N60200.AR.005011
NAS CECIL FIELD, FL
5090.3a

SITE REHABILITATION COMPLETION LETTER REPORT FOR ORTEGA RIVER OVERPASS JP5 VALVE LOCATION CF-VA06 NAS CECIL FIELD FL

4/18/2008

TETRA TECH NUS INC

TETRA TECH NUS, INC.
8640 Philips Highway, Suite 16 • Jacksonville, FL 32256
Tel 904.636.6125 • Fax 904.636.6165 • www.tetratech.com

Document Tracking Number 08JAX0032

April 18, 2008

Project Number 112GN4248

Mr. David Grabka
Florida Department of Environmental Protection
Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Reference: CLEAN III Contract Number N62467-94-D-0888
Contract Task Order 0248

Subject: Site Rehabilitation Completion Letter Report
Ortega River Overpass – JP5 Valve Location
Naval Air Station Cecil Field
Jacksonville, Florida

Dear Mr. Grabka:

Tetra Tech NUS, Inc. (TtNUS) is pleased to submit this Site Rehabilitation Completion Letter Report for the subject site. This report has been prepared for the United States Navy, Naval Facilities Engineering Command Southeast (NAVFAC SE) under Contract Task Order (CTO) 0248 for the Comprehensive Long-term Environmental Action Navy (CLEAN) III Contract Number N62467-94-D-0888. This Site Rehabilitation Completion Letter Report was prepared to request a Site Rehabilitation Completion Order at the Ortega River Overpass – JP5 Valve Location site.

BACKGROUND

The Ortega River Overpass site consisted of an area of petroleum-contaminated soil associated with an aboveground pipeline valve (VA06) located below the Ortega River Bridge on Timaquana Road. The Jet Fuel Pipeline is located under an approximately 14.5-mile section of 103rd Street (State Route 134) and Timiquana Road in Jacksonville, Florida. The Jet Fuel Pipeline was completed in 1952, and from 1952 to 1997, the pipeline supplied JP5 fuel to Naval Air Station (NAS) Cecil Field from the river-accessible fuel storage facility at NAS Jacksonville. The pipeline consists of an 8-inch-diameter pipe with 15 valves. Generally, the pipeline runs under the center of the left lane of the eastbound corridor of State Route 134. The pipeline ranges in depth from approximately 2 to 15 feet below ground surface (bgs).

In the spring of 1999, TtNUS was tasked to investigate 21 wall thickness anomalies and 11 valves along the Jet Fuel Pipeline. The subject site consisted of the area around the valve designated VA06 by TtNUS during its 1999 investigation. A figure and a table from this investigation are included as Attachment 1. A direct push technology investigation was performed at the Ortega River Overpass site (VA06) in which nine soil borings and one temporary monitoring well were installed in December 1999. One soil sample (SB-01) was submitted for laboratory analysis and exhibited benzo(a)pyrene and dibenzo(a,h)anthracene concentrations greater than Soil Cleanup Target Levels (SCTLs). For the groundwater assessment, dissolved hydrocarbon concentrations were below Groundwater Cleanup Target Levels for all contaminants of concern (COCs) in the temporary well installed at the site. Additional assessment work

was conducted in February 2000 to completely delineate the soil plume in which 10 soil borings were installed and soil samples were submitted for laboratory analysis. Benzo(a)pyrene concentrations in SB-10, SB-11, and SB-19 exceeded SCTLs. SB-11 also produced concentrations of 1-methylnaphthalene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene greater than SCTLs. Soil analytical results were below SCTLs for all COCs in all other borings. In October 2001, CH2M Hill Constructors (CH2M) conducted a source removal at the Ortega River Overpass site. The primary objective of the source removal was to remove polynuclear aromatic hydrocarbon (PAH)-impacted soil that exceeded the SCTLs outlined in Chapter 62-770, Florida Administrative Code (F.A.C.). A work plan was not prepared prior to excavation activities as directed by NAVFAC SE. The horizontal limits of the excavation area were staked by TtNUS, and the vertical extent of contamination was determined by the level of the water table at the time of the excavation, which was approximately 1 foot bgs based on available information. Under the technical direction of NAVFAC SE, soil was to be excavated to the specified limits (area delineated by SB-12, SB-13, and SB-15 through SB-18), disposed at an approved offsite facility, and backfilled with clean fill material from an approved offsite source. A site plan showing the soil sample locations, results, and approximate excavation area and a table summarizing the soil laboratory analytical results (SB-10 through SB-19) are included as Attachment 1.

The source removal was conducted at the Ortega River Bridge site from October 14 to October 18, 2001. Under the direction of NAVFAC SE, CH2M excavated the soils using a mini-excavator to the limits determined by TtNUS during site assessment activities in December 1999 and February 2000. At the beginning of the excavation activities, a vacuum truck was used to move soil from below the bridge to street level. This method proved to be ineffective; therefore, soil was loaded into a pan hopper, lifted onto the road surface of Timaquana Road (eastbound) using a boom truck, and dumped into a roll off container for offsite disposal. Based on the results of samples collected for waste characterization, the excavated soil was transported for disposal as non-hazardous. According to the disposal documentation, a total of 23.56 tons of PAH-contaminated soil were transported offsite and properly disposed at Broadhurst Environmental, Inc. landfill in Jessup, Georgia. A copy of the *Source Removal Report, Contaminated Soil Removal at Ortega River Overpass – JP5 Valve Location,* Revision 1 from May 2004 is included as Attachment 2.

CONCLUSIONS AND RECOMMENDATIONS

In October 2001, under the direction of NAVFAC SE, PAH-contaminated soil was excavated at the Ortega River Bridge site to the limits determined during previous site assessment activities. A total of 23.56 tons of PAH-contaminated soils were excavated from the site and transported offsite for disposal at Broadhurst Environmental, Inc. landfill in Jessup, Georgia. Soil samples collected at the boundaries of the excavation area showed no COCs at concentrations greater than the SCTLs outlined in Chapter 62-770, F.A.C.

Based on the activities summarized in this letter report and associated attachments, TtNUS recommends that a Site Rehabilitation Completion Order be issued for the site.

If you have any questions regarding the information presented in this document, please contact me by phone at (904) 730-4669, extension 213, or via e-mail at Mark.Peterson@tetratech.com.

Sincerely,

Mark A. Peterson, P.G.
Task Order Manager

Kara F. Wimble
Project Scientist

Attachments (2)

c: B. Nwokike, NAVFAC SE (CD only)
M. Halil, CH2M Hill (CD only)
M. Perry, TtNUS (unbound and CD)
D. Humbert, TtNUS (cover letter only)
J. Logan, TtNUS
R. Simcik, TtNUS (Bookcase File)
J. Johnson, TtNUS (Information Repository)
K. Wimble, TtNUS
CTO 0248 Project File

CERTIFICATION

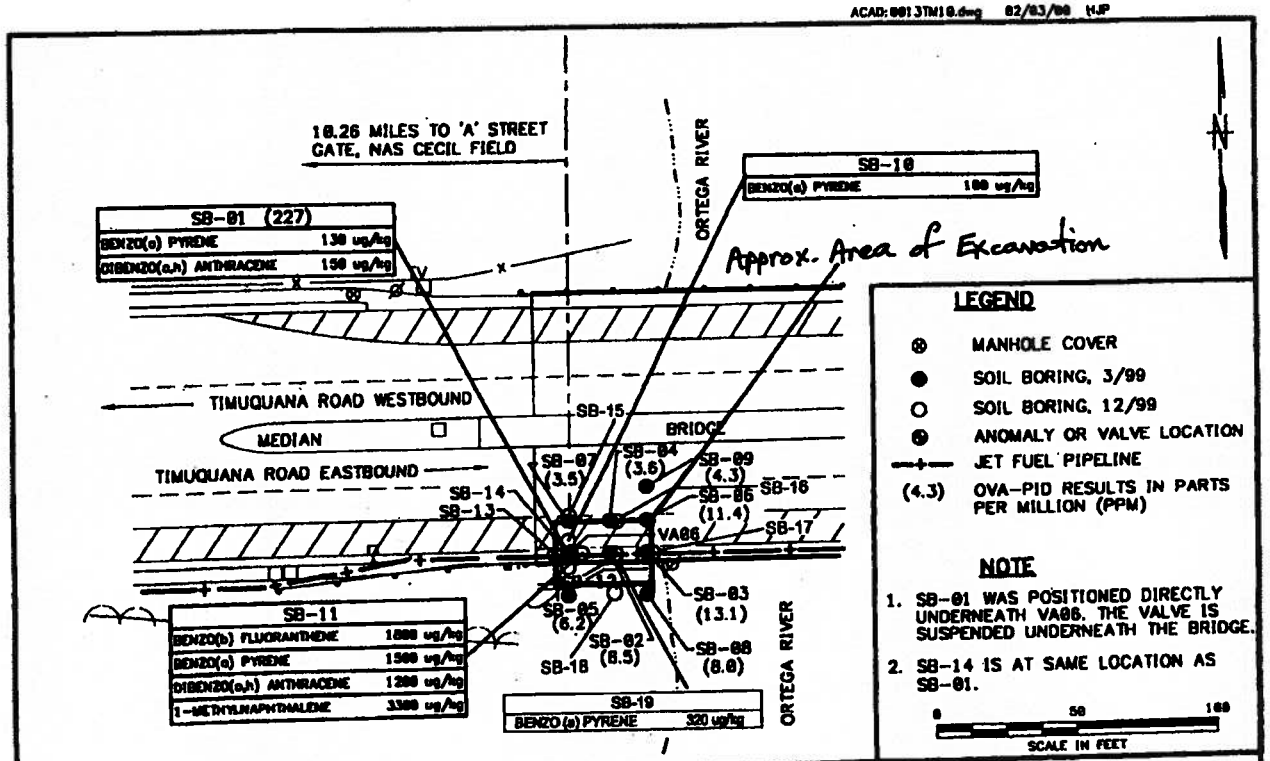
The information contained in this report is based on the geologic investigation and associated information detailed in the text and appended to this report and supporting documents referenced in this report. If conditions are determined to exist that differ from those described, the undersigned geologist should be notified to evaluate the effects of any additional information on the information described in this report. This Site Rehabilitation Completion Letter Report was developed for Ortega River Overpass – JP5 Valve Location, Naval Air Station Cecil Field, Jacksonville, Florida, and should not be construed to apply to any other site.

