N60200.AR.001586
NAS CECIL FIELD, FL
5090.3a

CLOSURE ASSESSMENT REPORT FOR UNDERGROUND STORAGE TANK AT BUILDING 200 NAS CECIL FIELD FL

12/7/1998

ENVIRONMENTAL DETACHMENT CHARLESTON

DER Form # 17-761.900(6)
Form Title: Closure Assessment Form
Effective Date: December 10, 1995
DER Application No.: _____
Prepared by DER

Florida Department of Environmental Regulation

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

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 200, HOBBY SHOP
5. Facility Owner: U.S. NAVY, NAVAL AIR STATION CECIL FIELD
6. Facility Address: BUILDING 200, "C" 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: USED 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: TWO 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? If yes, When: _____ Where: _____
☒	☐		3. Is the depth to ground water less than 20 feet?
☒	☐	☐	4. Are monitoring wells present around the storage system? If yes, specify type: ☒ Water monitoring ☐ Vapor monitoring
☐	☒	☐	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? Specify sample type: ☐ Vapor Monitoring wells ☐ Soil sample(s)
☐	☐	☒	7. Were the petroleum hydrocarbon vapor levels in the soils greater than 50 parts per million for diesel/kerosene? Specify sample type: ☐ Vapor Monitoring wells ☐ Soil sample(s)
☒	☐	☐	8. Were the analytical laboratory results of the ground water sample(s) greater than the allowable state target levels? (See target levels on reverse side of this form and supply laboratory data sheets)
☐	☒	☐	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 ¼ of a mile radius of the facility?
☐	☒		11. Is there a surface water body within ¼ mile radius of the site? If yes, indicate distance: _____

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Northeast District
7825 Baymeadows Way, Suite B-200
Jacksonville, Florida 32207

Central District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

Southwest District
4520 Oak Fair Blvd.
Tampa, Florida 33610-7347

South District
2269 Bay St.
Fort Myers, Florida 33901-3045

Southeast District
1900 S. Congress Ave., Suite A
West Palm Beach, Florida 33406

DER Form # 17-761.900(6)
Form Title Closure Assessment Form
Effective Date December 10, 1990
DER Application No. _____ (Filled in by DER)

12. A detailed drawing or sketch of the facility that includes the storage system location, monitoring wells, buildings, storm drains, sample locations, and dispenser locations must accompany this form.
13. If a facility has a pollutant storage tank system that has both gasoline and kerosene/diesel stored on site, both EPA Method 602 and EPA Method 610 must be performed on the ground water samples obtained.
14. Amount of soils removed and receipt of proper disposal.
15. If yes is answered to any one of questions 5-9, a Discharge Reporting Form 17-761.900(1) indicating a suspected release shall be submitted to the Department within one working day.
16. A copy of this form and any attachments must be submitted to the Department's district office in your area and to the locally administered program office under contract with the Department within 60 days of completion of tank removal or filling a tank with an inert material.

Signature of Owner — Date

T. L. LaFleur

Signature of Person Performing Assessment — Date

PROJECT MANAGER

Title of Person Performing Assessment

State Ground Water Target Levels That Affect A Pollutant Storage Tank System Closure Assessment

State ground water target levels are as follows:

1. For gasoline (EPA Method 602):
   a. Benzene — 1 ug/l
   b. Total VOA — 50 ug/l
      - Benzene
      - Toluene
      - Total Xylenes
      - Ethylbenzene
   c. Methyl Test-Butyl Ether (MTBE) — 50 ug/l
2. For kerosene/diesel (EPA Method 610):
   a. Polynuclear Aromatic Hydrocarbons (PAHS) (Best achievable detection limit, 10 ug/l maximum)

SPORTENVDETCHASN
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 200

Facility Name: Naval Air Station Cecil Field

Street Address: Building 200, "C" Avenue

City: Jacksonville, 32215-0101 County: Duval

III CLOSURE INFORMATION

Closure Started: 8/29/98 Closure Completed: 9/05/98

Number of USTs Closed: 2

N/A
Consultant

SPORTENVDETCHASN
UST Removal Contractor

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

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.

T.L. McElwee
Name (Type or Print)

T.L. McElwee
Signature

V. UST INFORMATION

	O/W SEP	O/W SEP TANK	Tank 3	Tank 4	Tank 5
A. Product	Waste Oil/ Water	Waste Oil/ Water			
B. Capacity	150 gal	300 gal			
C. Age	Unk	Unk			
D. Construction Material	steel	steel			
E. Month/Year of Last Use	Unk	Unk			
F. Depth (ft.) To Base of Tank	5' 6"	8' 5"			
G. Spill Prevention Equipment Y/N	N	N			
H. Overfill Prevention Equipment Y/N	N	N			
I. Method of Closure Removed/Filled	R	R			
J. Visible Corrosion or Pitting Y/N	N	N			
K. Visible Holes Y/N	N	N			

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

UST 200 & OWS 200 were removed, cut open at both ends, as needed, drained and cleaned with a steam cleaner. They were 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 removals the residual waste oil/water 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 200, a waste oil tank, and OWS 200, an O/W Separator, were steel exterior. OWS 200 was installed inside a concrete block vault (6' x 6' x 5' 6" deep). The concrete block vault had only soil as its bottom. Both tanks were in very good condition with no corrosion, pitting or holes.

VI. PIPING INFORMATION

	O/W SEP	O/W SEP TANK	Tank 3	Tank 4
A. Construction Material.....	Steel/ Cast Iron	Steel		
B. Distance from UST to Dispenser.....	10' see note 1	30' see note 1		
C. Number of Dispensers.....	1 see note 1	1 see note 1		
D. Type of System P/S/G.....	Gravity	Gravity		
E. Was Piping Removed from the Ground? Y/N....	Y See Note 2	Y See Note 2		
F. Visible Corrosion or Pitting Y/N.....	N	N		
G. Visible Holes Y/N.....	N	N		
H. Age.....	Unk	Unk		

Note 1: The OWS received waste oil/water from Building 200 floor drains. Inlet piping from the building to the separator was blanked prior to our arrival. The waste oil from the separator was held in UST 200.

Note 2: All piping was removed from the tank. As for the separator, the inlet piping from the building and the outlet piping to the sanitary sewer were the only ones left in place. All other piping was removed.

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

All piping was in good condition with little or no corrosion.

VII. BRIEF SITE DESCRIPTION AND HISTORY

Building 200 is the base Hobby Shop located on "C" Avenue at NAS Cecil Field. The building had a 150 gallon oil/water separator (OWS 200) with a connecting 300 gallon underground storage tank (UST 200) which collected waste oil after separation. The oil/water separator was supplied by fluids generated during vehicle and equipment maintenance. The fluids entered the floor drains inside the hobby shop and gravity fed to the oil/water separator. Prior to the DET's arrival, the floor drains had been blanked by personnel unknown. The underground storage tank measured 38" dia. x 5' long and the o/w separator measured 3'6" x 2'10" x 2' 3" deep and was located inside a concrete block vault. Both were located beneath grass on the east side of the building near the maintenance bays.

After the removal of UST 200 & OWS 200, a visual inspection was performed of the excavations and no signs of contamination were noted. There was no ground water in either excavation after tank removal. 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. Temporary wells were installed at the former tank sites and sampled.

VIII. SITE CONDITIONS

		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?		X	
D.	Did contaminated soils remain stockpiled on site after closure?		X	
E.	Was a petroleum sheen or free product detected on any excavation or boring waters?		X	

IX. SAMPLE INFORMATION

See Site Map 3

X. SAMPLING METHODOLOGY

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

After the removal of UST 200 & OWS 200, a visual inspection was performed of the excavations and no signs of contamination were noted. There was no ground water in either excavation after tank removal. 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 SPORTENVDETCHASN until they were transferred to NPWC Pensacola Environmental Laboratory for analysis as documented in the attached Chain-of-Custody Record.

XI. RECEPTORS

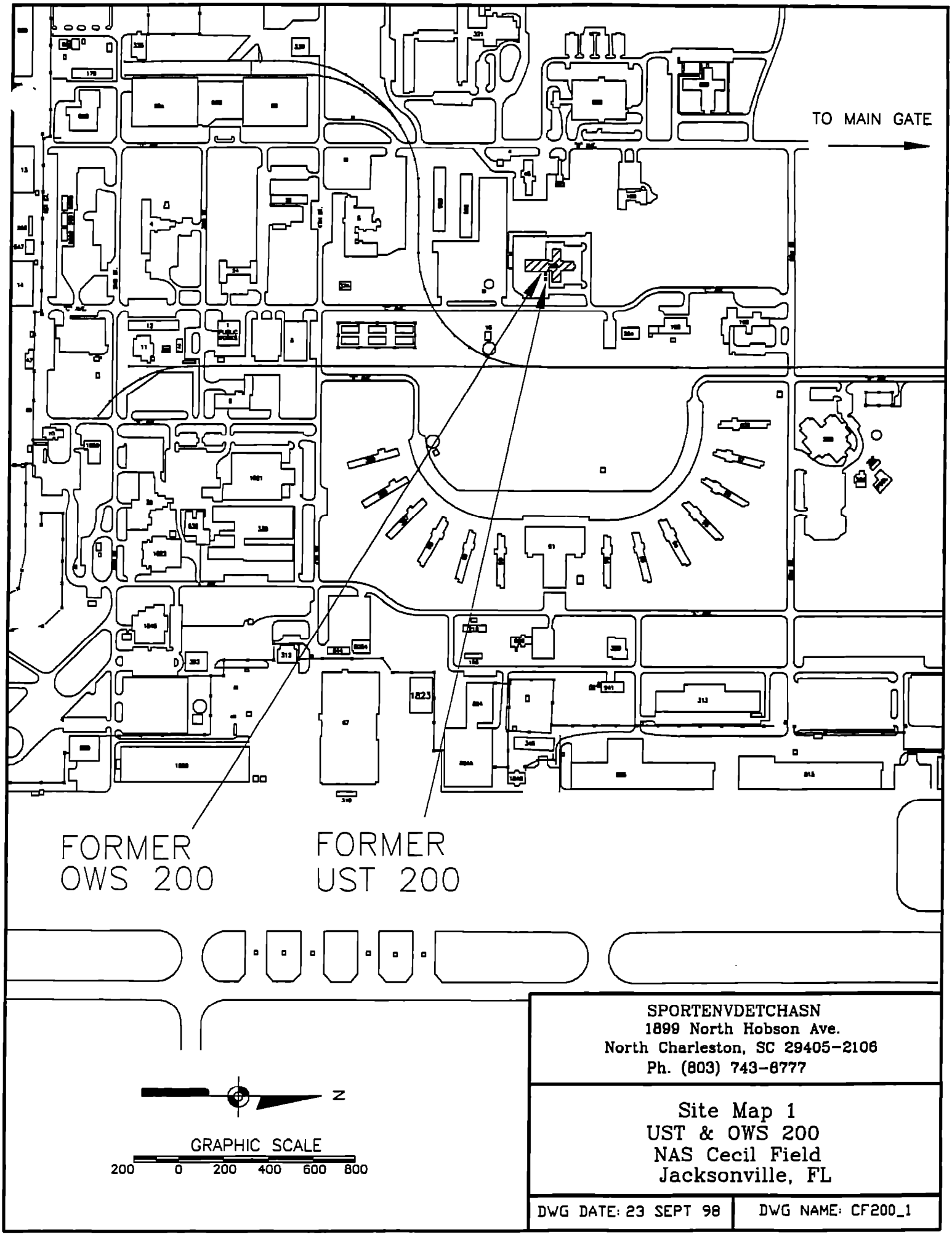
		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?		X
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?		X
C.	Are there any underground structures (e.g., basements) located within 100 feet of the 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, sanitary sewer, 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 and 3

