N60200.AR.003521
NAS CECIL FIELD, FL
5090.3a

"SITE CHARACTERIZATION SAMPLING, ANALYSIS AND SOIL DISPOSAL LETTER REPORT FOR BUILDING 233 NAS CECIL FIELD FL"
1/7/2003
CH2MHILL CONSTRUCTORS INC

CH2M HILL
115 Perimeter Center Place, N.E.
Suite 700
Atlanta, GA
30346-1278
Tel 770.604.9095
Fax 770.604.9282

January 7, 2003

Mr. Mark Davidson, Code ES339
Southern Division, Naval Facilities Engineering Command
P.O. Box 190010
North Charleston, South Carolina 29419 - 9010

Reference: Contract No. N62467-98-D-0995
Contract Task Order No. 0005
Naval Air Station (NAS) Cecil Field
Jacksonville, Florida

Subject: **Building 233 - Site Characterization Sampling, Analysis and Soil Disposal Letter Report**

Dear Mr. Davidson:

CH2M HILL Constructors, Inc. (CCI) with J.A. Jones Environmental Services Company (J.A. Jones) is pleased to submit this Site Characterization Sampling, Analysis and Soil Disposal Letter Report for the referenced Contract Task Order (CTO). This report was prepared for the United States Navy Southern Division Naval Facilities Engineering Command under CTO 0005, for the Remedial Action Contract (RAC) Number N62467-98-D-0995. The contents of this report document the fieldwork, results, and conclusions for the site characterization sampling, analysis and soil disposal effort performed at Building 233, NAS Cecil Field, Jacksonville, Florida.

The site characterization sampling, analysis and Soil Disposal effort was performed at Building 233 from April 6-May 4, 2002 to determine the level of contamination, if any present in the soil associated with the installation of an Oil / Water Separator that was installed by the City of Jacksonville, Florida, as well as to provide a means of disposal for the suspect contaminated soil. The site characterization sampling analysis and disposal effort included the following:

Soil Screening Summary

1. Soil screening was performed using a Foxboro TVA 1000 Flame Ionization/Photo Ionization Detector (FID/PID) Organic Vapor Detector (OVA) in the Flame Ionization (FID) mode. The sampling was performed using the soil vapor headspace analysis techniques. In this procedure, two clean 16-ounce, wide mouth glass jars are half-filled with the soil sample to be tested, each jar is then sealed with aluminum foil, and allowed to equilibrate at ambient temperatures for a period of five to ten minutes. The organic vapor concentration in the headspace of each jar is then analyzed using the OVA/FID. One jar was analyzed without a carbon filter and the other jar with a carbon filter in order to detect and correct for the presence of naturally occurring organic vapors (i.e.,

methane). The corrected reading is reported in parts per million (ppm), and represents the concentration of organic vapor from the soil sample resulting from the presence of volatile petroleum hydrocarbon compounds in the sample. The table below present the data obtained during the sampling event:

Table 1-1
Summary of Headspace Screening Results – BLDG # 233-OWS Installation

Sample Location (see Figure 3)	Date	Depth (ft bls)	FID Unfiltered (ppm)	FID with Filter (ppm)	FID Corrected (ppm)	Remarks
1	4/6/01	4'	5140	29	5111	Fuel / solvent odor
2	4/6/01	PILE	5835	8	5827	Fuel / solvent odor
3	4/6/01	PILE	8845	12	8833	Fuel / solvent odor
4	4/9/01	PILE	13000	2	12998	Fuel
5	4/9/01	PILE	15300	4	15296	Fuel
6	4/9/01	PILE	39900	0	39900	Fuel
7	4/9/01	PILE	5695	0	5695	Fuel
8	4/9/01	PILE	14000	3	13997	Fuel

Waste Characterization Sampling and Analytical Summary

1. One composite soil samples was collected from the stockpiled soil on 04/09/01 and sampled for the following:

TCLP Semi Volatiles by 1311/8270C, TCLP Pesticides by 1311/8081A, TCLP Herbicides by 1311/8151A, TCLP Metals by 1311/6010A, TRPH by FL. PRO, PCB's by 8082, ignitability by 1030, Corrosivity by 9054A, and reactivity by Chapter 7.3

2. The composite consisted of five grab samples from different locations at different depths within the stockpile. An OVA reading was taken at each of the five locations. The OVA results are provided in the above table and are listed as sample 4 thru 8. A site drawing illustrating the locations of the soil sample locations is provided in **Enclosure 1.**

3. One grab sample was taken from the location that yielded the highest OVA reading (sample 6). The grab sample was analyzed for TCLP Volatiles by 1311/8260B.