April 18, 2008
Mark A. Peterson, P.G.
Florida License Number PG-0001852

ATTACHMENT 1

SITE MAP AND ANALYTICAL SUMMARY TABLE
SITE ASSESSMENT ACTIVITIES – DECEMBER 1999 AND FEBRUARY 2000

ACAD: 0013TM10.dwg 02/03/00 HJP



DRAWN BY HJP DATE 2/3/00	SITE PLAN, SAMPLE LOCATIONS, AND RESULTS CF-VA06 NAS JAX TO NAS CECIL FIELD JET FUEL PIPELINE JACKSONVILLE, FLORIDA	CONTRACT NO. 0013
CHECKED BY DATE		APPROVED BY DATE
COST/SCHED-AREA		APPROVED BY DATE
SCALE AS NOTED		DRAWING NO. FIGURE REV. 0

FORM CADD NO. SSIV_AN.DWG - REV 0 - 1/20/98

Investigation Results - VA06

Table
Summary of Soil Quality
CF-VA06

NASJAX to NASCF Jet Fuel Transfer Pipeline
Naval Air Station Cecil Field
Jacksonville, Florida

Compound	FDEP Target Level[1]	SB-10@1ft. 12/28/99	SB-11@1ft. 12/28/99	SB-12@1ft. 12/28/99	SB-13@1ft. 12/28/99	SB-14@1.0ft. 12/28/99	SB-15@1.0ft. 2/16/00	SB-16@1.0ft. 2/16/00	SB-17@1.0ft. 2/16/00	SB-18@1.0ft. 2/16/00	SB-19@1.0ft. 2/16/00
Polynuclear Aromatic Hydrocarbons(EPA Method 8310)(ug/kg)											
Naphthalene	1700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	2200	260	3300	120	150	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	6100	ND	4600	ND	180	ND	ND	ND	ND	ND	ND
Acenaphthylene	27000	ND	620	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	2100	350	5600	30	160	ND	ND	ND	ND	ND	ND
Phenanthrene	250000	200	5300	ND	85	ND	ND	ND	ND	ND	50
Anthracene	2500000	40	1200	ND	13	2.0	ND	ND	ND	ND	ND
Fluorene	160000	18	420	ND	6.3	ND	ND	ND	ND	ND	ND
Fluoranthene	1200000	190	4800	31	180	12.0	21.0	20.0	47.0	5.1	240
Pyrene	880000	140	1600	16	35	9.0	26.0	32.0	79.0	7.0	290
Benzo (a) Anthracene	1400	130	3000	18	48	3.3	ND	ND	44.0	ND	280
Chrysene	77000	180	3300	18	79	5.3	ND	13.0	38.0	ND	160
Benzo (b) flouranthene	1400	120	1800	22	59	5.0	ND	ND	37.0	6.0	140
Benzo (k) fluoranthene	15000	52	930	32	29	2.0	27.0	ND	23.0	6.2	80
Benzo (a) pyrene	100	160	1500	16	53	2.0	ND	ND	27.0	5.0	120
Dibenzo (a,h) anthracene	100	87	1200	14	59	21.0	ND	ND	14.0	ND	82
Benzo (g,h,i) perylene	2300000	73	930	ND	31	ND	ND	ND	20	5	120
Indeno (1,2,3-cd) pyrene	1500	64	810	47	54	ND	ND	ND	9.4	ND	65

[1]Chapter 62-777, Florida Administrative Code (August 1999). Most stringent value of groundwater leachability and direct exposure limits.

Notes: EPA= Environmental Protection Agency.
FDEP=Florida Department of Environmental Protection.
µg/kg=micrograms per kilogram.
ND=no constituents detected.

ATTACHMENT 2

SOURCE REMOVAL REPORT
CONTAMINATED SOIL REMOVAL AT
ORTEGA RIVER OVERPASS – PJ5 VALVE LOCATION
REVISION 1

CH2MHILL

TRANSMITTAL

To: Gabriel Magwood
NAVFAC EFD SOUTH
P.O. Box 190010
North Charleston, SC 29419-9010

From: Amy Wolff
CH2M HILL Constructors, Inc.
115 Perimeter Center Pl., N.E.
Suite 700
Atlanta, GA 30346

Date: May 13, 2004

Contract: N62467-98-D-0995

CTO: Contract Task Order No. 0029
Naval Air Station (NAS) Cecil Field
Jacksonville, Florida

Re: *Source Removal Report for the Contaminated Soil Removal at Ortega River Overpass – JP5 Valve Location*

Quantity	Description
1	*Replacement Cover Page*
1	*Replacement Signature Page*
1	*Revised Page 3-1*

If material received is not as listed, please notify us at once

CC: Larry Blackburn (CD Only)
David Grabka/FDEP
Paul Calligan/TtNUS
Michael Halil/JAJones (NAS Cecil Field)
Project File No. 254282

Source Removal Report
Contaminated Soil Removal at
Ortega River Overpass – JP5 Valve Location

Contract No. N62467-98-D-0995
Contract Task Order No. 0029

Timuquana Road
Jacksonville, Florida

Revision 01

Submitted to:

U.S. Naval Facilities
Engineering Command
Southern Division

Prepared by:

CH2MHILL

May 2004

Prepared/Approved By:

Samuel M. Ross, Project Manager — Date

Approved By:

R. Scott Newman, Program Manager — Date

Client Acceptance:

U.S. Navy Responsible Authority — Date

Source Removal Report
Contaminated Soil Removal at
Ortega River Overpass – JP5 Valve Location

Timuquana Road
Jacksonville, Florida

Revision 01

Contract No. N62467-98-D-0995
Contract Task Order No. 0029

Submitted to:

U.S. Naval Facilities
Engineering Command
Southern Division

Prepared by:

CH2MHILL

115 Perimeter Center Place, N.E.
Suite 700
Atlanta, GA 30346

May 2004

CH2MHILL
Constructors, Inc.

TRANSMITTAL

To: Wayne Hansel
Southern Division
Naval Facilities Engineering Command
P.O. Box 190010
North Charleston, SC 29419-9010

From: Sam Ross
CH2M Hill Constructors, Inc.
115 Perimeter Center Place, N.E.
Suite 700
Atlanta, GA 30346

Date: February 19, 2002

Contract: Navy Contract # N62467-98-D-0995

CTO: Contract Task Order No. 0029
Naval Air Station (NAS) Cecil Field – Jacksonville, Florida

Re: *Source Removal Report for the Contaminated Soil Removal at Ortega River Overpass – JP5 Valve Location*

We Are Sending You:

Quantity	Description
1	*Source Removal Report for the Contaminated Soil Removal at Ortega River Overpass – JP5 Valve Location*

If material received is not as listed, please notify us at once

CC: Larry Blackburn/ROICC
David Grabka/FDEP
Mark Speranza/TetraTech NUS (2 copies)
Paul Calligan/TetraTech NUS
CCI Project File No. 154282

Source Removal Report
Contaminated Soil Removal at
Ortega River Overpass – JP5 Valve Location

Timuquana Road
Jacksonville, Florida

Contract No. N62467-98-D-0995
Contract Task Order No. 0029

Submitted to:

U.S. Naval Facilities
Engineering Command
Southern Division

Prepared by:

CH2MHILL
Constructors, Inc.
115 Perimeter Center Place, N.E.
Suite 700
Atlanta, GA 30346

February 2002

Source Removal Report
Contaminated Soil Removal at
Ortega River Overpass – JP5 Valve Location

Contract No. N62467-98-D-0995
Contract Task Order No. 0029

Timuquana Road
Jacksonville, Florida

Submitted to:

U.S. Naval Facilities
Engineering Command
Southern Division

Prepared by:

CH2MHILL
Constructors, Inc.

February 2002

Prepared/Approved By:

Samuel M. Ross, Project Manager — Date

Approved By:

R. Scott Newman, Program Manager — Date

Client Acceptance:

U.S. Navy Responsible Authority — Date

Distribution List

	Copies
Southern Division, Naval Facilities Engineering Command	1
NAS Cecil Field	1
Florida Department of Environmental Protection	1
CH2M HILL Constructors, Inc.	1
Tetra Tech NUS, Inc.	2

CH2MHILL
Constructors, Inc.

Certification of Completion

CH2M HILL Constructors, Inc., attests that, to the best of its knowledge and belief, the removal of contaminated soil at the Ortega River Overpass, delivered under Contract No. N62467-98-D-0995, Naval Air Station Cecil Field, Jacksonville, Florida, Contract Task Order (CTO) No. 0029, has been completed, inspected, and tested, and is in compliance with the contract.

_____ _____

Project QC Manager Date

Contents

Acronyms ..... **iv**
1.0 Introduction **1-1**
1.1 Site Background 1-1
1.2 Project Objectives 1-1
2.0 Source Removal Activities **2-1**
2.1 Site Preparation 2-1
2.2 Soil Excavation and Disposal 2-1
2.2.1 Soil Excavation 2-1
2.2.2 Soil Transportation and Disposal 2-1
2.2.3 Backfilling and Site Restoration 2-3
3.0 Conclusions **3-1**
4.0 References **4-1**

Figures

2-1 Soil Excavation Area 2-2

Tables

2-1 Summary of Manifest for Soil Disposal 2-2

Appendices

A Photographs
B Copies of Soil Manifest
C Certificate of Disposal
D Clean Fill Certification
E Waste Profile

Acronyms

bls	below land surface
CCI	CH2M HILL Constructors Inc.
CTO	Contract Task Order
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FID	flame ionization detector
FL-PRO	Florida Petroleum Residual Organic
GC	Groundwater Criteria (per FAC Chapter 62-770 and 62-777)
HLA	Harding Lawson Associates
KAG	Kerosene Analytical Group
NADSC	Natural Attenuation Default Source Concentrations (per FAC Chapter 62-770 and 62-777)
NAS	Naval Air Station
NAVFAC	Naval Facilities Engineering Command
OVA	organic vapor analyzer
PAHs	polynuclear aromatic hydrocarbons
ppm	parts per million
SCTLs	Soil Cleanup Target Levels per Chapter 62-770 and 62-777 FAC
TRPH	total recoverable petroleum hydrocarbons
UST	underground storage tank
VOCs	volatile organic compounds

1.0 Introduction

CH2M HILL Constructors, Inc. (CCI) was contracted by the Southern Division, Naval Facilities Engineering Command (NAVFAC) to perform a source removal at the JP-5 pipeline located below the Ortega River Bridge on Timuquana Road in Jacksonville, Florida. The source removal was conducted in accordance with the Florida Department of Environmental Protection (FDEP) Petroleum Contamination Site Cleanup Rule 62-770, Florida Administrative Code (FAC).

A work plan was not prepared for the scope of work based upon technical direction from Southern Division, NAVFAC. This work was authorized under the Response Action Contract No. N62467-98-D-0995, Contract Task Order (CTO) No. 0029.

1.1 Site Background

The Ortega River Overpass site consisted of an area of petroleum-contaminated soil associated with an aboveground valve for the JP-5 pipeline that extended from Naval Air Station (NAS) Cecil Field to NAS Jacksonville. The site was determined to be contaminated with polycyclic aromatic hydrocarbons (PAHs) during an investigation by Tetra Tech NUS (TtNUS).

1.2 Project Objectives

The primary objective of the source removal was to remove petroleum-contaminated soils that exceeded the Soil Cleanup Target Levels (SCTLs) outlined in FAC 62-770 and 62-777 to the horizontal excavation limits staked out by Ttnus and the vertical excavation limits of 1 foot below ground surface (bls) under technical direction from Southern Division NAVFAC. Soil was to be excavated to the specified limits and then the area was to be backfilled with clean fill material imported from offsite.

2.0 Source Removal Activities

A source removal was conducted at the Ortega River Bridge site from October 14, 2001 to October 18, 2001. A total of 23.56 tons of petroleum contaminated soil was excavated from the site and disposed offsite. No free product was found during the excavation activities. Photographs showing the site during and after the source removal are provided in Appendix A.

2.1 Site Preparation

In preparation for excavation, Sunshine State One Call of Florida marked out utilities. No utilities were encountered in the excavation area.