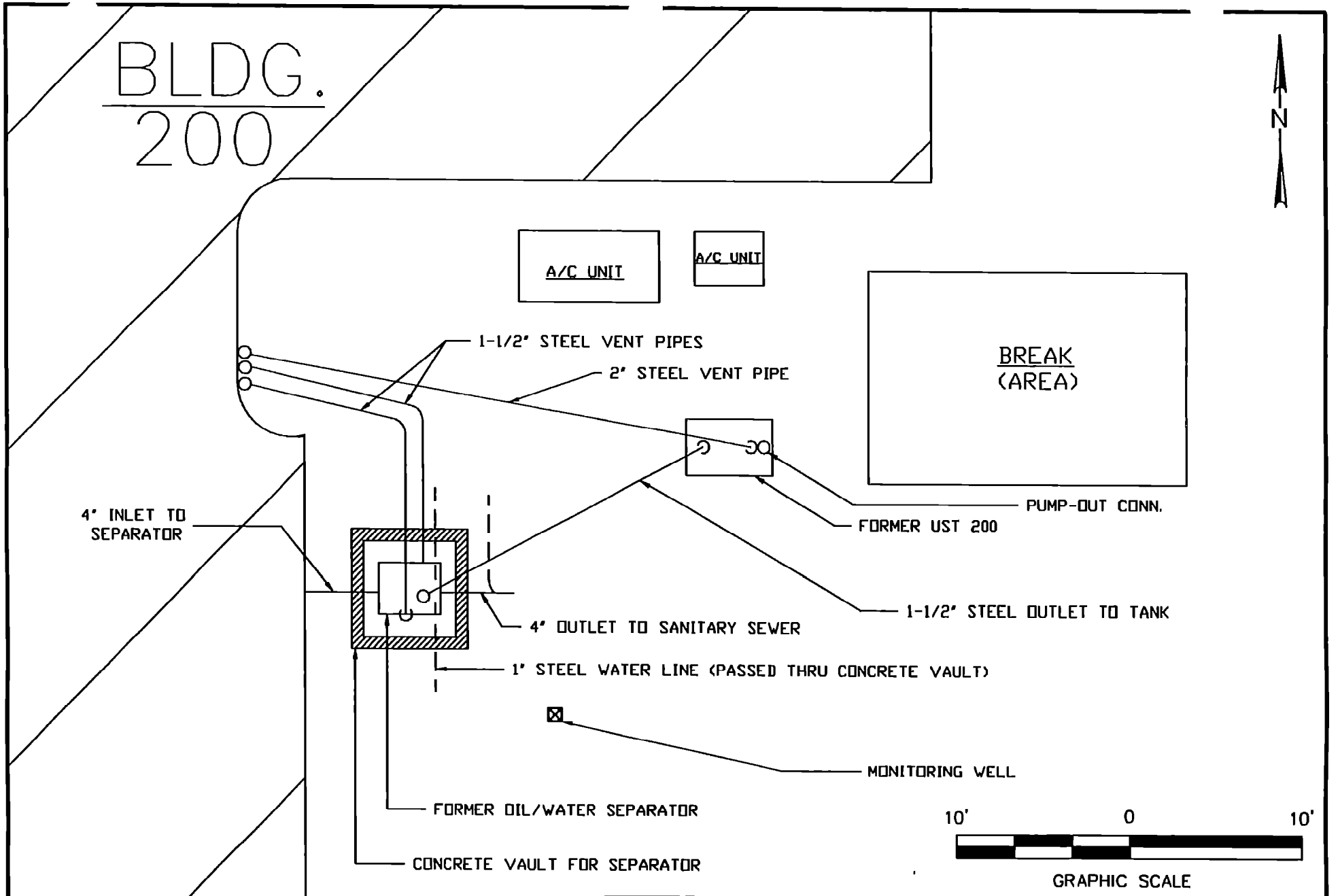
Photographs 1 thru 11



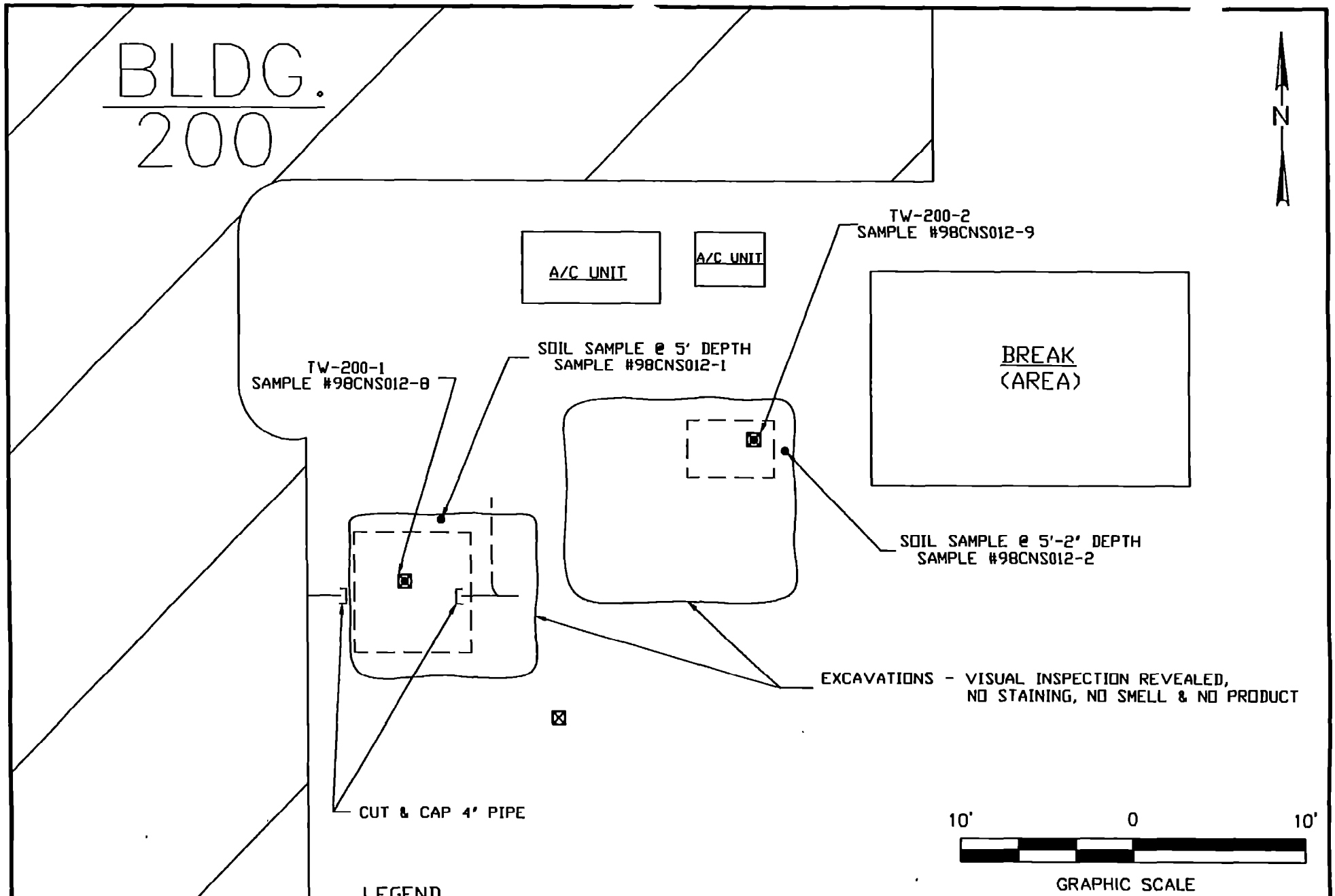
SPORTENVDETCHASN
1899 North Hobson Ave.
North Charleston, SC 29405-2106
Ph. (803) 743-6777

Site Map 1
UST & OWS 200
NAS Cecil Field
Jacksonville, FL

DWG DATE: 23 SEPT 98 | DWG NAME: CF200_1



SPORTENVDETCHASN 1899 North Hobson Ave. North Charleston, SC 29405-2106 Ph. (803) 743-6777	Site Map 2 BUILDING 200 SITE LAYOUT NAS Cecil Field Jacksonville, FL.	
	DWG DATE:05 OCT 98	DWG NAME: 200_2



LEGEND

TW - TEMPORARY WELL

SPORTENVDETCHASN 1899 North Hobson Ave. North Charleston, SC 29405-2106 Ph. (803) 743-6777	Site Map 3 BLDG. 200 EXCAVATIONS & WELL LOCATIONS NAS Cecil Field Jacksonville, FL.
	DWG DATE:05 OCT 98 | DWG NAME: 200_3

BUILDING 200 TANK REMOVALS

Photo 1: UST 200 & OWS 200 prior to excavation.

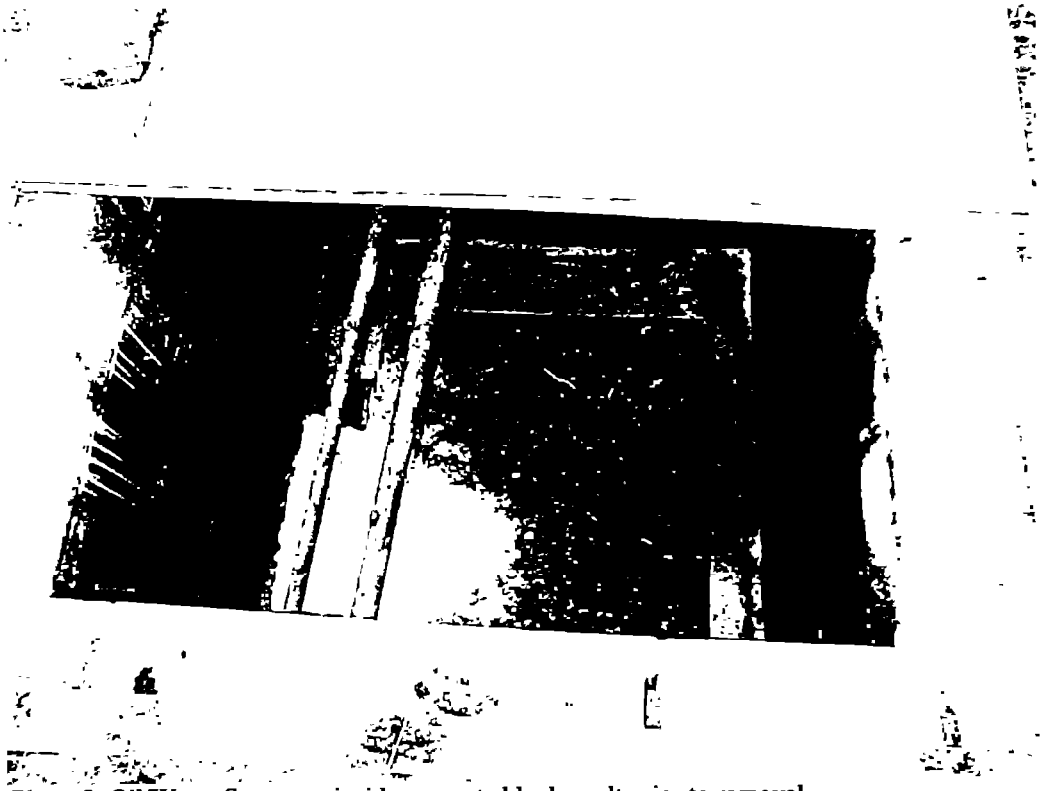


Photo 2: Oil/Water Separator inside concrete block vault prior to removal.

