sample Location
- Groundwater Sample at Existing Monitoring Well Location
- Generalized Groundwater Flow Direction. Direction of Generalized Groundwater Flow derived from qualitative evaluation of surface topography, surface water features, and pre-existing IRP site groundwater potentiometric maps where available.
- Former Buildings Area Targeted By Geophysical Survey (Electromagnetic followed by Ground Penetrating Radar of anomalies)
- Building
- Installation Boundary

ECP PARCEL CATEGORY DEFINITIONS

- 2 Areas where only release or disposal of petroleum products has occurred.

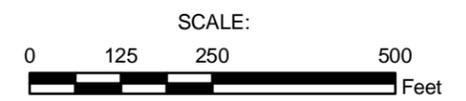
BRAC PARCEL LABEL DEFINITIONS

8(2)PS

CONTAMINATION DESCRIPTION	HS - Hazardous Substance Storage
	HR - Hazardous Substance Release
	PS - Petroleum Storage
	PR - Petroleum Release
	(P) - Possible Release or Disposal

CATEGORY NUMBER

PARCEL NUMBER



Base Realignment and Closure 2005

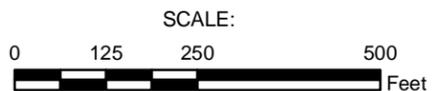


FIGURE 3.2-1
FORT MONMOUTH ECP
SITE INVESTIGATION
PARCEL 14 SAMPLE LOCATIONS
 CHARLES WOOD AREA
 FORT MONMOUTH
 NEW JERSEY



LEGEND

- Subsurface Metallic Object (Suspected UST)
- Generalized Groundwater Flow Direction. Direction of Generalized Groundwater Flow derived from qualitative evaluation of surface topography, surface water features, and pre-existing IRP site groundwater potentiometric maps where available.
- Former Buildings Area Targeted By Geophysical Survey (Electromagnetic followed by Ground Penetrating Radar of anomalies)
- Building
- Installation Boundary



Base Realignment and Closure 2005



Shaw Shaw Environmental, Inc.

FIGURE 3.2-2
FORT MONMOUTH ECP
SITE INVESTIGATION
PARCEL 14
SUSPECTED UST LOCATIONS
 CHARLES WOOD AREA
 FORT MONMOUTH
 NEW JERSEY



ATTACHMENT 3

Documentation on Field Investigation For Potential Tank At Former Building 2116

Memorandum of Record

**SUBJECT: U.S. Army BRAC 2005 Site Investigation Report, Fort Monmouth, NJ
Parcel 14, Geophysical Survey Anomaly P14_85**

To: Joe Fallon, Wanda Green

From: Frank Accorsi

May 21, 2012

The following information details the field investigation conducted on May 13, 2009 by TECOM Vinnell Services staff regarding the search for a possible abandoned underground storage tank at Parcel 14 (Charles Wood, former housing area). A geophysical survey conducted at Parcel 14 identified one electro-magnetic anomaly (P14_85) with a high probability of buried ferrous metal, possibly an underground storage tank. The GPS coordinates of that anomaly were located in the field and a backhoe was used to evaluate said anomaly. A test pit, approximately four feet wide, twelve feet long and five feet deep was excavated to determine the nature of the anomaly. Multiple abandoned, steel utility pipes (i.e. water, natural gas, and sewer) were observed in the test pit. No abandoned underground storage tank was observed at anomaly # P14_85 nor was there any petroleum staining or odors observed during the investigation. Based upon these observations, no soil samples were collected nor were they warranted. A digital photograph of the test pit was taken for record keeping purposes. See attached photograph.