2.2 Soil Excavation and Disposal

2.2.1 Soil Excavation

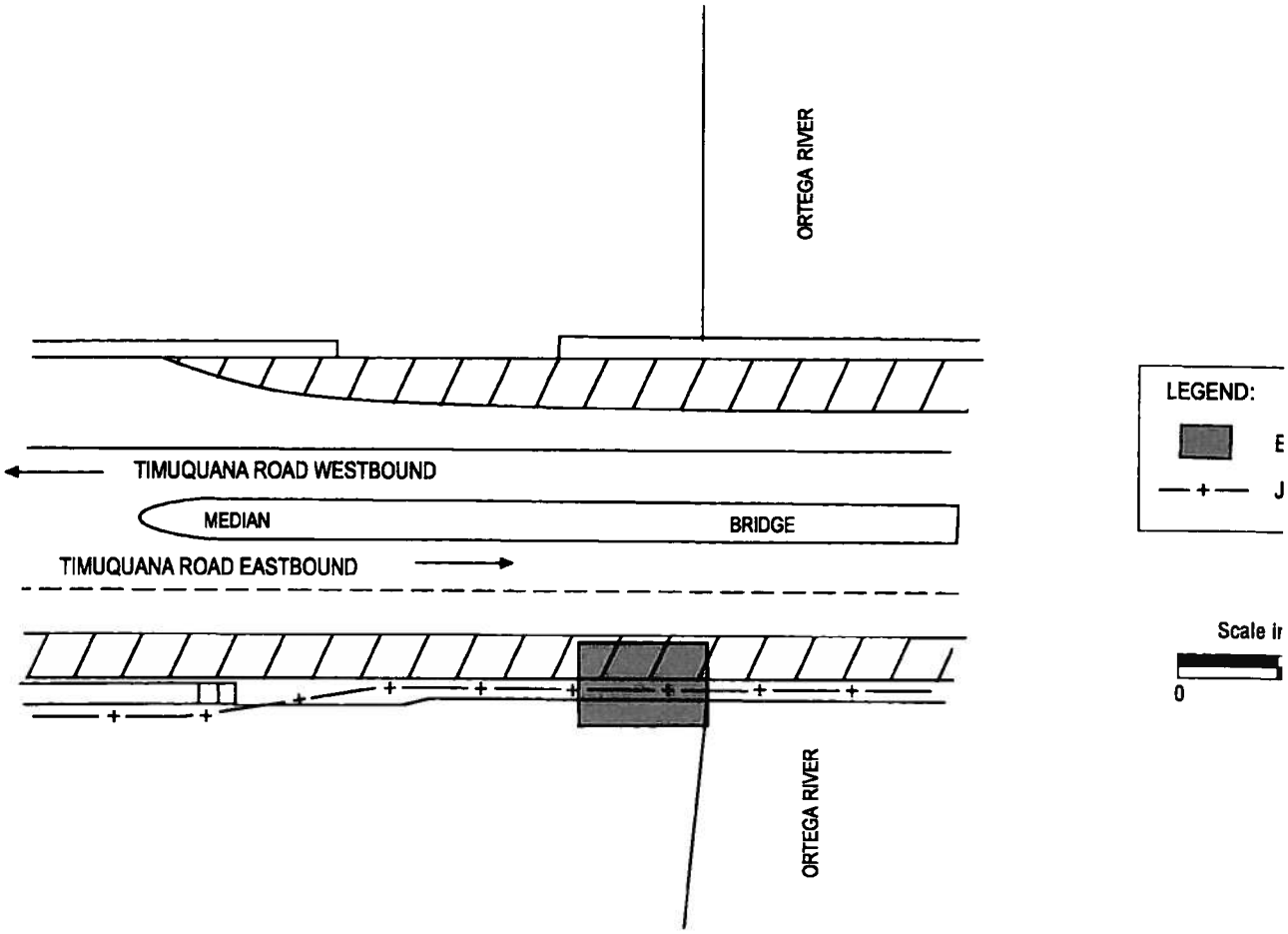
Soils were excavated to the limits that were staked out by TtNUS. The limits were based on soil samples collected during the Site Assessment performed by TtNUS (TtNUS, 2000). A total of 23.56 tons of contaminated soil was removed from the excavation using a mini-excavator. The soil was loaded into a hopper, raised to street level by a boom truck, and dumped into a roll-off container for offsite disposal. A vacuum truck was used to move the soil from below the bridge to the street level at the beginning of the project, but proved to be ineffective, so the hopper and boom truck method was utilized. Figure 2-1 shows the limits of the excavation and photographs showing the excavation are provided in Appendix A.

2.2.2 Soil Transportation and Disposal

The petroleum-contaminated soil was transported offsite by truck to the Broadhurst Landfill in Jesup, Georgia. A summary of the manifests is provided in Table 2-1, copies of the manifests are provided in Appendix B, and Certificates of Disposal are provided in Appendix C.

TABLE 2-1
Summary of Manifest for Soil Disposal

Date	Truck #	Company	Manifest #	Weight (pounds)	Tare (pounds)	Net (pounds)	Net (tons)
10/15/01	NA	Southland Waste	14656	49,800	31,800	18,000	9.00
10/16/01	NA	Southland Waste	14657	50,180	32,100	18,080	9.04
10/17/01	NA	Southland Waste	14658	42,000	31,040	11,040	5.52
				TOTAL			23.56



CH2MHILL

A102001004ATL \ Cecil 107.fh8

2.2.3 Backfilling and Site Restoration

The material used to backfill the excavation was obtained from Coxwell's Crystal Springs Pit and delivered by Spencer Contracting. A copy of the analytical report confirming that the material was clean fill is presented in Appendix D.

The backfilled area was leveled to match the existing grade.

3.0 Conclusions

During the source removal 23.56 tons of petroleum-contaminated soil were removed from the locations shown on Figure 2-1. The soil was transported to Broadhurst Landfill in Jesup, Georgia. The horizontal and vertical limits of the excavation matched the limits that were staked out by TtNUS. No free product was encountered during the excavation.

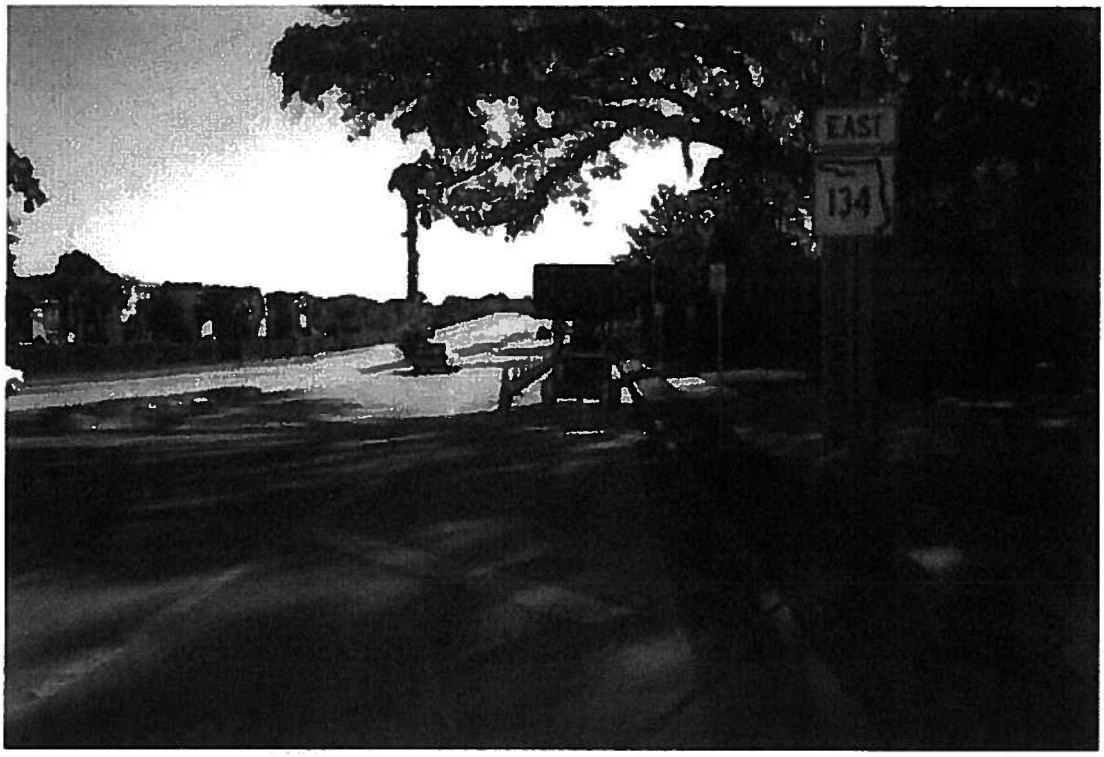
4.0 References

CH2M HILL Constructors, Inc. November 1998. Basewide Work Plan, Revision 01. NAS Cecil Field Jacksonville, Florida. Prepared for Southern Division Naval Facilities Engineering Command.

Florida Department of Environmental Protection. August 1999. Contaminant Target Levels Rule, Soil, Groundwater and Surface Water Target Cleanup Levels, Florida Administrative Code (F.A.C.) Chapter 62-777.