4. Following the waste characterization an additional sample was taken on 04/11/01 and analyzed for Total Volatiles by 8260 B, Total Semi Volatiles by 8310 and TPH by FL. PRO. This analysis was run in order to determine how the soil compared to the State of Florida Soil Cleanup Target Levels (SCTL's). The table below summarizes the analytical results**.**

HANGER 14
SOIL FROM OWS INSTALLATION
(near Bldg 233)

COMPOUND	Sample No. 005-H14WC02-S-0411-01 mg/kg	Direct Exposure Residential SCTL mg/kg	LEACHABILITY Based on GW Criteria mg/kg
Methylene Chloride	**0.09**	16	0.02
Acetone	0.76	780	2.8
2-Butanone	0.57	3100	17
1,2-Dichloroethane	**0.036**	0.5	0.01
4-Methyl-2-Pentanone	0.13	220	2.6
Toluene	0.035	380	0.5
Chlorobenzene	0.14	30	1.3
Ethylbenzene	**0.69**	1100	0.6
Total Xylenes	**4**	5900	0.2
Naphthalene	0.242	40	1.7
1-Methyl Naphthalene	0.336	68	2.2
2-Methyl Naphthalene	0.341	80	6.1
Acenaphthene	0.188	1900	2.1
Phenanthrene	0.101	2000	250
Anthracene	0.0476	18000	2500
Fluoranthene	0.149	2900	1200
Pyrene	0.067	2200	880
Benzo (a) Anthracene	0.0081	1.4	3.2
Chrysene	0.141	140	77
Benzo (b) Fluoranthene	0.013	1.4	10
Benzo (k) Fluoranthene	0.0083	15	25
Benzo (a) Pyrene	0.0125	0.1	8
Benzo (g,h,I) Perylene	0.0158	2300	32000
Indeno (1,2,3-cd) Pyrene	0.0088	1.5	28
FL PRO	221	340	340

NOTE:
Methylene Chloride, 1,2 Dichloroethane, Ethylbenxene, and Total Xylenes were below the Residential SCTL's , but exceeded the Leachability SCTL.

Soil Transportation and Disposal

1. Soil samples were collected, analyzed for waste characterization and profiled prior to the loading out of the soil. The waste characterization analytical laboratory reports and the waste profile are included in **Enclosure 2**. The non-hazardous petroleum contaminated soils were transported off-site by trucks to the Broadhurst Landfill in Jessup, Georgia. The manifests are tabulated in Table 2-2 below. Copies of the manifests and the certificate of disposal are presented in **Enclosure 3 and 4**, respectively.

TABLE 2-2
Summary of the Manifests for Soil Disposal

Transporter-Trucking Company	Date Transported	Truck Number	Load No.	Manifest Number	Disposal Date	Disposal Facility	Disp Fac Scale Tare Wt (lb)	Profile Number
Beaver Bulk	05/04/01	108	1	14147	05/07/01	Broadhurst Envr. Inc.	23.92	20157
Beaver Bulk	05/04/01	109	2	14148	05/07/01	Broadhurst Envr. Inc.	4.25	20157
						TOTAL	**28.17**	

Conclusion

1 The soil was excavated by the City of Jacksonville during the installation of an Oil water Separator, which was installed north of the catch basin that leads to the sanitary sewer system at Cecil Field. The soil was stockpiled on plastic sheeting and covered. CCI/JAJES was asked by the Navy to determine if the soil was contaminated and to dispose of it if it was. The soil was screened with an OVA and found to contain petroleum range organics. The soil was then analyzed for waste characterization, profiled for disposal, transported to an approved landfill and disposed of. T total of 28.17 tons of petroleum contaminated soil was disposed of. The soil was disposed of during the time Grey Sites III was being performed, so the soil was transported by the same vehicles that transported the Grey Site III (Site 25) soil. The certificate of disposal covers the soil removed from site 25, but does not indicate that soil come from Building 233. The manifests show the soil coming from Building 233. and the manifests numbers are listed on the certificate of disposal.

2 A copy of the site diagram showing the sample points is provided in **Enclosure 1,** a copy of the analytical results and waste profile are included in **Enclosure 2**, copies of the waste disposal manifests are provided in **Enclosure 3**, and a copy of the certificate of disposal is provided in **Enclosure 4**.

If you have any questions with regard to this submittal, please contact Paul Malewicki at (904) 777-4812 x. 225.

