

N60200.AR.002788  
NAS CECIL FIELD, FL  
5090.3a

SOURCE REMOVAL REPORT EXCAVATION OF PETROLEUM-CONTAMINATED SOIL AT  
POTENTIAL SOURCE OF CONTAMINATION 32 AREA OF INTEREST 32 MAIN BASE  
HAZARDOUS MATERIALS WAREHOUSE/STORAGE AREA NAS CECIL FIELD FL  
1/1/2001  
CH2MHILL CONSTRUCTORS INC

**Source Removal Report  
Excavation of Petroleum-Contaminated Soil at  
Potential Source of Contamination 32,  
Area of Interest 32, Main Base Hazardous  
Materials Warehouse/Storage Area**

**Naval Air Station Cecil Field  
Jacksonville, Florida**

**Revision No. 00**

**Contract No. N62467-98-D-0995**

**Contract Task Order No. 0005**

Submitted to:

**U.S. Naval Facilities  
Engineering Command  
Southern Division**

Prepared by:



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

January 2001

**Source Removal Report  
Excavation of Petroleum-Contaminated Soil at PSC 32,  
AOC 32, Main Base Hazardous Materials Warehouse/Storage Area**

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Southern Division**

Prepared by:



January 2001

**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

	<u>Copies</u>
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



**CERTIFICATION OF TECHNICAL  
DATA CONFORMITY (DECEMBER 2000)**

The contractor, CH2M HILL Constructors, Inc., hereby certifies that, to the best of its knowledge and belief, the technical data delivered herewith under Contract No. N62467-98-D-0995, CTO No. 0005 is complete and accurate and complies with all requirements of this contract.

Date: \_\_\_\_\_

Name and Title of Certifying Official:

\_\_\_\_\_  
Samuel M. Ross  
Project Manager



## Certificate of Completion

CH2M HILL Constructors, Inc. attests that, to the best of its knowledge and belief, the excavation of petroleum-contaminated soil at PSC 32, AOC 32, Main Base Hazardous Materials Warehouse/Storage Area, delivered under Contract No. N62467-98D-0995, Naval Air Station Cecil Field, Jacksonville, Florida, Contract Task Order (CTO) No. 0005, has been completed, inspected, and tested, and is in compliance with the contract.

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Project QC Manager

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Date

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# Acronyms

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AOC	Area of Concern
bls	below land surface
BRAC	Base Realignment and Closure
CCI	CH2M HILL Constructors, Inc.
CTO	Contract Task Order
DRMO	Defense Reutilization Marketing Office
EBS	Environmental Baseline Survey
$\mu\text{g}/\text{kg}$	micrograms per kilogram
NAS	Naval Air Station
NAVFAC	Naval Facilities Engineering Command
NTFF	North Tank Fuel Farm
PAH	polynuclear aromatic hydrocarbon
PSC	Potential Source of Contamination
SCTL	Soil Cleanup Target Level
TRPH	total recoverable petroleum hydrocarbon
TtNUS	Tetra Tech NUS, Inc.
UCL	upper confidence level

# 1.0 Introduction

---

CH2M HILL Constructors, Inc. (CCI) was contracted by the Southern Division, Naval Facilities Engineering Command (NAVFAC) to perform excavation, transportation, and disposal of petroleum-contaminated soils and prepare a Source Removal Report for Potential Source of Contamination (PSC) 32, Area of Interest (AOI) 32, Main Base Hazardous Materials Warehouse, at Naval Air Station (NAS) Cecil Field in Jacksonville, Florida. The source removal was conducted in accordance with the specifications outlined in the Removal Action Package for PSC 32, dated May 2000, prepared by Tetra Tech NUS, Inc. (TtNUS).

The scope of services for excavation of petroleum-contaminated soils at PSC 32 is described in detail in the NAS Cecil Field Basewide Work Plan, Revision 01 (CCI, 1998) and the Work Plan Addendum No. 6, "Excavation of Mercury-Arsenic, PAH-and/or Petroleum-Contaminated Soil from Various Grey Sites" dated June 2000 (CCI, 2000). This work was authorized under Remedial Action Contract No. N62467-98-D-0995, Contract Task Order (CTO) No. 0005.

## 1.1 Site Background

PSC 32 consists of the former AOI 32 and an unpaved area to the east. PSC 32 is located in the Main Base Area of the former NAS Cecil Field near the west end of Crossover Street. The PSC 32 area consists of a paved lot referred to as the Main Base Hazardous Materials Warehouse/Storage Area; Building 325, known as Hazardous Materials Storage, located on the paved lot; Building 335, known as the Hazardous Materials Warehouse, located adjacent to the southwest corner of the paved lot; and an unpaved area east of the paved lot. The PSC 32 area was used for initial storage and warehousing of materials as they arrived at the base. The area was originally investigated because of leaks and unpermitted storage of hazardous materials (TtNUS, 2000).

The PSC 32 area was initially evaluated during the Environmental Baseline Survey (EBS) conducted by ABB Environmental Services in 1994. Because of the storage of hazardous materials and reports of leaks, the EBS identified the site as requiring additional evaluation. Subsequent investigations were performed and found polynuclear aromatic hydrocarbon (PAH) contamination, specifically benzo(a)pyrene was detected at concentrations that exceed Soil Cleanup Target Levels (SCTLs). The Base Realignment and Closure (BRAC) Cleanup Team made the decision to delineate the extent of contaminated surface soil by a statistical based approach to achieve a site-wide upper confidence level (UCL) that was below the SCTLs. This iterative statistical process indicated that only the soil with benzo(a)pyrene concentrations greater than 1,500 micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ) would require removal. A site plan showing the proposed delineated soil excavation limits prior to this source removal is presented in Figure 1-1.