US ARMY, SELFM-PW-EV
DAILY UST SUBSURFACE REMOVAL LOG

BLDG.#: PARCEL 14-85 REG.#: _____
 DATE: 5-13-09 TOA: _____ TOD: _____
 SSE: FRANK ACCORSI NJDEP CERT.#: 0010042
 REMOVAL CONTRACTOR: TVS Inc. PWS-007
 CLOSURE SUPERVISOR: FRANK ACCORSI NJDEP CERT.#: 0010042
 WEATHER: SUNNY, 70's

ACTIVITY	YES / NO
THE TECHNICIAN (CLOSURE CERT.) WAS ON-SITE DURING ALL CLOSURE RELATED ACTIVITIES	Y
THE SSE WAS ON-SITE DURING UST REMOVAL AND SITE SCREENING AND SAMPLING ACTIVITIES	Y
ALL ON-SITE PERSONNEL HAD TRAINING IAW ALL SAFETY REQUIREMENTS (E.G. 29CFR)	Y
A CONFINED ENTRY PERMIT WAS COMPLETED AND POSTED ON-SITE BY THE CONTRACTOR	NA
THE UST WAS PLACED ONTO PLASTIC, SCRAPED OFF, INSPECTED FOR HOLES AND PHOTOGRAPHED	NA
A DISCHARGE WAS REPORTED BY THE DPW TO THE NJDEP (609-292-7172), CASE# _____	NA
PHOTOS HAVE UST#, BLDG. #, DATE, TIME, NAME OF SSE AND DESCR. WRITTEN ON BACK	Y
GROUNDWATER WAS ENCOUNTERED AT _____ FEET BG, A SHEEN (WAS/WAS NOT) OBSERVED ON GW	NA
IF OVA WAS USED: WAS IT CAL. AND FOUND TO BE OPERATIONAL (cal. data on COC)	Y
IF SAMPLES WERE TAKEN: COC, SCALED SITE MAP (VERT. SOIL HORIZONS AND PLOT PLAN)	Y
ALL SAMPLE COLLECTION ACTIVITIES WERE AS DESCRIBED IN THE NJDEP FSPM, 1992	Y
ALL SAMPLING WAS BIASED TOWARD HIGHEST OVA/FID RECORDED SITES IAW 7:26E-3.6 et seq.	YNA
ALL PETROL. CONT. SOILS WERE SECURED FROM THE WEATHER BY CLOSE OF BUSINESS TODAY	NA
THE DPW SSE AUTHORIZED BACKFILLING THE EXCAVATION (STONE TO 1" ABOVE GROUNDWATER) AND A BACKFILL AUTH. LTR. IS ATTACHED	Y
ALL ENVIRONMENTAL SAMPLE POINTS WERE GPS AND LOGGED	YNA
ADDITIONAL NOTES WERE TAKEN AND ARE RECORDED ON THE BACK OF THIS FORM	Y
THE FOLLOWING DOCUMENTS WERE ADDED TO THE PROJECT FOLDER TODAY: (CIRCLE EACH) SCRAP TICKET, CSE PERMIT, ACCIDENT REPORT, HAZ. WASTE MANIFEST, DAILY UST CLOSURE LOG, SCALED SITE MAP (SAMPLING), SRF-CLOSURE, CHAIN OF CUSTODY, SOIL ANALYTICAL RESULTS, CLEAN FILL TICKETS (IN YES'), PHOTOGRAPHS (UST, EXCAVATION, SAMPLING POINTS)	NA

CHECK ALL BOXES, LEAVE NO BLANKS

I certify under penalty of law that tank decommissioning activities were performed in compliance with N.J.A.C. 7:14B-9.2(b)3 and 7:26 et seq.. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment.

Closure Tech (print Name): FRANK ACCORSI Date: 5-13-09

SIGNATURE: Frank Accorsi

NO TANK WAS LOCATED IN TEST PIT, JUST ALOT OF
ABANDONED PIPES (WATER, NAT. GAS, SEWER)





State of New Jersey

CHRIS CHRISTIE
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Case Management
401 East State Street
P.O. Box 420/Mail Code 401-05F
Trenton, NJ 08625-0028
Phone #: 609-633-1455
Fax #: 609-633-1439

BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

May 30, 2012

Wanda Green
BRAC Environmental Coordinator
OACSIM – U.S. Army Fort Monmouth
PO Box 148
Oceanport, NJ 07757

