

N60200.AR.001587
NAS CECIL FIELD, FL
5090.3a

CLOSURE ASSESSMENT REPORT FOR UNDERGROUND STORAGE TANK AT BUILDING
808 NAS CECIL FIELD FL
12/7/1998
ENVIRONMENTAL DETACHMENT CHARLESTON



Florida Department of Environmental Regulation

Twin Towers Office Bldg • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

DER Form # 17-761.900(6)
Form Title: Closure Assessment Form
Effective Date: December 10, 1993
DER Application No.:

Closure Assessment Form

Owners of storage tank systems that are replacing, removing or closing in place storage tanks shall use this form to demonstrate that a storage system closure assesment was performed in accordance with Rule 17-761 or 17-762, Florida Administrative Code. Eligible Early Detection Incentive (EDI) and Reimbursement Program sites do not have to perform a closure assessment.

Please Print or Type
Complete All Applicable Blanks

- 1. Date: 12-7-98
2. DER Facility ID Number: 168507293
3. County: DUVAL
4. Facility Name: BUILDING 808, MEDICAL/DENTAL CLINIC
5. Facility Owner: U.S. NAVY, NAVAL AIR STATION CECIL FIELD
6. Facility Address: BUILDING 808, "D" AVENUE
7. Mailing Address: N.P.W.C., BOX 101, CECIL FIELD ZONE, NAS CECIL FIELD
8. Telephone Number: (904) 778-5620, x114
9. Facility Operator: DAVE KRUZICKI
10. Are the Storage Tank(s): (Circle one or both) A. Aboveground or B. Underground
11. Type of Product(s) Stored: #2 FUEL OIL
12. Were the Tank(s): (Circle one) A. Replaced B. Removed C. Closed in Place D. Upgraded (aboveground tanks only)
13. Number of Tanks Closed: ONE
14. Age of Tanks: UNKNOWN

Facility Assessment Information

- Yes No Not Applicable
1. Is the facility participating in the Florida Petroleum Liability Insurance and Restoration Program (FPLIRP)?
2. Was a Discharge Reporting Form submitted to the Department?
3. Is the depth to ground water less than 20 feet?
4. Are monitoring wells present around the storage system?
5. Is there free product present in the monitoring wells or within the excavation?
6. Were the petroleum hydrocarbon vapor levels in the soils greater than 500 parts per million for gasoline?
7. Were the petroleum hydrocarbon vapor levels in the soils greater than 50 parts per million for diesel/kerosene?
8. Were the analytical laboratory results of the ground water sample(s) greater than the allowable state target levels?
9. If a used oil storage system, did a visual inspection detect any discolored soil indicating a release?
10. Are any potable wells located within 1/4 of a mile radius of the facility?
11. Is there a surface water body within 1/4 mile radius of the site? If yes, indicate distance:

SPORTENVDETHASN
SUPSHIP PORTSMOUTH ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE
NORTH CHARLESTON, S.C. 29405-2106
Underground Storage Tank (UST) Assessment Report

I OWNERSHIP OF UST(S)

Agency/Owner: Naval Air Station, Cecil Field DER Facility No. 168507293			
Mailing Address: N.P.W.C., Box 101, Cecil Field Zone, NAS Cecil Field.			
City: Jacksonville	State: FL	Zip Code: 32215-0101	
Area Code: 904	Telephone Number: 778-5620, x114	Contact Person: Dave Kruzicki	

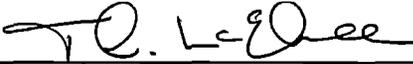
II SITE IDENTIFICATION AND LOCATION

Site I.D. #:	BUILDING 808		
Facility Name:	Naval Air Station Cecil Field		
Street Address:	Building 808, "D" Avenue		
City:	Jacksonville, 32215-0101	County:	Duval

III CLOSURE INFORMATION

Closure Started: 8/31/98	Closure Completed: 9/03/98
Number of USTs Closed: 1	
N/A	SPORTENVDETHASN
Consultant	UST Removal Contractor

IV. CERTIFICATION (Read and Sign after completing entire submittal)

<small>I certify that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate and complete.</small>	
T.L. McElwee	
Name (Type or Print)	
	
Signature	

V. UST INFORMATION

- A. Product.....
- B. Capacity.....
- C. Age.....
- D. Construction Material.....
- E. Month/Year of Last Use.....
- F. Depth (ft.) To Base of Tank.....
- G. Spill Prevention Equipment Y/N.....
- H. Overfill Prevention Equipment Y/N.....
- I. Method of Closure Removed/Filled.....
- J. Visible Corrosion or Pitting Y/N.....
- K. Visible Holes Y/N.....

Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
Fuel Oil					
6,000gal					
unk steel w/ fiberglass coating					
unk					
10' 3"					
N					
N					
R					
N					
N					

- L. Method of disposal for any USTs removed from the ground (attach disposal manifests)

UST 808 was removed, drained, cut open at both ends, and cleaned with a steam cleaner. It was then cut up for recycling as scrap metal and delivered to Commercial Metals Inc.. (See Attachment III.)

- M. Method of disposal for any liquid petroleum, sludges, or waste waters removed from the USTs (attach disposal manifests)

Prior to tank removal the residual fuel was pumped out of the tank by Cecil Field Fuel Farm personnel for recycling. The oily rinse water was recycled through the oil/water separator at the Transportation Office, Building 80, NAS Cecil Field.

- N. If any corrosion, pitting, or holes were observed, describe the location and extent for each UST

UST 808, a fuel oil tank, was steel with a fiberglass exterior. It was in very good condition with no corrosion.

VI. PIPING INFORMATION

- A. Construction Material.....
- B. Distance from UST to Dispenser.....
- C. Number of Dispensers.....
- D. Type of System P/S.....
- E. Was Piping Removed from the Ground? Y/N....
- F. Visible Corrosion or Pitting Y/N.....
- G. Visible Holes Y/N.....
- H. Age.....

Tank 1	Tank 2	Tank 3	Tank 4
Steel			
30' see note 1			
1 see note 1			
S			
Y See Note 2			
N			
N			
Unk			

Note 1: The tank provided fuel oil to Building 808 boiler.

Note 2: Piping was removed to the edge of the excavation and the remaining piping was flushed, capped and left in place.

- I. If any corrosion, pitting, or holes were observed, describe the location and extent for each line.

The steel piping was in good condition with little or no corrosion.

VII. BRIEF SITE DESCRIPTION AND HISTORY

Building 808 is the Medical/Dental Clinic located on "D" Avenue at NAS Cecil Field. The building had a 6,000 gallon underground storage tank which provided fuel oil to the boiler of building 808. The underground storage tank was previously replaced by an aboveground storage tank located adjacent to the underground storage tank site. The underground storage tank measured 8' dia. x 16' long and was located beneath grass on the southeast corner of the building. The tank had a concrete ballast pad w/access vault located on top of the tank (see photos 2 & 3).

The piping from building 808 was disconnected from the tank, flushed and then capped at the edge of the excavation (see photo 8).

After the removal of UST 808, OVA headspace samples were taken on each wall of the excavation, at 2', 4' and 6'. In this excavation, the initial depth to ground water was 7' 6". After soil sampling was completed, the excavation was backfilled with clean soil removed from the excavation and clean fill dirt from DT Services, Jacksonville, Florida. There was no excessively contaminated soil found at this site. A temporary well was installed at the former tank site and sampled.

VIII. SITE CONDITIONS

Yes No Unk

	Yes	No	Unk
A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?		X	
B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?		X	
C. Was water present in the UST excavation, soil borings, or trenches? UST Excavation @7'6" BGSL and was 18" deep	X		
D. <u>Did contaminated soils remain stockpiled on site after closure?</u>		X	
E. Was a petroleum sheen or free product detected on any excavation or boring waters? _____		X	

IX. SAMPLE INFORMATION

See Site Map 4

X. SAMPLING METHODOLOGY

Provide a detailed description of the methods used to collect and store (preserve) the samples.

After the removal of UST 808, OVA headspace samples were taken on each wall of the excavation at 2', 4' and 6'. In this excavation, the initial ground water depth was at 7' 6". All OVA headspace soil samples were extracted using the backhoe bucket and sampled from the middle of the bucket. A soil sample was taken under the area where the piping left the tank and ran towards the building. Sampling was performed in accordance with the FDEP Pollutant Storage Tank Closure Assessment Requirements and the FDEP Quality Assurance Standard Operating Procedures for Petroleum Storage System Closure Assessments.