BUILDING 200 TANK REMOVALS

Photo 3: Oil/Water Separator during removal.

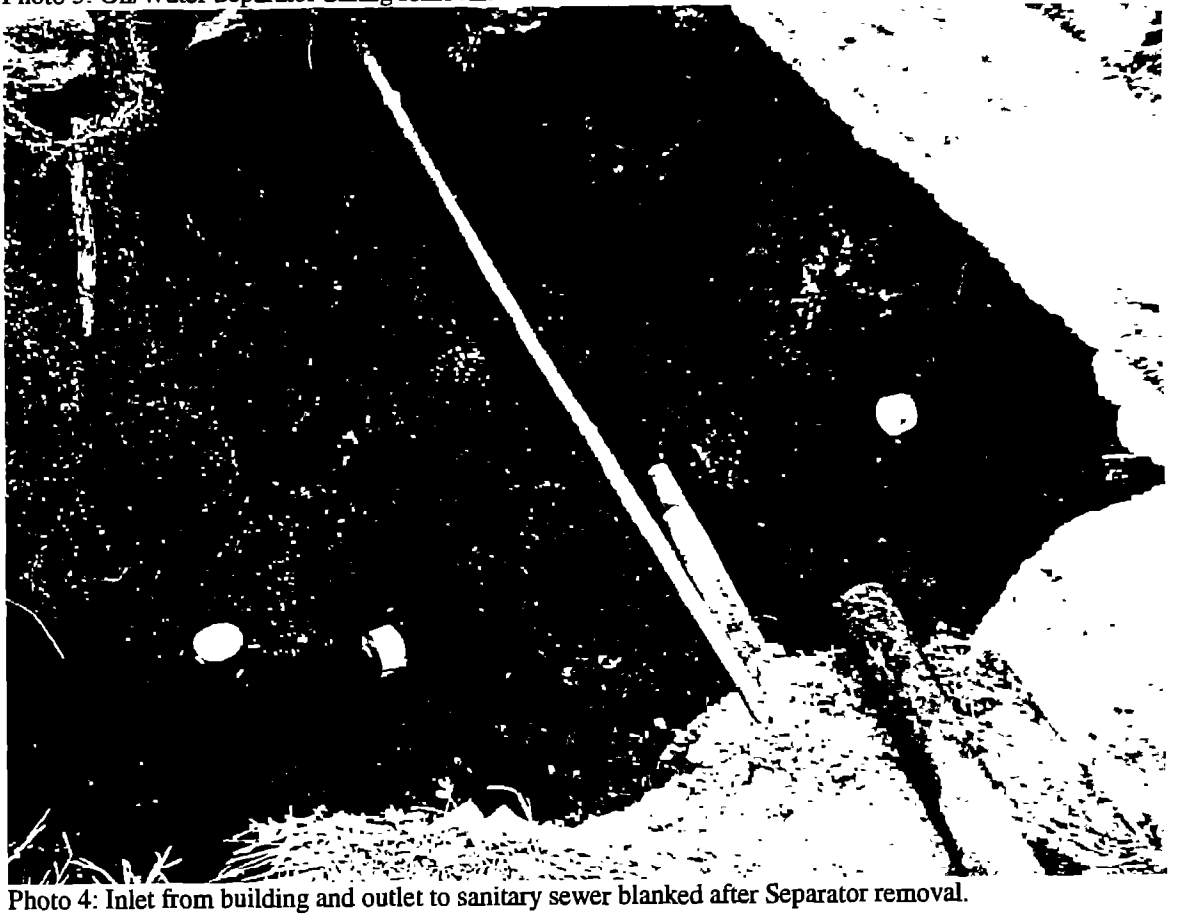


Photo 4: Inlet from building and outlet to sanitary sewer blanked after Separator removal.

BUILDING 200 TANK REMOVALS

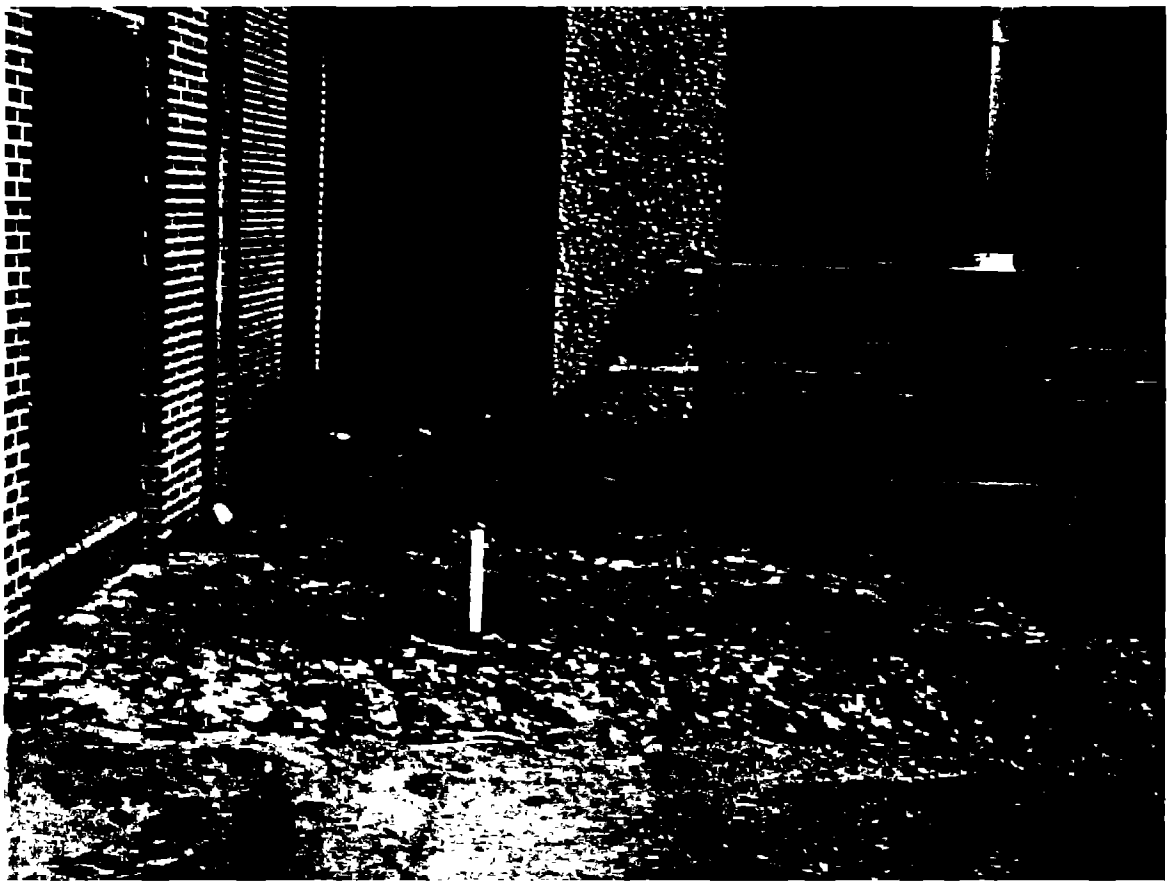


Photo 5: Oil/Water separator site after backfill and installation of Temporary well.

Photo 6: UST 200 prior to excavation.

BUILDING 200 TANK REMOVALS

Photo 7: UST 200 excavation.

Photo 8: UST 200 after removal.

BUILDING 200 TANK REMOVALS

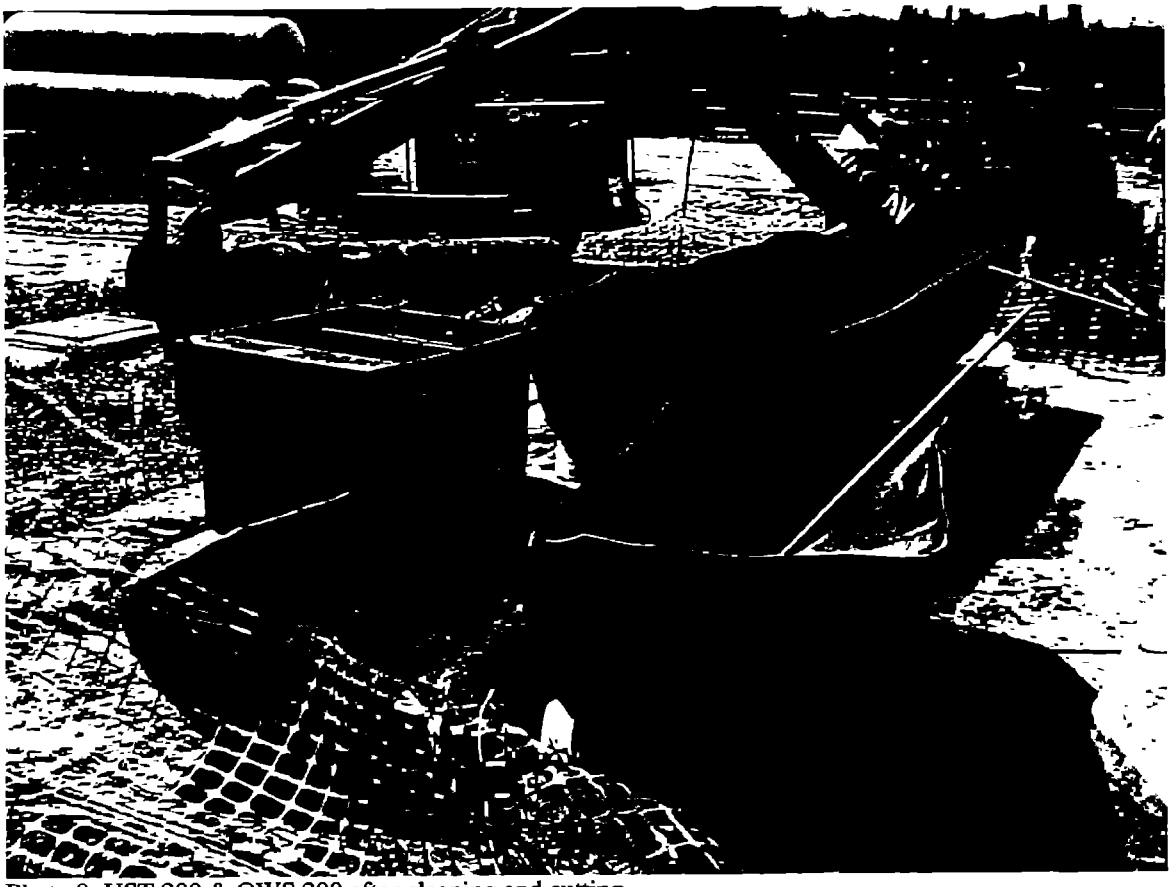


Photo 9: UST 200 & OWS 200 after cleaning and cutting.