Re: Parcel 14 Property Category Determination
Fort Monmouth, NJ
PI G000000032

Dear Ms. Green:

The New Jersey Department of Environmental Protection (Department) is in receipt of the May 22, 2012 Parcel 14 Property Category Determination, submitted by the Department of the Army on May 23, 2012. As proposed in the submittal, further evaluation of Parcel 14 indicates the majority of the property (excluding that area by Building 2275, see Figure 1), previously categorized as Category 2 – Areas where only release or disposal of petroleum products has occurred, may be categorized as Category 1 – Areas in which no release or disposal of hazardous substances or petroleum products have occurred (including no migration of such substances from adjacent areas). Category 2 was initially assigned based upon the release from the #2 fuel underground storage tank (UST) removed at Building 2275, which subsequently received a designation of No Further Action on August 29, 2000.

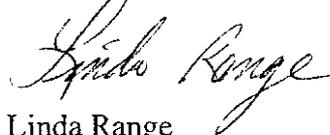
As indicated in the May 22, 2012 submittal, concurrence from “the appropriate State official” is required in accordance with 42 U.S.C. § 9620(h)(4)(B) for properties designated Category 1.

The Department has reviewed the documentation submitted in support of the re-categorization of the majority of Parcel 14 from Category 2 to Category 1, which includes the above referenced submittal, information in the case file, and additional documentation received on May 29, 2012. Investigation of the parcel identified only #2 fuel USTs as possible areas of concern (AOCs). Geophysical surveys were performed, and sampling was conducted throughout that area at which USTs were or may have been present. No USTs were found; all soils analytical results were below cleanup criteria applicable to the site.

The Department concurs with the Department of the Army's proposal to change the property classification for the majority of Parcel 14 from a Category 2 to a Category 1. The one area at which an underground storage tank (UST) was removed from Building 2275 will remain a Category 2, as indicated in Figure 1 of the submittal.

If you have any questions regarding this matter contact this office at (609) 984-6606.

Sincerely,

A handwritten signature in black ink, appearing to read "Linda Range". The signature is written in a cursive, flowing style.

Linda Range
Bureau of Case Management

cc: Joe Pearson, Calibre Systems
Rich Harrison, FMERA
Julie Carver, Matrix

APPENDIX C ENVIRONMENTAL PROFESSIONAL RESUME – JOSEPH PEARSON

Joseph Pearson (Joe)

Education:

College: Villanova University, BS, 1979, Chemical Engineering

Experience:

Mar 2007 - Present
CALIBRE,
Senior Engineer

Same duties as position below.

Mar 2004 - Feb 2007

CALIBRE,

Sr Analyst

(CALIBRE acquired SMI in Mar 2004)

