

N61165.AR.005085
CNC CHARLESTON
5090.3a

ABOVE GROUND STORAGE TANK (AST) ASSESSMENT REPORT AST TANK 3909 CNC
CHARLESTON SC
01/05/1998
ENVIRONMENTAL DETACHMENT CHARLESTON



file

21 July 1998

2600 Bull Street
Columbia, SC 29201-1708

COMMISSIONER:
Douglas E. Bryant

BOARD:
John H. Burriss
Chairman

William M. Hull, Jr., MD
Vice Chairman

Roger Leaks, Jr.
Secretary

Mark B. Kent

Cyndi C. Mosteller

Brian K. Smith

Rodney L. Grandy

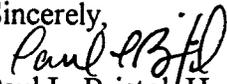
Department of the Navy
Southern Division NFEC
P.O. Box 190010
North Charleston, SC 29419-9010
Attn: Mr. Gabriel Magwood

Re: SCDHEC Correspondence dated 17 July 1998
AST 3909 (Site Identification # 01093)
Charleston Naval Complex/Charleston Naval Base
Charleston, SC
Charleston County

Dear Mr. Magwood:

Please note that the Site Identification number assigned this site had been inadvertently omitted from the referenced document. The AST 3909 project will be tracked under Site Identification # 01093. The author apologizes for any inconvenience this omission may have caused.

Should you have any questions please contact me at (803) 734-5328.

Sincerely,

Paul L. Bristol, Hydrogeologist
Groundwater Quality Section
Bureau of Water

cc: Trident District EQC



17 July 1998

2600 Bull Street
Columbia, SC 29201-1708

COMMISSIONER:
Douglas E. Bryant

BOARD:
John H. Burriss
Chairman

William M. Hull, Jr., MD
Vice Chairman

Roger Leaks, Jr.
Secretary

Mark B. Kent

Cyndi C. Mosteller

Brian K. Smith

Rodney L. Grandy

Department of the Navy
Southern Division NFEC
P.O. Box 190010
North Charleston, SC 29419-9010
Attn: Mr. Gabriel Magwood

Re: Aboveground Storage Tank Assessment Report dated 1 June 1998
AST 3909 (Site Identification # 010xx) **93**
Charleston Naval Complex/Charleston Naval Base
Charleston, SC
Charleston County

Dear Mr. Magwood:

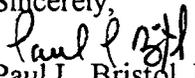
The author has completed technical review of the referenced document. As submitted, the report provides a narrative describing closure activities and analytical results of environmental sampling to determine if releases have occurred as a result of operation of the referenced vessel and/or associated piping system. The analytical results provided indicate reportable concentrations of PAH compounds were detected in soil grab samples obtained proximal to the AST foundation. The reported concentrations are below levels proposed in the SCAP (Soil Corrective Action Plan, amended July 1997). It should be noted that although sample results for SPORT 0616-2 were reported as BDL (below detection limits) the detection limit for this sample was elevated due to matrix interference. As noted in previous correspondence (Bristol to Amey, 2 September 1997), when contaminant concentrations are reported as zero (0) or BDL it will be assumed that the chemical constituent is equal to the elevated detection limit. With this consideration, the reported concentrations approach or exceed levels proposed in the SCAP (Soil Corrective Action Plan amended July 1997) for the Charleston Naval Complex and appear to indicate that additional endeavors for remedial actions and contaminant characterization are warranted at the referenced site. In this regard, assessment/corrective action activities proposed in the Tank Management Plan (dated October 1996) should be implemented in an appropriate and timely manner. Employed activities should be technically sufficient and reasonable to determine the extent and severity of suspected contamination. Please be reminded that groundwater sampling, if necessary, will require construction of sampling points and will need to be submitted for prior review and approval, as appropriate.

Further, appropriate consideration to the destruction and removal of the concrete piping trench should be incorporated with the above requested work.

Charleston Naval Complex/Charleston Naval Base
17 July 1998
page 2

Should you have any questions please contact me at (803) 734-5328.