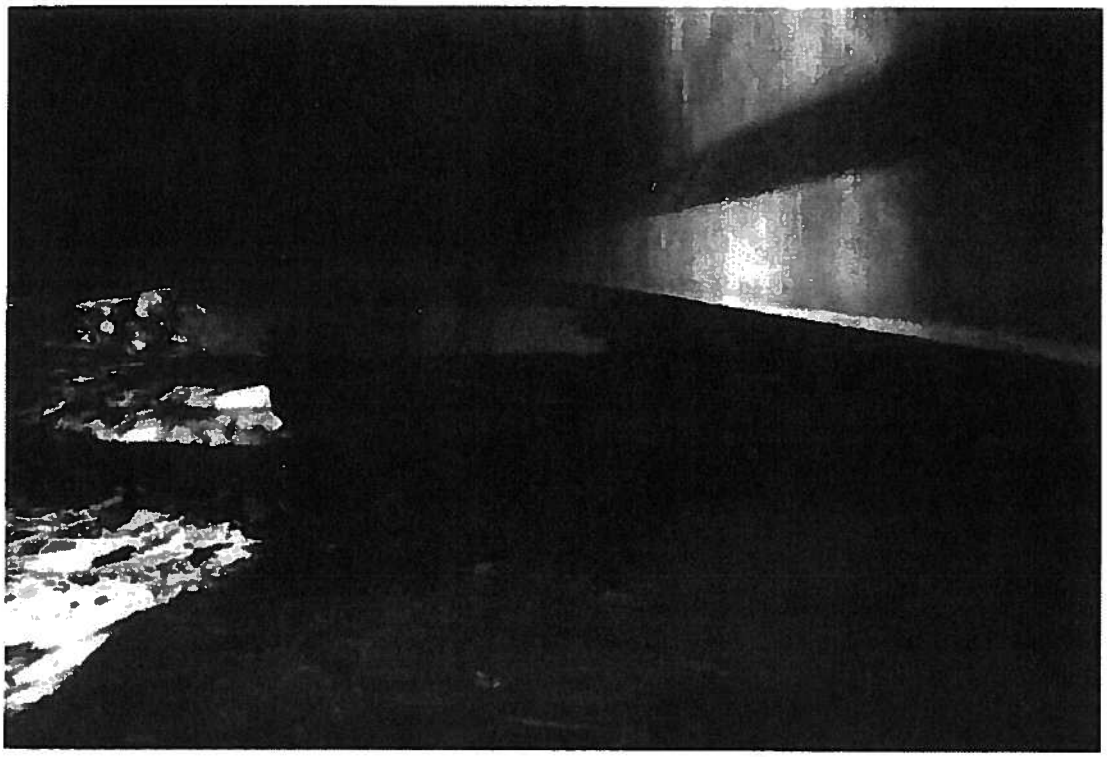
Appendix A

Photographs

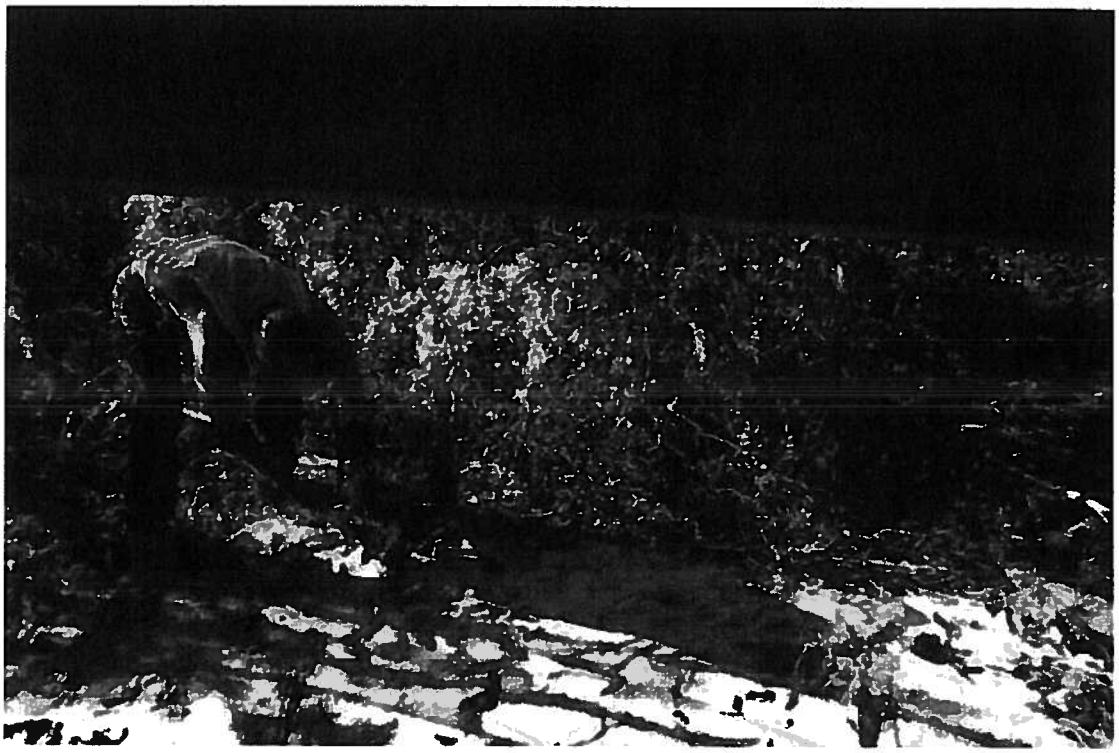


1. Site conditions prior to the initiation soil excavation activities. Looking East.

2. View of bridge coned off. Looking East.



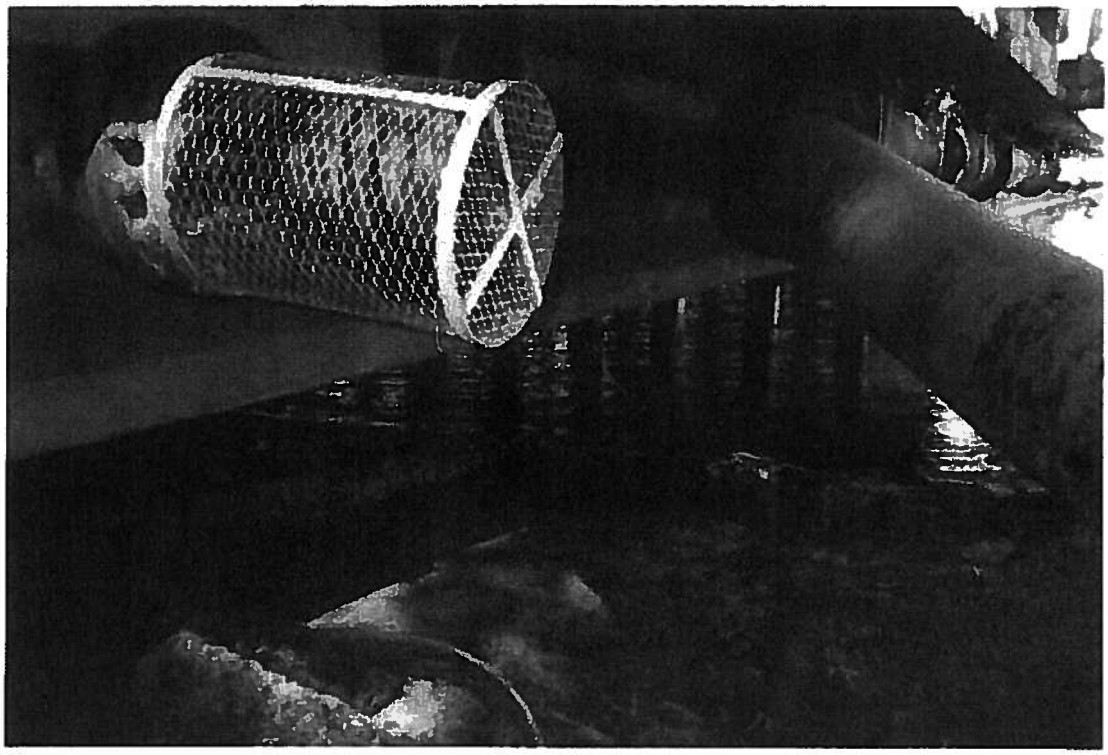
3. View of contaminated area under bridge. Looking West.



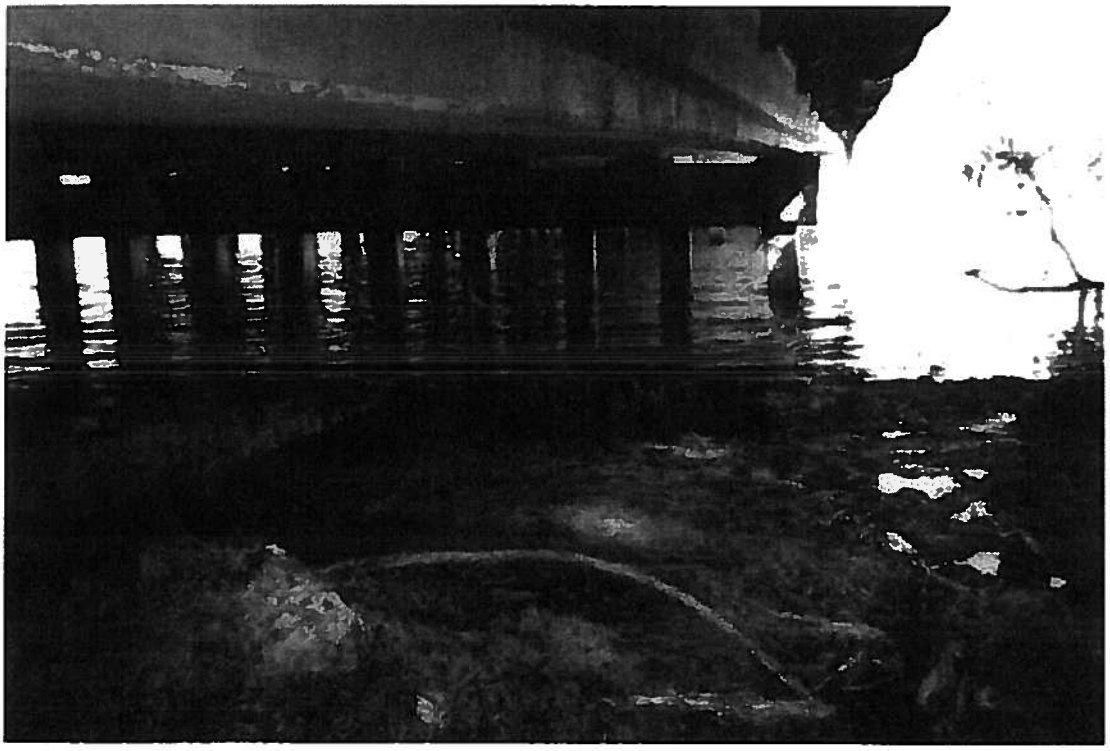
4. View of area being cleared of brush. Looking West.

5. Lowering equipment to contamination zone beneath bridge. Looking East.

6. Excavation of contaminated soil, removal of soil via six-inch hose into vacuum truck above. Looking North.



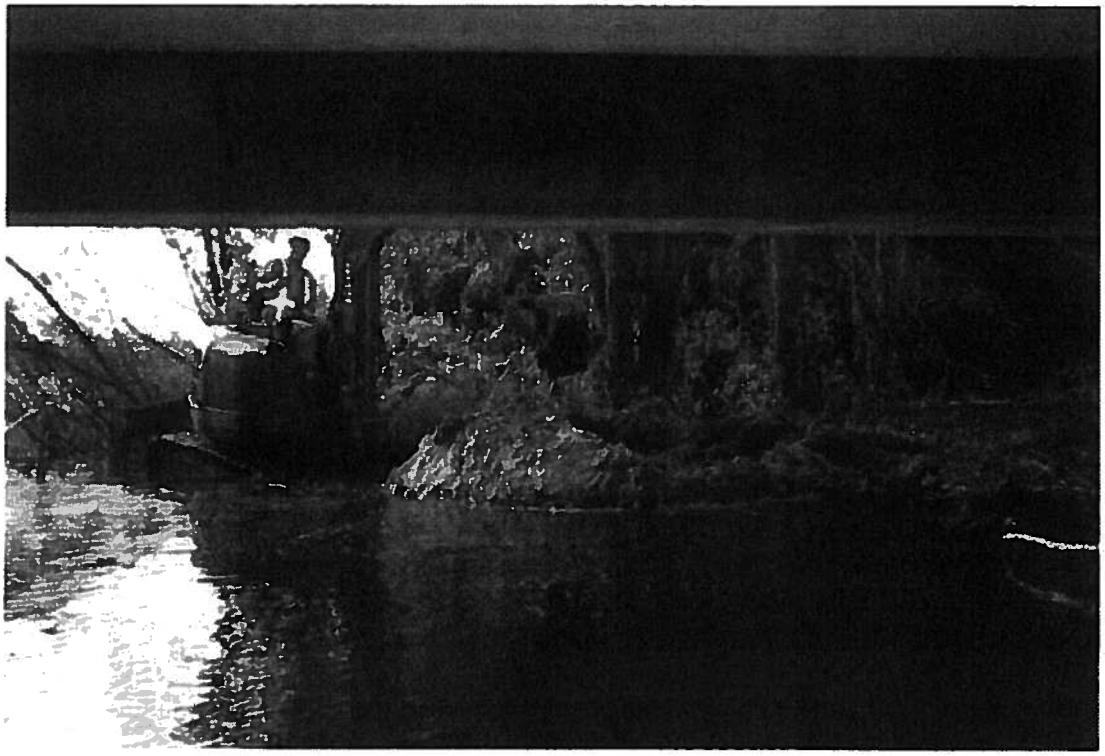
7. JP-5 pipeline and valve beneath bridge. Excavation beneath bridge in background. Looking East.



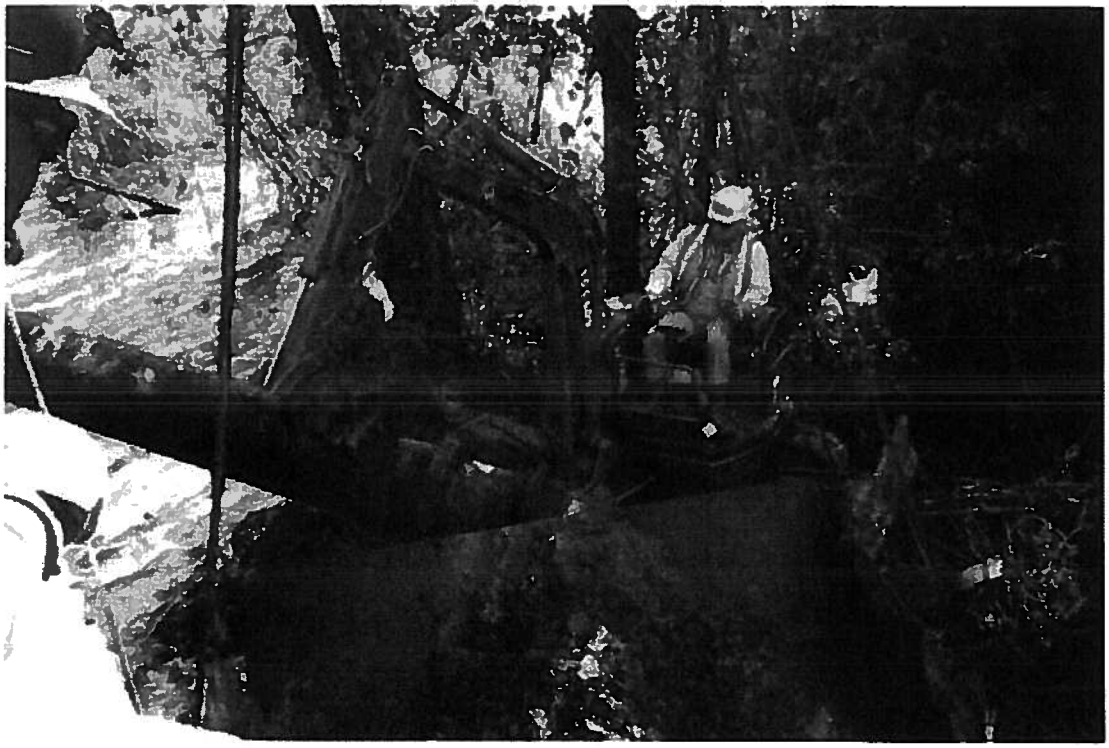
8. Excavation area beneath bridge. Looking East.