Provide communication/coordination, technical Quality Assurance (QA), implements program policy; evaluates subcontractor performance, and has responsibility for technical and logistical problem resolution to assure project/task completion on time and within budget. Mr. Pearson has extensive knowledge and expertise in remedial investigation, engineering analysis and cost estimation. Mr. Pearson has supported the BRACD office throughout the entire closure period at the Military Ocean Terminal, Bayonne. This was one of the initial early transfers and was done under an ESCA. Mr. Pearson supported the Army and worked closely with the Bayonne Local Resuse Authority (BLRA) to make this a model transfer. Mr. Pearson initially supported the Army leading the team that performed the initial environmental studies, including the Environmental Baseline Study, Remedial Investigation and Feasibility Studies and Decision Documents. Once the property was transferred Mr. Pearson provided QA and remedial action oversight, technical engineering support to evaluate remedial actions. Mr. Pearson provided periodic inspection of on-going remedial activities to assure that actions are being implemented appropriately and will function as designed. Mr. Pearson was also responsible for monitoring the financial aspects of the cleanup privatization between the Army and the BLRA. In addition to the technical oversight functions, Mr. Pearson also prepared various closeout and transfer documents, including Proposed Plans (PPs), Decision Documents (DDs), Environmental Services Cooperative Agreement and transfer deeds. Mr. Pearson also prepared a Finding of Suitability to Transfer (FOST) and a Finding of Suitability for Early Transfer (FOSET) for the MOTBY facility. Mr. Pearson is currently performing as the BRAC Environmental Coordinator (BEC) at Fort Monmouth Evans Area. Mr. Pearson has been responsible for maintaining the environmental documentation and supporting the disposal of real property actions at the Evans Areas. This has included the preparation of Finding of Suitability to Transfer (FOST) documents, BRAC Disposal Support Packages, deeds, and coordination with transferees. As part of his BEC duties, Mr. Pearson was responsible for the coordination of routine maintenance of the facilities. Mr. Pearson negotiated an adjustment to an electrical replacement project such that the Army saved \$60K and the reuse entity was happier with the end product. Mr. Pearson also set up a PBA for a major PCB soil cleanup that saved the Army approximately \$1.2 million. All projects at Evans Area have required coordination with the State Historic Preservation Office (SHPO) for the maintenance on historic buildings at the site (windows, doors, chimney, security fencing, and security). Historic building requirements were also included in transfer documents. The five year review for groundwater was drafted prior to Mr. Pearson's work at this site and potentially included more investigations and active remediation, however Mr. Pearson recognized that this was not likely necessary and had CALIBRE redraft the 5-year review which included only continuing monitoring and the extension of the use restriction. The revised plan was accepted by the regulators. Mr. Pearson is also the Restoration Advisory Board (RAB) co-chairman and runs the RAB meetings and prepares the minutes and communicates effectively with a very involved RAB. Mr. Pearson is also the BEC for Fort Ritchie where he is coordinating the implementation of Munitions and Explosives of Concerns (MEC) clearance at various portions of the former Fort Ritchie that are being redeveloped. Other actions at Fort Ritchie include long term monitoring of groundwater contaminated with volatile organics and the updating of a Record of Environmental Consideration. Mr. Pearson prepares Independent Government Estimates (IGEs) and Scopes of Work (SOWs) for various remedial programs at both active

and inactive Army facilities. The IGEs and SOWs are prepared for performance based contracts and require the development of remedial action strategies, evaluation of local and federal regulatory requirements, as well as facility operational and budgetary constraints. IGEs are prepared using government developed cost estimating software, Remedial Action Cost Estimating Requirements (RACER), or are built using standardized spreadsheets developed by Mr. Pearson. IGEs have addressed a full range of environmental issues including, contaminated groundwater (including non-aqueous phase liquid (NAPL) plumes, karst conditions), landfill closures, contaminated soils, underground storage tanks, waste pits, transformers and munitions and explosives of concern (MEC). As part of the IGE process, Mr. Pearson uses Crystal Ball to perform Monte Carlo Uncertainty Analysis to determine potential ranges of estimates as well as develop potential bid award points. As the lead cost estimator for CALIBRE, Mr. Pearson has developed technical guidance for preparing costs estimates in accordance with government requirements. Mr. Pearson has been responsible for the overall implementation and quality of CALIBRE's estimates associated with the PBA initiative. Mr. Pearson has also supported the PBA initiative by conducting candidate selection and evaluation of acquisition strategies (including site visits associated with Installation Action Plan workshops), reviewing regulatory framework (including RCRA and CERCLA cleanup programs), reviewing long-term management (LTM) and remedial action operation (RAO) acquisition strategies, developing Performance Work Statements (PWSs), conducting document review and preparing comments, developing cost estimating strategies, and providing support to technical evaluation boards. For the Stratford Army Engine Plant (SAEP) Mr. Pearson prepared engineering analysis and cost estimates for various alternatives for the demolition and partial demolition of the Stratford Army Engine Plant. The engineering analysis included the evaluation of facility utilities (electrical, storm and sanitary sewers, Heating Ventilation and Air Conditioning (HVAC), and potable and fire service water) and the ability to maintain certain portions of the facility in a ready or standby mode. The analysis culminated in the preparation of a facility laydown plan that supported the laydown of the facility and reduced both caretaker costs as well as utility costs.