Sincerely,


Paul L. Bristol, Hydrogeologist
Groundwater Quality Section
Bureau of Water

cc: Trident District EQC



DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
P.O. BOX 190010
2155 EAGLE DRIVE
NORTH CHARLESTON, S.C. 29419-9010

#01093

L 6.5.98
L 7.17.98

RECEIVED
JUN 4 1998
Code 1849
1 June 1998

Water Monitoring, Assessment &
Protection Division

Mr. Paul Bristol
South Carolina Department of Health
And Environmental Control
Division of Underground Storage Tank
2600 Bull Street
Columbia, SC 29201

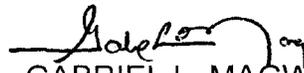
**UST ASSESSMENT REPORTS FOR CHARLESTON NAVAL COMPLEX,
CHARLESTON, SC**

Dear Mr. Bristol:

Enclosed are the Assessment Reports for the closure of Underground Storage
Tanks A, K, L, M, N, Y, 220 and 3909 located at the Charleston Naval Complex,
Charleston, SC.

If you have any questions please contact me at (843) 820-7307.

Sincerely,


GABRIEL L. MAGWOOD
Petroleum/UST

*As to be changed
15405*

Encl:
(1) Assessment Reports

#201093
 L16.5.98
 L7.17.98
RECEIVED
 JUN 4 1998
 Water Monitoring, Assessment & Protection Division

Aboveground Storage Tank (AST) Assessment Report

Date Received _____
 State Use Only _____

Submit Completed Form
 SCDHEC
 2600 Bull Street
 Columbia, South Carolina 29904
 Telephone (803) 734-5331

I. OWNERSHIP OF AST(S)

Agency/Owner: Southern Division, Naval Facilities Engineering Command, Caretaker Site Office
 Mailing Address: P.O. Box 190010
 City: N. Charleston State: SC Zip Code: 29419-9010
 Area Code: 843 Telephone Number: 743-9985 Contact Person: Henry N. Shepard II, P. E.

II. SITE IDENTIFICATION AND LOCATION

Site I.D. #: Unregulated
 Facility Name: Charleston Naval Base Complex, AST 3909
 Street Address: Dyess Avenue
 City: North Charleston, 29405-2413 County: Charleston

III. CLOSURE INFORMATION

Closure Started: 5 Jan 1998 Closure Completed: 6 Feb 1998
 Number of ASTs Closed: 1
 N/A Consultant SPORTENVDETCNASN
 AST 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.
 Henry Shepard II, P. E.
 Name (Type or Print)
 Signature: *Henry N. Shepard II P.E.* 5/27/98

V. AST INFORMATION

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

3909	Tank 2	Tank 3	Tank 4	Tank 5
Fuel oil				
200,000 gal.				
1964				
Steel				
Unk.				
N				
N				
R				
Y				
N				

- L. Method of disposal for any ASTs removed.

AST 3909 was cleaned with a steam cleaner, cut into sections, and recycled as scrap metal. (See Attachment III.)

- M. Method of disposal for any liquid petroleum, sludges, or waste waters removed from the ASTs.

All residual fuel oil, waste water, and sludge that could be pumped were recycled.

All sludge that was too thick to be pumped was characterized and found to be non-hazardous. This was disposed of as non-regulated sludge waste. (See Attachment III.)

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

AST 3909 was in good condition. Only minor patches of corrosion were present. No pitting or holes were found.

VI. PIPING INFORMATION

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

3909	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
Steel					
160'					
1 see history					
S					
Y					
Y					
N					
1964					

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

The steel supply and return piping for AST 3909 was protected by a 10" steel conduit which ran through a concrete pipe trench with removable covers.

The piping was corroded throughout its length, but severely corroded where it entered Building 123, where it was unprotected and covered with an oily film. Oily sludge was found inside the steel conduit (see photos), but its source was not determined.

VII. BRIEF SITE DESCRIPTION AND HISTORY

AST 3909 was constructed on site in 1964 to supply fuel oil to the boilers of auxiliary boiler house Building 123. The tank sat on a concrete foundation filled with approximately 18" of sand. The sand served as a soft pad for the tank bottom. Some sand pads on other tanks were found to be oil impregnated. Samples SPORT 0590-1 & 2 and SPORT 0599-2 & 3 were taken to determine if AST 3909's sand pad was oil impregnated and if it had to be disposed of as petroleum contaminated waste. Although the total petroleum hydrocarbon results were elevated, it appears that the sand was not impregnated and a release did not occur; therefore, the sand was left in place.