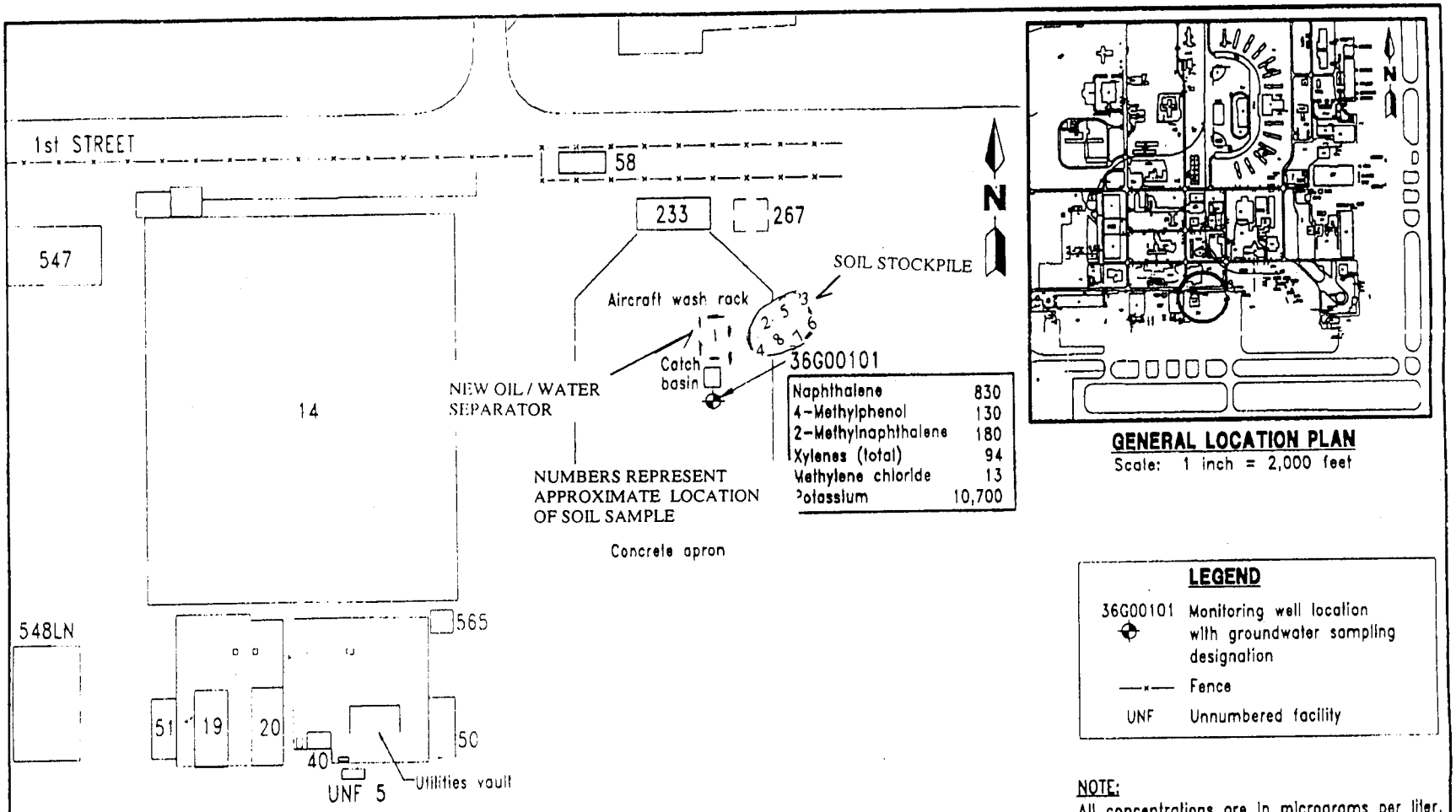
Respectfully,

Paul Malewicki
Project Manager

Enclosures (4)

Cc: Mr. Mike Halil (NAS Cecil Field Jacksonville)
Mr. David Grabka (FDEP)
Mrs. Debbie Vaughn-Wright (USEPA)
Mr. Mark Speranza (TtNUS)
Mr. Mark Jonnet (TtNUS)
CCI Project File No. 148799

Enclosure 1
Site Drawing



GENERAL LOCATION PLAN
Scale: 1 inch = 2,000 feet

LEGEND

36G00101 ⊕	Monitoring well location with groundwater sampling designation
—x—	Fence
UNF	Unnumbered facility

NOTE:
All concentrations are in micrograms per liter.