Feb 2002 - Feb 2004

Strategic Management Initiatives, Inc. (SMI), Broomfield, CO

Sr Analyst

Provide communication/coordination, technical Quality Assurance (QA), implements program policy; evaluates subcontractor performance, and has responsibility for technical and logistical problem resolution to assure project/task completion on time and within budget. Supported the Army leading the team that performed the initial environmental studies, including the Environmental Baseline Study, Remedial Investigation and Feasibility Studies and Decision Documents. Once the property was transferred Mr. Pearson provided QA and remedial action oversight, technical engineering support to evaluate remedial actions. Monitor the financial aspects of the cleanup privatization between the Army and the BLRA. In addition, technical oversight functions, prepared various closeout and transfer documents, including Proposed Plans (PPs), Decision Documents (DDs), Environmental Services Cooperative Agreement and transfer deeds, Finding of Suitability to Transfer (FOST) and a Finding of Suitability for Early Transfer (FOSET) for the MOTBY facility. As part of BEC duties, was responsible for the coordination of routine maintenance of the facilities. Set up a PBA for a major PCB soil cleanup that saved the Army approximately \$1.2 million. All projects at Evans Area have required coordination with the State Historic Preservation Office (SHPO) for the maintenance on historic buildings at the site (windows, doors, chimney, security fencing, and security). Historic building requirements were also included in transfer documents. The five year review for groundwater was drafted prior to Mr. Pearson's work and had CALIBRE redraft the 5-year review which included only continuing monitoring and the extension of the use restriction. The revised plan was accepted by the regulators. Mr. Pearson is also the Restoration Advisory Board (RAB) co-chairman and runs the RAB meetings and prepares the minutes and communicates effectively with a very involved RAB. Mr. Pearson prepares Independent Government Estimates (IGEs) and Scopes of Work (SOWs) for various remedial programs. The IGEs and SOWs are prepared for performance based contracts and require the development of remedial action strategies, evaluation of local and federal regulatory requirements, as well as facility operational and budgetary constraints. As part of the IGE process, Mr. Pearson performs Uncertainty Analysis to determine potential ranges of estimates as well as develop potential bid award points. Mr. Pearson has supported the PBA initiative by conducting candidate selection and evaluation of acquisition strategies (including site visits associated with Installation Action

Plan workshops), reviewing regulatory framework (including RCRA and CERCLA cleanup programs), reviewing long-term management (LTM) and remedial action operation (RAO) acquisition strategies, developing Performance Work Statements (PWSs), conducting document review and preparing comments, developing cost estimating strategies, and providing support to technical evaluation boards. For the Stratford Army Engine Plant (SAEP) Mr. Pearson prepared engineering analysis and cost estimates for various alternatives for the demolition and partial demolition of the Stratford Army Engine Plant. The engineering analysis included the evaluation of facility utilities (electrical, storm and sanitary sewers, Heating Ventilation and Air Conditioning (HVAC), and potable and fire service water) and the ability to maintain certain portions of the facility in a ready or standby mode. The analysis culminated in the preparation of a facility laydown plan that supported the laydown of the facility and reduced both caretaker costs as well as utility costs.