VIII. SITE CONDITIONS

Yes No Unk

A. Were any petroleum-stained or contaminated soils found near the AST?		X	
B. Were any petroleum odors detected? If yes, indicate location on site map and describe the odor (strong, mild, etc.)	X		

IX. SAMPLE INFORMATION

S.C.D.H.E.C. Lab Certification Number 10120

Sample #	Location	Sample Type (Soil/Water)	Depth*	Date/Time of Collection	Collected By	OVA#
SPORT 0590-1	AST foundation	Soil	18"	21 Jan 98 0845	W. Nesbit	8.1 ppm
SPORT 0590-2	AST foundation	Soil	18"	21 Jan 98 0930	W. Nesbit	7.8 ppm
SPORT 0599-2 & 0612-1	Pipe trench See Note 1.	Soil	2'	11 Feb 98 0940	W. Nesbit	Not Taken
SPORT 0599-3	AST foundation	Soil	18"	11 Feb 98 1005	W. Nesbit	Not Taken
SPORT 0599-4	AST foundation	Soil	18"	11 Feb 98 1025	W. Nesbit	Not Taken
SPORT 0616-2	Adjacent to tank.	Soil	2'	9 Mar 98 0950	W. Nesbit	0 ppm
SPORT 0616-3	Adjacent to tank.	Soil	2'	9 Mar 98 1025	W. Nesbit	0 ppm
SPORT 0616-4	Adjacent to tank.	Soil	2'	9 Mar 98 1059	W. Nesbit	0 ppm

Note 1: SPORT 0612-1 is a TCLIP metals test that was added to SPORT 0599-2.

X. SAMPLING METHODOLOGY

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

After the removal of AST 3909 and its associated piping, soil samples were taken. Sampling was performed in accordance with SC DHEC R.61-92 Part 280 and SC DHEC UST Assessment Guidelines.

Sample jars were prepared by the testing laboratory. The grab method was utilized to fill the sample containers leaving as little head space as possible and immediately capped. Samples were taken at strategic locations to characterize the site.

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 General Engineering Laboratories for analysis as documented in the attached Chain-of-Custody Record.