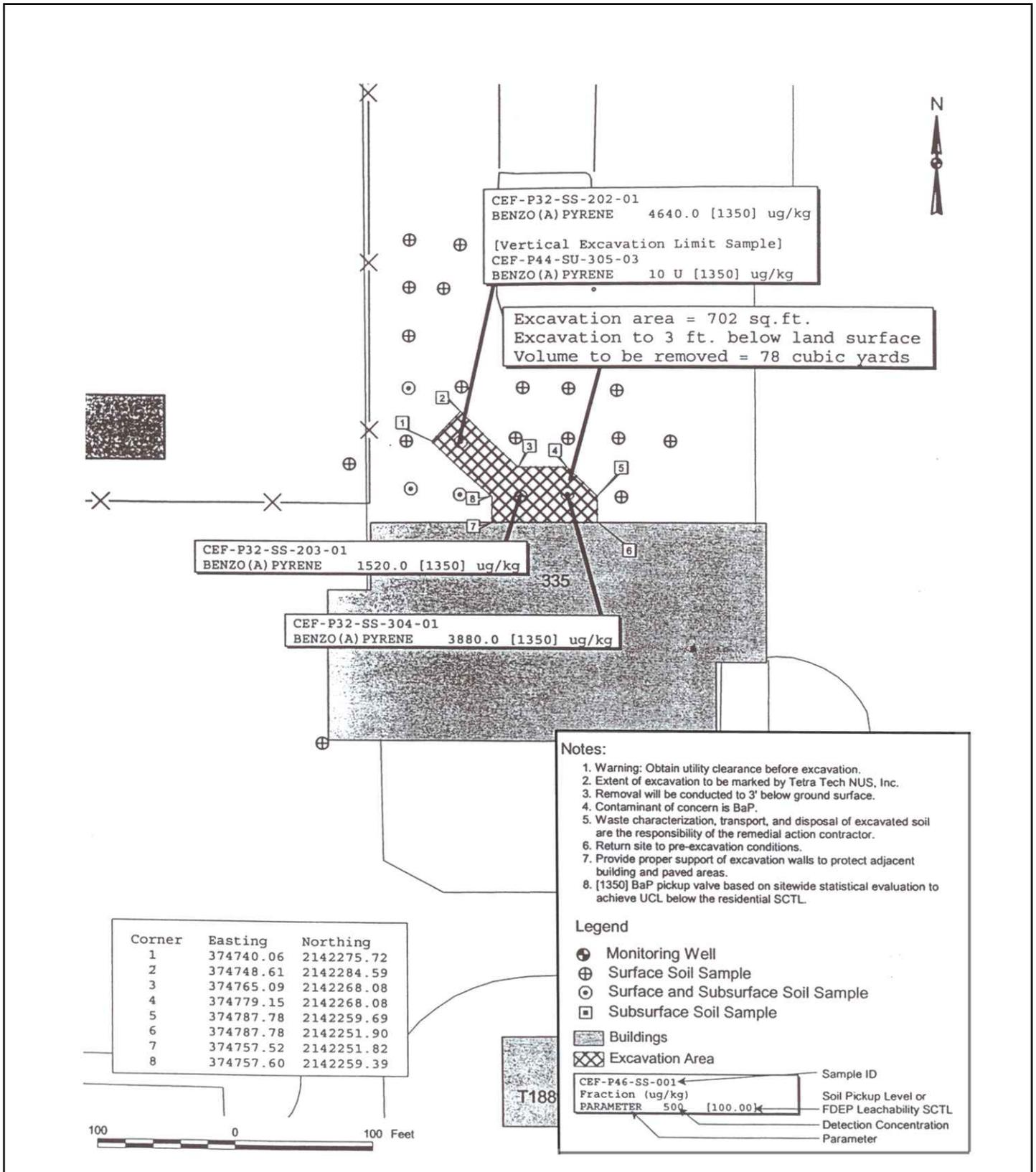


Figure 1-1  
 Proposed/Actual Soil Excavation Limits  
 PSC 32, DRMO Asphalt Storage Yard  
 NAS Cecil Field, Jacksonville, Florida

## 1.2 Project Objectives

The primary objective of the soil excavation was to remove petroleum-contaminated soils to the horizontal excavation limits shown on Figure 1-1 and the vertical excavation limit of 3 feet below land surface (bls), as specified in the Removal Action Package for PSC 32, (TtNUS, May 2000). Soils were excavated until the vertical and horizontal excavation limits were reached, and the excavated area backfilled with clean fill material imported from an offsite source.

## 2.0 Source Removal Activities

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A source removal was conducted at PSC 32 on August 23, 2000, with a total of 141.51 tons of petroleum-contaminated soils excavated. The excavated soil was directly loaded and transported offsite the same day it was excavated. Photographs showing the site before, during, and after the source removal are presented in Appendix A.

### 2.1 Site Preparation

In preparation for excavation, utility locations were conducted by Sunshine State One-Call of Florida and J.A. Jones Management Services. One water line running to a hose spigot attached to Building 335 was identified. This water line was not damaged during the excavation. Excavation around this water line was performed by hand.