9. Excavated soil is loaded into pan hopper and lifted to surface level via boom truck. Looking East.

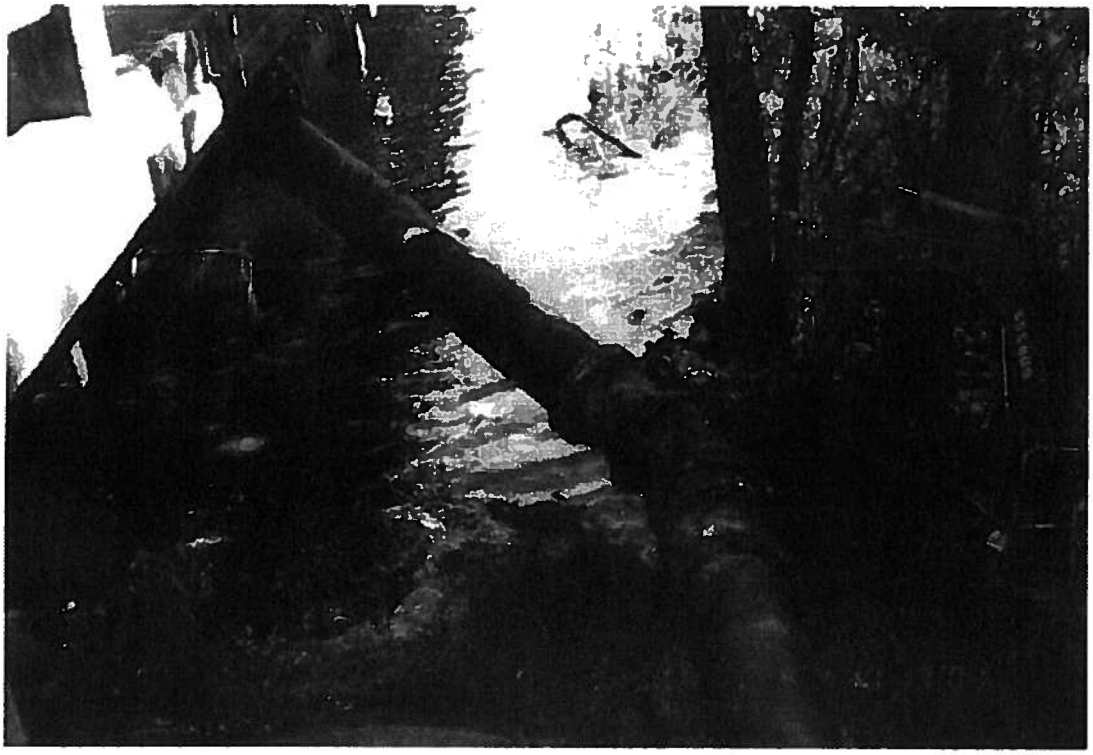
10. Excavation area during period of high tide. Looking North.



11. Excavation of contaminated soil. Looking North.



12. Excavated soil being loaded into pan hopper. Looking North.



13. Area being backfilled. Looking East.

Appendix B

Copy of Soil Manifest

REPUBLIC
Waste Services Division

Manifest Number: 14656

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: US Navy US EPA ID#: FL 5170022474

Billing Address: Omegasys, 4661 Hammermill Road, Suite B, Tucker, GA 30084

Site Address: NAS Cecil Field, Jacksonville, FL

County of Origin: Duval Phone: (904) 777-8850

Description of Waste	Total Quantity	Profile Number	Unit of Measure	Container Type
Contaminated Soil	Roll-off	20196	Tons	Dump Trailer
			9.00	

Special Handling Instructions
Site # Timequana Road

PO# 27706

(FENN. VAC)

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

David J. Kruzicki
Generator Authorized Agent Name

D. J. Kruzicki
Signature Date Shipped

TRANSPORTER

Transporter Name: Southland Waste system ~~Beaver Bulk, Inc.~~ DOT#: ~~0254452~~

Address: ~~P.O. Box 417, Live Oak, FL~~ 8619 Western Way Jacksonville Fla Truck Number: 312

Jon Tyson
Name of Authorized Agent

Signature Date Delivered

DISPOSAL FACILITY

Site Name: Broadhurst Environmental, Inc. Phone: 912-530-7050

Address: 4800 Broadhurst Road West, Screven, Georgia 31560

I hereby acknowledge receipt of the above described materials.

Broadhurst Env.
Name of Authorized Agent

Earlene
Signature

10/17/01
Date Received

White - Original Yellow - Transporter Pink - Disposal Facility Gold - Customer

REPUBLIC Waste Services Division

Manifest Number: 14657

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: US Navy US EPA ID#: FL 5170022474

Billing Address: Omegasys, 4661 Hammermill Road, Suite B, Tucker, GA 30084

Site Address: NAS Cecil Field, Jacksonville, FL

County of Origin: Duval Phone: (904) 777-8850

Description of Waste	Total Quantity	Profile Number	Unit of Measure	Container Type
Contaminated Soil	Roll-off	20196	Tons	Dump Trailer
			9.04	

Special Handling Instructions
Site # Timeqaana Rd.

(FEW-VAC)

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

David J. Kruzicki
Generator Authorized Agent Name

D. J. Kruzicki
Signature

10-16-01
Date Shipped

TRANSPORTER

Transporter Name: South Land Waste ~~Reeves Bulk Inc.~~ DOT#: ~~0254452~~

Address: 3619 Westen Way Jacksonville ~~P.O. Box 417, Live Oak, FL~~ Truck Number: 329

STEVEN R JUMP
Name of Authorized Agent

Signature

10-16-01
Date Delivered

DISPOSAL FACILITY

Site Name: Broadhurst Environmental, Inc. Phone: 912-530-7050

Address: 4800 Broadhurst Road West, Screven, Georgia 31560

I hereby acknowledge receipt of the above described materials.

Broadhurst
Name of Authorized Agent

Eulene
Signature

10/17/01
Date Received

White - Original Yellow - Transporter Pink - Disposal Facility Gold - Customer

REPUBLIC
Waste Services Division

Manifest Number: 14658

NON-HAZARDOUS WASTE MANIFEST

GENERATOR

Generator Name: US Navy US EPA ID#: FL 5170022474

Billing Address: Omegasys, 4661 Hammermill Road, Suite B, Tucker, GA 30084

Site Address: NAS Cecil Field, Jacksonville, FL

County of Origin: Duval Phone: (904) 777-8850

Description of Waste	Total Quantity	Profile Number	Unit of Measure	Container Type
Contaminated Soil	Roll-off	20196	Tons	Dump Trailer
			5.52	

Special Handling Instructions
Site # Timiquana Rd.

Fenn-Vac

I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

David J. Kruzicki D. J. Kruzicki 10-17-01
Generator Authorized Agent Name Signature Date Shipped

TRANSPORTER

Transporter Name: South Land Waste ~~Beaver Bulk Inc.~~ DOT#: 0254452

Address: 8619 Western Way Fla. Jacksonville. ~~P.O. Box 417, Live Oak, FL~~ Truck Number: 529

STEVEN R JUNE 10-17-01
Name of Authorized Agent Signature Date Delivered

DISPOSAL FACILITY

Site Name: Broadhurst Environmental, Inc. Phone: 912-530-7050

Address: 4800 Broadhurst Road West, Screven, Georgia 31560

I hereby acknowledge receipt of the above described materials.

Broadhurst Earlene 10/18/01
Name of Authorized Agent Signature Date Received

White - Original Yellow - Transporter Pink - Disposal Facility Gold - Customer

Appendix C

Certificate of Disposal

Broadhurst
Environmental, Inc.

OCTOBER 31,2001

CERTIFICATE OF DISPOSAL

This letter is to certify that all wastes received from FENN VAC,INC. on behalf of US NAVY CECIL FIELDon the following dates were landfilled in accordance with all state and federal regulations.

SITE Name:TIMEGUANA.

MANIFEST NUMBER	TONAGE	DATE
14656, 14657, 14658	23.56	10/17-18/2001

Waste material= Contaminated Soil

Profile number: 20196

Disposal method was D-81(Subtitle D Landfill)

BROADHURST ENVIRONMENTAL, INC.

John W Summions 11/1/01
Date

20196

P.O. Box 278 • Screven, Georgia 31560 • Phone (912) 530-7050 • Fax (912) 530-7070

Appendix D

Analytical Lab Data for

Clean Fill

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

RF

FAXED
#30-0003

Laboratory Report

Report Number: 124935

Project: Coxwell Pit

Prepared For:

Tim Prep Inc.
540 West Mill Street
Baldwin, FL 32234

Attention: Mr. Michael Stokes

August 8, 2000

P.O. No. 7358

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Stacie Harper
Project Manager

Kathryn Smith
Quality Assurance

Analytical Services Inc., Norcross Laboratory maintains the following certifications, approvals, and accreditations: Georgia Laboratory Certification No.'s: 812/851/1301; Alabama Laboratory I.D. No.: 41090; Arkansas Certification; California Laboratory Certification No.:2290; Connecticut Laboratory I.D. No.: PH-0250; Florida Certification No.'s: 87403/E87315 and Florida QA Plan No.: 910158G; National Sanitation Foundation International Certification No.: 04180; North Carolina Certification No.: 381; North Dakota Certification No.: R-116; Oklahoma Laboratory I.D. 9907; South Carolina Laboratory I.D. No.: 98011; Tennessee Laboratory I.D. No.: 02994; United States Army Corps of Engineers-MRD Certification; USDA Soil Import License No.: S-36027; and Virginia Laboratory I.D. No.: 00026. All analysis performed by or under the supervision of a Georgia Drinking Water or Wastewater Certified Analyst. Analyst certification numbers available upon request.

This report may not be reproduced, except in full, without written approval from Analytical Services, Inc.

ASI ANALYTICAL SERVICES, INC.
Environmental Monitoring & Laboratory Analysis
110 Technology Parkway Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Tim-Prep Inc.
540 West Mill Street
Baldwin, FL 32234

Attention: Mr. Michael Stokes
Report No. 124935

P.O. No. 7353
August 8, 2000

Sample Description

Tim-Prep Inc.
Soil, grab, Coxwell Pit, North\South\East\West Areas, 07/20/2000, received 07/21/2000

Analytical Method	Analyte	Result	Detection Limit	Units
	General Chemistry			
EPA 9045	pH (laboratory)	5.34E	-	
	Target Analyte List - Metals			
	Metals			
EPA 6010	Total Aluminum (Al)	2900	10	mg/kg
EPA 6010	Total Antimony (Sb)	BDL	5.0	mg/kg
EPA 7060	Total Arsenic (As)	BDL	3.0	mg/kg
EPA 6010	Total Barium (Ba)	BDL	1.0	mg/kg
EPA 6010	Total Beryllium (Be)	BDL	1.0	mg/kg
EPA 6010	Total Cadmium (Cd)	BDL	1.0	mg/kg
EPA 6010	Total Calcium (Ca)	300	5.0	mg/kg
EPA 6010	Total Chromium (Cr)	3.1	1.0	mg/kg
EPA 6010	Total Cobalt (Co)	BDL	4.0	mg/kg
EPA 6010	Total Copper (Cu)	3.1	2.0	mg/kg
EPA 6010	Total Iron (Fe)	78	10	mg/kg
EPA 6010	Total Lead (Pb)	BDL	5.0	mg/kg
EPA 6010	Total Magnesium (Mg)	14	5.0	mg/kg
EPA 6010	Total Manganese (Mn)	BDL	4.0	mg/kg
EPA 7471	Total Mercury (Hg)	BDL	0.25	mg/kg
EPA 6010	Total Nickel (Ni)	BDL	2.0	mg/kg
EPA 6010	Total Potassium (K)	24	20	mg/kg
EPA 7740	Total Selenium (Se)	BDL	4.0	mg/kg
EPA 6010	Total Silver (Ag)	BDL	1.0	mg/kg
EPA 6010	Total Sodium (Na)	280	5.0	mg/kg
EPA 7841	Total Thallium (Tl)	BDL	5.0	mg/kg

BDL - Below Detection Limit
E - Estimated concentration

August 8, 2000

Sample Description

Tim-Prep Inc.