XI. RECEPTORS

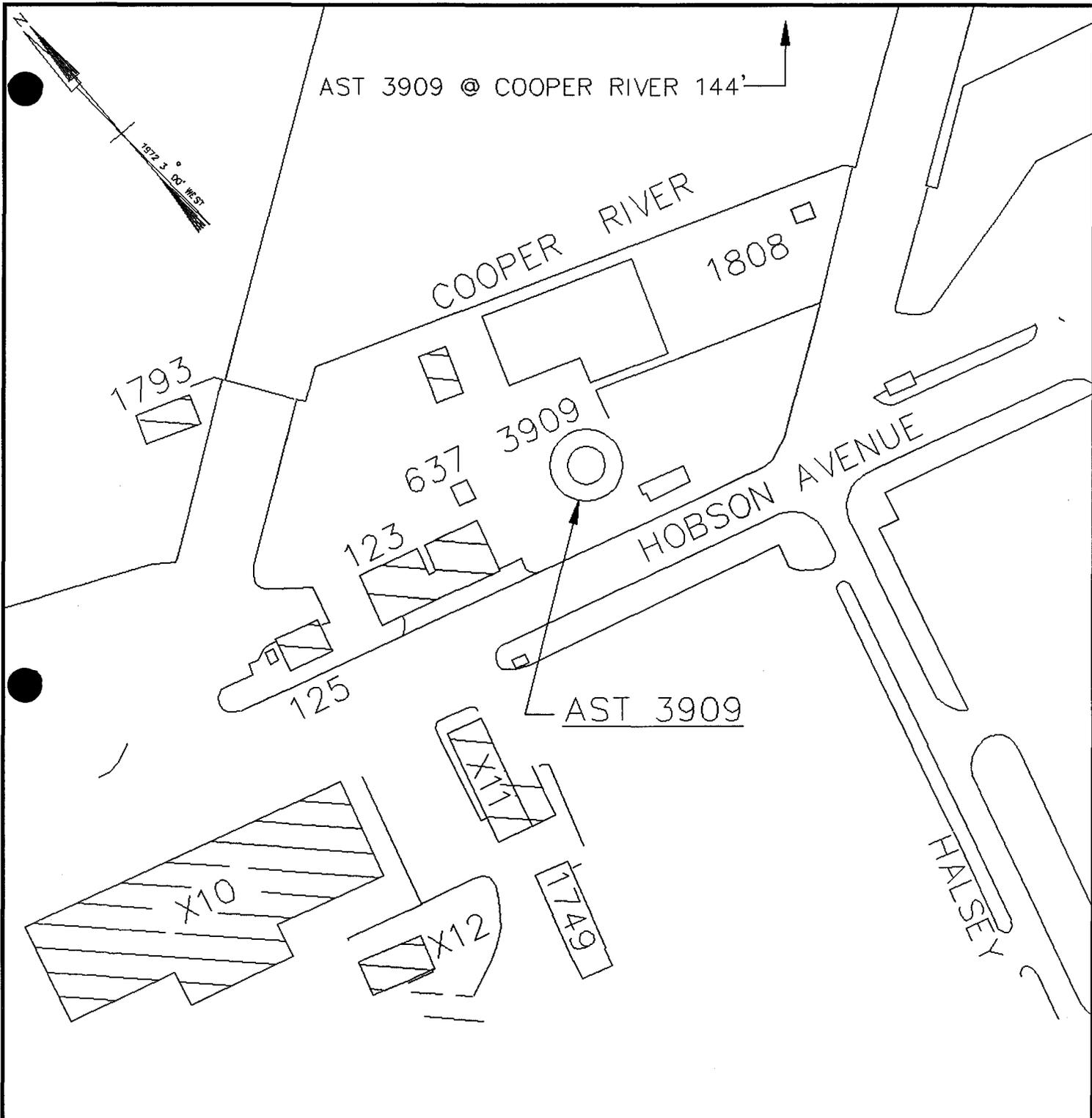
Yes No

<p>A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the AST system? [Cooper R. ~ 144'] If yes, indicate type of receptor, distance, and direction on site map.</p>	X	
<p>B. Are there any public, private, or irrigation water supply wells within 1000 feet of the AST system? If yes, indicate type of well, distance, and direction on site map.</p>		X
<p>C. Are there any underground structures (e.g., basements) located within 100 feet of the AST system? If yes, indicate the type of structure, distance, and direction on site map.</p>		X
<p>D. Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the AST system that could potentially come in contact with the contamination? If yes, indicate the type of utility, distance, and direction on the site map. [storm drain]</p>	X	

SITE MAP

You must supply a scaled site map. It should include all buildings, road names, utilities, tank and pump island locations, sample locations, extent of excavation, and any other pertinent information.

Site Maps 1, 2, and 3
Photographs 1 - 6



AST 3909 @ COOPER RIVER 144'

1793

COOPER RIVER

1808

123

637

3909

HOBSON AVENUE

125

AST 3909

X10

X12

1749

HALSEY

150' 0 150'