Sample jars were prepared by the testing laboratory. The sample containers were filled leaving no head space and immediately capped.

The samples were marked, logged, and immediately placed in sample coolers packed with ice to maintain an approximate temperature of 4° C. Tools were thoroughly cleaned and decontaminated with organic-free soap and water after each sample.

The samples remained in the custody of SPORTENVDETHASN until they were transferred to NPWC Pensacola Environmental Laboratory for analysis as documented in the attached Chain-of-Custody Record.

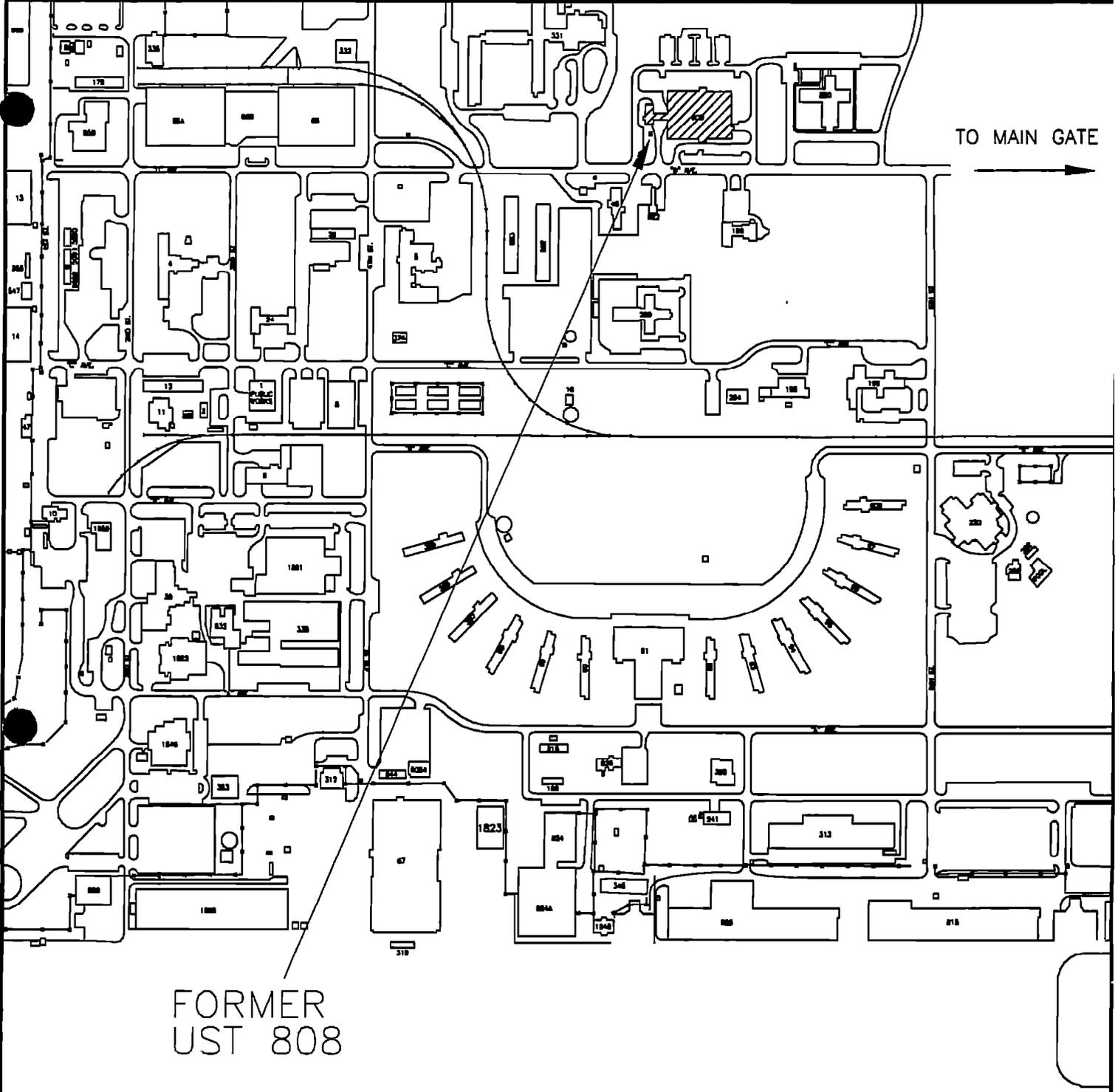
XI. RECEPTORS

Yes No

A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?		X
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		X
C.	Are there any underground structures (e.g., basements) located within 100 feet of the UST system?		X
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? [electrical, steam, telephone & water]	X	
E.	Has contaminated soil been identified at a depth of less than 3 feet below land surface in an area that is not capped by asphalt or concrete?		X

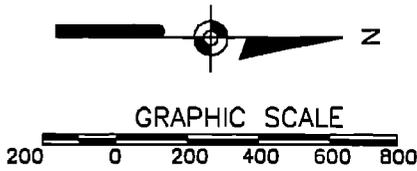
Attachment I
SITE MAPS AND PHOTOGRAPHS

Site Maps 1, 2, 3 and 4
Photographs 1 thru 10



TO MAIN GATE

FORMER
UST 808

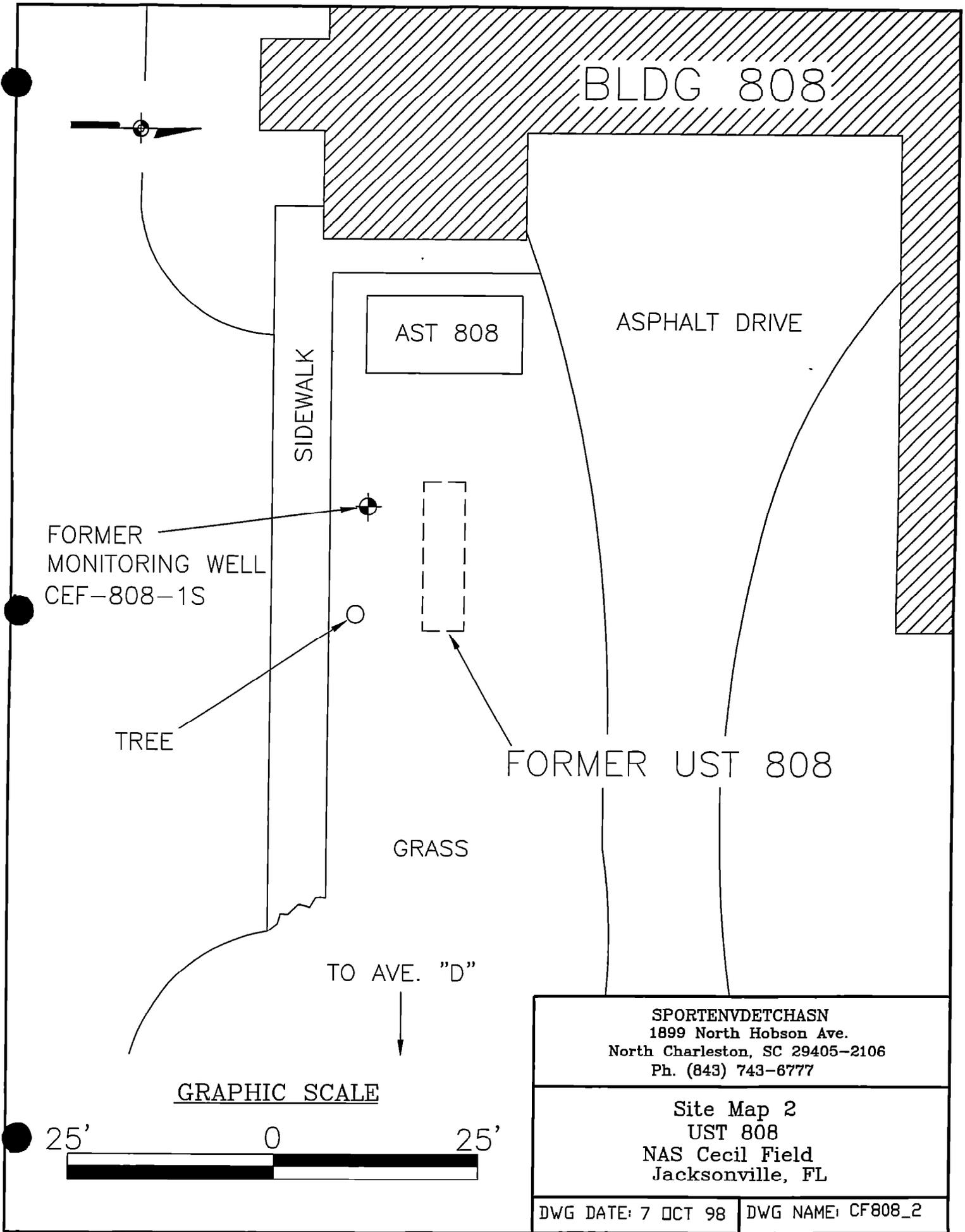


SPORTENVDETHASN
 1899 North Hobson Ave.
 North Charleston, SC 29405-2106
 Ph. (803) 743-8777