Photo 10: UST 200 site after backfill and installation of Temporary well.

BUILDING 200 TANK REMOVALS

Photo 11: UST 200 & OWS 200 site after backfill, Temporary well installation and seeding.

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

Analytical Report
Priority Pollutant Volatiles by Method 8260

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

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

Lab Report Number: 83319
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- **83319**
Sample Name / Location	98CNS012-1 O/W Sep. BLDG 200
Collector's Name	Nesbitt
Date & Time Collected	31 Aug 98 @ 1600
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	3 Sep 98 JM Method 5030/8260
Date of Analysis	3 Sep 98
Sample Matrix	Soil
Dilution	X 1

Compound Name	1- 83319	units	Det. Limit	Flags
Acrolein	BDL	ug/Kg	25	
Acrylonitrile	BDL	ug/Kg	5	
Benzene	BDL	ug/Kg	1	
Bromodichloromethane	BDL	ug/Kg	1	
Bromoform	BDL	ug/Kg	2	
Bromomethane	BDL	ug/Kg	4	
Carbon Tetrachloride	BDL	ug/Kg	1	
Chlorobenzene	BDL	ug/Kg	2	
Chloroethane	BDL	ug/Kg	4	
Chloroform	BDL	ug/Kg	1	
Chloromethane	BDL	ug/Kg	1	
2-Chloroethylvinylether	BDL	ug/Kg	3	
Dibromochloromethane	BDL	ug/Kg	2	
1,1-Dichloroethane	BDL	ug/Kg	1	
1,2-Dichloroethane	BDL	ug/Kg	1	
1,1-Dichloroethene	BDL	ug/Kg	2	
trans-1,2-Dichloroethene	BDL	ug/Kg	1	
1,2-Dichloropropane	BDL	ug/Kg	2	
1,3-Dichloropropene	BDL	ug/Kg	2	
Ethylbenzene	BDL	ug/Kg	2	
Methylene Chloride	BDL	ug/Kg	1	
1,1,2,2-Tetrachloroethane	BDL	ug/Kg	3	
Tetrachloroethene	BDL	ug/Kg	2	
Toluene	BDL	ug/Kg	2	
1,1,1-Trichloroethane	BDL	ug/Kg	1	
1,1,2-Trichloroethane	BDL	ug/Kg	2	
Trichloroethene	BDL	ug/Kg	2	
Vinyl Chloride	BDL	ug/Kg	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-1120	105
Toluene-d8	81-117	100
Bromoflourobenzene	74-121	91

COMMENTS :

Navy Public Works Center

Environmental Laboratory

Analytical Report

Priority Pollutant Volatiles by Method 8260

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

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

Lab Report Number: 83319
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- **83319**
Sample Name / Location	98CNS012-1 O/W Sep. BLDG 200
Collector's Name	Nesbitt
Date & Time Collected	31 Aug 98 @ 1600
Sample Type (composite or grab)	Grab
Analyst	M. Chambers
Date of Extraction / Initials	3 Sep 98 MC
Date of Analysis	4 Sep 98
Sample Matrix	Soil
Dilution	X 1

Additional Compounds Identified	Estimated Concentration	Units
2-ethyl Dodecane	26	ug/Kg
Naphthalene	2	ug/Kg
and no others.		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : _____
Jerry Dees, Laboratory Director

Date: 10/13/98
Report Generated

End of Report

Navy Public Works Center

Environmental Laboratory

Analytical Report

Priority Pollutant Acid Extractables 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: SPORTENVDETCHASN Lab
Address: 1899 No. Hobson Ave.
N. Charleston, SC 29405-2106
Phone #: (843) 743-3239 x124
Contact: Bill Hiers

Lab Report Number: 83319
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- 83319
Sample Name / Location	98CNS012-1 O/W Sep. BLDG 200
Collector's Name	Nesbitt
Date & Time Collected	31 Aug 98 @ 1600
Sample Type (composite or grab)	Grab
Analyst	M. Chambers
Date of Extraction / Initials	3 Sep 98 MC
Date of Analysis	4 Sep 98
Sample Matrix	Soil
Dilution	X 1

Compound Name	1- 83319	units	Det. Limit	Flags
2-Chlorophenol	BDL	ug/Kg	150	
2,4-Dichlorophenol	BDL	ug/Kg	170	
2,4-Dimethylphenol	BDL	ug/Kg	150	
2,4-Dinitrophenol	BDL	ug/Kg	110	
4,6-Dinitro-2-methylphenol	BDL	ug/Kg	170	
2-Nitrophenol	BDL	ug/Kg	160	
4-Nitrophenol	BDL	ug/Kg	110	
4-Chloro-3-methylphenol	BDL	ug/Kg	150	
Pentachlorophenol	BDL	ug/Kg	140	
Phenol	BDL	ug/Kg	190	
2,4,6-Trichlorophenol	BDL	ug/Kg	150	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
2-Fluorophenol	25-121	84
Phenol d-5	24-113	75
2,4,6-Tribromophenol	19-122	85

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 10/13/98
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Analytical Report
Priority Pollutant B/N Extractables 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: SPORTENVDETCHASN Lab
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LAB Sample ID#	1- 83319			
Sample Name / Location	98CNS012-1 O/W Sep. BLDG 200			
Collector s Name	Nesbitt			
Date & Time Collected	31 Aug 98 @ 1600			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	3 Sep 98 MC			
Date of Analysis	4 Sep 98			
Sample Matrix	Soil			
Dilution	X 1			
Compound Name	**1- 83319**	**units**	**Det. Limit**	**Flags**
Acenaphthene	BDL	ug/Kg	160	
Acenaphthylene	BDL	ug/Kg	190	
Anthracene	BDL	ug/Kg	170	
Benzidine	BDL	ug/Kg	720	
Benzo(a)anthracene	BDL	ug/Kg	160	
Benzo[b]fluoranthene	BDL	ug/Kg	160	
Benzo[k]fluoranthene	BDL	ug/Kg	210	
Benzo[g,h,i]perylene	BDL	ug/Kg	180	
Benzo[a]pyrene	BDL	ug/Kg	180	
Benzylbutyl phthalate	BDL	ug/Kg	210	
Bis(2-chloroethoxy)methane	BDL	ug/Kg	170	
Bis(2-chloroethyl)ether	BDL	ug/Kg	200	
Bis(2-chloroisopropyl)ether	BDL	ug/Kg	180	
Bis(2-Ethylhexyl) phthalate	BDL	ug/Kg	210	
4-Bromophenyl-phenylether	BDL	ug/Kg	160	
2-Chloronaphthalene	BDL	ug/Kg	170	
4-Chlorophenyl-phenylether	BDL	ug/Kg	170	
Chrysene	BDL	ug/Kg	190	
Dibenz[a,h]anthracene	BDL	ug/Kg	170	
Di-n-butyl phthalate	BDL	ug/Kg	170	
Di-n-octylphthalate	BDL	ug/Kg	190	
1,2-Dichlorobenzene	BDL	ug/Kg	160	
1,3-Dichlorobenzene	BDL	ug/Kg	150	
1,4-Dichlorobenzene	BDL	ug/Kg	150	
3,3'-Dichlorobenzidine	BDL	ug/Kg	120	
Diethylphthalate	BDL	ug/Kg	170	
Dimethylphthalate	BDL	ug/Kg	160	
2,4-Dinitrotoluene	BDL	ug/Kg	150	
2,6-Dinitrotoluene	BDL	ug/Kg	150	
1,2-Diphenylhydrazine	BDL	ug/Kg	230	
Fluoranthene	BDL	ug/Kg	180	
Fluorene	BDL	ug/Kg	160	
Hexachlorobenzene	BDL	ug/Kg	170	
Hexachlorobutadiene	BDL	ug/Kg	160	
Hexachlorocyclopentadiene	BDL	ug/Kg	80	
Hexachloroethane	BDL	ug/Kg	150	
Indeno[1,2,3-cd]pyrene	BDL	ug/Kg	180	
Isophorone	BDL	ug/Kg	190	
Naphthalene	BDL	ug/Kg	160	

Approved by : _____
Jerry Dees, Laboratory Director

Date: 10/13/98
Report Generated

Navy Public Works Center
Environmental Laboratory

Analytical Report
Priority Pollutant B/N Extractables by Method 8270

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

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

Lab Report Number: 83319
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- **83319**
Sample Name / Location	98CNS012-1 O/W Sep. BLDG 200
Collector's Name	Nesbitt
Date & Time Collected	31 Aug 98 @ 1600
Sample Type (composite or grab)	Grab
Analyst	M. Chambers
Date of Extraction / Initials	3 Sep 98 MC
Date of Analysis	4 Sep 98
Sample Matrix	Soil
Dilution	X 1

Compound Name	1- 83319	units	Det. Limit	Flags
Nitrobenzene	BDL	ug/Kg	200	
N-Nitroso-di-n-propylamine	BDL	ug/Kg	180	
N-Nitrosodimethylamine	BDL	ug/Kg	180	
N-Nitrosodiphenylamine	BDL	ug/Kg	190	
Phenanthrene	BDL	ug/Kg	180	
Pyrene	BDL	ug/Kg	200	
1,2,4-Trichlorobenzene	BDL	ug/Kg	150	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene-d5	23-120	74
2-Flourobiphenyl	30-115	80
Terphenyl-d14	18-137	103

Additional Compounds Identified	Estimated Concentration	Units
2,3-dimethyl-1-Butene	1200	ug/Kg
2,4-dimethyl Heptane	940	ug/Kg
2,6-dimethyl Heptane	1400	ug/Kg
and no others.		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg

COMMENTS :

Approved by : Jerry Dees, Laboratory Director

Date: 10/13/98
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Analytical Report
Total RCRA Metals by SW-846 Methods

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

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

Lab Report Number: 83319
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- **83319**
Sample Name / Location	98CNS012-1 O/W Sep. BLDG 200
Collector's Name	Nesbitt
Date & Time Collected	31 Aug 98 @ 1600
Sample Type (composite or grab)	Grab
Analyst	B. Nelson
Date of Digestion / Initials	2 Sep 98 BH
Date of Analysis	3 Sep 98
Sample Matrix	Soil

Element	Method #	Result	units	Detection Limit	Flags
Arsenic (As)	EPA SW 6010	BDL	mg/Kg	20	
Barium (Ba)	EPA SW 6010	1	mg/Kg	1	
Cadmium (Cd)	EPA SW 6010	BDL	mg/Kg	1	
Chromium (Cr)	EPA SW 6010	1	mg/Kg	1	
Lead (Pb)	EPA SW 6010	BDL	mg/Kg	5	
Mercury (Hg)	EPA SW 7471	BDL	mg/Kg	0.02	
Selenium (Se)	EPA SW 6010	BDL	mg/Kg	20	
Silver (Ag)	EPA SW 6010	BDL	mg/Kg	1	