Mar 1985 - Feb 2002

Ecology and Environment, Inc. (E&E), Philadelphia, PA

Regional Manager/Project Manager

As Program Manager for Environmental Services Program Support, provided program support to the Baltimore District of the U.S. Army Corps of Engineers. Support included providing multidisciplinary environmental assistance to the U.S. Army Environmental Center in its Base Closure and Realignment (BRAC) activities which encompassed environmental investigations, Remedial Investigation/Feasibility Studies (RI/FSs), compliance support, remedial engineering and design, database development, laboratory analysis and emergency disposal services at U.S. Army installations and formerly used defense sites. Managed the direction of BRAC support activities (RI/FS) at the Military Ocean Terminal Bayonne, by developing a comprehensive program to investigate and evaluate over 80 environmental concerns raised during the Environmental Baseline Survey (EBS). The RI/FS addressed a former landfill, multiple Underground Storage Tanks (USTs) and Above Ground Storage Tanks (ASTs), former storage areas, various historic spill sites, discharges to sediments surrounding the base and Polychlorinated Biphenyls (PCB) transformers and PCB spills. In addition, directed a lead-based paint study at base living quarters and addressed other environmental concerns from base operations (sewers, machinery pits, dry dock operations, etc.). Upon completion of the field investigations, led the preparation of a feasibility study (FS) to address necessary base-wide remedial actions. Key individual in the preparation of various transfer documents including a proposed plan, decision documents, findings of suitability to transfer and classification exception area (for groundwater). Provided engineering peer review and quality assurance (QA) for various environmental design projects for the U.S. Departments of Defense (DoD) and State clients. Projects included the replacement of sewer systems and lift stations at Langley Air Force Base, a slurry wall and groundwater treatment system at the Sweden Landfill site in New York State and the remediation of radioactive materials placed in a residential setting at the Welsbach/General Gas Mantle Site in New Jersey. As the Program Manager for E&E's Alternative Remedial Contracting Strategy (ARCS) program in Pennsylvania, Virginia, West Virginia, Maryland, Delaware and the District of Columbia, provided direct technical and financial direction for all program work assignments which totaled over \$23 million. Also coordinated and managed multidisciplinary projects which encompassed the full range of services from RI/FS through remedial design, remedial action and construction management. The ARCS 3 program included a site discovery project, 44 Preliminary Assessments (PAs), 27 Environmental Priorities Initiative PAs, 19 screening Site Inspections (SIs), two expanded SIs, preparation of three Hazard Ranking System Site Scoring Packages, five RI/FSs, five remedial designs, seven remedial actions, five projects involving remedial design/remedial action oversight, and two five-year reviews. Assured implementation of all work was in accordance with contract terms and evaluated/implemented all program procedural and contractual changes. Led E&E's preparation and updating of the program management plan covering both technical and financial aspects of contract implementation. Prepared updates and addenda to the ARCS 3 program management plan to assure that changing U.S. Environmental Protection Agency (EPA) requirements were met and that EPA continuously received cost-effective, quality service; and controlled program management costs while keeping the level of service and quality high. Established subcontracting procedures in accordance with Federal Acquisition Regulations (FAR) and regional needs. In addition, provided cost-effective management of Government-Furnished Property (GFP) through application of cost-competitive procurements, cost/benefit analyses, acceptance of GFP from other EPA contractors and sharing of GFP with other EPA contractors on a temporary basis. Under the ARCS 3