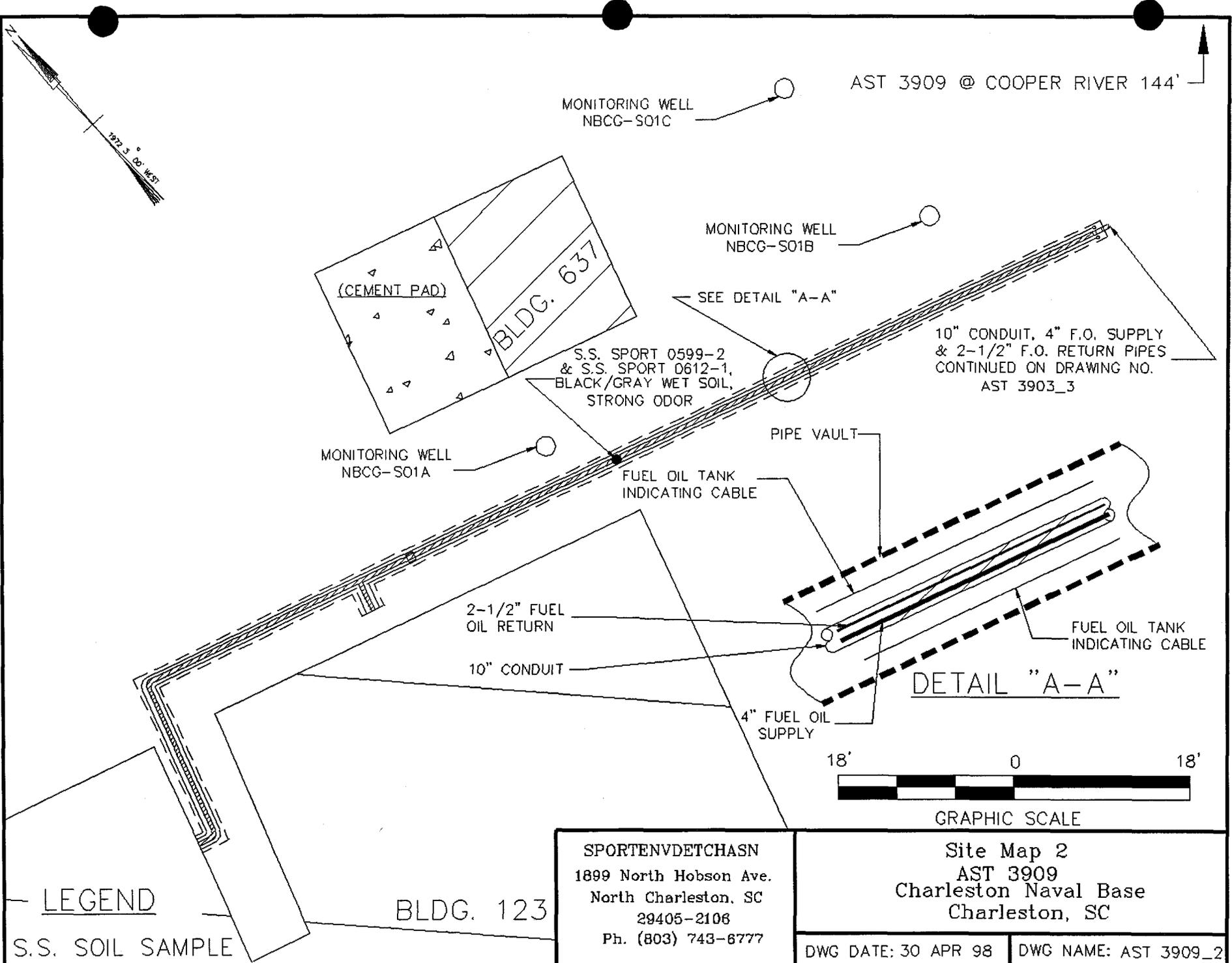


GRAPHIC SCALE

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

Site Map 1
 AST 3909
 Charleston Naval Base
 Charleston, SC

DWG DATE: 28 APR 98 DWG NAME: AST 3909_1



AST 3909 @ COOPER RIVER 144'

MONITORING WELL
NBCG-S01C

MONITORING WELL
NBCG-S01B

(CEMENT PAD)

BLDG. 637

S.S. SPORT 0599-2
& S.S. SPORT 0612-1,
BLACK/GRAY WET SOIL,
STRONG ODOR

SEE DETAIL "A-A"

10" CONDUIT, 4" F.O. SUPPLY
& 2-1/2" F.O. RETURN PIPES
CONTINUED ON DRAWING NO.
AST 3903_3

MONITORING WELL
NBCG-S01A

PIPE VAULT

FUEL OIL TANK
INDICATING CABLE

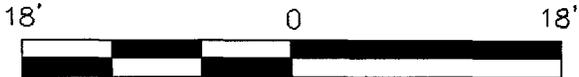
2-1/2" FUEL
OIL RETURN

10" CONDUIT

4" FUEL OIL
SUPPLY

FUEL OIL TANK
INDICATING CABLE

DETAIL "A-A"