COMMENTS :

BDL = Below Detection Limit. mg/Kg = Milligram per kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 10/13/98

Navy Public Works Center
Environmental Laboratory

Analytical Report
FL-Petroleum Range Organics in Soil

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

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

Lab Report Number: 83319
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- 83319			
Sample Name / Location	98CNS012-1 O/W Sep. BLDG 200			
Collector's Name	Nesbitt			
Date & Time Collected	31 Aug 98 @ 1600			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of Extraction / Initials	3 Sep 98 MC			
Date of Analysis	4 Sep 98			
Sample Matrix	Soil			
Dilution	X 1			
Parameter	**1- 83319**	**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	101
Nonatriacontane (C-39)	42-193	89

COMMENTS :

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

Approved by : Jerry Dees, Laboratory Director

Date: 10/13/98

Navy Public Works Center
Environmental Laboratory

Analytical Report
Priority Pollutant Volatiles by Method 8260

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

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

Lab Report Number: 83320
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- **83320**
Sample Name / Location	98CNS012-2 O/W Sep. BLDG 200
Collector's Name	Nesbitt
Date & Time Collected	31 Aug 98 @ 1600
Sample Type (composite or grab)	Grab
Analyst	J. Moore
Date of Extraction / Initials	3 Sep 98 JM Method 5030/8260
Date of Analysis	3 Sep 98
Sample Matrix	Soil
Dilution	X 1

Compound Name	1- 83320	units	Det. Limit	Flags
Acrolein	BDL	ug/Kg	25	
Acrylonitrile	BDL	ug/Kg	5	
Benzene	BDL	ug/Kg	1	
Bromodichloromethane	BDL	ug/Kg	1	
Bromoform	BDL	ug/Kg	2	
Bromomethane	BDL	ug/Kg	4	
Carbon Tetrachloride	BDL	ug/Kg	1	
Chlorobenzene	BDL	ug/Kg	2	
Chloroethane	BDL	ug/Kg	4	
Chloroform	BDL	ug/Kg	1	
Chloromethane	BDL	ug/Kg	1	
2-Chloroethylvinylether	BDL	ug/Kg	3	
bromochloromethane	BDL	ug/Kg	2	
1,1-Dichloroethane	BDL	ug/Kg	1	
1,2-Dichloroethane	BDL	ug/Kg	1	
1,1-Dichloroethene	BDL	ug/Kg	2	
trans-1,2-Dichloroethene	BDL	ug/Kg	1	
1,2-Dichloropropane	BDL	ug/Kg	2	
1,3-Dichloropropene	BDL	ug/Kg	2	
Ethylbenzene	BDL	ug/Kg	2	
Methylene Chloride	BDL	ug/Kg	1	
1,1,2,2-Tetrachloroethane	BDL	ug/Kg	3	
Tetrachloroethene	BDL	ug/Kg	2	
Toluene	4	ug/Kg	2	
1,1,1-Trichloroethane	BDL	ug/Kg	1	
1,1,2-Trichloroethane	BDL	ug/Kg	2	
Trichloroethene	BDL	ug/Kg	2	
Vinyl Chloride	BDL	ug/Kg	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-1120	106
Toluene-d8	81-117	96
Bromoflourobenzene	74-121	87

COMMENTS :

Navy Public Works Center
Environmental Laboratory

Analytical Report
Priority Pollutant Volatiles by Method 8260

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

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

Lab Report Number: 83320
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- **83320**
Sample Name / Location	98CNS012-2 O/W Sep. BLDG 200
Collector's Name	Nesbitt
Date & Time Collected	31 Aug 98 @ 1600
Sample Type (composite or grab)	Grab
Analyst	M. Chambers
Date of Extraction / Initials	3 Sep 98 MC
Date of Analysis	4 Sep 98
Sample Matrix	Soil
Dilution	X 1

Additional Compounds Identified	Estimated Concentration	Units
Carbon Disulfide**	3	ug/Kg
Methylene Chloride**	2	ug/Kg
m,p-Xylene	1	ug/Kg
Naphthalene	12	ug/Kg
and no others.		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg

**Results may be due to contamination within the laboratory.

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : _____
Jerry Dees, Laboratory Director

Date: 10/13/98
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Analytical Report
Priority Pollutant Acid Extractables by Method 8270

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

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

Lab Report Number: 83320
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- 83320			
Sample Name / Location	98CNS012-2 O/W Sep. BLDG 200			
Collector's Name	Nesbitt			
Date & Time Collected	31 Aug 98 @ 1600			
Sample Type (composite or grab)	Grab			
Analyst	M. Chambers			
Date of Extraction / Initials	3 Sep 98 MC			
Date of Analysis	4 Sep 98			
Sample Matrix	Soil			
Dilution	X 1			
Compound Name	1- 83320	units	Det. Limit	Flags
2-Chlorophenol	BDL	ug/Kg	150	
2,4-Dichlorophenol	BDL	ug/Kg	170	
2,4-Dimethylphenol	BDL	ug/Kg	150	
2,4-Dinitrophenol	BDL	ug/Kg	110	
4,6-Dinitro-2-methylphenol	BDL	ug/Kg	170	
2-Nitrophenol	BDL	ug/Kg	160	
4-Nitrophenol	BDL	ug/Kg	110	
4-Chloro-3-methylphenol	BDL	ug/Kg	150	
Pentachlorophenol	BDL	ug/Kg	140	
Phenol	BDL	ug/Kg	190	
2,4,6-Trichlorophenol	BDL	ug/Kg	150	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
2-Fluorophenol	25-121	74
Phenol d-5	24-113	68
2,4,6-Tribromophenol	19-122	85

COMMENTS :

BDL = Below Detection Limit. ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 10/13/98
Report Generated

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

Analytical Report
Priority Pollutant B/N Extractables by Method 8270

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

Lab Report Number: 83320
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- **83320**
Sample Name / Location	98CNS012-2 O/W Sep. BLDG 200
Collector's Name	Nesbitt
Date & Time Collected	31 Aug 98 @ 1600
Sample Type (composite or grab)	Grab
Analyst	M. Chambers
Date of Extraction / Initials	3 Sep 98 MC
Date of Analysis	4 Sep 98
Sample Matrix	Soil
Dilution	X 1

Compound Name	1- 83320	units	Det. Limit	Flags
Acenaphthene	BDL	ug/Kg	160	
Acenaphthylene	BDL	ug/Kg	190	
Anthracene	BDL	ug/Kg	170	
Benzidine	BDL	ug/Kg	720	
Benzo(a) anthracene	BDL	ug/Kg	160	
Benzo[b]fluoranthene	BDL	ug/Kg	160	
Benzo[k]fluoranthene	BDL	ug/Kg	210	
Benzo[g,h,i]perylene	BDL	ug/Kg	180	
Benzo[a]pyrene	BDL	ug/Kg	180	
Benzylbutyl phthalate	BDL	ug/Kg	210	
Bis(2-chloroethoxy)methane	BDL	ug/Kg	170	
s(2-chloroethyl)ether	BDL	ug/Kg	200	
s(2-chloroisopropyl)ether	BDL	ug/Kg	180	
Bis(2-Ethylhexyl) phthalate	BDL	ug/Kg	210	
4-Bromophenyl-phenylether	BDL	ug/Kg	160	
2-Chloronaphthalene	BDL	ug/Kg	170	
4-Chlorophenyl-phenylether	BDL	ug/Kg	170	
Chrysene	BDL	ug/Kg	190	
Dibenz[a,h]anthracene	BDL	ug/Kg	170	
Di-n-butyl phthalate	BDL	ug/Kg	170	
Di-n-octylphthalate	BDL	ug/Kg	190	
1,2-Dichlorobenzene	BDL	ug/Kg	160	
1,3-Dichlorobenzene	BDL	ug/Kg	150	
1,4-Dichlorobenzene	BDL	ug/Kg	150	
3,3'-Dichlorobenzidine	BDL	ug/Kg	120	
Diethylphthalate	BDL	ug/Kg	170	
Dimethylphthalate	BDL	ug/Kg	160	
2,4-Dinitrotoluene	BDL	ug/Kg	150	
2,6-Dinitrotoluene	BDL	ug/Kg	150	
1,2-Diphenylhydrazine	BDL	ug/Kg	230	
Fluoranthene	BDL	ug/Kg	180	
Fluorene	BDL	ug/Kg	160	
Hexachlorobenzene	BDL	ug/Kg	170	
Hexachlorobutadiene	BDL	ug/Kg	160	
Hexachlorocyclopentadiene	BDL	ug/Kg	80	
Hexachloroethane	BDL	ug/Kg	150	
Indeno[1,2,3-cd]pyrene	BDL	ug/Kg	180	
Isophorone	BDL	ug/Kg	190	
Naphthalene	BDL	ug/Kg	160	

Approved by : Jerry Dees, Laboratory Director

Date: 10/13/98
Report Generated

Navy Public Works Center
Environmental Laboratory

Analytical Report
Priority Pollutant B/N Extractables 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: SPORTENVDETCHASN Lab
Address: 1899 No. Hobson Ave.
N. Charleston, SC 29405-2106
Phone #: (843) 743-3239 x124
Contact: Bill Hiers

Lab Report Number: 83320
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- **83320**
Sample Name / Location	98CNS012-2 O/W Sep. BLDG 200
Collector's Name	Nesbitt
Date & Time Collected	31 Aug 98 @ 1600
Sample Type (composite or grab)	Grab
Analyst	M. Chambers
Date of Extraction / Initials	3 Sep 98 MC
Date of Analysis	4 Sep 98
Sample Matrix	Soil
Dilution	X 1

Compound Name	1- 83320	units	Det. Limit	Flags
Nitrobenzene	BDL	ug/Kg	200	
N-Nitroso-di-n-propylamine	BDL	ug/Kg	180	
N-Nitrosodimethylamine	BDL	ug/Kg	180	
N-Nitrosodiphenylamine	BDL	ug/Kg	190	
Phenanthrene	BDL	ug/Kg	180	
Pyrene	BDL	ug/Kg	200	
1,2,4-Trichlorobenzene	BDL	ug/Kg	150	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene-d5	23-120	65
2-Flourobiphenyl	30-115	79
Terphenyl-d14	18-137	100

Additional Compounds Identified	Estimated Concentration	Units
4-methyl-2-Pentene	810	ug/Kg
2,4-dimethyl Heptane	700	ug/Kg
and no others.		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg
		ug/Kg

COMMENTS :

Approved by : Jerry Dees, Laboratory Director

Date: 10/13/98
Report Generated

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

Analytical Report

Total RCRA Metals by SW-846 Methods

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

Lab Report Number: 83320
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- **83320**
Sample Name / Location	98CNS012-2 O/W Sep. BLDG 200
Collector's Name	Nesbitt
Date & Time Collected	31 Aug 98 @ 1600
Sample Type (composite or grab)	Grab
Analyst	B. Nelson
Date of Digestion / Initials	2 Sep 98 BH
Date of Analysis	3 Sep 98
Sample Matrix	Soil