FIGURE 1
FACILITY 233
AIRCRAFT WASH RACK
SAMPLE LOCATION PLAN

SAMPLING AND ANALYSIS REPORT

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

Enclosure 2
Analytical Results
And
Waste Profile

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

COC NUMBER
148799-18

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	148799	PEL Laboratories, Inc. Darcy Weisman	Jennifer Zimmerman, 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.):
Hanger 14 Soil Stockpile Waste Characterization	CTO 005	2533	Jeff Wilmoth, 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)-248-1537	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) 1311/8260B TCLP Volatiles	1311/8270C TCLP SemiVols	1311/8081A TCLP Pest.	1311/8151A TCLP Herb.	1311/6010A TCLP Metals	FL PRO	Method 8082 PCBs	Method 1030 Ignitability	Method 9045A Corrosivity	Chapter 7.3 Reactivity	SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
1	005-H14WC1-S-0409-01	Hanger 14 Stockpile	soil	04/09/01	11:05	III/A	7 Day	x	x	x	x	x	x	x	x	x	x	Composite		
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:
Dave Keul, CCI/JAJES	FedEx Tracking No. 7915-2262-8527	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
Bill Canelos, CCI/JAJES W/ Canelos	4/9/01	12:00	FedEx Tracking No. 7915-2262-8527	4/9/01	12:00
Printed Name and Signature:			Printed Name and Signature:		

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

Form CCI001, Rev 02/00

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

005H14WC1S0409

Lab Name: PEL LABORATORIES INC. Contract:

Lab Code: PEL Case No.: SAS No.: SDG No.: 2104057

Matrix: (soil/water) AIR Lab Sample ID: 210405701

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 05701

Level: (low/med) HIGH Date Received: 04/10/01

% Moisture: not dec. _____ Date Analyzed: 04/12/01

GC Column: RTX 502.2 ID: 0.18 (mm) Dilution Factor: 10.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/L	Q
75-01-4	Vinyl Chloride	0.050	U
75-35-4	1,1-Dichloroethene	0.10	U
78-93-3	2-Butanone	20	U
67-66-3	Chloroform	1.0	U
56-23-5	Carbon tetrachloride	0.10	U
71-43-2	Benzene	0.10	U
107-06-2	1,2-Dichloroethane	0.10	U
79-01-6	Trichloroethylene	0.10	U
127-18-4	Tetrachloroethylene	0.70	U
108-90-7	Chlorobenzene	20	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
005H14WC1S0409

Lab Name: PEL LABORATORIES INC. Contract: CECIL

Lab Code: PEL Case No.: SAS No.: SDG No.: 2104057

Matrix: (soil/water) WATER Lab Sample ID: 210405701

Sample wt/vol: 500.0 (g/mL) ML Lab File ID: 057-01

Extraction: (SepF/Cont/Sonc) SEPF Date Received: 04/10/01

% Moisture: _____ decanted: (Y/N)___ Date Extracted:04/12/01

Concentrated Extract Volume: 1(ml) Date Analyzed: 04/13/01

Injection Volume: _____(uL) Dilution Factor: 1.0

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

GC Column: HPMS-5 ID: 0.25 (mm)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
110-86-1	Pyridine	10.0	U
106-46-7	1,4-Dichlorobenzene	10.0	U
95-48-7	2-Methylphenol	10.0	U
67-72-1	Hexachloroethane	10.0	U
782-06-0	m and p-Methylphenol	10.0	U
98-95-3	Nitrobenzene	10.0	U
87-68-3	Hexachlorobutadiene	10.0	U
88-06-2	2,4,6-Trichlorophenol	10.0	U
95-95-4	2,4,5-Trichlorophenol	10.0	U
121-14-2	2,4-Dinitrotoluene	10.0	U
118-74-1	Hexachlorobenzene	10.0	U
87-86-5	Pentachlorophenol	10.0	U

BW 4/18/01
SP 4/18/01
LK 4-18-01

FORM 1
SVPEST ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
005H14WC1S0409

Lab Name: PEL LABORATORIES INC. Contract:

Lab Code: PEL Case No.: SAS No.: SDG No.: 2104057

Matrix: (soil/water) WATER Lab Sample ID: 210405701

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 57-01

% Moisture: _____ decanted: (Y/N)___ Date Received: 04/10/01

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 04/12/01

Concentrated Extract Volume: 10(ml) Date Analyzed: 04/18/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

GC Column (1): XTI-5 ID: 0.53(mm) GC Column (2): RTX-1701 ID: 0.53(mm)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
58-89-9	gamma-BHC (Lindane)	0.10	U
76-44-8	heptachlor	0.10	U
1024-57-3	heptachlor epoxide	0.10	U
72-20-8	endrin	0.10	U
72-43-5	methoxychlor	0.10	U
57-74-9	Chlordane-Total	1.0	U
8001-35-2	Toxaphene-Total	2.0	U