GRAPHIC SCALE

LEGEND

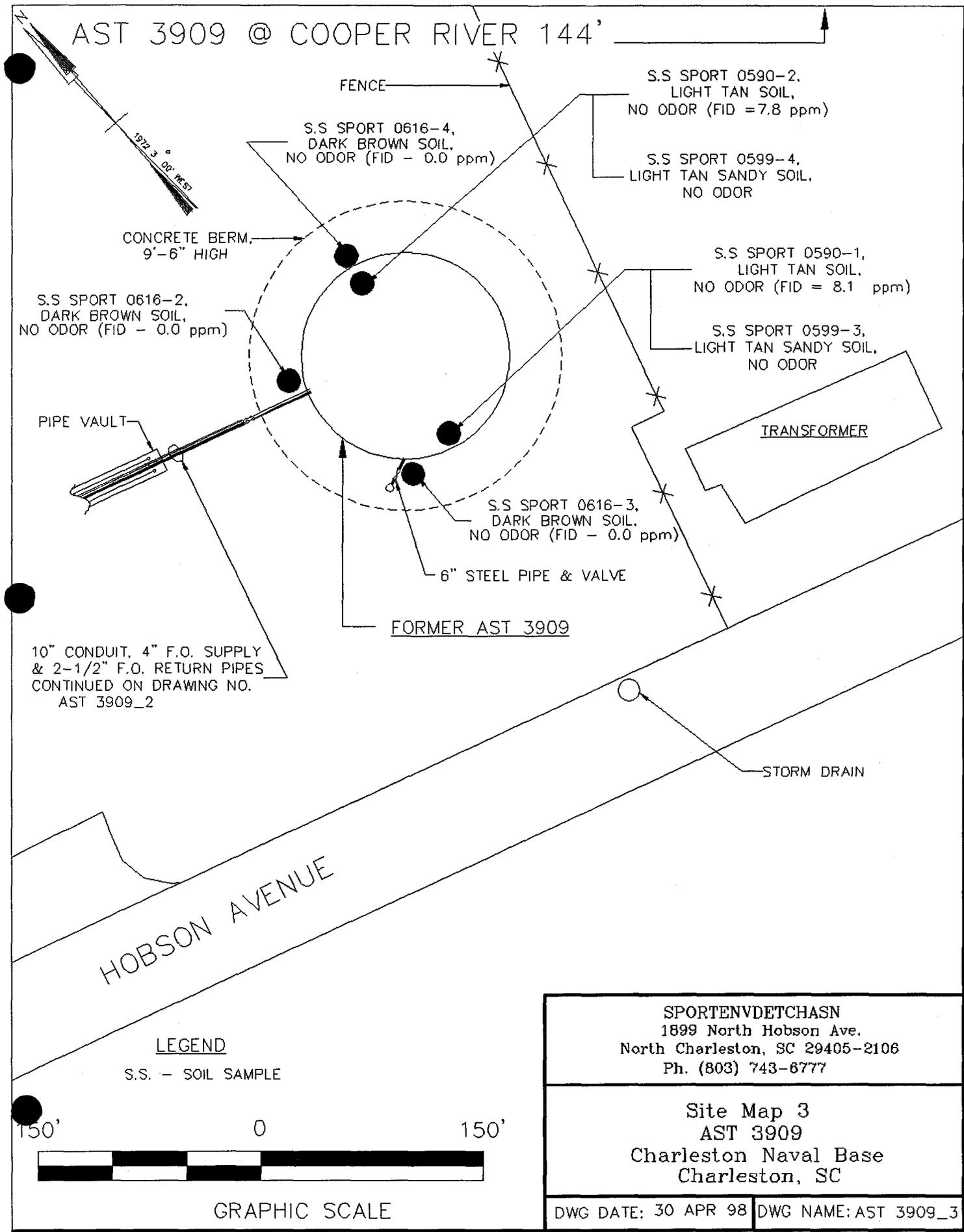
S.S. SOIL SAMPLE

BLDG. 123

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

Site Map 2
AST 3909
Charleston Naval Base
Charleston, SC
DWG DATE: 30 APR 98 | DWG NAME: AST 3909_2