### 2.2 Soil Excavation and Disposal

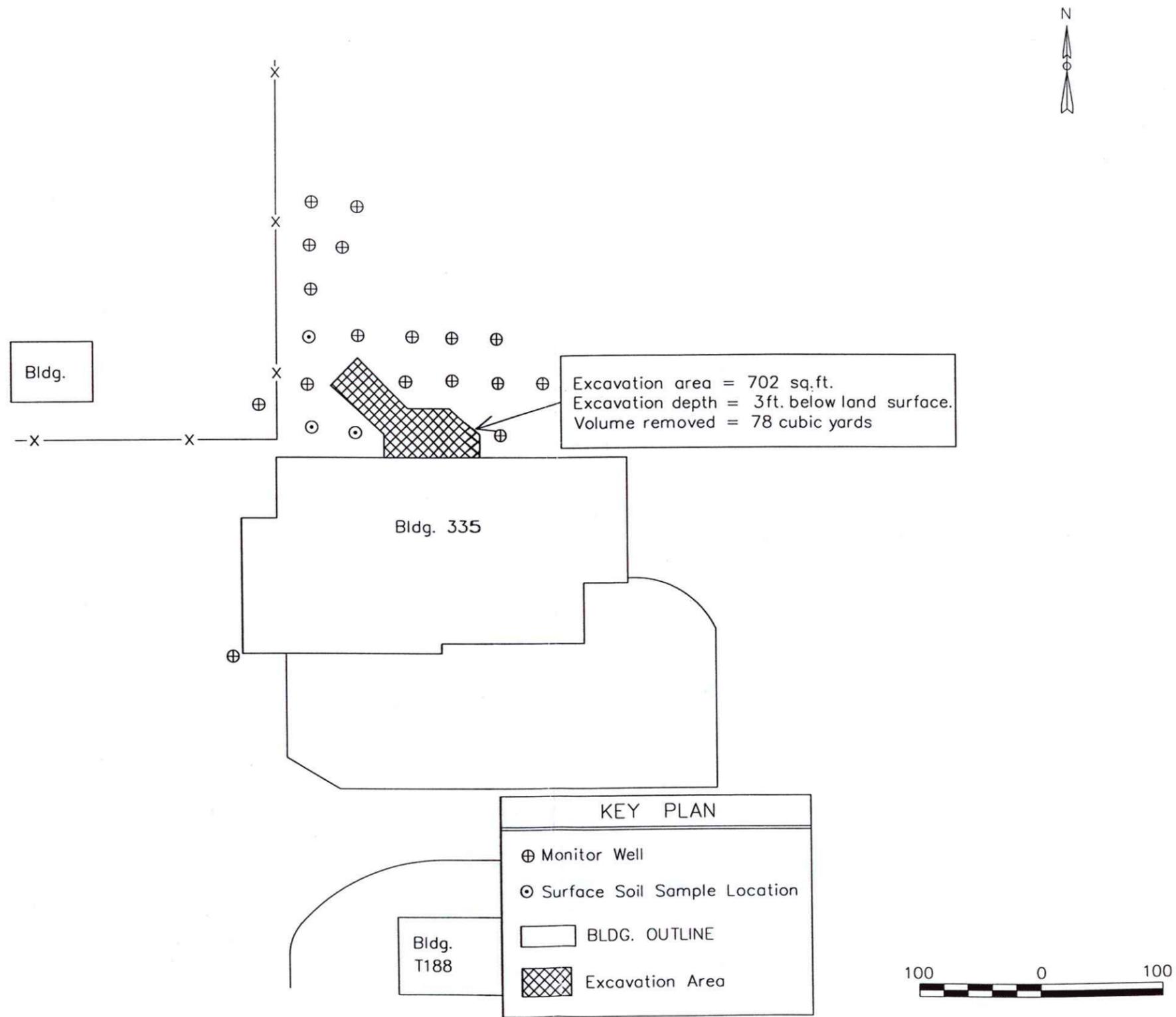
#### 2.2.1 Soil Excavation

Soils were excavated to the proposed horizontal excavation limits shown on Figure 1-1 and the vertical excavation limit of 3 feet bls as specified in the Removal Action Design Package for PSC 32 (TtNUS, May 2000). The limits shown in Figure 1-1 were surveyed and staked by TtNUS prior to beginning excavation.

The soil was excavated using a hydraulic track excavator and direct loaded into tarp covered dump trucks for transportation and disposal. Based on the facility weight tickets, 141.51 tons of petroleum-contaminated soils from PSC 32 were excavated and disposed of offsite. The actual horizontal excavation limits matched the staked boundaries and the proposed horizontal excavation limits specified in the Removal Action Design Package for PSC 32. A post excavation survey was not performed because the soil was excavated to the original staked boundary. The horizontal excavation area is shown on Figure 2-1. The vertical excavation depths were spot checked by hand measurements.

#### 2.2.2 Soil Transportation and Disposal

Soil samples were collected and analyzed for waste characterization prior to beginning excavation. The waste characterization analytical lab reports are included in Appendix E. The petroleum-contaminated soils were transported offsite by trucks provided by Beaver Bulk Trucking to the Broadhurst Landfill in Jessup, Georgia. The manifests are tabulated in Table 2-1 below. Copies of the manifests and of the certificate of disposal are presented in Appendices B and C, respectively.



**TABLE 2-1**  
Summary of Soil Disposal Manifests

Date	Truck No.	Company	Manifest Load No.	Manifest No.	Weight (pounds)	Tare (pounds)	Net (pounds)	Net (tons)
8/23/00	80	Beaver Bulk	36	32001	79,900	29,320	50,580	25.29
8/23/00	194	Beaver Bulk	37	32002	80,840	28,500	52,340	26.17
8/23/00	198	Beaver Bulk	38	32003	79,140	31,500	47,640	23.82
8/23/00	164	Beaver Bulk	39	32004	77,220	30,080	47,140	23.57
8/23/00	80	Beaver Bulk	40	32005	77,640	35,000	42,640	21.32
8/23/00	781	Beaver Bulk	41	32006	78,880	36,200	42,680	21.34

### 2.2.3 Backfilling and Site Restoration

The material used to backfill the excavation was certified clean fill and brought in from the North Tank Fuel Farm (NTFF) at NAS Cecil Field. The certified clean soil used to backfill the PSC 32 excavation was taken from NTFF Clean Pile 7. The laboratory analytical report for Clean Pile 7 showing that the material was clean fill is presented in Appendix D. The backfill was compacted using the excavation machine. No compaction tests were required.

Once the excavation area was backfilled, the site was graded and the grass was restored to its previous or better condition by hydro-seeding with a mixture of brown millet, rye, bahia grass, fertilizer and mulch. The standard Navy bahia seed mix was used.

## 2.3 Confirmatory Sampling and Analysis

No confirmatory sampling and analyses were performed based on the specifications outlined in the Removal Action Design Package for PSC 32 (TtNUS, 2000).

## 3.0 Conclusions

---

A total of 141.51 tons of petroleum-contaminated soils from PSC 32 were removed and disposed of offsite during this source removal. The soils were excavated to the horizontal excavation limits shown on Figure 1-1 and the vertical excavation limit of 3 feet bls. The actual vertical and horizontal excavation limits matched the proposed vertical and horizontal excavation limits specified in the Removal Action Design Package for PSC 32, (TtNUS, 2000). No confirmatory sampling and analysis were performed based on the specifications outlined in the Removal Action Design Package.

## 4.0 References

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CH2M HILL Constructors, Inc.; Basewide Work Plan, Revision 01; NAS Cecil Field, Jacksonville, Florida; November 1998.

CH2M HILL Constructors, Inc.; CTO No. 0005 Work Plan Addendum No. 6, Excavation of Mercury-Arsenic, PAH, and/or Petroleum-Contaminated Soil from Various Grey Sites; NAS Cecil Field, Jacksonville, Florida; June 2000.

Tetra Tech NUS, Inc.; Removal Action Design Package for PSC 32 – Area Of Interest 32 - Main Base Hazardous Materials Warehouse/Storage Area; NAS Cecil Field, Jacksonville, Florida; May 2000.

**Appendix A**  
**Project Photographs**



1. View of the PSC 32 site excavation in progress.



2. View of the PSC 32 depth of excavation measurement.



3. View of the completed PSC 32 backfilled and hydro-seeded excavation.



4. View of the backfilled and hydro-seeded PSC 32 excavation.

## **Appendix B**

### **Copies of Soil Manifests**

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Document No. **32001**

2. Page 1 of 1

3. Generator's Name and Mailing Address

US Navy - NAS Cecil Field  
6219 Authority Ave., Jacksonville, FL 32221

4. Generator's Phone ( 904 ) 777-8850

Load # **36**

5. Transporter 1 Company Name

Beaver Bulk, Inc.

6. US EPA ID Number

N/A

A. Transporter's Phone

800-232-8371

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Broadhurst Environmental, Inc.  
4800 Broadhurst Rd. W  
Jessup, GA 31545

10. US EPA ID Number

N/A

C. Facility's Phone

912-530-7050

11. Waste Shipping Name and Description

12. Containers  
No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

a. Non RCRA, Non CERCLA, Non DOT Regulated  
(Petroleum Contaminated Soil)

0.01 D.T

25.18

T

b.

c.

d.