4/19/01
4/19/01
4/19/01

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
005H14WC1S0409

Lab Name: PEL LABORATORIES INC. Contract: CECIL FIELD

Lab Code: PEL Case No.: SAS No.: SDG No.: 2104057

Matrix: (soil/water) WATER Lab Sample ID: 210405701

Sample wt/vol: 400.0 (g/ml) ML Lab File ID: 5701

% Moisture: _____ decanted: (Y/N)___ Date Received: 04/10/01

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted:04/12/01

Concentrated Extract Volume: 10(ml) Date Analyzed: 04/14/01

Injection Volume: _____(uL) Dilution Factor: 1.0

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

GC Column (1): RTX-1701 ID: 0.53(mm) GC Column (2): RTX-1701 ID: 0.53(mm)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
94-75-7	2,4-D	0.625	U
93-72-1	2,4,5-TP	0.625	U

4/18/01

4/18/01

4-18-01

PRELIMINARY RESULTS

- CERTIFICATE OF ANALYSIS -

(HRS #E84207 and FDEP CompQap #900306)

To: Steve Tsangaris
CH2M Hill

PROJECT_SEQ: 2104057
PROJECT ID: Hanger 14 Soil Stockpile

PEL Lab# : 210405701
Client ID : 005H14WC1S0409
Matrix : Soil

Collection Information:
Sample Date: 4/10/01 10:30:00 AM

Parameter	Method	Results	Units	RL	Dilution Factor
INORGANICS	EPA 1311/6010				
Arsenic	EPA 1311/6010	1.00 U	mg/L	1.00	1
Barium	EPA 1311/6010	0.636J	mg/L	20.0	1
Cadmium	EPA 1311/6010	0.200 U	mg/L	0.200	1
Chromium	EPA 1311/6010	1.00 U	mg/L	1.00	1
Lead	EPA 1311/6010	1.00 U	mg/L	1.00	1
Selenium	EPA 1311/6010	0.200 U	mg/L	0.200	1
Silver	EPA 1311/6010	1.00 U	mg/L	1.00	1
INORGANICS	EPA 1311/7470				
Mercury	EPA 1311/7470	0.0400 U	mg/L	0.0400	1

(*): Short Hold Time Analysis Date

Brian C. Spann	Laboratory Manager
Jodi Hutchins	Quality Assurance
Lara Keene	Semi-Volatiles Team Leader
Lisa Pelo	Volatiles Team Leader

FORM 1
FL-PRO ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
005H14WC1S0409

Lab Name: PEL LABORATORIES INC. Contract:

Lab Code: PEL Case No.: SAS No.: SDG No.: 2104057

Matrix: (soil/water) SOIL Lab Sample ID: 210405701

Sample wt/vol: 25.2 (g/mL) G Lab File ID: 057-01

Extraction: (SepF/Cont/Sonc) OTHER Date Received: 04/10/01

% Moisture: 17 decanted: (Y/N) N Date Extracted:04/11/01

Concentrated Extract Volume: 2(ml) Date Analyzed: 04/12/01

Injection Volume: _____(uL) Dilution Factor: 1.0

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

GC Column: RTX-5 ID: 0.53 (mm)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
5289290-40-0----	TPH (C8-C40)	231	

PRE-LIM

DJG 4-24-01

INC. 4-24-01

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
005H14WC1S0409

Lab Name: PEL LABORATORIES INC. Contract: CECIL FIELD

Lab Code: PEL Case No.: SAS No.: SDG No.: 2104057

Matrix: (soil/water) SOIL Lab Sample ID: 210405701

Sample wt/vol: 33.0 (g/mL) G Lab File ID: 5701

% Moisture: 17 decanted: (Y/N) N Date Received: 04/10/01

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/11/01

Concentrated Extract Volume: 10(ml) Date Analyzed: 04/17/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

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

GC Column (1): XTI-5 ID: 0.53(mm) GC Column (2): RTX-1701 ID: 0.53(mm)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	PCB 1016 Total	36.7	U
11096-82-5	PCB 1260 Total	36.7	U
11104-28-2	PCB 1221 Total	367	U
11141-16-5	PCB 1232 Total	367	U
53469-21-9	PCB 1242 Total	367	U
12672-29-6	PCB 1248 Total	367	U
11097-69-1	PCB 1254 Total	367	U