Site Map 1
 UST 808
 NAS Cecil Field
 Jacksonville, FL

DWG DATE: 23 SEPT 98

DWG NAME: CF808_1



BLDG 808

AST 808

UST EXCAVATION

TLI

VENT

SUPPLY
RETURN

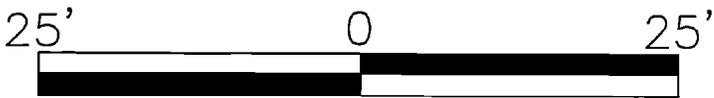
REMOTE FILL

PUMP OUT

FORMER UST 808

TO AVE. "D"

GRAPHIC SCALE



SPORTENVDETHASN
1899 North Hobson Ave.
North Charleston, SC 29405-2106
Ph. (843) 743-6777

Site Map 3
UST 808
NAS Cecil Field
Jacksonville, FL

DWG DATE: 7 OCT 98 | DWG NAME: CF808_3

BLDG 808

TEMPORARY
MONITORING WELL
TW-808,
GROUNDWATER SAMPLE
#98CNS012-7

AST 808

UST EXCAVATION

SAMPLE LOCATION, TYP.

MONITORING WELL
CEF-808-1S
ABANDONED & REMOVED

⑤+⑥

SOIL SAMPLE
#98CNS012-5
AT 7'6" BELOW GSL

FORMER UST 808

SAMPLE LOCATION	DEPTH IN FEET	OVA READING IN ppm
1	2	0
1	4	0
1	6	0
2	2	0
2	4	0
2	6	0
3	2	0
3	4	0
3	6	0
4	2	0
4	4	0
4	6	17.1
5	1	10.2
6	2	0

TO AVE. "D"

GRAPHIC SCALE



SPORTENVDETHASN
1899 North Hobson Ave.
North Charleston, SC 29405-2106
Ph. (843) 743-6777

Site Map 4
UST 808
NAS Cecil Field
Jacksonville, FL

DWG DATE: 13 OCT 98 | DWG NAME: CF808_4

UST 808 Tank Removal



Photo 1: Building 808 site prior to excavation.

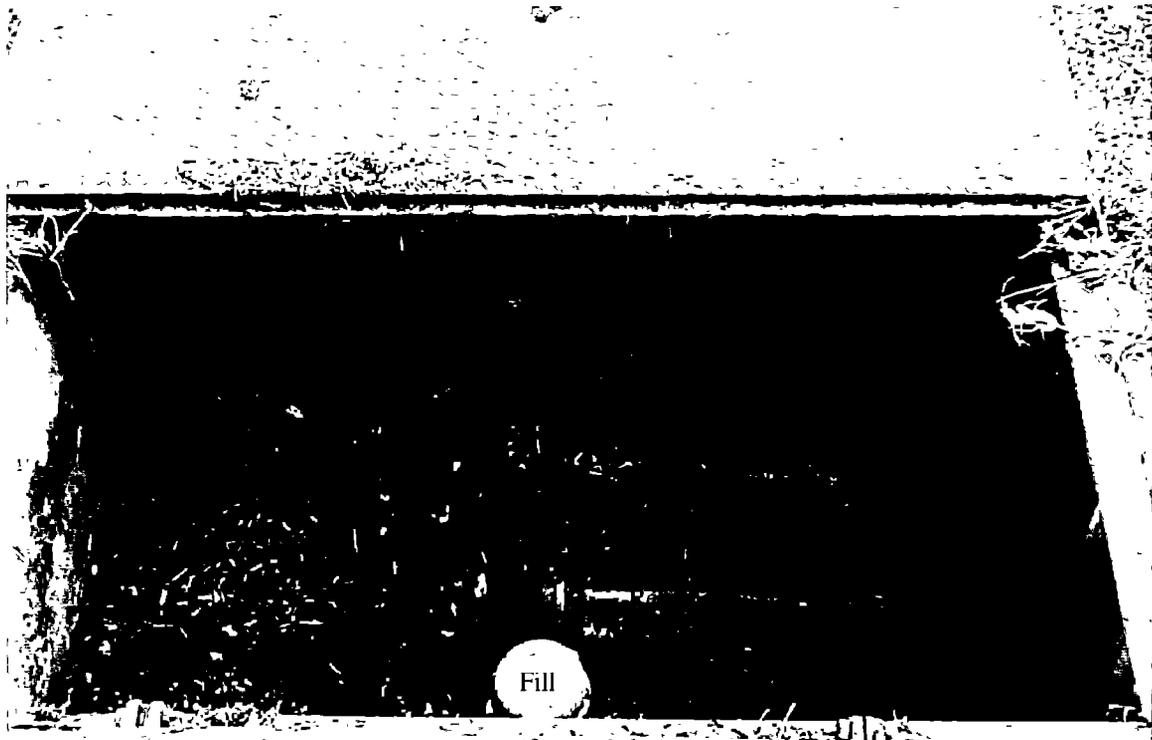


Photo 2: Piping vault for UST 808.

UST 808 Tank Removal



Photo 3: Concrete slab/vault on top of UST 808 (2' 6" thick X 7' wide X 18' long).

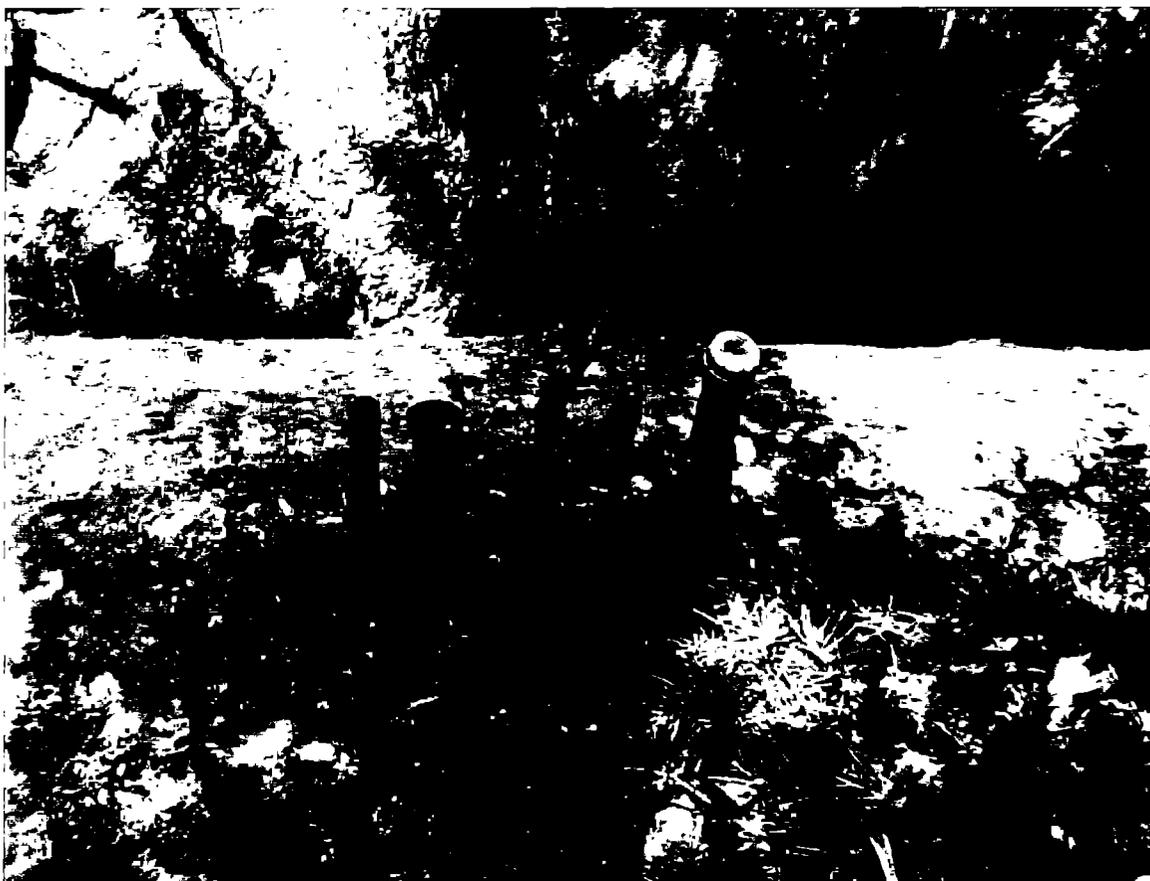


Photo 4: UST piping after removal of concrete pad.