Soil, grab, Coxwell Pit, North\South\East\West Areas, 07/20/2000, received 07/21/2000

Analytical Method	Analyte	Result	Detection Limit	Units
EPA 6010	Total Vanadium (V)	BDL	2.0	mg/kg
EPA 6010	Total Zinc (Zn)	12	2.0	mg/kg
	Target Compound List			
	Volatile Organics			
EPA 8260B	Acetone	BDL	10	ug/kg
EPA 8260B	Benzene	BDL	10	ug/kg
EPA 8260B	Bromodichloromethane	BDL	10	ug/kg
EPA 8260B	Bromoform	BDL	10	ug/kg
EPA 8260B	Bromomethane	BDL	10	ug/kg
EPA 8260B	2-Butanone	BDL	10	ug/kg
EPA 8260B	Carbon disulfide	BDL	10	ug/kg
EPA 8260B	Carbon tetrachloride	BDL	10	ug/kg
EPA 8260B	Chlorobenzene	BDL	10	ug/kg
EPA 8260B	Chloroethane	BDL	10	ug/kg
EPA 8260B	Chloroform	BDL	10	ug/kg
EPA 8260B	Chloromethane	BDL	10	ug/kg
EPA 8260B	Dibromochloromethane	BDL	10	ug/kg
EPA 8260B	1,1-Dichloroethane	BDL	10	ug/kg
EPA 8260B	1,2-Dichloroethane	BDL	10	ug/kg
EPA 8260B	1,1-Dichloroethene	BDL	10	ug/kg
EPA 8260B	1,2-Dichloroethene (total)	BDL	10	ug/kg
EPA 8260B	1,2-Dichloropropane	BDL	10	ug/kg
EPA 8260B	cis-1,3-Dichloropropene	BDL	10	ug/kg
EPA 8260B	trans-1,3-Dichloropropene	BDL	10	ug/kg
EPA 8260B	Ethylbenzene	BDL	10	ug/kg
EPA 8260B	2-Hexanone	BDL	10	ug/kg
EPA 8260B	4-Methyl-2-pentanone	BDL	10	ug/kg
EPA 8260B	Methylene chloride	BDL	10	ug/kg
EPA 8260B	Styrene	BDL	10	ug/kg
EPA 8260B	1,1,2,2-Tetrachloroethane	BDL	10	ug/kg
EPA 8260B	Tetrachloroethene	BDL	10	ug/kg
EPA 8260B	Toluene	BDL	10	ug/kg
EPA 8260B	1,1,1-Trichloroethane	BDL	10	ug/kg
EPA 8260B	1,1,2-Trichloroethane	BDL	10	ug/kg
EPA 8260B	Trichloroethene	BDL	10	ug/kg
EPA 8260B	Vinyl chloride	BDL	10	ug/kg
EPA 8260B	Xylenes	BDL	10	ug/kg
	Pesticides			

BDL - Below Detection Limit
E - Estimated concentration

August 8, 2000

Sample Description

Tim-Prep Inc.

Soil, grab, Coxwell Pit, North\South\East\West Areas, 07/20/2000, received 07/21/2000

Analytical Method	Analyte	Result	Detection Limit	Units
EPA 8081A	Aldrin	BDL	3.3	ug/kg
EPA 8081A	BHC-alpha	BDL	3.3	ug/kg
EPA 8081A	BHC-beta	BDL	3.3	ug/kg
EPA 8081A	BHC-delta	BDL	3.3	ug/kg
EPA 8081A	BHC-gamma (Lindane)	BDL	3.3	ug/kg
EPA 8081A	Chlordane-alpha	BDL	3.3	ug/kg
EPA 8081A	Chlordane-gamma	BDL	3.3	ug/kg
EPA 8081A	4,4'-DDD	BDL	3.3	ug/kg
EPA 8081A	4,4'-DDE	BDL	3.3	ug/kg
EPA 8081A	4,4'-DDT	BDL	3.3	ug/kg
EPA 8081A	Dieldrin	BDL	3.3	ug/kg
EPA 8081A	Endosulfan I	BDL	3.3	ug/kg
EPA 8081A	Endosulfan II	BDL	3.3	ug/kg
EPA 8081A	Endosulfan sulfate	BDL	3.3	ug/kg
EPA 8081A	Endrin	BDL	3.3	ug/kg
EPA 8081A	Endrin aldehyde	BDL	3.3	ug/kg
EPA 8081A	Endrin ketone	BDL	3.3	ug/kg
EPA 8081A	Heptachlor	BDL	3.3	ug/kg
EPA 8081A	Heptachlor epoxide	BDL	3.3	ug/kg
EPA 8081A	Methoxychlor	BDL	3.3	ug/kg
EPA 8081A	Toxaphene	BDL	9.9	ug/kg
		BDL	66	ug/kg
	PCB's			
EPA 8082	PCB 1016	BDL	33	ug/kg
EPA 8082	PCB 1221	BDL	33	ug/kg
EPA 8082	PCB 1232	BDL	33	ug/kg
EPA 8082	PCB 1242	BDL	33	ug/kg
EPA 8082	PCB 1248	BDL	33	ug/kg
EPA 8082	PCB 1254	BDL	33	ug/kg
EPA 8082	PCB 1260	BDL	33	ug/kg
	Chlorinated Herbicides			
EPA 8151A	2,4-D	BDL	170	ug/kg
EPA 8151A	2,4-DB	BDL	30	ug/kg
EPA 8151A	2,4,5-T	BDL	4.0	ug/kg
EPA 8151A	2,4,5-TP (Silvex)	BDL	330	ug/kg
EPA 8151A	Dalapon	BDL	150	ug/kg
EPA 8151A	Dicamba	BDL	26	ug/kg
EPA 8151A	Dichloroprop	BDL	35	ug/kg
EPA 8151A	Dinoseb	BDL	130	ug/kg

BDL - Below Detection Limit
E - Estimated concentration

August 8, 2000

Sample Description

Tim-Prep Inc.

Soil, grab. Coxwell Pit. North\South\East\West Areas. 07/20/2000, received 07/21/2000

Analytical Method	Analyte	Result	Detection Limit	Units
EPA 8151A	MCPA	BDL	5000	ug/kg
EPA 8151A	MCPP	BDL	3800	ug/kg

BDL - Below Detection Limit
E - Estimated concentration

CHAIN OF CUSTODY RECORD

ASI ANALYTICAL SERVICES, INC.
ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS
110 TECHNOLOGY PARKWAY NORCROSS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CLIENT NAME: Tim-Prep Inc.

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 540 [illegible] St. Baldwin FL. 32234 [illegible]-266-4784 [illegible]-266-4038

ATTENTION: Mike Stokes

CC:

REQUESTED COMPLETION DATE: ASAP

PO #: 7353

PROJECT NAME/STATE: Coxwell Pit

PROJECT #:

DATE	TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# OF CONTAINERS	ANALYSIS REQUESTED	LAB ID NUMBER
7-20-00	2:15	S		✓	North Area	1		
7-20-00	[illegible]	S		✓	South Area	1		
7-20-00	[illegible]	S		✓	East Area	1		
7-20-00	[illegible]	S		✓	West Area	1		

SAMPLED BY AND TITLE: SOE BERGLIN	DATE/TIME: 7/20 2:13 pm	RELINQUISHED BY:	DATE/TIME:
RECEIVED BY:	DATE/TIME:	RELINQUISHED BY:	DATE/TIME:
RECEIVED BY:	DATE/TIME:	RELINQUISHED BY:	DATE/TIME:
RECEIVED BY LAB: [illegible]	DATE/TIME: [illegible]	SAMPLE SHIPPED VIA: UPS FED-EX COURIER CLIENT OTHER:	
ENTERED INTO LIMS:	COC REVIEWED:	AIR BILL #: [illegible]	COOLER #:

CO
ICE
pH
TEM
SAM

Environmental Conservation Laboratories, Inc.
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210
www.enccolabs.com

ENCO Laboratories

DHRS Certificate No. E82277

CLIENT : TASK Environmental
ADDRESS: 501 South Blvd.
Tampa, FL 33606

REPORT # : JAX14577
DATE SUBMITTED: December 4, 2000
DATE REPORTED : December 7, 2000

ATTENTION: Mr. Chris Cherniak

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT #: 149152

NTFF Removal

12/04/00

#1 - CFNT-WC-CLEANFILL @ 10:00

PROJECT MANAGER Scott D. Martin

ENCO LABORATORIES
REPORT # : JAX14577
DATE REPORTED: December 7, 2000
REFERENCE : 149152
PROJECT NAME : NTFF Removal

RESULTS OF ANALYSIS

EPA METHOD 8270

TCL Semivolatiles	CFMT-NC-CLEANFILL	LAB BLANK	Units
Acenaphthene	360 U	330 U	µg/Kg
Acenaphthylene	360 U	330 U	µg/Kg
Anthracene	360 U	330 U	µg/Kg
Benzo(a)anthracene	360 U	330 U	µg/Kg
Benzo(b)fluoranthene	360 U	330 U	µg/Kg
Benzo(k)fluoranthene	360 U	330 U	µg/Kg
Benzo(g,h,i)perylene	360 U	330 U	µg/Kg
Benzo(a)pyrene	360 U	330 U	µg/Kg
Benzylbutyl phthalate	360 U	330 U	µg/Kg
Bis(2-chloroethoxy)methane	360 U	330 U	µg/Kg
Bis(2-chloroethyl)ether	360 U	330 U	µg/Kg
Bis(2-chloroisopropyl)ether	360 U	330 U	µg/Kg
Bis(2-ethylhexyl)phthalate	360 U	330 U	µg/Kg
4-Bromophenylphenyl ether	360 U	330 U	µg/Kg
2-Chloronaphthalene	360 U	330 U	µg/Kg
Carbazole	360 U	330 U	µg/Kg
4-Chlorophenyl phenyl ether	360 U	330 U	µg/Kg
Chrysene	360 U	330 U	µg/Kg
Dibenzo(a,h)anthracene	360 U	330 U	µg/Kg
1,2-Dichlorobenzene	360 U	330 U	µg/Kg
1,3-Dichlorobenzene	360 U	330 U	µg/Kg
1,4-Dichlorobenzene	360 U	330 U	µg/Kg
3,3'-Dichlorobenzidine	710 U	660 U	µg/Kg

U - Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX14577
DATE REPORTED: December 7, 2000
REFERENCE : 149152
PROJECT NAME : NTFF Removal

RESULTS OF ANALYSIS

EPA METHOD 8270 (cont.) - TCL Semivolatiles	CFNT-WC-CLEANFILL	LAB BLANK	Units
Diethyl phthalate	360 U	330 U	µg/Kg
Dimethyl phthalate	360 U	330 U	µg/Kg
Di-n-butyl phthalate	360 U	330 U	µg/Kg
Di-n-octyl phthalate	360 U	330 U	µg/Kg
2,4-Dinitrotoluene	360 U	330 U	µg/Kg
2,6-Dinitrotoluene	360 U	330 U	µg/Kg
Fluoranthene	360 U	330 U	µg/Kg
Fluorene	360 U	330 U	µg/Kg
Hexachlorobenzene	360 U	330 U	µg/Kg
Hexachlorobutadiene	360 U	330 U	µg/Kg
Hexachlorocyclopentadiene	360 U	330 U	µg/Kg
Hexachloroethane	360 U	330 U	µg/Kg
Indeno(1,2,3-cd)pyrene	360 U	330 U	µg/Kg
Isophorone	360 U	330 U	µg/Kg
2-Methylnaphthalene	360 U	330 U	µg/Kg
Naphthalene	360 U	330 U	µg/Kg
Nitrobenzene	360 U	330 U	µg/Kg
N-Nitrosodi-n-propylamine	360 U	330 U	µg/Kg
N-Nitrosodiphenylamine	360 U	330 U	µg/Kg
Phenanthrene	360 U	330 U	µg/Kg
Pyrene	360 U	330 U	µg/Kg
1,2,4-Trichlorobenzene	360 U	330 U	µg/Kg
4-Chloroaniline	360 U	330 U	µg/Kg
2-Nitroaniline	360 U	330 U	µg/Kg

U = Compound was analyzed for but not detected to the level shown.