4/18/01

4/18/01

4-18-01

EPA 1010 Flash Point

Date:4/09/01 ***Time:17:00:00*** ***Tech.: JC***

Room Temperature: 74F ***Pressure: 760mm HG***

Sample	Matrix	Initial Temp. (F)	Final Temp. (F)	Result	Comment	RPD
P-XYLENE	LIQUID	67	78	FLASH	101% Recovery	
005H14WCIS0409	SOLID	69	>200	NA	Sample didn't flash	
Dup	SOLID	68	>200	NA	Sample didn't flash	0
NA: Sample did not flash						

QC: P-XYLENE IS1287 TV=77F +/- 1 **Thermometer HB96822**

4-17-01

Corros Preparation Log

Preparation:

4/3/01
12:00 PM

Method: 9045
JC

BATCH:

PEL Sample ID#:	Analysis Instrument:	Final Sample pH	RPD
pH 4.00 HACH IS1055	Fisher	3.99	
pH 7.00 HACH IS1280	Fisher	7.03	
pH 10.00 HACH IS1057	Fisher	10.09	
RICCA LCS IS1457	Fisher	6.98	99.71
005H14WC1S0409	Fisher	7.72	
005H14WC1S0409 DUP	Fisher	7.74	0.26
pH 7.00 HACH IS1280	Fisher	7.04	

Analyst Signature:

Comments: 4.17 4

TestAmerica
INCORPORATED

ANALYTICAL REPORT

PEL 8809
JORGE ALWOOOD
4420 PENDOLA POINT ROAD
TAMPA, FL 33619

Project: 2104-057
Project Name: Cecil Field
Sampler:

Lab Number: 01-A48738
Sample ID: 005H14WC1S0409
Sample Type: Soil
Site ID:

Date Collected: 4/ 9/01
Time Collected: 11:05
Date Received: 4/12/01
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS										
% Dry Weight	81.	%			1	4/13/01	16:42	J. Rudden	CLP	136
Reactive Cyanide	ND	mg/kg	50.0	50.0	1	4/13/01	12:30	K. Warner	SW-846	821
Reactive Sulfide	ND	mg/kg	100.	100.	1	4/13/01	12:30	K. Warner	SW-846	821
	Comment					4/17/01	11:42	P.Lane		

Reactive Cyanide and Sulfide results from total determination methods 9012 and 9034.

ND - Not detected at the report limit.
- Recovery outside Laboratory historical limits.

All metal and organic results have been corrected for dry weight.

Sample report continued . . .

TestAmerica
INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A48738
Sample ID: 005H14WC1S0409
Project: 2104-057
Page 2

These results relate only to the items tested.
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: _____ Report Date: 4/17/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director
Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: HRS-E87358

End of Sample Report.

TestAmerica
INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 2104-057

- Value outside Laboratory historical QC limits.

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

COC NUMBER
148799-20

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	**148799**	**PEL Laboratories, Inc. Darcy Weisman**	**Jennifer Zimmerman, 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.):
Hanger 14 Soil Stockpile Waste Characterization	**CTO 005**	**2533**	**Jeff Wilmoth, 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)-248-1537	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) EPA 8260B Volatiles	EPA 8310 SemiVols	FL PRO							SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
1	**005-H14WC2-S-0411-01**	**Hanger 14 Stockpile**	**soil**	**04/11/01**	**13:00**	**III/A**	**7 Day**	**x**	**x**	**x**							**Composite**	**OVA = 30,000 ppm**	
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:
Dave Keul, CCI/JAJES	**FedEx Tracking No. 7924-0860-7183**	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
Bill Canelos, CCI/JAJES	**4/11/01**	**14:00**	**FedEx Tracking No. 7924-0860-7183**	**4/11/01**	**14:00**
Printed Name and Signature:			Printed Name and Signature:		

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

Form CCI001, Rev 02/00

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
005H14WC2S0411

Lab Name: PEL LABORATORIES INC. Contract:

Lab Code: PEL Case No.: SAS No.: SDG No.: 2104078

Matrix: (soil/water) SOIL Lab Sample ID: 210407801

Sample wt/vol: 5.0 (g/ml) G Lab File ID: 78-1

Level: (low/med) HIGH Date Received: 04/12/01

% Moisture: not dec. 12 Date Analyzed: 04/20/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 98.4