25.29

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Site Location:

PSC-32

TARE **80040**  
**29680**  
**50360**

Truck/Trailer #: **L-50/304**

Approval #20090

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

DAVID J. KURWICKI

Signature

*David J. Kurwicki*

Month Day Year  
10 8 12 31 00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

A BRYANT

Signature

*A Bryant*

Month Day Year  
10 8 12 31 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

AS-03-00

Signature

Month Day Year

19. Discrepancy Indication Space

00045 14 02

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Carlene

Signature

*Carlene Lambeth*

Month Day Year  
8 23 00

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

Environmental Environmental  
4900 Broadhurst Rd W  
Tusup GA 31545  
Phone (912) 530-7058

Vehicle: 114909  
Date/Time: 23 August 2000 11:07 am  
Vehicle: CAPENV  
Origin: Duval Co., FL  
Reference: 80\*\*001  
Contract: 20090

000141  
CAPITAL ENVIRONMENTAL  
8229 BOONE ROULEVARD, SUITE 310

Inbound -

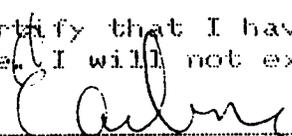
VIENNA, VA 22182

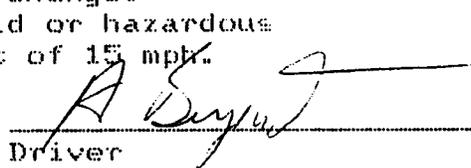
00 Gross Weight 79,900.00 LB  
Tare Weight 29,320.00 LB  
Net Weight 50,580.00 LB 25.29 TN

Quantity	Unit	Description	Rate	Total
25.29	TN	Contaminated Soil		

Net Amount:  
Tendered: \$0.00  
Change:

I certify that I have not disposed of any liquid or hazardous waste. I will not exceed the posted speed limit of 15 mph.

  
Weighmaster: Earlene

  
Driver

LOAD #36

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Document No. **32002**

2. Page 1 of 1

3. Generator's Name and Mailing Address  
 US Navy - NAS Cecil Field  
 6219 Authority Ave., Jacksonville, FL 32221

4. Generator's Phone ( 904 ) 777-9850

Load # 37

5. Transporter 1 Company Name  
 Beaver Bulk, Inc.

6. US EPA ID Number  
 . . . . . N / A . . . . .

A. Transporter's Phone  
 800-232-8371

7. Transporter 2 Company Name

8. US EPA ID Number  
 . . . . .

B. Transporter's Phone

9. Designated Facility Name and Site Address  
 Broadhurst Environmental, Inc.  
 4800 Broadhurst Rd. W  
 Jessup, GA 31545

10. US EPA ID Number  
 . . . . . N / A . . . . .

C. Facility's Phone  
 912-530-7050

11. Waste Shipping Name and Description

12. Containers  
 No. Type

13. Total Quantity

14. Unit Wt/Vol

a. Non RCRA, Non CERCLA, Non DOT Regulated  
 (Petroleum Contaminated Soil)

0 0 1 D T

25.68

T

b.

26.12

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Site Location:

PSC-32

80740

TARE 29380

51360

Truck/Trailer #: 6794/9301

Approval #20090

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

*DAVID J. KUZICKI*

Signature

*David J. Kuzicki*

Month Day Year  
 10 12 31 01

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

*WILLIAM R. CASON*

Signature

*William R. Cason*

Month Day Year  
 10 12 31 01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

08-23-00

Signature

Month Day Year

19. Discrepancy Indication Space

80760 16 GR

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

*Broadhurst  
 Carlene*

Signature

*Carlene Lambeth*

Month Day Year  
 8 12 31 00

ORIGINAL - RETURN TO GENERATOR

Broadhurst Environmental  
4800 Broadhurst Rd #  
Jesup GA 31545  
Phone (912) 530-7000

Plate # 114714  
Date/Time Exp 23 August 2000  
Vehicle: COPENV  
Origin: Duval Co., FL  
Reference: 194\*\*002  
Contract: 20090

000141  
CAPITAL ENVIRONMENTAL  
3229 BOONE BOULEVARD, SUITE 310  
VIENNA, VA 22182

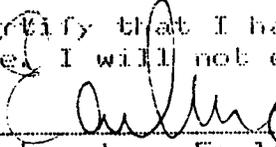
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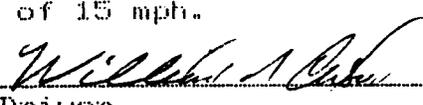
00 Gross Weight 80,840.00 LB  
Tare Weight 28,500.00 LB  
Net Weight 52,340.00 LB 26.17 TN

Quantity	Unit	Description	Rate	Total
26.17	TN	Contaminated Soil		

Net Amount:  
Tendered: \$10.00  
Change:

I certify that I have not disposed of any liquid or hazardous waste. I will not exceed the posted speed limit of 15 mph.

  
Weighmaster: Earlene

  
Driver

LOAD #37

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Document No. **32-003**

2. Page 1 of 1

3. Generator's Name and Mailing Address  
 US Navy - NAS Cecil Field  
 6219 Authority Ave., Jacksonville, FL 32221

Load # **38**

4. Generator's Phone ( 904 ) 777-8850

5. Transporter 1 Company Name  
 Beaver Bulk, Inc.

6. US EPA ID Number  
 . . . . . N . / . A . . . . .

A. Transporter's Phone  
 800-232-8371

7. Transporter 2 Company Name

8. US EPA ID Number  
 . . . . .

B. Transporter's Phone

9. Designated Facility Name and Site Address  
 Broadhurst Environmental, Inc.  
 4800 Broadhurst Rd. W  
 Jessup, GA 31545

10. US EPA ID Number  
 . . . . . N . / . A . . . . .

C. Facility's Phone  
 912-530-7050

11. Waste Shipping Name and Description  
 a. Non RCRA, Non CERCLA, Non DOT Regulated  
 (Petroleum Contaminated Soil)

12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
001	D T	23.80	T

b.			23.82	
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Site Location: **79260**  
**PSC-32**      **TARE 31660**      Truck/Trailer #: **L198/198**  
                                  **47600**      Approval #20090

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name **DAVID J. KRUZICKI**      Signature *David J. Kruzicki*      Month Day Year **10/23/00**

17. Transporter 1 Acknowledgement of Receipt of Materials  
 Printed/Typed Name **D. Wendon**      Signature *D. Wendon*      Month Day Year **10/23/00**