UST 808 Tank Removal



Photo 5: UST 808 during removal.

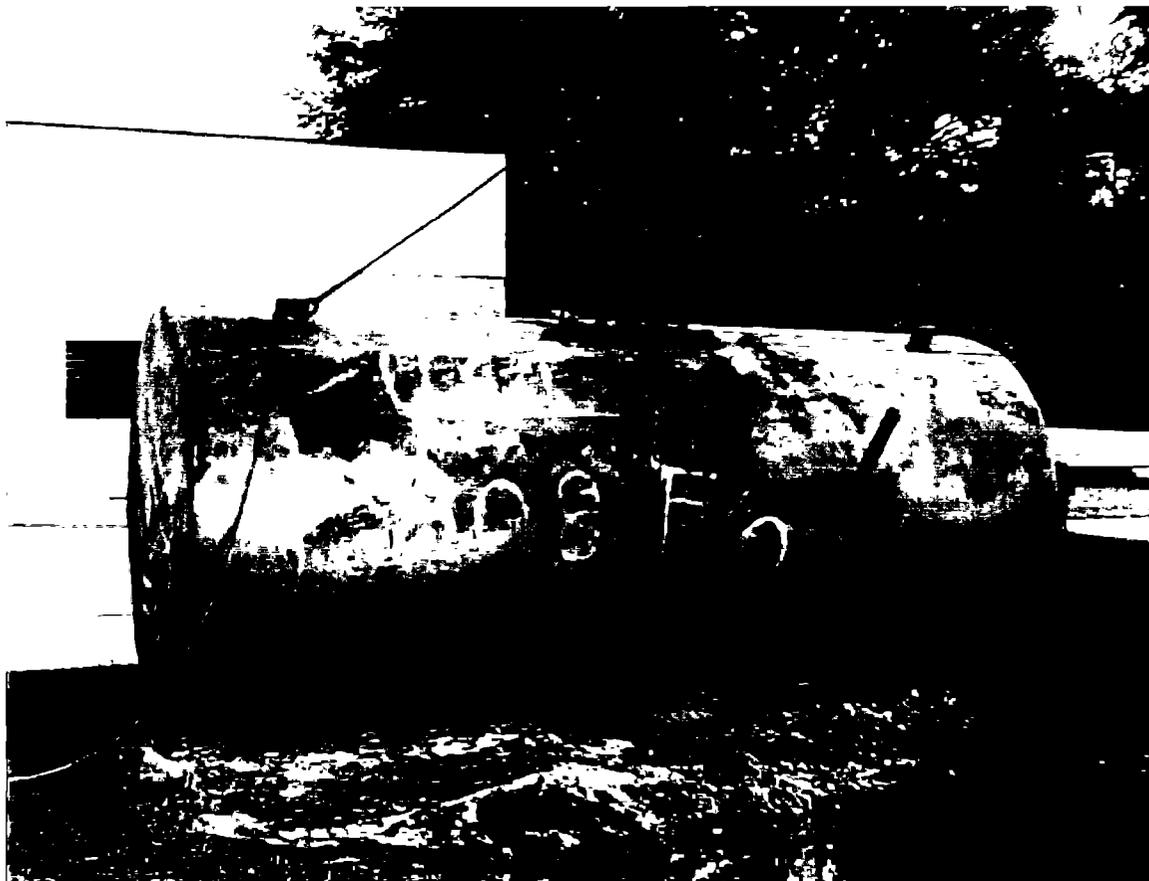


Photo 6: UST 808 after removal.

UST 808 Tank Removal

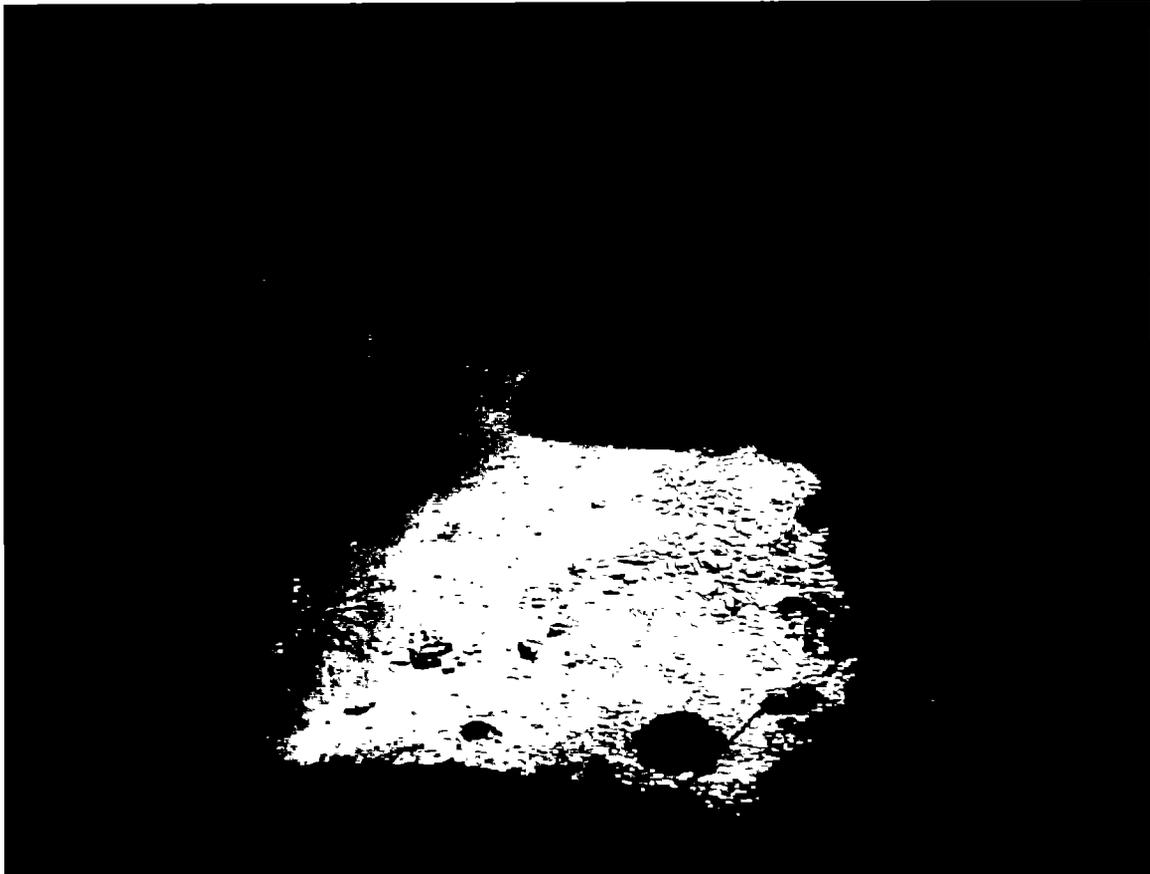


Photo 7: Ground water in excavation after tank removal.



Photo 8: Piping capped at edge of excavation after draining and flushing of all fluids.

UST 808 Tank Removal



Photo 9: UST 808 during cut-up for recycling.



Photo 10: UST 808 site after restoration.

Attachment II
ANALYTICAL RESULTS

NOTE:

Sample Number **98CNS012-6** was inadvertently used on two different Chain of Custody sheets for two different samples (see enclosed). The first use was for a VOA soil trip blank and the second use was the ground water sample from the temporary monitoring well at UST 808 site. The Laboratory tracking numbers and the sample matrix will serve to distinguish the two samples from each other.