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	220	U
75-01-4	Vinyl Chloride	220	U
74-83-9	Bromomethane	220	U
75-00-3	Chloroethane	220	U
75-35-4	1,1-Dichloroethene	220	U
75-15-0	Carbon Disulfide	220	U
75-09-2	Methylene Chloride	90	J
156-60-5	trans 1,2-Dichloroethene	220	U
75-34-3	1,1-Dichloroethane	220	U
67-64-1	Acetone	760	J
156-59-2	cis-1,2-Dichloroethene	220	U
78-93-3	2-Butanone	570	J
67-66-3	Chloroform	220	U
71-55-6	1,1,1-Trichloroethane	220	U
56-23-5	Carbon tetrachloride	220	U
71-43-2	Benzene	220	U
107-06-2	1,2-Dichloroethane	36	J
79-01-6	Trichloroethylene	220	U
78-87-5	1,2-Dichloropropane	220	U
75-27-4	Bromodichloromethane	220	U
10061-01-5	cis 1,3-Dichloropropene	220	U
108-10-1	4-Methyl-2-Pentanone	130	J
108-88-3	Toluene	35	J
10061-02-6	trans 1,3-Dichloropropene	220	U
79-00-5	1,1,2-Trichloroethane	220	U
127-18-4	Tetrachloroethylene	220	U
591-78-6	2-Hexanone	1100	U
124-48-1	Dibromochloromethane	220	U
108-90-7	Chlorobenzene	140	J
100-41-4	Ethylbenzene	690	
511-39-00	p,m-Xylene	2800	
95-47-6	o-Xylene	1200	
100-42-5	Styrene	220	U

PRE-LIM

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
005H14WC2S0411

Lab Name: PEL LABORATORIES INC. Contract:

Lab Code: PEL Case No.: SAS No.: SDG No.: 2104078

Matrix: (soil/water) SOIL Lab Sample ID: 210407801

Sample wt/vol: 5.0 (g/ml) G Lab File ID: 78-1

Level: (low/med) HIGH Date Received: 04/12/01

% Moisture: not dec. 12 Date Analyzed: 04/20/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 98.4

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-25-2	Bromoform	220	U
79-34-5	1,1,2,2-Tetrachloroethane	220	U
1330-20-7	Xylenes (Total)	4000	

FORM 1
PAH ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

005H14WC2S0411

Lab Name: Contract:

Lab Code: CECIL FIELD Case No.: SAS No.: SDG No.: 2104078

Matrix: (soil/water) SOIL Lab Sample ID: 210407801

Sample wt/vol: 33.1 (g/mL) G Lab File ID: 78-1

Extraction: (SepF/Cont/Sonc) OTHER Date Received: 04/12/01

% Moisture: 12 decanted: (Y/N) N Date Extracted:04/16/01

Concentrated Extract Volume: 1(ml) Date Analyzed: 04/22/01

Injection Volume: _____(uL) Dilution Factor: 1.0

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

GC Column: VYDAC 201TP54ID: 4.6 (mm)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	242	J
208-96-8	Acenaphthylene	10.4	U
90-12-0	1-Methyl naphthalene	336	
91-57-6	2-Methyl naphthalene	341	
83-32-9	Acenaphthene	188	
86-73-7	Fluorene	10.4	U
85-01-8	Phenanthrene	101	
120-12-7	Anthracene	47.6	
206-44-0	Fluoranthene	149	
129-00-0	Pyrene	67.0	
56-55-3	Benzo(a)Anthracene	8.1	J
218-01-9	Chrysene	141	J
205-99-2	Benzo(b)Fluoranthene	13.0	J
207-08-9	Benzo(k)Fluoranthene	8.3	J
50-32-8	Benzo(a)pyrene	12.5	J
53-70-3	Dibenz(ah)Anthracene	207	U
191-24-2	Benzo(ghi)Perylene	15.8	J
193-39-5	Indeno(123cd)Pyrene	8.8	J

PRE-LIM

for 45 Road 4/22/01

FORM 1
FL-PRO ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

005H14WC2S0411

Lab Name: PEL LABORATORIES INC. Contract:

Lab Code: PEL Case No.: SAS No.: SDG No.: 2104078

Matrix: (soil/water) SOIL Lab Sample ID: 210407801

Sample wt/vol: 25.1 (g/mL) G Lab File ID: 078-01

Extraction: (SepF/Cont/Sonc) OTHER Date Received: 04/12/01

% Moisture: 12 decanted: (Y/N) N Date Extracted: 04/16/01

Concentrated Extract Volume: 2 (ml) Date Analyzed: 04/18/01

Injection Volume: _____(uL) Dilution Factor: 1.0

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

GC Column: RTX-5 ID: 0.53 (mm)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/KG	Q
5289290-40-0----	TPH (C8-C40)	221	

PRE-LIM

FORM I FL-PRO

4-23-01

REPUBLIC SERVICES, INC.