18. Transporter 2 Acknowledgement of Receipt of Materials  
 Printed/Typed Name **08-23-00**      Signature \_\_\_\_\_      Month Day Year \_\_\_\_\_

19. Discrepancy Indication Site

**79260 16 GR**

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name **Carlene**      Signature *Carlene Lambeth*      Month Day Year **8/23/00**

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL - RETURN TO GENERATOR

Broadhurst Environmental  
3300 Broadhurst Rd E  
Jesup GA 31545  
Phone (912) 530-7050

Invoice: 114011  
Date/Time In: 23 August 2009 11:07 am  
Vehicle: CAPEHV  
Origin: Duval Co., FL  
References: 198\*\*003  
Contract: 20090

000141  
CAPITAL ENVIRONMENTAL  
8229 BOONE BOULEVARD, SUITE 310

Inbound -

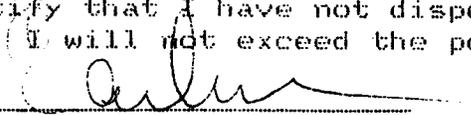
VIENNA, VA - 22182

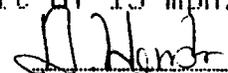
00 Gross Weight 79,140.00 LB  
Tare Weight 31,500.00 LB  
Net Weight 47,640.00 LB 23.82 TN

Quantity	Unit	Description	Rate	Total
23.82	TN	Contaminated Soil		

Net Amount:  
Tendered: \$0.00  
Change:

I certify that I have not disposed of any liquid or hazardous waste. I will not exceed the posted speed limit of 15 mph.

  
Weighmaster: Earlene

  
Driver

LOAD #38

**NON-HAZARDOUS  
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Document No. 52007

2. Page 1 of 1

3. Generator's Name and Mailing Address

US Navy - NAS Cecil Field  
6219 Authority Ave., Jacksonville, FL 32221

4. Generator's Phone ( 904 ) 777-8850

Load # 39

5. Transporter 1 Company Name

Beaver Bulk, Inc.

6. US EPA ID Number

N / A

A. Transporter's Phone

800-232-8371

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

Broadhurst Environmental, Inc.  
4800 Broadhurst Rd. W  
Jessup, GA 31545

10. US EPA ID Number

N / A

C. Facility's Phone

912-530-7050

11. Waste Shipping Name and Description

a. Non RCRA, Non CERCLA, Non DOT Regulated  
(Petroleum Contaminated Soil)

12. Containers  
No. Type

0 0 1 D T

13. Total Quantity

23.40

14. Unit Wt/Vol

T

b.

25.37

c.

d.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Site Location:

PSC-32

77380  
TARE 30580  
46800

Truck/Trailer #: 4164/4165

Approval #20090

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

DAVID J. KRUZICKI

Signature

*David J. Kruzicki*

Month Day Year  
08 23 00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Adam DeRocco

Signature

*Adam DeRocco*

Month Day Year  
08 23 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

08-23-00

Signature

Month Day Year

19. Discrepancy Indication Space

77380 1b GR

20. Facility Owner or Operator Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Broadhurst

Printed/Typed Name

Earlene

Signature

*Earlene Lambert*

Month Day Year  
8 23 00

TRANSPORTER #1

Broadhurst Environmental  
1280 Broadhurst Rd  
Jesup GA 31545  
Phone (912) 530-7000

Invoice # 114916  
Date: 23 August 2000  
Vehicle: CAPERS  
Origin: Duval Co., FL  
Reference: 164\*\*004  
Contract: 20090

000141  
CAPITAL ENVIRONMENTAL  
8229 BOONE BOULEVARD, SUITE 310  
VIENNA, VA 22182

Inbound -

00 Gross Weight 77,220.00 LB  
Tare Weight 30,080.00 LB  
Net Weight 47,140.00 LB 23.57 TN

Quantity	Unit	Description	Rate	Total
23.57	TN	Contaminated Soil		

Net Amount:  
Tendered: ~~48.00~~  
Change:

I certify that I have not disposed of any liquid or hazardous waste. (I will not exceed the posted speed limit of 15 mph.)

Earlene  
Weighmaster: Earlene

A DeLoro  
Driver

LOAD # 39

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Document No. **32005**

2. Page 1 of 1

3. Generator's Name and Mailing Address  
US Navy - NAS Cecil Field  
6219 Authority Ave., Jacksonville, FL 32221

Load # **40**

4. Generator's Phone ( 904 ) 777-8850

5. Transporter 1 Company Name  
Beaver Bulk, Inc.

6. US EPA ID Number  
N / A

A. Transporter's Phone  
800-232-8371

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address  
Broadhurst Environmental, Inc.  
4800 Broadhurst Rd. W  
Jessup, GA 31545

10. US EPA ID Number  
N / A

C. Facility's Phone  
912-530-7050

11. Waste Shipping Name and Description

12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
0.0.1	D.T	21.78	T
		21.32	

a. Non RCRA, Non CERCLA, Non DOT Regulated  
(Petroleum Contaminated Soil)

GENERATOR

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Site Location:

PSC-32

TARE <sup>78820</sup>  
35260  
43560

Truck/Trailer #: 80/01  
Approval #20090

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name  
**DAVID J. KRZICKI**

Signature  
*David J. Krzicki*

Month Day Year  
08 23 00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name  
**CHRIS TANNER #80**

Signature  
*Chris Tanner*

Month Day Year  
08 23 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name  
08-23-00

Signature

Month Day Year

19. Discrepancy Indication Space

78820 16 GR

20. Facility Owner or Operator Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

**Broadhurst**

Printed/Typed Name  
**Carlene**

Signature  
*Carlene*

Month Day Year  
08 23 00

ORIGINAL - RETURN TO GENERATOR

TRANSPORTER

FACILITY

Specialty Environmental  
1690 Broadhurst Rd  
Festus MO 63155  
Phone (918) 538-7050

Invoice # 119007  
Processors, Inc 23 August 2000 10:10 pm  
Vehicle: CAPENV  
Origin: Duval Co., FL  
Reference: 88\*\*005  
Contract: 20090

000141  
CAPITAL ENVIRONMENTAL  
8229 BOONE BOULEVARD, SUITE 310  
VIENNA, VA 22182

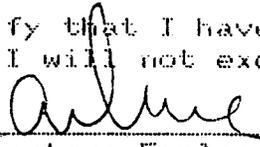
Inbound

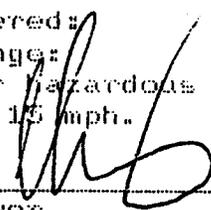
00 Gross Weight 77,640.00 LB  
Tare Weight 35,000.00 LB  
Net Weight 42,640.00 LB 21.32 TN

Quantity	Unit	Description	Rate	Total
21.32	TN	Contaminated Soil		

Net Amount:  
Tendered: \$0.00  
Change:

I certify that I have not disposed of any liquid or hazardous waste. I will not exceed the posted speed limit of 15 mph.