AST 3909 @ COOPER RIVER 144'



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

Site Map 3
AST 3909
Charleston Naval Base
Charleston, SC

DWG DATE: 30 APR 98 | DWG NAME: AST 3909_3

AST 3909

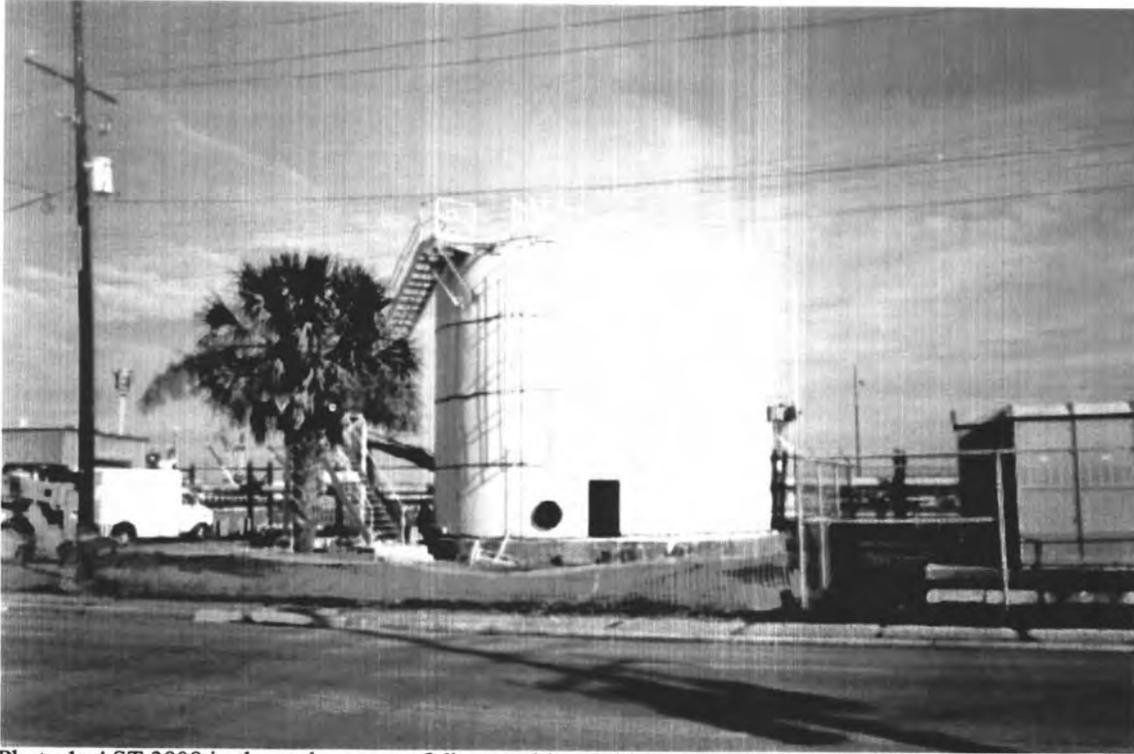


Photo 1: AST 3909 in the early stages of disassembly. Grid work is where the lead base paint was removed prior to cutting.



Photo 2: The last stages of the dismantling operation for the tank.