5

ENCO LABORATORIES
REPORT # : JAX14577
DATE REPORTED: December 7, 2000
REFERENCE : 149152
PROJECT NAME : NTFF Removal

RESULTS OF ANALYSIS

EPA METHOD 8270 (cont.) -

TCL Semivolatiles	CFNT-WC-CLEANFILL	LAB BLANK	Units
3-Nitroaniline	360 U	330 U	µg/Kg
4-Nitroaniline	360 U	330 U	µg/Kg
Dibenzofuran	360 U	330 U	µg/Kg
4-Chloro-3-methylphenol	360 U	330 U	µg/Kg
2-Chlorophenol	360 U	330 U	µg/Kg
2,4-Dichlorophenol	360 U	330 U	µg/Kg
2,4-Dimethylphenol	360 U	330 U	µg/Kg
2,4-Dinitrophenol	1800 U	1600 U	µg/Kg
2-Methyl-4,6-dinitrophenol	1100 U	990 U	µg/Kg
2-Nitrophenol	360 U	330 U	µg/Kg
4-Nitrophenol	360 U	330 U	µg/Kg
Pentachlorophenol	360 U	330 U	µg/Kg
Phenol	360 U	330 U	µg/Kg
2,4,6-Trichlorophenol	360 U	330 U	µg/Kg
2-Methylphenol	360 U	330 U	µg/Kg
3 & 4-Methylphenol	360 U	330 U	µg/Kg
2,4,5-Trichlorophenol	360 U	330 U	µg/Kg

Surrogate:	% RECOV	% RECOV	LIMITS
Nitrobenzene -D5	46	41	30-106
2-Fluorobiphenyl	61	57	38-107
Terphenyl -D14	75	72	29-131
Phenol -D5	40	42	12-87
2-Fluorophenol	38	42	19-115
2,4,6-Tribromophenol	43	39	35-126
Date Prepared	12/06/00	12/06/00	
Date Analyzed	12/06/00	12/06/00	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX14577
DATE REPORTED: December 7, 2000
REFERENCE : 149152
PROJECT NAME : NTFF Removal

RESULTS OF ANALYSIS

MISCELLANEOUS	METHOD	CFMT-WC-CLEANFILL	LAB BLANK	Units
Percent Solids	SM2540G	93	NA	%
Date Analyzed		12/06/00		

EPA METHOD FLPRO - PETROL. RESIDUAL ORG.	CFMT-WC-CLEANFILL	LAB BLANK	Units
Hydrocarbons (C8-C40)	7.1 U	6.6 U	mg/Kg
Surrogate:	% RECOV	% RECOV	LIMITS
o-Terphenyl	86	109	51-148
Date Prepared	12/05/00	12/05/00	
Date Analyzed	12/06/00	12/06/00	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JAX14577
DATE REPORTED: December 7, 2000
REFERENCE : 149152
PROJECT NAME : NTFF Removal

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 8270				
Phenol	45/ 44/ 42	30-135	2	38
2-Chlorophenol	56/ 56/ 50	46-133	<1	38
1,4-Dichlorobenzene	57/ 54/ 49	31-123	5	33
N-Nitrosodi-N-Propylamine	44/ 43/ 41	26-112	2	29
1,2,4-Trichlorobenzene	65/ 60/ 46	37-131	8	20
4-Chloro-3-methylphenol	64/ 58/ 45	46-133	10	38
Acenaphthene	68/ 63/ 53	39-135	8	29
4-Nitrophenol	67/ 65/ 57	10-97	3	68
2,4-Dinitrotoluene	75/ 74/ 57	39-137	1	32
Pentachlorophenol	60/ 60/ 39	10-133	<1	41
Pyrene	79/ 76/ 53	39-160	4	37
PETROL. RESIDUAL ORG.				
Hydrocarbons (C8-C40)	76/ 89/ 83	62-204	16	25

Environmental Conservation Laboratories Comprehensive QA Plan #910190

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

1 Perimeter Center Plaza, Suite 700
anta, GA 30346-1370
1 No (770) 604-9182 ; Fax No (770) 604-9282

CHAIN-OF-CUSTODY RECORD

PROJECT NAME	PROJECT NUMBER	LAB NAME AND CONTACT	FAX AND MAIL REPORTS TO: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Ad
A.K. Cecil Field TPP Removal	149152	ENCO Laboratories, Inc. Wendy Webb	Chris Cherniak, TASK Environmental	P.O. Box 156 777-6880 La
PROJECT PHASE/TASK	PO OR DO NUMBER	LAB PO NUMBER	FAX AND MAIL REPORTS TO: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Ad
Hole Clean Fill	6062		Bill Canales, CCI/JAJES	8319 Authori 777-4812 Sa
PROJECT CONTACT	PROJECT TEL NO AND FAX NO	PH (813) 247-8202 FAX (813) 240-1297	FAX AND MAIL REPORTS TO: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Ad
hris Cherniak	phone (904) 777-6880	(904) 256-3007		

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (use codes on back)	DATE COLLECTED	TIME COLLECTED	DATA FIELD LEVEL (use codes on back)	TAT (include days)	PCL, EDD, field data	Metals by PL, FBD									
1	CFNT-WC-Cleanfill	Tim Prep Source Pit	S	12/04/00	10:00	III/A	3 day	X	X									
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

ANALYSES REQUIRED (Include Method Number)

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE
hris Cherniak, TASK Environmental	Transported to ENCO Labs by TASK Environmental	

RELINQUISHED BY	DATE	TIME	RECEIVED BY
Printed Name and Signature: hris Cherniak, TASK Environmental	12/4/00	15:35	Printed Name and Signature:
Printed Name and Signature: L. Cibula	12/4/00	15:35	Printed Name and Signature:

Distribution: [ ] Original - Laboratory (To be returned with Analytical Report); [ ] Copy 1 - Project File; [ ] Copy 2 - PMO

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
005-BF01-S-0221-01

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: J2100508-001

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 0221-24

Level: (low/med) LOW Date Received: 02/21/01

% Moisture: 0 decanted: (Y/N) N Date Extracted: 02/21/00

Concentrated Extract Volume: 1(ml) Date Analyzed: 02/21/01

Injection Volume: _____(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	3.6	U
91-57-6	2-Methylnaphthalene	3.6	U
208-96-8	Acenaphthylene	3.6	U
83-32-9	Acenaphthene	3.6	U
86-73-7	Fluorene	3.6	U
85-01-8	Phenanthrene	3.6	U
120-12-7	Anthracene	3.6	U
206-44-0	Fluoranthene	3.6	U
129-00-0	Pyrene	3.6	U
56-55-3	Benz(a)anthracene	3.6	U
218-01-9	Chrysene	3.6	U
205-99-2	Benzo(b)fluoranthene	3.6	U
207-08-9	Benzo(k)fluoranthene	3.6	U
50-32-8	Benzo(a)pyrene	3.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	3.6	U
53-70-3	Dibenz(a,h)anthracene	3.6	U
191-24-2	Benzo(g,h,i)perylene	3.6	U
90-12-0	1-Methylnaphthalene	3.6	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
005-DUP01
-S-0221-01

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) SOIL Lab Sample ID: J2100508-002

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 0221-25

Level: (low/med) LOW Date Received: 02/21/01

% Moisture: 0 decanted: (Y/N) N Date Extracted: 02/21/00

Concentrated Extract Volume: 1 (ml) Date Analyzed: 02/22/01

Injection Volume: _____(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	3.6	U
91-57-6	2-Methylnaphthalene	3.6	U
208-96-8	Acenaphthylene	3.6	U
83-32-9	Acenaphthene	3.6	U
86-73-7	Fluorene	3.6	U
85-01-8	Phenanthrene	3.6	U
120-12-7	Anthracene	3.6	U
206-44-0	Fluoranthene	3.6	U
129-00-0	Pyrene	3.6	U
56-55-3	Benz(a)anthracene	3.6	U
218-01-9	Chrysene	3.6	U
205-99-2	Benzo(b)fluoranthene	3.6	U
207-08-9	Benzo(k)fluoranthene	3.6	U
50-32-8	Benzo(a)pyrene	3.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	3.6	U
53-70-3	Dibenz(a,h)anthracene	3.6	U
191-24-2	Benzo(g,h,i)perylene	3.6	U
90-12-0	1-Methylnaphthalene	3.6	U

CH2M Hill Constructors, Inc.
15 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No (770) 604-9182 ; Fax No (770) 604-9282

CHAIN-OF-CUSTODY RECORD

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORT/BILL TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (
JAS Cecil Field	148799	Columbia Analytical Labs, Inc. Tom Kissinger	Jennifer Zimmerman, CCI/J.A. Jones	6219 Autho 777-4812 F
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORT/BILL TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (
Offsite Backfill Analysis	CTO 005	2612	Jeff Wilmoth, CCI	115 Perime 30346 (770
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	PH (904) 779-3277 FAX (904)-779-3011	FAX AND MAIL REPORT/BILL TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (
Bill Canelos	PH (904) 777-4812 FAX (904) 777-4262			

ANALYSIS REQUIRED (Include Method Number)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (use codes on back)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (use codes on back)	TAT (calendar days)	8270-SIM-Benzo[a]Pyr									
1	005-BF01-S-0221-01	Coxwell's Crystal Springs Pit	soil	02/21/01	11:00	III/C	3 Day	x									
2	005-DUP01-S-0221-01	Coxwell's Crystal Springs Pit	soil	02/21/01	11:00	III/C	3 Day	x									
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERAT
Bill Canelos, CCI/JAJES	sampler transport samples to Columbia Analytical Labs	

RELINQUISHED BY	DATE	TIME	RECEIVED BY
Printed Name and Signature: Bill Canelos, CCI/JAJES W/ Canelos	2/21/01	12:10	Printed Name and Signature: M J Rosam
Printed Name and Signature:			Printed Name and Signature:

Distribution: [ ] Original - Laboratory (To be returned with Analytical Report); [ ] Copy 1 - Project File; [ ] Copy 2 - PMO

Appendix E

Waste Profile

REPUBLIC SERVICES, INC.