Element	Method #	Result	units	Detection Limit	Flags
Arsenic (As)	EPA SW 6010	BDL	mg/Kg	20	
Barium (Ba)	EPA SW 6010	2	mg/Kg	1	
Cadmium (Cd)	EPA SW 6010	BDL	mg/Kg	1	
Chromium (Cr)	EPA SW 6010	3	mg/Kg	1	
Lead (Pb)	EPA SW 6010	8	mg/Kg	5	
Mercury (Hg)	EPA SW 7471	BDL	mg/Kg	0.02	
Selenium (Se)	EPA SW 6010	BDL	mg/Kg	20	
Silver (Ag)	EPA SW 6010	BDL	mg/Kg	1	

COMMENTS :

BDL = Below Detection Limit. mg/Kg = Milligram per kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 10/13/98

Navy Public Works Center
Environmental Laboratory

Analytical Report
FL-Petroleum Range Organics in Soil

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

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

Lab Report Number: 83320
Sample Date: 31 Aug 98
Received Date: 1 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- 83320			
Sample Name / Location	98CNS012-2 O/W Sep. BLDG 200			
Collector's Name	Nesbitt			
Date & Time Collected	31 Aug 98 @ 1600			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of Extraction / Initials	3 Sep 98 MC			
Date of Analysis	4 Sep 98			
Sample Matrix	Soil			
Dilution	X 1			
Parameter	**1- 83320**	**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	91
Nonatriacontane (C-39)	42-193	91

COMMENTS :

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

Approved by : Jerry Deas, Laboratory Director

Date: 10/13/98

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: SPORTENVDETCHASN 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
Report Generated

End of Report

HAZARDOUS WASTE CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

NPWC Environmental Laboratory
~~Bldg. 2887, Code 920~~
NAS Pensacola, Fl. 32508
Ph#: (904) 452-4728/2642
SN: 922-4728/2642
FAX: (904) 452-2799/2287

Report Required? (Yes) No DEP? (Yes) No

Requestor: SPORTENVDETCHASN LAB
Address: 1899 N. HOBSON AVE
N. CHARLESTON, SC 29405-2106
Phone #: 843-743-3239 ext 124
Contact: MR. BILL HIERS
Job Order #: 1274102

Lab ID Number:
Sample Date:
Received Date: 9/1/98
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 or Location	----------	98CNS012-1 O/W Sep BLDG 200	98CNS012-2 O/W Sep TANK BLDG 200	98CNS012-3 F/O TANK NORTH BLDG 80	98CNS012-4 F/O TANK-SW BLDG 80
Sampled by	----------	NESBITT	NESBITT	MCELWEE	MCELWEE
Collection Date		8/31/98	8/31/98	8/31/98	8/31/98
Date/Time 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	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	FY97 Units	Containers Required (L/S)	Preservatives Used (Liquids)
HW Charact. (complete)	EPA SW 846									58	See below	See below
Ignitability (Flashpoint)	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 9040/9045									3.5	250ml/4 oz.	4° C
Toxicity (TCLP) complete	EPA SW-846									50	See below	See below
Toxicity (TCLP) complete	EPA SW-846									50	See below	See below
TCLP Non Volatile Extraction	SW 846 1311									4	40 mx3/4 oz.	4° C
TCLP Volatile ZHE Extraction	SW 846 1311									4	1Lx4/32 oz.	HCl to pH<2/4° C
TCLP BNA Extractables	SW 846 8270									18	1Lx3/4 oz.	4° C
TCLP Acid Extractables	SW 846 8270									9	1Lx3/4 oz.	4° C
TCLP B/N Extractables	SW 846 8270									9	1Lx3/4 oz.	4° C
TCLP Pesticides	SW 846 8080									9	1Lx3/4 oz.	4° C
TCLP Herbicides	SW 846 8150									9	1Lx3/4 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-846									8.5	500 ml/4 oz.	HNO_3 to pH<2
Multiphasic Samples	EPA SW-846									~50%	See above	See above
Complete Priority Pollutants	EPA SW-846									40	See below	See below
39 Acid Extractables	SW 846 8270									9	1Lx3/4 oz.	4° C
39 B/N Extractables	SW 846 8270									9	1Lx3/4 oz.	4° C
39 Pesticides/PCB's	SW 846 8080									9	1Lx3/4 oz.	4° C
39 Volatiles	SW 846 8260									3	40 ml x 3/4 oz.	HCl to pH<2/4° C
39 Metals (13)	EPA SW-846									9	500 ml/4 oz.	HNO_3 to pH<2
39 Cyanide/Phenol	EPA SW-846									4	1L Plastic/1L Glass	NaOH/H_2SO_4
Toxicity (TCLP less Pest/Herb)	EPA SW-846									38	See below	See below
F001 - F005 Solvents	EPA SW-846									24	1Lx3&40mlx4/16 oz.	4° C
Kerosene Anal. Group (PLOP RC)	SW-846/PLOP									24	Multiple	As Required
PLOP R.C.	PLOP	X		X		X		X		5	1Lx3/16 oz.	H_2SO_4 to pH<2/4°C
Total Volatiles + TIC	SW 846 8260	X		X						3	40 ml x 3/4 oz.	HCl to pH<2/4° C
Total BNA Extractables + TIC	SW 846 8270	X		X						18	1Lx2/16 oz.	4° C
Total RCRA Metals (8)	EPA SW-846	X		X						8.5	500 ml/4 oz.	HNO_3 to pH<2
Single Metals	EPA SW-846										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/Wipes	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 8OZ JAR EACH. *3 DAY TURNAROUND-ALL SAMPLES.*

Relinquished by: T.L. McElwee FEDEX
Date/Time: 8/31/98 1900 overnight

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

17 8oz 15 Syrum Bags
1 40ml

HAZARDOUS WASTE CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

vironmental Laboratory
J7, Code 920
ensacola, Fl. 32508
#: (904) 452-4728/3642
DSN: 922-4728/3642
FAX: (904) 452-2799/2367

Requester: SPORTENVDETCHASN LAB
Address: 1899 N. HOBSON AVE
N. CHARLESTON, S.C. 29405-2106
Phone #: 843-743-3239 ext 124
Contact: MR. BILL HIERS
Job Order #:

Report Required? (Yes) No DEP? (Yes) No
Lab ID Number:
Sample Date:
Received Date: 9/1/98
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	----------	F/C TANK BLDG 808	VOA - SOIL TRIP BLANK			
Sampled by	----------	NESBITT				
Collection	Date	8/31/98	8/31/98			
Date/Time	Time	1330	1630			
Sample Matrix	----------	SOIL	SOIL			

GROUP PARAMETERS by Method Name	METHOD #	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	FY97 Units	Containers Required (L/S)	Preservative(s) Used (Liquids)
HW Charact. (complete)	EPA SW 846									56	See below	See below
Ignitability (Flashpoint	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 9040/9045									0.5	250ml/4 oz.	4° C
Toxicity (TCLP) complete	EPA SW-846									50	See below	See below
Toxicity (TCLP) complete	EPA SW-846									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	1Lx4/32 oz.	HCl to pH<2/4° C
TCLP BNA Extractables	SW 846 8270									18	1Lx3/4 oz.	4° C
TCLP Acid Extractables	SW 846 8270									9	1Lx3/4 oz.	4° C
TCLP B/N Extractables	SW 846 8270									9	1Lx3/4 oz.	4° C
TCLP Pesticides	SW 846 8080									9	1Lx3/4 oz.	4° C
TCLP Herbicides	SW 846 8150									9	1Lx3/4 oz.	4° C
TCLP Volatiles	SW 846 8260									5	40 ml x 3/4 oz.	HCl to pH<2/4° C
TCLP Metals (8)	EPA SW-846									8.5	500 ml/4 oz.	HNO_3 to pH<2
Multiphasic Samples	EPA SW-846									~50%	See above	See above
Complete Priority Pollutants	EPA SW-846									40	See below	See below
PP Acid Extractables	SW 846 8270									9	1Lx3/4 oz.	4° C
PP B/N Extractables	SW 846 8270									9	1Lx3/4 oz.	4° C
PP Pesticide/PCB's	SW 846 8080									9	1Lx3/4 oz.	4° C
PP Volatiles	SW 846 8260									5	40 ml x 3/4 oz.	HCl to pH<2/4° C
PP Metals (13)	EPA SW-846									3	500 ml/4 oz.	HNO_3 to pH<2
PP Cyanide/Phenol	EPA SW-846									4	1L Plastic/1L Glass	NaOH/H_2SO_4
Toxicity (TCLP less Pest/Herb	EPA SW-846									36	See below	See below
F001 - F005 Solvents	EPA SW-846									24	1Lx3&40mls4/16 oz.	4° C
Kerosene Anal. Group (FL-PPO)	SW-846/FL DEP									24	Multiple	As Required
FL-PPO.	FL DEP	X								5	1Lx3/16 oz.	H_2SO_4 to pH<2/4°C
Total Volatiles	SW 846 8260									8	40 ml/3/4 oz.	HCl to pH<2/4° C
Total BNA Extractables	SW 846 8270									16	1Lx2/16 oz.	4° C
Total RCRA Metals (8)	EPA SW-846									8.5	500 ml/4 oz.	HNO_3 to pH<2
Single Metals	EPA SW-846									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/Wipes	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

Relinquished by: T.R. Lotter
Date/Time: 8/31/98 1900

Received by: Jason T. Jones
Date/Time: 9/1/98 0915

Navy Public Works Center

Environmental Laboratory

Analytical Report

Priority Pollutant Volatiles by Method 8260

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

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

Lab Report Number: 83386
Sample Date: 5 Sep 98
Received Date: 9 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- 83386
Sample Name / Location	98CNS012-8 TW-200-1 Bldg 200
Collector's Name	McElwee
Date & Time Collected	5 Sep 98 @ 1405
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- 83386	units	Det. Limit	Flags
Acrolein	BDL	ug/L	5	
Acrylonitrile	BDL	ug/L	1	
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
roform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
2-Chloroethylvinylether	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Methylene Chloride	BDL	ug/L	5	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	105
Toluene-d8	86-119	101
Bromoflourobenzene	85-116	102

COMMENTS :
BDL = Below Detection Limit. ug/L = Microgram per liter, ug/Kg = Microgram per kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 10/1/98
Report Generated
End of Report

Navy Public Works Center

Environmental Laboratory

Analytical Report

Priority Pollutant Acid Extractables 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: SPORTENVDETCHASN Lab
Address: 1899 N. Hobson Ave
N. Charleston SC 29405-2100
Phone #: (843) 743-3239 Ext. 124
Contact: Mr. Bill Hiers

Lab Report Number: 83386
Sample Date: 5 Sep 98
Received Date: 9 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- 83386			
Sample Name / Location	98CNS012-8 TW-200-1 Bldg 200			
Collector's Name	McElwee			
Date & Time Collected	5 Sep 98			
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- 83386**	**units**	**Det. Limit**	**Flags**
2-Chlorophenol	BDL	ug/L	10	
2,4-Dichlorophenol	BDL	ug/L	15	
2,4-Dimethylphenol	BDL	ug/L	10	
2,4-Dinitrophenol	BDL	ug/L	15	
4,6-Dinitro-2-methylphenol	BDL	ug/L	10	
2-Nitrophenol	BDL	ug/L	10	
4-Nitrophenol	BDL	ug/L	10	
4-Chloro-3-methylphenol	BDL	ug/L	10	
Pe[illegible]hlorophenol	BDL	ug/L	15	
Pl[illegible]	BDL	ug/L	5	
2,4,6-Trichlorophenol	BDL	ug/L	15	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
2-Flourophenol	21-112	52
Phenol d-5	12-110	25
2,4,6-Tribromophenol	22-168	91

COMMENTS :

BDL = Below Detection Limit. ug/L = Microgram per liter. ug/Kg = Microgram per kilogram.