Navy Public Works Center Environmental Laboratory

Bldg. 3887, Code 440
NAS Pensacola, FL 32508
Phone (850) 452-3180/3642
DSN 922-3180/3642
FAX (850) 452-2799/2387

Client: **SPORTENVDETHASN Lab**
Address: 1899 No. Hobson Ave.
N. Charleston, SC 29405-2106
Phone #: (843) 743-3239 x124
Contact: Bill Hiers

Analytical Report

BETX + MTBE by Method 8260

Lab Report Number: 83323
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- 83323			
Sample Name / Location	98CNS012-5 F/O Tank Bldg 808			
Collector's Name	Nesbitt			
Date & Time Collected	31 Aug 98 @ 1530			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of Extraction / Initials	12 Sep 98 JM Method 5030/8260			
Date of Analysis	12 Sep 98			
Sample Matrix	Soil			
Dilution	X 1			
Compound Name	1- 83323	units	Det. Limit	Flags
Benzene	BDL	ug/Kg		1
Ethylbenzene	BDL	ug/Kg		2
Toluene	BDL	ug/Kg		2
m,p-Xylene	BDL	ug/Kg		4
o-Xylene	BDL	ug/Kg		2
Methyl-tert-butyl ether (MTBE)	BDL	ug/Kg		2

SURROGATE SPIKE RECOVERIES

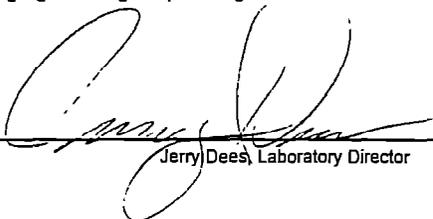
	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	107
Toluene-d8	86-119	102
Bromoflourobenzene	85-116	97

Explanation of Flags:

COMMENTS :

BDL = Below Detection Limit. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by :


Jerry Dees, Laboratory Director

Date: 10/13/98

Report Generated

**Navy Public Works Center
Environmental Laboratory**

Analytical Report

610 PAH's by Method 8270

Bldg. 3887, Code 440
NAS Pensacola, FL 32508
Phone (850) 452-3180/3642
DSN 922-3180/3642
FAX (850) 452-2799/2387

Client: **SPORTENVDETHASN Lab**
Address: 1899 No. Hobson Ave.
N. Charleston, SC 29405-2106
Phone #: (843) 743-3239 x124
Contact: Bill Hiers

Lab Report Number: 83323
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- 83323			
Sample Name / Location	98CNS012-5 F/O Tank Bldg 808			
Collector's Name	Nesbitt			
Date & Time Collected	31 Aug 98 @ 1530			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of Extraction / Initials	4 Sep 98 JM			
Date of Analysis	4 Sep 98			
Sample Matrix	Soil			
Dilution	X 1			
Compound Name	1- 83323	units	Det. Limit	Flags
Acenaphthene	BDL	ug/Kg	160	
Acenaphthylene	BDL	ug/Kg	190	
Anthracene	BDL	ug/Kg	170	
Benzo(a)anthracene	BDL	ug/Kg	160	
Benzo(a)pyrene	BDL	ug/Kg	180	
Benzo(b)fluoranthene	BDL	ug/Kg	160	
Benzo(g,h,i)perylene	BDL	ug/Kg	180	
Benzo(k)fluoranthene	BDL	ug/Kg	210	
Chrysene	BDL	ug/Kg	170	
benz(a,h)anthracene	BDL	ug/Kg	170	
Fluoranthene	BDL	ug/Kg	180	
Fluorene	BDL	ug/Kg	160	
Indeno(1,2,3-cd)pyrene	BDL	ug/Kg	180	
1-Methylnaphthalene *	BDL	ug/Kg	200	
2-Methylnaphthalene	BDL	ug/Kg	220	
Naphthalene	BDL	ug/Kg	160	
Phenanthrene	BDL	ug/Kg	180	
Pyrene	BDL	ug/Kg	200	

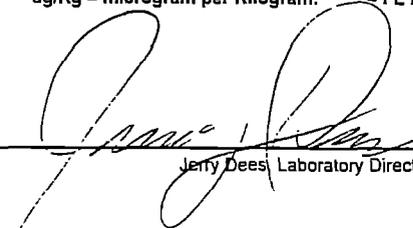
SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	23-120	73
2-Fluorobiphenyl	30-115	84
Terphenyl -d14	18-137	113

COMMENTS :

BDL = Below Detection Limit. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by :


Jerry Dees, Laboratory Director

Date: 10/13/98

Report Generated
End of Report

**Navy Public Works Center
Environmental Laboratory**

Analytical Report

Petroleum Range Organics by FLPRO

Bldg. 3887. Code 440
NAS Pensacola, FL 32508
Phone (850) 452-3180/3642
DSN 922-3180/3642
FAX (850) 452-2799/2387

Client: **SPORTENVDETHASN Lab**
Address: 1899 No. Hobson Ave.
N. Charleston, SC 29405-2106
Phone #: (843) 743-3239 x124
Contact: Bill Hiers

Lab Report Number: 83323
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- 83323			
Sample Name / Location	98CNS012-5 F/O Tank Bldg 808			
Collector's Name	Nesbitt			
Date & Time Collected	31 Aug 98 @ 1530			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of Extraction / Initials	3 Sep 98 JM			
Date of Analysis	11 Sep 98			
Sample Matrix	Soil			
Dilution	X 1			
Parameter	1- 83323	units	Det. Limit	Flags
Petroleum Range Organics by FLPRO	BDL	mg/L	5.0	

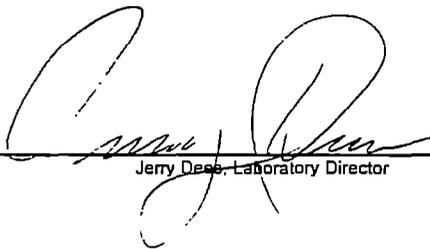
SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142	118
Nonatriacontane (C-39)	42-193	110

COMMENTS :

BDL = Below Detection Limit. mg/Kg = milligram per Kilogram.

Approved by :


Jerry Deeb, Laboratory Director

Date: 10/13/98
Page 1 of 1 End of Report

Navy Public Works Center Environmental Laboratory

Bldg. 3887, Code 440
NAS Pensacola, FL 32508
Phone (850) 452-3180/3642
DSN 922-3180/3642
FAX (850) 452-2799/2387

Client: SPORTENVDETHASN Lab
Address: 1899 No. Hobson Ave.
N. Charleston, SC 29405-2106
Phone #: (843) 743-3239 x124
Contact: Bill Hiers

Analytical Report

BETX + MTBE by Method 8260

Lab Report Number: 83324
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1-	83324		
Sample Name / Location	98CNS012-6 VOA Soil Trip Blank			
Collector's Name	NS			
Date & Time Collected	31 Aug 98 @ 1630			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of Extraction / Initials	12 Sep 98 JM Method 5030/8260			
Date of Analysis	12 Sep 98			
Sample Matrix	Soil			
Dilution	X 1			
Compound Name	1-	83324	units	Det. Limit Flags
Benzene	BDL		ug/Kg	1
Ethylbenzene	BDL		ug/Kg	2
Toluene	BDL		ug/Kg	2
m,p-Xylene	BDL		ug/Kg	4
o-Xylene	BDL		ug/Kg	2
Methyl-tert-butyl ether (MTBE)	BDL		ug/Kg	2

SURROGATE SPIKE RECOVERIES

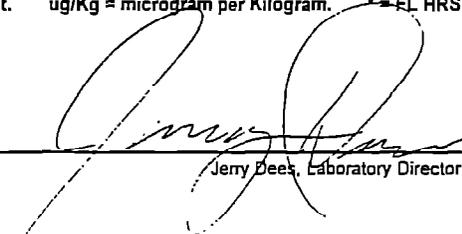
	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	109
Toluene-d8	86-119	102
Bromoflourobenzene	85-116	99

Explanation of Flags:

COMMENTS :

BDL = Below Detection Limit. ug/Kg = microgram per Kilogram. * = FL HRS certification pending.