program, provided QA and overall direction for the RI/FS for the H&H Incorporated site in Virginia, where E&E identified widely dispersed contamination; the RI/FS for the Saunders Supply Company wood-treating site, where the fast-track FS included evaluation/recommendation of innovative techniques for chemical dehalogenation and thermal desorption, followed by treatability studies; and the RI/FS for the Strasburg mixed use landfill, where the FS resulted in recommendations to improve cap and leachate collection systems to reduce infiltration and leaching. To expedite the remedial action for two operable units at the Strasburg site, directed two fast-track, focused FSs addressing leachate collection and treatment of highly productive seeps. Directed E&E's third-party oversight for remedial design/remedial action activities at the Bendix Flight Systems and Middletown Airfield sites, as well as the five-year remedial action review for the Presque Isle site. As the Director, Berks Sand Pit, Pennsylvania, directed the design of a modular groundwater pump-and-treat system that could be expanded to increase capacity and treatment efficiency. Developed the initial system to collect detailed hydro geologic data and extract/treat the most contaminated groundwater. When the well network was expanded to include air stripping/ carbon adsorption, prepared plans, specifications and bid documents including piping and instrumentation diagrams, process drawings, electrical control schematics and design details for the air stripper; then directed its installation. Also as the Director of the Hellertown Site, Pennsylvania, directed the preparation of designs for placement of an impermeable cover and for a pump-and-treat system (air stripper with carbon adsorption). The strategy was to place the cap while additional groundwater system design data were being obtained, in order to expedite the overall site remediation. The cover design included both a liner and bituminous paving, to promote impermeability and future use as a parking lot for the commercial/industrial area. As Director, Hebelka Site, Pennsylvania, directed the removal/disposal of lead contaminated surface debris, primarily battery casings; followed by the removal, solidification and disposal of lead-contaminated soil. Both phases included excavation monitoring by use of x-ray fluorimeters. As the Program Manager, Pennsylvania Department of Environmental Protection (PADEP) was program manager for the statewide, \$1.8 million UST contract and the multi-site, \$6 million Interim Response Service (IRS) program. Responsibilities encompassed the scoping of new assignments; preparation of work plans; implementation of removal actions; coordination with local, state and federal officials; and provision of community relations support. Projects under the two state programs included investigations and removal actions at drum sites, the cleanup of contaminated soil, design/installation of water treatment systems for affected residences and stabilization of potentially dangerous conditions at tank farms and waste sites. Negotiated basic ordering agreement subcontracts with construction and disposal firms. Under the Pennsylvania Department of Environmental Resources (PADER) IRS contract, personally managed the \$900,000 multisubstance drum categorization/removal project at the Autolife Products site. The site became publicly sensitive when about 400 drums containing unknown contents were discovered in an inner-city building near residences and an overhead rapid transit system. Developed the detailed work plan, health and safety plan, cost estimates and arranged for multiple subcontractor support within two days after notification of assignment. In addition to providing liaison with city fire, transit and police officials, coordinated closely with representatives of the Pennsylvania Attorney General and Pennsylvania/New Jersey water quality and hazardous material response task forces to arrange an effective and expeditious cleanup. Under the PADER IRS contract, provided overall direction and QA for the \$1 million cleanup program for the Savage Industries site, which contained about 400 drums and eight ASTs. Developed a work plan and directed the interim response action, which included use of Level B personal protection (positive-pressure self-contained breathing apparatus with dermal protection) to complete a hazard categorization, waste profiling and analytical testing required for proper waste disposal. This site required an expedited cleanup. As IRS program manager, provided QA and coordinated E&E support for a \$750,000 interim cleanup that involved the pumping of contaminated runoff, repair of leaking ASTs, maintenance of residential treatment (carbon adsorption) units and repair of an existing air stripper at the Industrial Solvents AST farm. As the FS Manager in support of E&E's Zone 2 Technical Assistance Team (TAT) contract with EPA, managed the FS for the Agricultural Street Landfill in New Orleans, Louisiana. The presence of low-income housing and a school on the 100 acre, abandoned former municipal landfill gave the site high public sensitivity and precedent-setting potential under the Federal Environmental Justice initiative. As FS manager, was responsible for the extremely short-turnaround evaluation of alternatives to meet the eight-month schedule. To address contaminants including metals and polynuclear aromatic hydrocarbons, the engineering options included site capping, installation of landfill gas collection systems, on-site solidification and groundwater collection/treatment. The FS team identified applicable or relevant and appropriate requirements (ARARs) and developed remedial action objectives. Led the identification/