  
Weighmaster: Earlene

  
Driver

LOAD # 40

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Document No. **32-006**

2. Page 1 of 1

3. Generator's Name and Mailing Address  
 US Navy - NAS Cecil Field  
 6219 Authority Ave., Jacksonville, FL 32221

4. Generator's Phone ( 904 ) 777-8850

Load # 41

5. Transporter 1 Company Name  
 Beaver Bulk, Inc.

6. US EPA ID Number  
 N / A

A. Transporter's Phone  
 800-232-8371

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address  
 Broadhurst Environmental, Inc.  
 4800 Broadhurst Rd. W  
 Jessup, GA 31545

10. US EPA ID Number  
 N / A

C. Facility's Phone  
 912-530-7050

11. Waste Shipping Name and Description

12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
--------------------	------	--------------------	-----------------

a. Non RCRA, Non CERCLA, Non DOT Regulated  
 (Petroleum Contaminated Soil)

0.01	D.T	21.62	T
------	-----	-------	---

b.

--	--	--	--

c.

		21.34	
--	--	-------	--

d.

--	--	--	--

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

Site Location: **79800**  
**PSC-32**      **TARE36560**  
                          **43240**

Truck/Trailer #: **781-77**  
 Approval #20090

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name <b>DAVID J. KAVICKI</b>	Signature <i>David J. Kavicki</i>	Month Day Year <b>08 23 00</b>
---	--------------------------------------	-----------------------------------

Printed/Typed Name <b>Frank Boyette</b>	Signature <i>Frank Boyette</i>	Month Day Year <b>08 23 00</b>
--	-----------------------------------	-----------------------------------

Printed/Typed Name <b>08-23-00</b>	Signature	Month Day Year
---------------------------------------	-----------	----------------

19. Discrepancy Indication Space  
**79800 15 05**

20. Facility Owner or Operator Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name <b>Artene Lambeth</b>	Signature <i>Artene Lambeth</i>	Month Day Year <b>8 23 00</b>
---	------------------------------------	----------------------------------

GENERATOR

TRANSPORTER

FACILITY

Capital Environmental  
7800 Woodbridge Rd  
Suite 100  
Phone: (919) 336-7600

Invoice # 11790  
Date: 02/28/00  
Origin: Duval Co., FL  
Reference: 78144006  
Contract: 20096

02/28/00

006141  
CAPITAL ENVIRONMENTAL  
8229 MOORE BOULEVARD, SUITE 310  
VIENNA, VA 22182

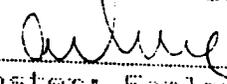
Inbound

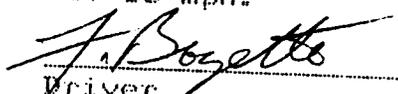
90 Gross Weight 79,800.00 LB  
Tare Weight 36,200.00 LB  
Net Weight 42,600.00 LB 21.34 TN

Quantity	Unit	Description	Rate	Total
21.34	TN	Contaminated Soil		

Net Amount:  
Tendered: \$0.00  
Change:

I certify that I have not disposed of any liquid or hazardous waste. I will not exceed the posted speed limit of 15 mph.

  
Weighmaster: Earlene

  
Driver

LOAD # 41

## **Appendix C**

### **Certificate of Disposal**



CERTIFICATE OF DISPOSAL

This letter is to certify that all wastes received from Capital Environmental, Inc. on behalf of CCI/US Navy on the following dates were landfilled in accordance with all state and federal regulations.

Load Number	Tonnage	Dates
1-70	1675.13	8/15/00-8/28/00

Disposal Method was D-81 (Subtitle D Landfill)

BROADHURST ENVIRONMENTAL, INC.

Donna Davis-Harrell                      9/15/00  
Donna Davis-Harrell                      Date

## **Appendix D**

### **Clean Fill Material Analytical Report**

# VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

002-CP7-S-0815-00

Lab Name: PEL Laboratories, Inc. Contract: Cecil Field

Lab Code: PEL Case No. \_\_\_\_\_ SAS No: \_\_\_\_\_ SDG No.: 2007271

Matrix: SOIL Lab Sample ID 200727101 Lab File ID 27101R.D

Sample wt/vol: 5.04 Units: G Date Received: 8/16/00

Concentrated Extract Volume: \_\_\_\_\_ Date Extracted: \_\_\_\_\_

Level:(low/med) LOW Date Analyzed: 8/16/00 Time: 3:50 PM

PercentSolids: 88.36 decanted: \_\_\_\_\_ Dilution Factor: 1

Extraction: PURGETRAP Station ID Clean Pile #7 Method: 8260

GPC Cleanup : ( Y/N ) \_\_\_\_\_ pH: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: *ug/Kg*

CAS NO.	ANALYTE	RESULT	Q
74-87-3	Chloromethane	11	U
75-01-4	Vinyl chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-35-4	1,1-Dichloroethene	11	U
75-15-0	Carbon disulfide	11	U
75-09-2	Methylene chloride	11	U
156-60-5	Trans-1,2-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
67-64-1	Acetone	11	U
156-59-2	Cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone (MEK)	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	0.3	JB
79-01-6	Trichloroethene	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	Cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	Trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethylene	11	U
591-78-6	2-Hexanone	11	U

# VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

002-CP7-S-0815-00

Lab Name: PEL Laboratories, Inc. Contract: Cecil Field

Lab Code: PEL Case No. \_\_\_\_\_ SAS No: \_\_\_\_\_ SDG No.: 2007271

Matrix: SOIL Lab Sample ID 200727101 Lab File ID 27101R.D

Sample wt/vol: 5.04 Units: G Date Received: 8/16/00

Concentrated Extract Volume: \_\_\_\_\_ Date Extracted: \_\_\_\_\_

Level:(low/med) LOW Date Analyzed: 8/16/00 Time: 3:50 PM

PercentSolids: 88.36 decanted: \_\_\_\_\_ Dilution Factor: 1

Extraction: PURGETRAP Station ID Clean Pile #7 Method: 8260

GPC Cleanup: ( Y/N ) \_\_\_\_\_ pH: \_\_\_\_\_

GC Column: DB-624 ID: 0.18 (mm)

CONCENTRATION UNITS: *ug/Kg*

CAS NO.	ANALYTE	RESULT	Q
124-48-1	Dibromochloromethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
511-39-00	M,P-Xylene	11	U
95-47-6	O-Xylene	11	U
100-42-5	Styrene	11	U
75-25-2	Bromofom	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
1330-20-7	Xylenes (total)	11	U