Approved by :


Jerry Dees, Laboratory Director

Date: 10/13/98

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HAZARDOUS WASTE CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

NPWC Environmental Laboratory

3807 Code 920
 NAS Pensacola, FL 32508
 Phone: (904) 452-4726/3642
 422-4726/2642
 FAX: (904) 452-2799/2267

Requester:
 Address:
 Phone #:
 Contact:
 Job Order #:

SPORTS/NUDE/ETCHAS/N LAB
1899 N. HOBSON AVE
N. CHARLESTON, S.C. 29405-2106
843-743-3239, ext 124
MR. BILL HIGGS
1274102

Report Required? Yes No DEP? Yes No
 Lab ID Number:
 Sample Date:
 Received Date: 9/11/98
 Sample Site: NAS CECIL FIELD
 Lab Due Date:

Sample ID #	Lab	#1-8-3319	#2-8-3320	#3-8-3321	#4-8-3322
Sample Name		98CNS012-1 OJW sep	98CNS012-2 OJW sep TANK	98CNS012-3 F/O TANK NORTH	98CNS012-4 F/O TANK-SW
or Location		BLDG 200	BLDG 200	BLDG 80	BLDG 80
Sampled by		NESBITT	NESBITT	MCELWEE	MCELWEE
Collection Date		8/31/98	8/31/98	8/31/98	8/31/98
Date/Time		1600	1600	1630	1630
Sample Matrix		SOIL	SOIL	SOIL	SOIL

Notes
 *3 DAY TURN-AROUND ON ALL 4 SAMPLES. *

GROUP PARAMETERS	by Method Name	METHOD #	X	Sample ID #'s	FY97	Container	Preservative(s)						
											Units	Required (L/S)	Used (Liquids)
HW Character (complete)	EPA 846										58	See below	See below
Inertivity (Fluoride)	SW 846 1010										2	250ml/4 oz.	4° C
Reactivity (Cyanide & Sulfide)	EPA SW-346										4	1L/4 oz.	4° C
Corrosivity (pH)	SW 846 5040/9045										1.5	250ml/4 oz.	4° C
Toxicity (TCDF complete)	EPA SW-346										50	See below	See below
Toxicity (TCDF) complete	EPA SW-346										50	See below	See below
TCDF Non Volatile Extraction	SW 846 1311										4	40 ml x 3/4 oz.	4° C
TCDF Volatile ZNE Extraction	SW 846 1311										4	1L/32 oz.	-Cl to pH < 2/4° C
TCDF BNA Extractables	SW 846 8270										9	1L x 3/4 oz.	4° C
TCDF Acid Extractables	SW 846 8270										9	1L x 3/4 oz.	4° C
TCDF B/N Extractables	SW 846 8270										9	1L x 3/4 oz.	4° C
TCDF Pesticides	SW 846 8080										9	1L x 3/4 oz.	4° C
TCDF Herbicides	SW 846 8150										9	1L x 3/4 oz.	4° C
TCDF Volatiles	SW 846 8280										9	40 ml x 3/4 oz.	-Cl to pH < 2/4° C
Metals (2)	EPA SW-346										9.5	500 ml/4 oz.	HNO ₃ to pH < 2
Mutagenic Samples	EPA SW-346										~50%	See above	See above
Complete Priority Pollutants	EPA SW-346										40	See below	See below
PP Acid Extractables	SW 846 8270										9	1L x 3/4 oz.	4° C
PP B/N Extractables	SW 846 8270										9	1L x 3/4 oz.	4° C
PP Pesticide/PCB's	SW 846 8080										9	1L x 3/4 oz.	4° C
PP Volatiles	SW 846 8280										9	40 ml x 3/4 oz.	HCl to pH < 2/4° C
PP Metals (1)	EPA SW-346										9	500 ml/4 oz.	HNO ₃ to pH < 2
PP Cyanide/Phenol	EPA SW-346										4	1L Plastic/1L Glass	NaOH/H ₂ SO ₄
Toxicity (TCDF less Pestic/Herb)	EPA SW-346										25	See below	See below
PCDF - PCOS Solvents	EPA SW-346										24	1L x 36.40 ml/418 oz.	4° C
Kerosene Anal. Group (R-PPCI)	SW-346/R DEP										24	Multiple	As Required
FL-3 R.C.	R DEP	X		X		X		X			5	1L x 3/16 oz.	H ₂ SO ₄ to pH < 2/4° C
Total Volatiles + TIC	SW 846 8280	X		X		X		X			9	40 ml x 3/4 oz.	HCl to pH < 2/4° C
Total BNA Extractables + TIC	SW 846 8270	X		X		X		X			18	1L x 2/16 oz.	4° C
Total PCRA Metals (1)	EPA SW-346	X		X		X		X			6.5	500 ml/4 oz.	HNO ₃ to pH < 2
Single Metals	EPA SW-346										1	500 ml/4 oz.	HNO ₃ to pH < 2
PCB's in Oil	SW 846 8080										3	40 ml/4 oz.	None
PCB's in Water/Soil/Waxes	SW 846 8080										4	1L/4 oz.	None
Other:													
BTEX						X		X					
PAH						X		X					

Comments: TOTAL VOLATILES AND BTEX SAMPLES INCLUDE 3 ENCORE SAMPLERS

EACH AND ONE 8 OZ JAR EACH.

3 DAY TURNAROUND-ALL SAMPLES.

Remanufactured by:
 Date/Time:

T.Q. L-8000
8/31/98 1900

FEDER
OVERNIGHT

Received by:
 Date/Time:

[Signature]
9/11/98 0915

1780Z
 1400L

15 Syrum Bags

HAZARDOUS WASTE CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

Environmental Laboratory

Report Required? Yes No

DEP? Yes No

17. Code 920

Requester: SPORTENDETCHASN LAB

1000 S.W. 11th St., Ft. Lauderdale, FL 32508

Address: 1899 N. HOBSON AVE

Lab ID Number: _____

Phone: (904) 452-4728/3642

Phone #: 843-743-3239 ext 124

Sample Date: _____

OSN: 922-4728/3642

Contact: MR. BILL HIERS

Received Date: 9/1/98

FAX: (904) 452-2799/2387

Job Order #: _____

Sample Site: NAS CECIL FIELD

Lab Due Date: _____

Sample ID #	Lab	#1-8-3323	#2-8-3324	#3-	#4-	Notes:
Sample Name		98CNS012-5	98CNS012-6			
or Location		FLOTANK BLDG 808	VOA - Soil TRIP BLANK			
Sampled by		NESBITT				
Collection Date		8/31/98	8/31/98			
Date/Time		1530	1630			
Sample Matrix		SOIL	SOIL			

GROUP PARAMETERS										FY97	Containers	Preservatives
by Method Name	METHOD #	X	Bottle ID #'s	Units	Required (L/S)	Used (Liquids)						
HW Charact. (complete)	EPA SW 846									56	See below	See below
Volatility (Flampoint)	SW 846 1010									2	250ml/4 oz.	4° C
Reactivity (Cyanide & Sulfide)	EPA SW-846									4	1L/4 oz.	4° C
Corrosivity (pH)	SW 846 9040/9045I									35	250ml/4 oz.	4° C
Toxicity (TCLP) complete	EPA SW-346									50	See below	See below
Toxicity (TCLP) complete	EPA SW-346									50	See below	See below
TCLP Non Volatile Extraction	SW 846 1311									4	40 ml/3/4 oz.	4° C
TCLP Volatile ZHE Extraction	SW 846 1311									4	1L/4/32 oz.	HCl to pH<2/4° C
TCLP SNA Extractables	SW 846 8270									18	1L/3/4 oz.	4° C
TCLP Acid Extractables	SW 846 8270									9	1L/3/4 oz.	4° C
TCLP S/N Extractables	SW 846 8270									3	1L/3/4 oz.	4° C
TCLP Pesticides	SW 846 8080									7	1L/3/4 oz.	4° C
TCLP Herbicides	SW 846 8150									3	1L/3/4 oz.	4° C
TCLP Volatiles	SW 846 8260									3	40 ml x 3/4 oz.	HCl to pH<2/4° C
TCLP Metals (8)	EPA SW-346									35	500 ml/4 oz.	HNO ₃ to pH<2
Municipal Samples	EPA SW-346									-50% I	See above	See above
Complete Priority Pollutants	EPA SW-346									40	See below	See below
PP Acid Extractables	SW 846 8270									3	1L/3/4 oz.	4° C
PP S/N Extractables	SW 846 8270									3	1L/3/4 oz.	4° C
PP Pesticides/PCB's	SW 846 8080									9	1L/3/4 oz.	4° C
PP Volatiles	SW 846 8260									3	40 ml x 3/4 oz.	HCl to pH<2/4° C
PP Metals (13)	EPA SW-346									3	500 ml/4 oz.	HNO ₃ to pH<2
PP Cyanide/Phenol	EPA SW-346									4	1L Plastic/1L Glass	NaOH/H ₂ SO ₄
Toxicity (TCLP) Inert Pest/Herb	EPA SW-346									36	See below	See below
FOOT - FCCS Solvents	EPA SW-346									24	1Lx36, 40mlx15 oz.	4° C
Kerosene Anal. Group (FL-PRO)	SW-346/FL DEP									24	Multistep	As Required
FL-PRO	FL DEP	X								5	1L/3/18 oz.	H ₂ SO ₄ to pH<2/4° C
Total Volatiles	SW 846 8260									3	40 ml/3/4 oz.	HCl to pH<2/4° C
Total SNA Extractables	SW 846 8270									18	1L/2/18 oz.	4° C
Total RCRA Metals (8)	EPA SW-346									6.5	500 ml/4 oz.	HNO ₃ to pH<2
Single Metals	EPA SW-346									1	500 ml/4 oz.	HNO ₃ to pH<2
PCB's in Oil	SW 846 8080									3	40 ml/4 oz.	None
PCB's in Water/Soil/Waxes	SW 846 8080									4	1L/4 oz.	None
Other:												
BTEX		X		X								
PAH		X										