Approved by : Jerry Deck, Laboratory Director

Date: 10/5/98
Report Generated
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

Analytical Report

Priority Pollutant B/N Extractables by Method 8270

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

Lab Report Number: 83386
Sample Date: 5 Sep 98
Received Date: 9 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- 83386			
Sample Name / Location	98CNS012-8 TW-200-1 Bldg 200			
Collector's Name	McElwee			
Date & Time Collected	5 Sep 98			
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- 83386**	**units**	**Det. Limit**	**Flags**
Acenaphthene	BDL	ug/L	5	
Acenaphthylene	BDL	ug/L	5	
Anthracene	BDL	ug/L	5	
Benzidine	BDL	ug/L	100	
Benzo(a) anthracene	BDL	ug/L	5	
Benzo[b]fluoranthene	BDL	ug/L	5	
Benzo[k]fluoranthene	BDL	ug/L	5	
Benzo[g,h,i]perylene	BDL	ug/L	5	
P[illegible]o[a]pyrene	BDL	ug/L	5	
[illegible]ylbutyl phthalate	BDL	ug/L	5	
Bis(2-chloroethoxy)methane	BDL	ug/L	10	
Bis(2-chloroethyl)ether	BDL	ug/L	10	
Bis(2-chloroisopropyl)ether	BDL	ug/L	10	
Bis(2-Ethylhexyl) phthalate	BDL	ug/L	10	
4-Bromophenyl-phenylether	BDL	ug/L	5	
2-Chloronaphthalene	BDL	ug/L	10	
4-Chlorophenyl-phenylether	BDL	ug/L	5	
Chrysene	BDL	ug/L	5	
Dibenz[a,h]anthracene	BDL	ug/L	5	
Di-n-butyl phthalate	BDL	ug/L	5	
Di-n-octylphthalate	BDL	ug/L	5	
1,2-Dichlorobenzene	BDL	ug/L	10	
1,3-Dichlorobenzene	BDL	ug/L	10	
1,4-Dichlorobenzene	BDL	ug/L	10	
3,3'-Dichlorobenzidine	BDL	ug/L	10	
Diethylphthalate	BDL	ug/L	5	
Dimethylphthalate	BDL	ug/L	5	
2,4-Dinitrotoluene	BDL	ug/L	5	
2,6-Dinitrotoluene	BDL	ug/L	5	
1,2-Diphenylhydrazine	BDL	ug/L	5	
Fluoranthene	BDL	ug/L	5	
Fluorene	BDL	ug/L	5	
Hexachlorobenzene	BDL	ug/L	5	
Hexachlorobutadiene	BDL	ug/L	5	
Hexachlorocyclopentadiene	BDL	ug/L	10	
Hexachloroethane	BDL	ug/L	5	
Indeno[1,2,3-cd]pyrene	BDL	ug/L	5	
I[illegible]orone	BDL	ug/L	10	
Naphthalene	BDL	ug/L	10	

Navy Public Works Center

Environmental Laboratory

Analytical Report

Priority Pollutant B/N Extractables 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: SPORTENVDETCHASN Lab
Address: 1899 N. Hobson Ave
N. Charleston SC 29405-2100
Phone #: (843) 743-3239 Ext. 124
Contact: Mr. Bill Hiers

Lab Report Number: 83386
Sample Date: 5 Sep 98
Received Date: 9 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- 83386
Sample Name / Location	98CNS012-8 TW-200-1 Bldg 200
Collector's Name	McElwee
Date & Time Collected	5 Sep 98 @ 1405
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- 83386	units	Det. Limit	Flags
Nitrobenzene	BDL	ug/L	10	
N-Nitroso-di-n-propylamine	BDL	ug/L	10	
N-Nitrosodimethylamine	BDL	ug/L	10	
N-Nitrosodiphenylamine	BDL	ug/L	5	
Phenanthrene	BDL	ug/L	5	
Pyrene	BDL	ug/L	5	
1,2,4-Trichlorobenzene	BDL	ug/L	10	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene-d5	51-140	77
2-Flourobiphenyl	49-132	78
Terphenyl-d14	50-154	88

COMMENTS :

Approved by : Jerry Deck, Laboratory Director

Date: 10/1/98
Report Generated
End of Report

Navy Public Works Center
Environmental Laboratory

Analytical Report
Total RCRA Metals

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

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

Lab Report Number: 83386
Sample Date: 5 Sep 98
Received Date: 9 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- **83386**
Sample Name / Location	98-CNS012-8 TW-200-1 Bldg 200
Collector's Name	McElwee
Date & Time Collected	5 Sep 98 @ 1405
Sample Type (composite or grab)	Grab
Analyst	B. Nelson
Date of Analysis	10, 11 Sep 98
Sample Matrix	Groundwater

Element	Method #	Result	units	Detection Limit
Arsenic (As)	EPA SW 6010	BDL	mg/L	0.2
Barium (Ba)	EPA SW 6010	0.3	mg/L	0.01
Cadmium (Cd)	EPA SW 6010	BDL	mg/L	0.01
Chromium (Cr)	EPA SW 6010	0.2	mg/L	0.01
Lead (Pb)	EPA SW 6010	BDL	mg/L	0.05
Mercury (Hg)	EPA SW 7470	BDL	mg/L	0.0002
Selenium (Se)	EPA SW 6010	BDL	mg/L	0.2
Silver (Ag)	EPA SW 6010	BDL	mg/L	0.01

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

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

Analytical Report
Petroleum Range Organics by FLPRO

Client:	SPORTENVDETCHASN Lab	Lab Report Number:	83386
Address:	1899 N. Hobson Ave N. Charleston SC 29405-2100	Sample Date:	5 Sep 98
		Received Date:	9 Sep 98
Phone #:	(843) 743-3239 Ext. 124	Sample Site:	NAS Cecil Field
Contact:	Mr. Bill Hiers	Job Order No.:	127 4021

LAB Sample ID#	1- 83386			
Sample Name / Location	98CNS012-8 TW-200-1 Bldg 200			
Collector's Name	McElwee			
Date & Time Collected	5 Sep 98 @ 1405			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / initials	11 Sep 98 JJ			
Date of Analysis	11 Sep and 6 Oct 98			
Sample Matrix	Groundwater			
Dilution	x 5			
Parameter	1- 83386	units	Det. Limit	Flags
Petroleum Range Organics by FLPRO	26	mg/L	1.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142	131
Nonatriacontane (C-39)	42-193	128

COMMENTS :

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

Approved by : Jerry Dees, Laboratory Director

Date: 10/7/98

Navy Public Works Center

Environmental Laboratory

Analytical Report

Priority Pollutant Volatiles by Method 8260

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

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

Lab Report Number: 83387
Sample Date: 5 Sep 98
Received Date: 9 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- 83387
Sample Name / Location	98CNS012-9 TW-200-2 Bldg 200
Collector's Name	McElwee
Date & Time Collected	5 Sep 98 @ 1345
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- 83387	units	Det. Limit	Flags
Acrolein	BDL	ug/L	5	
Acrylonitrile	BDL	ug/L	1	
Benzene	BDL	ug/L	1	
Bromodichloromethane	BDL	ug/L	1	
Bromoform	BDL	ug/L	2	
Bromomethane	BDL	ug/L	3	
Carbon Tetrachloride	BDL	ug/L	1	
Chlorobenzene	BDL	ug/L	1	
Chloroethane	BDL	ug/L	1	
Chloroform	BDL	ug/L	1	
Chloromethane	BDL	ug/L	1	
2-Chloroethylvinylether	BDL	ug/L	1	
Dibromochloromethane	BDL	ug/L	1	
1,1-Dichloroethane	BDL	ug/L	1	
1,2-Dichloroethane	BDL	ug/L	1	
1,1-Dichloroethene	BDL	ug/L	1	
trans-1,2-Dichloroethene	BDL	ug/L	1	
1,2-Dichloropropane	BDL	ug/L	1	
1,3-Dichloropropene	BDL	ug/L	1	
Ethylbenzene	BDL	ug/L	1	
Methylene Chloride	BDL	ug/L	5	
1,1,2,2-Tetrachloroethane	BDL	ug/L	1	
Tetrachloroethene	BDL	ug/L	1	
Toluene	BDL	ug/L	1	
1,1,1-Trichloroethane	BDL	ug/L	1	
1,1,2-Trichloroethane	BDL	ug/L	1	
Trichloroethene	BDL	ug/L	1	
Vinyl Chloride	BDL	ug/L	1	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	103
Toluene-d8	86-119	101
Bromoflourobenzene	85-116	103

COMMENTS :
BDL = Below Detection Limit. ug/L = Microgram per liter. ug/Kg = Microgram per kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 10/1/98
Report Generated

End of Report

Navy Public Works Center
Environmental Laboratory

Analytical Report
Priority Pollutant B/N Extractables 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:	SPORTENVDETCHASN Lab
Address:	1899 N. Hobson Ave N. Charleston SC 29405-2100
Phone #:	(843) 743-3239 Ext. 124
Contact:	Mr. Bill Hiers

Lab Report Number:	83387
Sample Date:	5 Sep 98
Received Date:	9 Sep 98
Sample Site:	NAS Cecil Field
Job Order No.:	127 4021

LAB Sample ID#	1- 83387
Sample Name / Location	98CNS012-9 TW-200-2 Bldg 200
Collector's Name	McElwee
Date & Time Collected	5 Sep 98
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- 83387	units	Det. Limit	Flags
Acenaphthene	BDL	ug/L	5	
Acenaphthylene	BDL	ug/L	5	
Anthracene	BDL	ug/L	5	
Benzidine	BDL	ug/L	100	
Benzo(a) anthracene	BDL	ug/L	5	
Benzo[b]fluoranthene	BDL	ug/L	5	
Benzo[k]fluoranthene	BDL	ug/L	5	
Benzo[g,h,i]perylene	BDL	ug/L	5	
Benzo[a]pyrene	BDL	ug/L	5	
[illegible]ibutyl phthalate	BDL	ug/L	5	
Bis(2-chloroethoxy)methane	BDL	ug/L	10	
Bis(2-chloroethyl)ether	BDL	ug/L	10	
Bis(2-chloroisopropyl)ether	BDL	ug/L	10	
Bis(2-Ethylhexyl) phthalate	BDL	ug/L	10	
4-Bromophenyl-phenylether	BDL	ug/L	5	
2-Chloronaphthalene	BDL	ug/L	10	
4-Chlorophenyl-phenylether	BDL	ug/L	5	
Chrysene	BDL	ug/L	5	
Dibenz[a,h]anthracene	BDL	ug/L	5	
Di-n-butyl phthalate	BDL	ug/L	5	
Di-n-octylphthalate	BDL	ug/L	5	
1,2-Dichlorobenzene	BDL	ug/L	10	
1,3-Dichlorobenzene	BDL	ug/L	10	
1,4-Dichlorobenzene	BDL	ug/L	10	
3,3'-Dichlorobenzidine	BDL	ug/L	10	
Diethylphthalate	BDL	ug/L	5	
Dimethylphthalate	BDL	ug/L	5	
2,4-Dinitrotoluene	BDL	ug/L	5	
2,6-Dinitrotoluene	BDL	ug/L	5	
1,2-Diphenylhydrazine	BDL	ug/L	5	
Fluoranthene	BDL	ug/L	5	
Fluorene	BDL	ug/L	5	
Hexachlorobenzene	BDL	ug/L	5	
Hexachlorobutadiene	BDL	ug/L	5	
Hexachlorocyclopentadiene	BDL	ug/L	10	
Hexachloroethane	BDL	ug/L	5	
Indeno[1,2,3-cd]pyrene	BDL	ug/L	5	
I[illegible]rone	BDL	ug/L	10	
N[illegible]halene	BDL	ug/L	10	