# PAH ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

002-CP7-S-0815-00

Lab Name: PEL Laboratories, Inc. Contract: Cecil Field  
 Lab Code: PEL Case No. \_\_\_\_\_ SAS No: \_\_\_\_\_ SDG No.: 2007271  
 Matrix: SOIL Lab Sample ID 200727101 Lab File ID 271-1.D  
 Sample wt/vol: 33.48 Units: G Date Received: 8/16/00  
 Concentrated Extract Volume: 1 Date Extracted: 8/16/00  
 Level:(low/med) LOW Date Analyzed: 8/17/00 Time: 3:17 AM  
 PercentSolids: 88.36 decanted: \_\_\_\_\_ Dilution Factor: 1  
 Extraction: SONC Station ID Clean Pile #7 Method: 8310  
 GPC Cleanup : ( Y/N ) N pH: \_\_\_\_\_  
 GC Column: Vydac 201TP54 ID: 4.6 (mm)

CONCENTRATION UNITS: ug/Kg

CAS NO.	ANALYTE	RESULT	Q
91-20-3	Naphthalene	1270	U
208-96-8	Acenaphthylene	10	U
90-12-0	1-Methylnaphthalene	10	U
91-57-6	2-Methylnaphthalene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	8.9	J
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	7.6	J
56-55-3	Benzo(a)anthracene	13	J
218-01-9	Chrysene	27	J
205-99-2	Benzo(b)fluoranthene	9.2	J
207-08-9	Benzo(k)fluoranthene	38	U
50-32-8	Benzo(a)pyrene	38	U
53-70-3	Dibenz(a,h)anthracene	203	U
191-24-2	Benzo(g,h,i)perylene	7.1	J
193-39-5	Indeno(1,2,3-cd)pyrene	4.5	J

# FL-PRO ORGANIC ANALYSIS DATA SHEET

EPA Sample No.

002-CP7-S-0815-00

Lab Name: PEL Laboratories, Inc. Contract: Cecil Field  
 Lab Code: PEL Case No. \_\_\_\_\_ SAS No: \_\_\_\_\_ SDG No.: 2007271  
 Matrix: SOIL Lab Sample ID 200727101 Lab File ID 271-1.D  
 Sample w/vol: 25.26 Units: G Date Received: 8/16/00  
 Concentrated Extract Volume: 2 Date Extracted: 8/16/00  
 Level:(low/med) LOW Date Analyzed: 8/17/00 Time: 5:09 AM  
 PercentSolids: 88.36 decanted : \_\_\_\_\_ Dilution Factor: 1  
 Extraction: SONC Station ID Clean Pile #7 Method: FL-PRO  
 GPC Cleanup : ( Y/N ) N pH: \_\_\_\_\_  
 GC Column: RTX-5 ID: 0.53 (mm)

CONCENTRATION UNITS: *mg/Kg*

CAS NO.	ANALYTE	RESULT	Q
5289290-40-0	Total Petroleum Hydrocarbons	66	



PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.)
NAS Cecil Field	149152	PEL Laboratories, Inc. Darcy Weisman	Bill Canelos CCI/J.A. Jones	6219 Authority Avenue, Jacksonville, FL 32215 PH: 904-777-4812 Fax: 904-777-4262
PROJECT PHASE/SITE/TASK	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.)
NTFF Clean Soil Pile #7	CTO 002	2098	Lisa Schwan, CCI	115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346 (770)604-9182 Ext.561 FAX:604-9282
PROJECT CONTACT	PROJECT TEL NO AND FAX NO.	PH (813) 247-2805 FAX (813)-248-1337	FAX AND MAIL REPORTS/EDD TO: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.)
Bill Canelos	PH (904) 777-4812 FAX (904) 777-4262			

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)	ANALYSES REQUIRED (Include Method Numbers)			SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
								EPA 8260B (Crab)	EPA 8310 (composite)	FL PRO (Composite)			
1	002-CP7-S-0815-00	Clean Pile #7	soil	08/15/00	17:00	III/C	3 Day	x	x	x		OVA = 0 ppm	
2												Level III	
3												- Temp upon receipt	
4												- SDs received in enclosures	
5												- pick ms/msd	
6													
7													
8													
9													
10													

SAMPLER(S) AND COMPANY: (please print) W. J. Canelos, CCI/JAJES		COURIER AND SHIPPING NUMBER: FedEx Tracking No. 7911-2786-9008		SAMPLES TEMPERATURE AND CONDITION, UPON RECEIPT	
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature: W. J. Canelos, CCI/JAJES <i>WJ Canelos</i>	8/15/00	18:00	Printed Name and Signature: FedEx Tracking No. 7911-2786-9008	8/15/00	18:30
Printed Name and Signature:			Printed Name and Signature:		

## **Appendix E**

### **Soil Waste Characterization Analytical Report**



# Report of Analysis

<b>Client Sample ID:</b> 005-PSC321-S-0727-00	<b>Date Sampled:</b> 07/27/00
<b>Lab Sample ID:</b> F7178-4	<b>Date Received:</b> 07/27/00
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 90.2
<b>Method:</b> SW846 8260B	
<b>Project:</b> NAS Cecil Field-Tank Removals	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0013902.D	10	08/07/00	JG	07/31/00	MS663	VG387
Run #2							

### VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.020	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		80-120%
2037-26-5	Toluene-D8	94%		80-120%
460-00-4	4-Bromofluorobenzene	92%		80-120%
17060-07-0	1,2-Dichloroethane-D4	90%		69-128%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



# Report of Analysis

<b>Client Sample ID:</b> 005-PSC321-S-0727-00	<b>Date Sampled:</b> 07/27/00
<b>Lab Sample ID:</b> F7178-4	<b>Date Received:</b> 07/27/00
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 90.2
<b>Method:</b> SW846 8270C	
<b>Project:</b> NAS Cecil Field-Tank Removals	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L004732.D	1	08/02/00	ME	08/01/00	OP1897	SL293
Run #2							

**ABN TCLP Leachate**

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		21-100%
4165-62-2	Phenol-d5	29%		10-94%
118-79-6	2,4,6-Tribromophenol	82%		10-123%
4165-60-0	Nitrobenzene-d5	77%		35-114%
321-60-8	2-Fluorobiphenyl	65%		43-116%
1718-51-0	Terphenyl-d14	80%		33-141%

ND = Not detected  
 MCL = Maximum Contamination Level (40 CFR 261 6/96)  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