App. #_____

Special Waste Acceptance Application

A. GENERATOR INFORMATION

1. Generator Name: U.S. NAVY
2. Site Location: CECIL FIELD
3. City: JACKSONVILLE
   State: FL Zip: 32215
4. Phone: (904) 777-6812
5. Fax: (904) 777-4262
6. Contact: DAVE KRUZICKI
7. Title: Commanding Officer

B. CUSTOMER INFORMATION

1. Customer Name: OMEGASYS
2. Address: 4661 HAMMERMILL ROAD Suite B
3. City: TUCKER
   State: GA Zip: 30084
4. Phone: (770) 621-9414
5. Fax: (770) 934-2451
6. Contact: Steven Grant
7. Title: Disposal Coordinator

C. WASTE STREAM INFORMATION

1. Common Name of Waste: Petroleum Contaminated Soil
2. Detailed Description of Process Generating Waste and Material Description: Leaking Valve on bulk Product transfer line (JP-5 Fuel line)
3. Industrial Generator [ ]Yes [X]No If yes, please list the SIC Code_____
4. Municipal Generator [ ]Yes [X]No
5. Physical State at 70° [X]Solid [ ]Semisolid [ ]Liquid [ ]Powder [ ]Combination
6. Odor: [ ]None [X]Mild [ ]Semisolid (describe)_____
7. Color Lt. Brown 8. Flash Point +200 9. Viscosity _____ 1
10. Reactive [ ]Yes [X]No With: N/A 11. pH Range: 6.8-7.5
12. Free Liquid: [ ]Yes [X]No 13. Water Content: N/A % by Water
14. Is the analytical attached derived from testing a representative sample in accordance with 40 CFR 261.35? [ ] N/A [X] Yes [ ] No
15. Does the waste contain radioactive or U.S. D.O.T. hazardous material materials? [ ] Yes [X] No

D. SUPPLEMENTAL INFORMATION

[ ] None [ ] MSDS [X] Analytical Data [ ] Memo/Letter [ ] Process Knowledge No. of Pages_____

E. SHIPPING INFORMATION

1. Packaging: [X] Bulk Solids [ ] Bulk Liquids [ ] Drum [ ] Roll-off [ ] Dump Truck [ ] Tank Truck
2. Estimated Volume: 200 [X] Tons [ ] Cubic yards [ ] Gallons [ ] Other _____
3. Shipping Frequency: One time Designated Landfill: Broadhurst

F. GENERATOR / CUSTOMER CERTIFICATION

I hereby certify that all information submitted and all attached documents contain true and accurate descriptions of this waste. No deliberate or willful omissions of composition or properties exist, and all known or suspected hazards have been disclosed. I further certify that the waste is not designated a Hazardous Waste defined by the USEPA in 40 CFR 261, nor does it contain PCB's regulated under TSCA 40 CFR 761.

I, DAVID J. KRUZICKI (Name, Please Print), am employed by U.S. NAVY (Company Name), and am authorized to sign this request for:

U.S. NAVY (Company Name), [signature] (Signature), 9/25/01 (Date).

Form SWO1 (99)

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 029-103-S-0809
GPL ID: 108080-001-01-1/1
Matrix: Soil
Date Collected: 08/09/01
Date Received: 08/10/01

Prep Method: SW5030B
Prep Date: 08/22/01
Prep Time: 11:03
Prep Batch 13609

Analytical Method: SW8260B_TCLP
Date Analyzed: 08/22/01
Time Analyzed 15:23
Analysis Batch 11179

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
1,1-Dichloroethene	BQL	100	ug/L	U	10
1,2-Dichloroethane	BQL	100	ug/L	U	10
1,4-Dichlorobenzene	BQL	100	ug/L	U	10
2-Butanone	BQL	100	ug/L	U	10
Benzene	BQL	100	ug/L	U	10
Carbon Tetrachloride	BQL	100	ug/L	U	10
Chlorobenzene	BQL	100	ug/L	U	10
Chloroform	BQL	100	ug/L	U	10
Tetrachloroethene	BQL	100	ug/L	U	10
Trichloroethene	BQL	100	ug/L	U	10
Vinyl Chloride	BQL	100	ug/L	U	10

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

029103S0809

Lab Name: GPL_LABORATORIES Contract: CH2M_CECILF

Lab Code: GPL Case No.: N/A SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 108080-001-01-1/1

Sample wt/vol: 200 (g/ml) ML Lab File ID: D24873.D

Level: (low/med) LOW Date Received: 08/10/01

% Moisture: decanted:(Y/N) N Date Extracted: 08/17/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/20/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
110-86-1	Pyridine	50	U
106-46-7	1,4-Dichlorobenzene	50	U
95-48-7	2-Methylphenol	50	U
67-72-1	Hexachloroethane	50	U
106-44-5	3 & 4-Methylphenol	50	U
98-95-3	Nitrobenzene	50	U
87-68-3	Hexachlorobutadiene	50	U
88-06-2	2,4,6-Trichlorophenol	50	U
95-95-4	2,4,5-Trichlorophenol	50	U
121-14-2	2,4-Dinitrotoluene	50	U
118-74-1	Hexachlorobenzene	50	U
87-86-5	Pentachlorophenol	100	U

Summary of Analytical Results

Client ID 029-103-S-0809
GPL ID: 108080-001-01-1/1
Matrix: Soil
Date Collected: 08/09/01
Date Received: 08/10/01

Prep Method: SW3510C
Prep Date: 08/17/01
Prep Time: 12:00
Prep Batch 13467

Analytical Method: SW8081A_TCLP
Date Analyzed: 08/20/01
Time Analyzed 14:35
Analysis Batch 11083

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Chlordane	BQL	5	ug/L	U	1
Endrin	BQL	0.25	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.25	ug/L	U	1
Heptachlor	BQL	0.25	ug/L	U	1
Heptachlor Epoxide	BQL	0.25	ug/L	U	1
Methoxychlor	BQL	0.25	ug/L	U	1
Toxaphene	BQL	5	ug/L	U	1

Summary of Analytical Results

Client ID 029-103-S-0809
GPL ID: 108080-001-01-1/1
Matrix: Soil
Date Collected: 08/09/01
Date Received: 08/10/01

Prep Method: EXT_SW8151
Prep Date: 08/18/01
Prep Time: 12:00
Prep Batch 13479

Analytical Method: SW8151A_TCLP
Date Analyzed: 08/20/01
Time Analyzed 16:14
Analysis Batch 11080

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
2,4,5-TP (Silvex)	BQL	5	ug/L	U	1
2,4-D	BQL	5	ug/L	U	1

Summary of Analytical Results

Client ID 029-103-S-0809
GPL ID: 108080-001-01-1/1
Matrix: Soil
Date Collected: 08/09/01
Date Received: 08/10/01

Prep Method: SW3010A
Prep Date: 08/16/01
Prep Time: 12:00
Prep Batch 13444

Analytical Method: SW6010B_TCLP
Date Analyzed: 08/16/01
Time Analyzed 17:58
Analysis Batch 11008

Parameter	Result	Rep Limit	Units	Qualifier	D.F. /
Arsenic	BQL	200	ug/L	U	1
Barium	BQL	1000	ug/L	U	1
Cadmium	BQL	30	ug/L	U	1
Chromium	50.1	50	ug/L		1
Lead	BQL	100	ug/L	U	1
Selenium	BQL	200	ug/L	U	1
Silver	BQL	30	ug/L	U	1

Summary of Analytical Results

Client ID 029-103-S-0809
GPL ID: 108080-001-01-1/1
Matrix: Soil
Date Collected: 08/09/01
Date Received: 08/10/01

Prep Method: SW7470A_DIG
Prep Date: 08/17/01
Prep Time: 04:00
Prep Batch 13456

Analytical Method: SW7470ATCLP
Date Analyzed: 08/18/01
Time Analyzed 14:57
Analysis Batch 11162

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Mercury	BQL	2	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 029-103-S-0809	**Prep Method:**	**Analytical Method: SW1010**
GPL ID: 108080-001-04-1/1	**Prep Date:**	**Date Analyzed: 08/15/01**
Matrix: Soil	**Prep Time:**	**Time Analyzed 00:00**
Date Collected: 08/09/01	**Prep Batch**	**Analysis Batch 10974**
Date Received: 08/10/01		

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Flash Point	BQL	100	DC	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 029-103-S-0809	**Prep Method:**	**Analytical Method: SW9045C**
GPL ID: 108080-001-03-1/1	**Prep Date:**	**Date Analyzed: 08/17/01**
Matrix: Soil	**Prep Time:**	**Time Analyzed 08:45**
Date Collected: 08/09/01	**Prep Batch**	**Analysis Batch 11070**
Date Received: 08/10/01		

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
pH	7.18	0	pH		1

Summary of Analytical Results

Client ID 029-103-S-0809	**Prep Method:**	**Analytical Method: SW9034R**
GPL ID: 108080-001-03-1/1	**Prep Date:**	**Date Analyzed: 08/15/01**
Matrix: Soil	**Prep Time:**	**Time Analyzed 16:10**
Date Collected: 08/09/01	**Prep Batch 0**	**Analysis Batch 11242**
Date Received: 08/10/01		

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Sulfide, Reactive	BQL	9.7	mg/kg	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 029-103-S-0809
GPL ID: 108080-001-03-1/1
Matrix: Soil
Date Collected: 08/09/01
Date Received: 08/10/01

Prep Method:
Prep Date:
Prep Time:
Prep Batch 0

Analytical Method: SW9014R
Date Analyzed: 08/17/01
Time Analyzed 07:00
Analysis Batch 11243

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Cyanide, Reactive	BQL	0.024	mg/kg	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 029-103-S-0809
GPL ID: 108080-001-03-1/1
Matrix: Soil
Date Collected: 08/09/01
Date Received: 08/10/01

Prep Method:
Prep Date:
Prep Time:
Prep Batch 0

Analytical Method: CLP_SOLIDS
Date Analyzed: 08/20/01
Time Analyzed 16:20
Analysis Batch 11203

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Percent Solids	70.5	1	%		1

CH2M Hill Constructors, Inc.
115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No (770) 604-9182 ; Fax No (770) 604-9282

CHAIN-OF-CUSTODY RECORD

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO: RECIPIENT 1 (Name and Company)	RECI
N.A.S. Cecil Field 103rd Street	154282	GPL Laboratories, LLLP	Jennifer Zimmerman / J.A Jones Env. Services	6219 3222
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO: RECIPIENT 2 (Name and Company)	RECI
CTO 029 Waste Charterization	0029		Jeff Wilmoth / CH2M Hill Constuctors, Inc.	115 Atla
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO: RECIPIENT 3 (Name and Company)	RECI
Bill Canelos	Ph:(904)777-4812 Fax:(904) 777-4262	Ph: 770-449-8800 Fax: 770-449-5477		

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on back)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on back)	TAT (calendar days)	TCLP Vol SW-846/1311/8260B	TCP SV SW-846/1311/8270C	TCP Pest SW-846/1311/8081A	TCP Herb SW-846/1311/8151	TCP Metal 1311/6000/7470A	Tot Met SW 846/6000A/7470	TPH FL PRO	PCB SW 846 8082	[illegible]
1	029-103-S-0809	Waste Characterization	S	08/09/01	1:30	III B	14	X	X	X	X	X		X	X	X
2	029-858-W-0809	Waste Characterization	W	08/09/01	3:00	III B	14	X	X	X	X		X	X	X	X
3	029-TB1-0809	Trip Blank	W	**		III B	14	X								
4		Temp Blank	W													
5								X	X	X	X		X	X	X	X
6																
7																
8																
9																
10																

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TE
Dave Keul / Paul Malewicki J.A. Jones Environmental Services	8-13-01 verified with Paul Malewicki that water samples require TCL (total) analyses - not TCLP	Note

RELINQUISHED BY	DATE	TIME	RECEIVED BY
Printed Name and Signature: P. Malewicki [signature]	8/9/01	1548	Printed Name and Signature: Federal Express 828532163310
Printed Name and Signature:			Printed Name and Signature:
Printed Name and Signature:			Printed Name and Signature: [signature]

Distribution: [ ] Original - Laboratory (To be returned with Analytical Report), [ ] Copy 1 - Project File, [X] Copy 2 - PMO

32

133080