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

Analytical Report

Priority Pollutant B/N Extractables by Method 8270

Client:	SPORTENVDETCHASN Lab	Lab Report Number:	83387
Address:	1899 N. Hobson Ave N. Charleston SC 29405-2100	Sample Date:	5 Sep 98
		Received Date:	9 Sep 98
Phone #:	(843) 743-3239 Ext. 124	Sample Site:	NAS Cecil Field
Contact:	Mr. Bill Hiers	Job Order No.:	127 4021

LAB Sample ID#	1- 83387			
Sample Name / Location	98CNS012-9 TW-200-2 Bldg 200			
Collector's Name	McElwee			
Date & Time Collected	5 Sep 98 @ 1345			
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- 83387	units	Det. Limit	Flags
Nitrobenzene	BDL	ug/L	10	
N-Nitroso-di-n-propylamine	BDL	ug/L	10	
N-Nitrosodimethylamine	BDL	ug/L	10	
N-Nitrosodiphenylamine	BDL	ug/L	5	
Phenanthrene	BDL	ug/L	5	
Pyrene	BDL	ug/L	5	
1,2,4-Trichlorobenzene	BDL	ug/L	10	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
Nitrobenzene-d5	51-140	89
2-Flourobiphenyl	49-132	85
Terphenyl-d14	50-154	90

COMMENTS :

Approved by : Jerry Dees, Laboratory Director

Date: 10/1/98
Report Generated
End of Report

Navy Public Works Center
Environmental Laboratory

Analytical Report
Priority Pollutant Acid Extractables 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: SPORTENVDETCHASN Lab
Address: 1899 N. Hobson Ave
N. Charleston SC 29405-2100
Phone #: (843) 743-3239 Ext. 124
Contact: Mr. Bill Hiers

Lab Report Number: 83387
Sample Date: 5 Sep 98
Received Date: 9 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- **83387**
Sample Name / Location	98CNS012-9 TW-200-2 Bldg 200
Collector's Name	McElwee
Date & Time Collected	5 Sep 98
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- 83387	units	Det. Limit	Flags
2-Chlorophenol	BDL	ug/L	10	
2,4-Dichlorophenol	BDL	ug/L	15	
2,4-Dimethylphenol	BDL	ug/L	10	
2,4-Dinitrophenol	BDL	ug/L	15	
4,6-Dinitro-2-methylphenol	BDL	ug/L	10	
2-Nitrophenol	BDL	ug/L	10	
4-Nitrophenol	BDL	ug/L	10	
4-Chloro-3-methylphenol	BDL	ug/L	10	
[illegible]chlorophenol	BDL	ug/L	15	
[illegible]ol	BDL	ug/L	5	
2,4,6-Trichlorophenol	BDL	ug/L	15	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
2-Flourophenol	21-112	57
Phenol d-5	12-110	41
2,4,6-Tribromophenol	22-168	88

COMMENTS :

BDL = Below Detection Limit ug/L = Microgram per liter. ug/Kg = Microgram per kilogram.

Approved by : Jerry Dees, Laboratory Director

Date: 10/1/98
Report Generated
End of Report

Navy Public Works Center
Environmental Laboratory

Analytical Report
Total RCRA Metals

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

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

Lab Report Number: 83387
Sample Date: 5 Sep 98
Received Date: 9 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#		1- 83387		
Sample Name / Location		98CNS012-9 TW-200-2 Bldg 200		
Collector's Name		McElwee		
Date & Time Collected		5 Sep 98 @ 1345		
Sample Type (composite or grab)		Grab		
Analyst		B. Nelson		
Date of Analysis		10, 11 Sep 98		
Sample Matrix		Groundwater		
Element	**Method #**	**Result**	**units**	**Detection Limit**
Arsenic (As)	EPA SW 6010	BDL	mg/L	0.2
Barium (Ba)	EPA SW 6010	0. 02	mg/L	0.01
Cadmium (Cd)	EPA SW 6010	BDL	mg/L	0.01
Chromium (Cr)	EPA SW 6010	BDL	mg/L	0.01
Lead (Pb)	EPA SW 6010	BDL	mg/L	0.05
Mercury (Hg)	EPA SW 7470	BDL	mg/L	0.0002
Selenium (Se)	EPA SW 6010	BDL	mg/L	0.2
Silver (Ag)	EPA SW 6010	BDL	mg/L	0.01

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

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

Lab Report Number: 83387
Sample Date: 5 Sep 98
Received Date: 9 Sep 98
Sample Site: NAS Cecil Field
Job Order No.: 127 4021

LAB Sample ID#	1- 83387			
Sample Name / Location	98CNS012-9 TW-200-2 Bldg 200			
Collector's Name	McElwee			
Date & Time Collected	5 Sep 98 @ 1345			
Sample Type (composite or grab)	Grab			
Analyst	J. Moore			
Date of extraction / Initials	11 Sep 98 JJ			
Date of Analysis	11 Sep 98			
Sample Matrix	Groundwater			
Dilution		x	1	
Parameter	**1- 83387**	**units**	**Det. Limit**	**Flags**
Petroleum Range Organics by FLPRO	BDL	mg/L	0.25	

SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery
ortho-Terphenyl	82-142	99
Nonatriacontane (C-39)	42-193	99

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

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

Requester: SOUTHERN DETACHASN LAB
Address: 1899 N. HUBBARD AVE
N. CHARLESTON, S.C 29405-2100
Phone #: 843-743-3239 ext 124
Contact: MR. BILL HIERS
Job Order #:

Repeat Required? Yes No DEP? Yes No
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 TW-80	98CNS012-7 TW-808	98CNS012-8 TW-200-1	98CNS012-9 TW-200-2	
Sample Location		BLDG 80	BLDG 808	BLDG 200	BLDG 200	
Sampled by		MCELWEE	MCELWEE	MCELWEE	MCELWEE	
Collection	Date	9/5/98	9/5/98	9/5/98	9/5/98	
Date/Time	Time	1000	1100	1405	1345	
Sample Matrix		GW	GW	GW	GW	

GROUP PARAMETERS or Method Name	METHOD #	X Sample ID #1	X Sample ID #2	X Sample ID #3	X Sample ID #4	FY97 Units	Containers Required (L/S)	Preservatives Used (Liquids)
HW Charact. (complete)	EPA SW 846					58	See below	See below
Ignitability (Flashpoint)	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 9040/9045					2.5	250ml/4 oz.	4° C
Toxicity (TCLP) complete	EPA SW-846					50	See below	See below
Toxicity (TCLP) complete	EPA SW-846					50	See below	See below
TCLP Non Volatile Extraction	SW 846 1311					4	40 ml x 3/4 oz.	4° C
TCLP Volatile ZHE Extraction	SW 846 1311					4	1Lx4/32 oz.	HCl to pH<2/4° C
TCLP BNA Extractables	SW 846 8270					16	1Lx3/4 oz.	4° C
TCLP Acid Extractables	SW 846 8270					3	1Lx3/4 oz.	4° C
TCLP B/N Extractables	SW 846 8270					3	1Lx3/4 oz.	4° C
TCLP Pesticides	SW 846 8080					3	1Lx3/4 oz.	4° C
TCLP Herbicides	SW 846 8150					3	1Lx3/4 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-846					3.5	500 ml/4 oz.	HNO_3 to pH<2
Mutagenic Samples	EPA SW-846					~50%	See above	See above
Composite Priority Pollutants	EPA SW-846					40	See below	See below
PP Acid Extractables	SW 846 8270					3	1Lx3/4 oz.	4° C
PP B/N Extractables	SW 846 8270					3	1Lx3/4 oz.	4° C
PP Pesticides/PCB's	SW 846 8080					3	1Lx3/4 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-846					3	500 ml/4 oz.	HNO_3 to pH<2
PP Cyanide/Phenol	EPA SW-846					4	1L Plastic/1L Glass	NaOH/H.SO
Toxicity (TCLP) less Pesticide	EPA SW-846					36	See below	See below
8001 - F005 Solvents	EPA SW-846					24	1Lx40ml/16 oz.	4° C
Kerosene and Grease (O.-FRO)	SW-846/FL DEP					24	Auto	As Required
FL-PRO	FL DEP	X	X	X	X	5	1Lx3/16 oz.	HCl to pH<2/4° C
Total Volatiles w/TIC	SW 846 8260			X	X	3	40 ml x 3/4 oz.	HCl to pH<2/4° C
Total BNA Extractables w/TIC	SW 846 8270			X	X	16	1Lx2/16 oz.	4° C
Total RCRA Metals (8)	EPA SW-846			X 4-16-98	X 4-16-98	3.5	500 ml/4 oz.	HNO_3 to pH<2
Sample Matrix	EPA SW-846					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/Wipes	SW 846 8080					4	1L/4 oz.	None
Other								
BTEX, NAPTH, MTBE		X	X					
PAH		X	X					

Comments:

Relinquished by: T.R. LeBlanc
Date/Time: 9/6/98 1218 hrs

Received by: [illegible]
Date/Time: [illegible]

Attachment III

Certificate of Disposal (tank)

UST Certificate of Disposal

CONTRACTOR

Supervisor of Shipbuilding, Conversion and Repair, USN
Portsmouth, VA
Environmental Detachment Charleston
1899 North Hobson Avenue
North Charleston 29405-2106

Telephone (803) 743-6482

TANK ID & LOCATION

Building 200, UST 200 & OWS 200, NAS Cecil Field, Jacksonville, Florida

DISPOSAL LOCATION

Recycling Center
NAS Cecil Field, Jacksonville

TYPE OF TANKS	SIZE (GAL)
Steel	300 & 150

CLEANING/DISPOSAL METHOD

The tanks were removed from the Building 200 site, cut open, cleaned with a steam cleaner, cut into sections, and recycled through Commercial Metals.

DISPOSAL CERTIFICATION

I certify that the above tanks have been properly cleaned and disposed of.

T. R. McElree / 12/16/98
(Name) (Date)