# Report of Analysis

<b>Client Sample ID:</b> 005-PSC321-S-0727-00	<b>Date Sampled:</b> 07/27/00
<b>Lab Sample ID:</b> F7178-4	<b>Date Received:</b> 07/27/00
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 90.2
<b>Method:</b> FLORIDA-PRO	
<b>Project:</b> NAS Cecil Field-Tank Removals	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP09983.D	1	08/03/00	ME	08/01/00	OP1894	GOP419
Run #2							

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	17.9	9.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	99%		40-140%

ND = Not detected  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound



<b>Client Sample ID:</b> 005-PSC321-S-0727-00	<b>Date Sampled:</b> 07/27/00
<b>Lab Sample ID:</b> F7178-4	<b>Date Received:</b> 07/27/00
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 90.2
<b>Method:</b> SW846 8151	
<b>Project:</b> NAS Cecil Field-Tank Removals	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF30001.D	1	08/07/00	ANJ	08/07/00	N:OP7949	N:GEF1733
Run #2							

**Herbicide TCLP Leachate**

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.020	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0040	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	79%		40-150%
19719-28-9	2,4-DCAA	80%		40-150%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b> 005-PSC321-S-0727-00	<b>Date Sampled:</b> 07/27/00
<b>Lab Sample ID:</b> F7178-4	<b>Date Received:</b> 07/27/00
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 90.2
<b>Method:</b> SW846 8081A	
<b>Project:</b> NAS Cecil Field-Tank Removals	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST06640.D	1	08/10/00	SKW	08/01/00	OP1896	GST238
Run #2							

**Pesticide TCLP Leachate**

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0020	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	60%		50-128%
2051-24-3	Decachlorobiphenyl	111%		11-157%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 90.2
<b>Method:</b> SW846 8082	
<b>Project:</b> NAS Cecil Field-Tank Removals	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB15228.D	1	08/01/00	SKW	07/31/00	OP1891	GAB555
Run #2							

**PCB List**

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	370	ug/kg	
11104-28-2	Aroclor 1221	ND	370	ug/kg	
11141-16-5	Aroclor 1232	ND	370	ug/kg	
53469-21-9	Aroclor 1242	ND	370	ug/kg	
12672-29-6	Aroclor 1248	ND	370	ug/kg	
11097-69-1	Aroclor 1254	ND	370	ug/kg	
11096-82-5	Aroclor 1260	ND	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		50-144%
2051-24-3	Decachlorobiphenyl	103%		10-180%

ND = Not detected  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



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<b>Project:</b> NAS Cecil Field-Tank Removals	

## Metals Analysis, TCLP Leachate

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method
Arsenic	<0.50	D004	5.0	0.50	mg/l	1	08/04/00	08/10/00 JK	SW846 6010A
Barium	<1.0	D005	100	1.0	mg/l	1	08/04/00	08/10/00 JK	SW846 6010A
Cadmium	<0.050	D006	1.0	0.050	mg/l	1	08/04/00	08/10/00 JK	SW846 6010A
Chromium	<0.050	D007	5.0	0.050	mg/l	1	08/04/00	08/10/00 JK	SW846 6010A
Lead	<0.50	D008	5.0	0.50	mg/l	1	08/04/00	08/10/00 JK	SW846 6010A
Mercury	<0.0020	D009	0.20	0.0020	mg/l	1	08/08/00	08/09/00 JK	SW846 7470A
Selenium	<0.50	D010	1.0	0.50	mg/l	1	08/04/00	08/10/00 JK	SW846 6010A
Silver	<0.050	D011	5.0	0.050	mg/l	1	08/04/00	08/10/00 JK	SW846 6010A

RL = Reporting Limit

MCL = Maximum Contamination Level (40 CFR 261 6/96)



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<b>Project:</b> NAS Cecil Field-Tank Removals	

## General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	8.5			1	08/10/00 JK	SW846 CHAP7
Cyanide Reactivity	<1.7	1.7	mg/kg	1	08/11/00 JK	SW846 CHAP7
Ignitability (Flashpoint)	>212	212	Deg. F	1	08/11/00 JK	SW846 1010
Solids, Percent	90.2		%	1	08/02/00 SJL	EPA 160.3 M
Sulfide Reactivity	<55	55	mg/kg	1	08/10/00 JK	SW846 CHAP7

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RL = Reporting Limit

**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**

F7178

COC NUMBER

148799-1 page 1 of 1

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No., and Fax No.):
N.A.S. Cecil Field Various Tank Removals	148799	Accutest, Orlando, FL	Saul Grosser, Capitol Environmental Services, Inc.	8229 Boone Blvd., Vienna, VA 22182-2623 phone (703) 356-3135 fax 703-356-4198
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No., and Fax No.):
Soil Waste Characterization	0005		Bill Canelos, CCI/JAJES	6219 Authority Road, Jacksonville, FL 32221 phone (904) 777-4812 fax 904-777-4262
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)	RECIPIENT 3 (Address, Tel No., and Fax No.):
Bill Canelos	phone (904) 777-4812 fax 904-777-4262	phone (407) 425-6700		

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)	ANALYSES REQUIRED (Include Method Numbers)													SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
								1311/8260B TCLP Volatiles	1311/8270C TCLP SemiVols	1311/8081A TCLP Pest.	1311/8151A TCLP Herb.	1311/6010B TCLP Metals	FL PRO	Method 8082 PCBs	Method 1030 Ignitability	Method 9045A Corrosivity	Chapter 7.3 Reactivity						
1	005-HSR1-S-0727-00	Soil Waste Characterization	S	07/27/00	9:25	III/C	7 day	X	X	X	X	X	X	X	X	X	X	X	Composite				
2	005PSC461-S-0727-00	Soil Waste Characterization	S	07/27/00	10:25	III/C	7 day	X	X	X	X	X	X	X	X	X	X	X	Composite				
3	005-PSC451-S-0727-00	Soil Waste Characterization	S	07/27/00	11:40	III/C	7 day	X	X	X	X	X	X	X	X	X	X	X	Composite				
4	005-PSC321-S-0727-00	Soil Waste Characterization	S	07/27/00	12:15	III/C	7 day	X	X	X	X	X	X	X	X	X	X	X	Composite				
5	005-OGC1-S-0727-00	Soil Waste Characterization	S	07/27/00	13:00	III/C	7 day	X	X	X	X	X	X	X	X	X	X	X	Composite				
6																							
7																							
8																							
9																							
10																							

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:
David Poe, Dorado Services, Inc.	Driven to lab by Sampler	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature: David M. Poe	7/27/00	4:45	Printed Name and Signature: L. King	7/27	
Printed Name and Signature: Dorado Services, Inc.			Printed Name and Signature:		