App. # 20157

Special Waste Acceptance Application

A. GENERATOR INFORMATION

1. Generator Name: US Navy
2. Site Location: NAS Cecil Field
3. City: Jacksonville
   State: FL Zip: 32215
4. Phone: (904 777-8850
5. Fax: (904 777-6567
6. Contact: David J. Kruzicki
7. Title: Environmental Director

B. CUSTOMER INFORMATION

1. Customer Name: Omegasys, Inc.
2. Address: 4661 Hammermill Road
3. City: Tucker
   State: GA Zip: 30084
4. Phone: (770 - 621-9414
5. Fax: (770 - 270-5809
6. Contact: Rob Wright
7. Title: Project Manager

C. WASTE STREAM INFORMATION

1. Common Name of Waste: Contaminated Soil - E. of Hanger 14
2. Detailed Description of Process Generating Waste and Material Description: Installation of oil-wtr separator
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 brown 8. Flash Point > 200° F 9. Viscosity N/A
10. Reactive [ ]Yes [X]No With: _____ 11. pH Range: 7 - 8
12. Free Liquid: [ ]Yes [X]No 13. Water Content: _____ % 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: [ ] Bulk Solids [ ] Bulk Liquids [ ] Drum [ ] Roll-off [X]Dump Truck [ ] Tank Truck
2. Estimated Volume: 30 [X]Tons [ ] Cubic yards [ ] Gallons [ ] Other _____
3. Shipping Frequency: 1 time Designated Landfill: Broadhurst LF in Jesup, GA

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.

X 1. DAVID J. KRUZICKI (Name, Please Print) am employed by U.S. NAVY (Company Name) and am authorized to sign this request for:

X U.S. NAVY (Company Name) David J. Kruzicki (Signature) 5/3/01 (Date)

Form SWO1 (99)

Southland Waste Systems

May 3, 2001

Mr. Rob Wright
Omegasys, Inc.
4661 Hammermill Road, Suite B
Tucker, Georgia 30084

Dear Mr. Wright,

Thank you for speaking with me recently regarding the disposal of the contaminated soil generated by the US Navy, Cecil Field in Jacksonville, Florida. We have reviewed Special Waste Acceptance Application number 20157 and have approved the material for disposal at our Broadhurst Landfill. This approval number will be used to track this waste stream throughout its transportation and disposal. This approval expires on August 1, 2001.

A manifest must accompany each load and reference the approved profile number. The waste may not contain free liquids upon arrival at the landfill. This approval is for contaminated soil as represented by the attached analytical only. All other material must be profiled and approved separately.

Thank you for the opportunity to do business with Omegasys, Inc. If I can be of any further assistance, please contact me at (904)731-2456.

Sincerely,

Donna Davis-Harrell

Donna Davis-Harrell
Director of Special Waste Services

8619 WESTERN WAY • JACKSONVILLE, FL 32256 • P.O. BOX 56110 (32241)
SERVICE (904) 731-1232 • SALES (904) 731-1732 • ADMINISTRATIVE / BILLING (904) 731-2456

Enclosure 3
Disposal Manifests

REPUBLIC
Waste Services Division

Manifest Number: 14147

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	23.97	20157	Tons	Dump Trailer
			23.92	

Special Handling Instructions
Site # East of Hanger 14

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 5-4-01
Signature Date Shipped

TRANSPORTER

Transporter Name: Beaver Bulk, Inc. DOT#: 0254452

Address: P.O. Box 417, Live Oak, FL Truck Number: 108

Name of Authorized Agent

Signature 5-4-01
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

Earlene 5/7/01
Signature Date Received

REPUBLIC
Waste Services Division

Manifest Number: 14148

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		20157	Tons	Dump Trailer
			4.25	

Special Handling Instructions
Site # Hanger 14

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 5-4-01
Generator Authorized Agent Name — Signature — Date Shipped

TRANSPORTER

Transporter Name: Beaver Bulk, Inc. DOT#: 0254452

Address: P.O. Box 417, Live Oak, FL Truck Number: 109

LEE WHITAKER — 5-4-01
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 — Eulene 5/7/01
Name of Authorized Agent — Signature — Date Received

Enclosure 4
Certification of Disposal

Broadhurst
Environmental, Inc.

JULY 10, 2001

CERTIFICATE OF DISPOSAL

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

SITE NAME: CECIL FIELD – SITE#25

Manifest Number	Tonnage	Dates
14125-14333	5136.16	4/27/01-5/24/01

Waste material = Low level Benzo(a)pyrene,pesticides,PCBS.CONTAMINATED SOIL
Profile number 20154

Disposal Method was D-81 (Subtitle D Landfill)

BROADHURST ENVIRONMENTAL, INC.

7/11/01

John W. Simmons — Date

P. O. Box 278 • Screven, Georgia 31560 • Phone (912) 530-7050 • Fax (912) 530-7079