Comments: BTEX SAMPLE INCLUDES 3 ENCORE SAMPLERS AND ONE 8OZ JAR.
THIS SAMPLE DOES NOT REQUIRE A 3 DAY TURNAROUND

Requested by: TR. L. [Signature]
 Date/Time: 8/31/98 1900

Received by: [Signature]
 Date/Time: 9/1/98 0915

Navy Public Works Center

Environmental Laboratory

Bldg. 3887, Code 440
 NAS Pensacola, FL 32508
 Phone (850) 452-3180/3642
 DSN 922-3180/3642
 FAX (850) 452-2799/2387

Client: SPORTENVDETHASN Lab
 Address: 1899 N. Hobson Ave
 N. Charleston SC 29405-2100
 Phone #: (843) 743-3239 Ext. 124
 Contact: Mr. Bill Hiers

Analytical Report

Total Volatiles by Method 8260

Lab Report Number: 83385
 Sample Date: 5 Sep 98
 Received Date: 9 Sep 98
 Sample Site: NAS Cecil Field
 Job Order No.: 127 4021

LAB Sample ID#	1- 83385			
Sample Name / Location	98CNS012-7 TW-808 Bldg 808			
Collector's Name	McElwee			
Date & Time Collected	5 Sep 98 @ 1100			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	9 Sep 98 MC			
Date of Analysis	9 Sep 98			
Sample Matrix	Groundwater			
Dilution	X 1			
Compound Name	1- 83385	units	Det. Limit	Flags
Benzene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
m,p-Xylene	1	ug/L	1	
o-Xylene	1	ug/L	1	
Methyl-tert-butyl ether (MTBE)	BDL	ug/L	1	
Naphthalene	2	ug/L	1	

SURROGATE SPIKE RECOVERIES

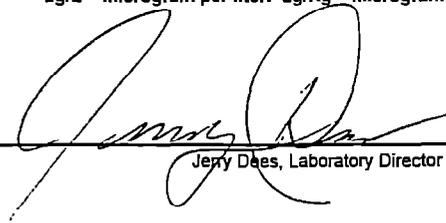
	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	104
Toluene-d8	86-119	101
Bromoflourobenzene	85-116	102

Explanation of Flags:

COMMENTS :

BDL = Below Detection Limit. ug/L = Microgram per liter. ug/Kg = Microgram per kilogram. * = FL HRS certification pending.

Approved by :



 Jerry Dées, Laboratory Director

Date: 10/1/98

Report Generated

Navy Public Works Center Environmental Laboratory

Bldg. 3887, Code 440
NAS Pensacola, FL 32508
Phone (850) 452-3180/3642
DSN 922-3180/3642
FAX (850) 452-2799/2387

Client: SPORTENVDETHASN Lab
Address: 1899 N. Hobson Ave
N. Charleston SC 29405-2100
Phone #: (843) 743-3239 Ext. 124
Contact: Mr. Bill Hiers

Analytical Report

610 PAH's by Method 8270

Lab Report Number: 83385
Sample Date: 5 Sep 98
Received Date: 9 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- 83385				
Sample Name / Location	98CNS012-7 TW-808 Bldg 808				
Collector's Name	McElwee				
Date & Time Collected	5 Sep 98 @ 1100				
Sample Type (composite or grab)	Grab				
Analyst	J. Moore				
Date of Extraction / Initials	11 Sep 98 JJ				
Date of Analysis	25 Sep 98				
Sample Matrix	Groundwater				
Dilution	X 1				
Compound Name	1-	83385	units	MDL	Flags
Acenaphthene	BDL		ug/L	2	
Acenaphthylene	BDL		ug/L	2	
Anthracene	BDL		ug/L	2	
Benzo(a)anthracene	BDL		ug/L	2	
Benzo(a)pyrene	BDL		ug/L	2	
Benzo(b)fluoranthene	BDL		ug/L	2	
Benzo(g,h,i)perylene	BDL		ug/L	2	
Benzo(k)fluoranthene	BDL		ug/L	3	
Chrysene	BDL		ug/L	2	
Dibenz(a,h)anthracene	BDL		ug/L	2	
Fluoranthene	BDL		ug/L	2	
Flourene	BDL		ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL		ug/L	2	
1-Methylnaphthalene *	BDL		ug/L	2	
2-Methylnaphthalene	BDL		ug/L	3	
Naphthalene	BDL		ug/L	2	
Phenanthrene	BDL		ug/L	2	
Pyrene	BDL		ug/L	2	

SURROGATE SPIKE RECOVERIES

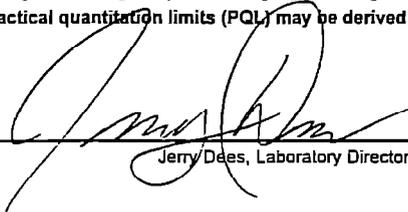
	Acceptance Limits	Percent Recovery
Nitrobenzene- d5	35-114	78
2-Fluorobiphenyl	43-116	76
Terphenyl -d14	33-141	74

Explanation of Flags:

COMMENTS : Surrogate recovery limits derived from EPA OLM01.0 SOW 3/90.

BDL = Below Detection Limit. ug/L = Microgram per liter. ug/Kg = Microgram per kilogram. * = FL HRS certification pending.
MDL = Method detection limit. Practical quantitation limits (PQL) may be derived by multiplying the MDL by 4.

Approved by :


Jerry Dees, Laboratory Director

Date: 10/1/98

Report Generated

Navy Public Works Center

Environmental Laboratory

Bldg. 3887, Code 440
 NAS Pensacola, FL 32508
 Phone (850) 452-3180/3642
 DSN 922-3180/3642
 FAX (850) 452-2799/2387

Client: SPORTENVDETHASN Lab
 Address: 1899 N. Hobson Ave
 N. Charleston SC 29405-2100
 Phone #: (843) 743-3239 Ext. 124
 Contact: Mr. Bill Hiers

Analytical Report

Petroleum Range Organics by FLPRO

Lab Report Number: 83385
 Sample Date: 5 Sep 98
 Received Date: 9 Sep 98
 Sample Site: NAS Cecil Field
 Job Order No.: 127 4021

LAB Sample ID#	1- 83385			
Sample Name / Location	98CNS012-7 TW-808 Bldg 808			
Collector's Name	McElwee			
Date & Time Collected	5 Sep 98 @ 1100			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	11 Sep 98 JJ			
Date of Analysis	11 Sep 098			
Sample Matrix	Groundwater			
Dilution	x 1			
Parameter	1-	83385	units	Det. Limit
Petroleum Range Organics by FLPRO		BDL	mg/L	0.25
Flags				

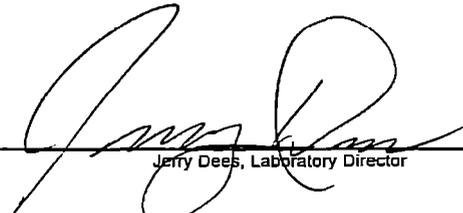
SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142	101
Nonatriacontane (C-39)	42-193	106

COMMENTS :

BDL = Below Detection Limit mg/L = milligram per Liter. mg/Kg = milligram per Kilogram.