screening of specific technologies for effectiveness, implementability and cost-effectiveness and the development of detailed cost estimates for technologies meeting the ARARs. Under the Zone 2 TAT program, was responsible for the fast-track remedial design for the Southern Shipbuilding Corporation site in Slidell, Louisiana. To meet EPA deadlines, the project involved development of two concurrent designs for bioremediation and incineration, based on the E&E-prepared engineering evaluation/cost analysis. As the Project Planning/Design Engineer for the USACE Kansas City District, was responsible for project planning and preparation of the QA, health and safety and site sampling plans for E&E's full-scale remedial design and construction project at the Bridgeport Rental and Oil Services NPL site. Reviewed data from the RI and supplemental investigation to ensure that the information was comprehensive enough to provide a basis for the remedial design. Oversaw FS-related field investigations and developed plans and specifications to handle/treat waste from 95 USTs and ASTs and a 13 acre lagoon filled with approximately 2.5-million gallons of contaminated oil. The complex lagoon configuration required design and implementation of innovative logging and sampling equipment and methodologies. Among other items, the plans and specifications delineated the material handling and incineration systems needed to destroy the complex contaminants. As E&E RI/FS project manager for the Worcester hazardous waste site in Massachusetts, planned and implemented a multidisciplinary field investigation, evaluated all environmental and engineering data and prepared the RI and FS reports. Worked closely with representatives of the Massachusetts Department of Environmental Quality Engineering to address agency concerns. As Design Engineer, Illinois EPA, completed the detailed design plans and specifications for incineration of PCB-contaminated soil at the LaSalle Electrical Utilities Superfund site in Illinois. Developed prequalification specifications for selection of qualified bidders and developed detailed cost estimates to evaluate bidder cost proposals. As a Technical Reviewer, United Gas Pipe Line Company, conducted a technical review of RI/FS reports for a lead-contaminated facility in Flowood, Mississippi, then recommended alternative remediation designs for the cleanup of lead-contaminated groundwater and soil. As an International Project Manager for Israel Military Industries Ltd., managed E&E's RI/FS and design of a soil and groundwater cleanup program for a former military propellants and explosives facility in Nof-Yam, Israel. The 110 acre site was used for the production of various propellants containing nitrocellulose, nitroguanidine, nitroglycerin, nitric acid, TNT, DNT, diphenylamine, centralite, and sulfuric acids. As principal in charge, provided QA for E&E's evaluation of industrial waste abatement concerns as part of the integrated urban environmental management study for the Chembur and Thane Belapur industrial areas of Bombay, India. Also E&E project manager for several environmental audits of facilities undergoing client consideration for purchase, including a metal shop; a wood-treating facility and a food-processing plant; and asphalt facilities. For the audit of the metal shop, conducted a site visit to examine air emission rates, wastewater discharges, on-site storage practices and off-site disposal procedures for waste oil; and evaluated existing permits. Recommended further air testing, minimization techniques for wastewater and storage procedures to comply with state and Federal regulations.

Jan 1981 - Feb 1985

Cargill, Inc./Namoco, Willow Grove, PA

Project Engineer

Was responsible for the cost estimation of new facilities designed for the storage of various chemicals and oil products. Designed plant modifications, held responsibility for equipment procurement and managed construction and installation activities from inception through project start-up. Responsible for facility compliance with applicable environmental and waste disposal standards and regulations.

Oct 1979 - Dec 1980

General Public Utilities, Three Mile Island, Middletown, PA

Unit II Recovery Project Engineer

Responsible for the development of storage areas to contain dewatered radioactive resins and solidified and dry compacted wastes. In addition, administered, implemented and evaluated the facility groundwater monitoring program. Led the upgrading and relocation of a low-level waste processing system, including system conception, design, engineering, construction and start-up. Provided project engineering support for the procurement, installation and solution of problems encountered during the installation of the facility's \$15M submerged demineralizer system.

Computer Experience:

Crystal Ball; RACER

Crystal Ball is a program to perform Monte Carlo analysis used in developing uncertainty in estimates and bounding cost estimates. RACER is the Army's cost estimating program.

Security Clearance: SECRET, DISCO

Certifications:

Registered Professional Engineer - States of Pennsylvania, Virginia, and Maryland

Awards:**Publications:****Summary:**

Mr. Pearson has 25 years of management experience in environmental and hazardous waste programs. Mr. Pearson has been responsible for directing all technical and administrative aspects of complex, multidisciplinary programs for Federal and state agencies addressing both Resource Conservation and Recovery Act and Comprehensive Environmental Response, Compensation and Liability Act.

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