Approved by :



 Jerry Dees, Laboratory Director

Date: 10/1/98

HAZARDOUS WASTE CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

NPWC Environmental Laboratory

Report Required? Yes No DEP? Yes No

Bldg. 3887, Code 920
 NAS Pensacola, FL 32508
 Ph#: (904) 452-4728/3842
 DSN: 922-4728/3842
 FAX: (904) 452-2799/2387

Requester: FORTENUDETCHASN LAB
 Address: 1299 N. HOBBS AVE
N. CHARLESTON, S.C 29405-2106
 Phone #: 843-743-3239 ext 124
 Contact: MR. Bill Hiers
 Job Order #:

Lab ID Number: _____
 Sample Date: _____
 Received Date: _____
 Sample Site: NAS CECIL FIELD
 Lab Due Date: _____

Sample ID #	Lab	1-83384	2-83385	3-83386	4-83387	Notes:
Sample Name		98CNS012-6	98CNS012-7	98CNS012-8	98CNS012-9	
Site Location		TW-80	TW-808	TW-200-1	TW-200-2	
Sampled by		MCELWEE	MCELWEE	MCELWEE	MCELWEE	
Collection Date		9/5/98	9/5/98	9/5/98	9/5/98	
Collection Time		1000	1100	1405	1345	
Sample Matrix		GW	GW	GW	GW	

GROUP PARAMETERS	METHOD #	Sample ID #1	Sample ID #2	Sample ID #3	Sample ID #4	RVST	Containers	Preservatives
by Method Name						Units	Required (L/S)	Used (Liquids)
HW Character (composite)	EPA SW-846					45	See above	See above
Ignitability (Flashpoint)	SW 846 1010					2	250ml/4 oz.	4° C
Reactivity (Cyanide & Sulfide)	EPA SW-846					4	1L/3/4 oz.	4° C
Corrosivity (pH)	SW 846 6040/6041					23	250ml/4 oz.	4° C
Toxicity (TCDF) composite	EPA SW-846					50	See above	See above
Toxicity (TCDF) composite	EPA SW-846					50	See above	See above
TCDF Non Volatile Extraction	SW 846 1311					4	40 ml/3/4 oz.	4° C
TCDF Volatile ZHE Extraction	SW 846 1311					4	1L/3/4 oz.	HCl to pH < 2.0
TCDF BNA Extractions	SW 846 8270					8	1L/3/4 oz.	4° C
TCDF Acid Extractions	SW 846 8270					3	1L/3/4 oz.	4° C
TCDF B/N Extractions	SW 846 8270					3	1L/3/4 oz.	4° C
TCDF Pesticides	SW 846 8080					1	1L/3/4 oz.	4° C
TCDF Herbicides	SW 846 8150					3	1L/3/4 oz.	4° C
TCDF Volatiles	SW 846 8280					3	40 ml x 3/4 oz.	HCl to pH < 2.0
TCDF Metals (6)	EPA SW-846					33	500 ml/4 oz.	HNO ₃ to pH < 2
Nonhazardous Solvents	EPA SW-846					450%	See above	See above
Composite Priority Pollutants	EPA SW-846					40	See above	See above
PP Acid Extractions	SW 846 8270					3	1L/3/4 oz.	4° C
PP B/N Extractions	SW 846 8270					3	1L/3/4 oz.	4° C
PP Pesticides/PCBs	SW 846 8080					3	1L/3/4 oz.	4° C
PP Volatiles	SW 846 8280					3	40 ml x 3/4 oz.	HCl to pH < 2.0
PP Metals (13)	EPA SW-846					3	500 ml/4 oz.	HNO ₃ to pH < 2
PP Cyanide/Phenol	EPA SW-846					1	1L/3/4 oz.	HACHMAN SC
Toxicity (TCDF) less Petroleum	EPA SW-846					38	See above	See above
COOL - COB Solvents	EPA SW-846					24	1L/3/4 40 ml/4 1/8 oz.	4° C
Ketone/Alc. Group (AL-PCO)	SW-846/AL DEP					24	As above	As Required
AL-2 PCO	AL DEP	X	X	X	X	5	1L/3/4 oz.	HCl to pH < 2.0
Total Volatiles w/TC	SW 846 8280			X	X	3	40 ml/3/4 oz.	HCl to pH < 2.0
Total BNA Extractions w/TC	SW 846 8270			X	X	8	1L/3/4 oz.	4° C
Total PCRA Metals (6)	EPA SW-846			X 4-11-98	X 4-11-98	15	500 ml/4 oz.	HNO ₃ to pH < 2
Single Metals	EPA SW-846					1	500 ml/4 oz.	HNO ₃ to pH < 2
PCBs in Oil	SW 846 8080					1	40 ml/4 oz.	None
PCBs in Water/Solvents	SW 846 8080					1	1L/3/4 oz.	None
Other								
BTEX, NAPTH, MTBE		X	X					
PAH		X	X					

Comments:

Requested by
 Date/Time

V.R. LeDore
9/6/98 1218 hrs

Received by
 Date/Time

K. [Signature]
9/10/98 1750

Attachment III

Certificate of Disposal (tank)

Attachment IV

Monitoring Well Abandonment Forms

WELL COMPLETION REPORT (Please complete in black ink or type.)

PERMIT # _____ CURR # _____ DID # _____

If permit is for multiple wells indicate the number of wells drilled _____

_____ date remaining wells to be cancelled _____

WATER WELL CONTRACTOR'S (All wells drilled need an individual completion report)

SIGNATURE [Signature] License # 1927

I certify that the information provided in this report is accurate and true.

Grout	No. of Bags	From (Ft.)	To (Ft.)
Neat Cement:	<u>1</u>	<u>0</u>	<u>1.5</u>
Bentonite:			

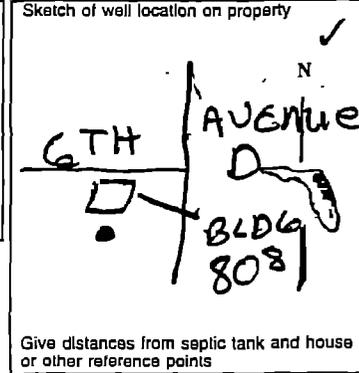
WELL LOCATION: County Duval County Fuel Farm

_____ 1/4 of _____ 1/4 of Section 15 Twp: 35 Rge: 24C

Latitude _____ Longitude _____

DATE STAMP

Official Use Only



CHEMICAL ANALYSIS WHEN REQUIRED

Iron: _____ ppm Sulfate: _____ ppm

Chloride: _____ ppm

Lab Test Field Test Kit

Pump Type

Centrifugal Jet Submersible Turbine

Horsepower _____ Capacity _____ G.P.M. _____

Depth _____ Ft. Intake Depth _____ Ft.

OWNER'S NAME NAS Cecil

COMPLETION DATE 8-21-98 Florida Unique I.D. _____

WELL USE: DEP/Public _____ Irrigation _____ Domestic _____ Monitor _____

HRS Limited 62-524 Other Abandonment

DRILL METHOD Rotary Cable Tool Combination

Jet Auger Other _____

Measured Static Water Level _____		Measured Pumping Water Level _____	
After _____ Hours at _____ G.P.M. Measuring Pt. (Describe): _____			
Which is _____ Ft. <input type="checkbox"/> Above <input type="checkbox"/> Below Land Surface.			
Casing: <input type="checkbox"/> Black Steel <input type="checkbox"/> Galv. <input checked="" type="checkbox"/> PVC Other _____			
<input type="checkbox"/> Open Hole	Depth (Ft.)	DRILL CUTTINGS LOG Examine	
<input checked="" type="checkbox"/> Screen		cuttings every 20 ft. or at formation changes.	
Casing Diameter & Depth (Ft.)	From To	Note cavities, depth to producing zones.	
Diameter <u>8"</u>	<u>0</u>	<u>ABANDON</u>	
From <u>0</u>	<u>15</u>	<u>WELL WITH</u>	
To <u>15</u>		<u>TREMIE PIPE</u>	
Diameter _____		<u>CEF-808-15</u>	
From _____			
To _____			
Liner <input type="checkbox"/> or			
Casing <input type="checkbox"/>			
Diameter _____			
From _____			
To _____			

Driller's Name: Michael E Nicholson