AST 3909

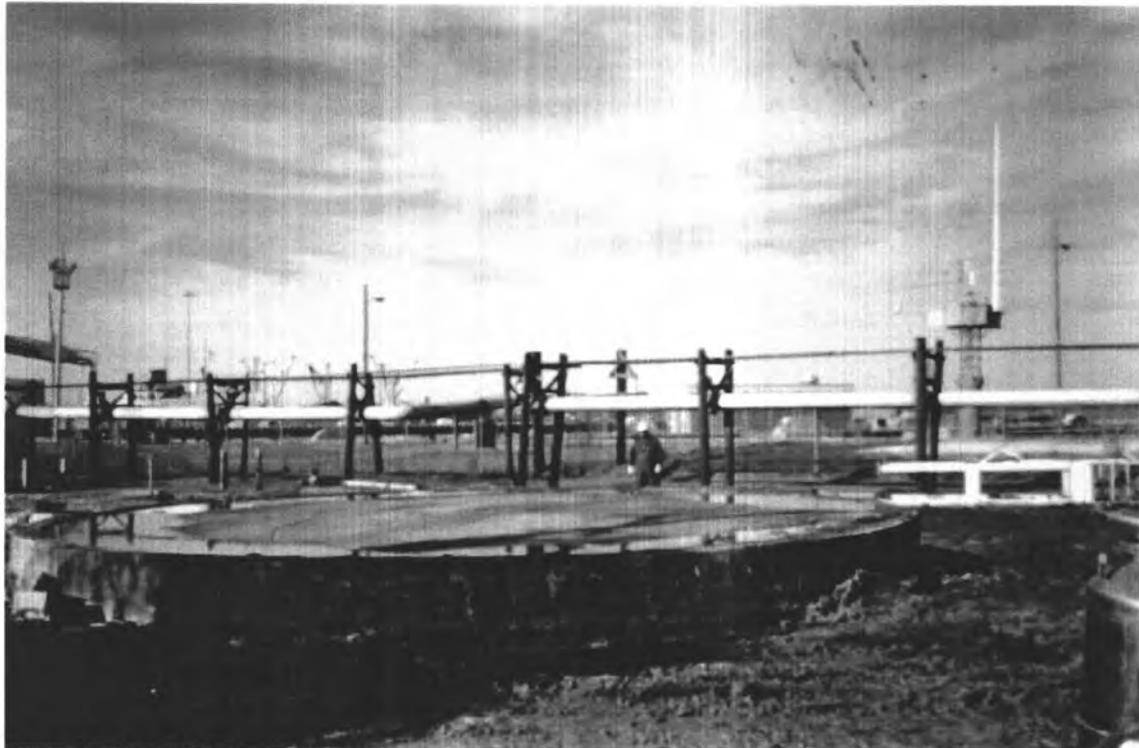


Photo 3: AST 3909 foundation.



Photo 4: AST 3909 pipe trench.



Photo 5: Close-up of AST 3909 pipe trench arrangement.

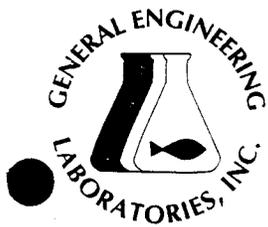


Photo 6: Pipe trench after removal of piping.

ANALYTICAL RESULTS

You must submit the laboratory report and chain-of-custody form for the samples. These samples must be analyzed by a South Carolina certified laboratory.

Certified Analytical Results
Chain-of-Custody



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87-
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: February 03, 1998

Page 1 of 2

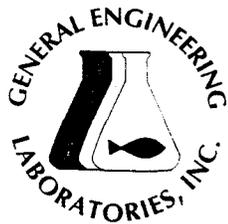
Sample ID : SPORT0590-1
 Lab ID : 9801495-01
 Matrix : Soil
 Date Collected : 01/21/98
 Date Received : 01/21/98
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>BTEX - 4 items</i>											
Benzene	U	0.00	1.00	2.00	ug/kg	1.0	TCL	01/25/98	0308	115192	
Ethylbenzene	U	0.00	1.00	2.00	ug/kg	1.0					
Toluene	U	0.310	1.00	2.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.00	1.00	4.00	ug/kg	1.0					
Naphthalene	U	0.00	1.00	2.00	ug/kg	1.0					
General Chemistry											
Total Rec. Petro. Hydrocarbons		262	10.0	50.0	mg/kg	1.0	JLP	01/27/98	1300	115404	2

Surrogate Recovery	Test	Percent%	Acceptable Limits
Bromofluorobenzene	BTEX-8260	97.5	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	74.0	(63.4 - 136.)
Toluene-d8	BTEX-8260	107.	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	97.5	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	74.0	(63.4 - 136.)
Toluene-d8	NAP-8260	107.	(72.1 - 137.)

M = Method	Method-Description
M 1	EPA 8260
M 2	EPA 9071A





GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/R
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers
Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: February 03, 1998

Page 1 of 2

Sample ID : SPORT0590-2
 Lab ID : 9801495-02
 Matrix : Soil
 Date Collected : 01/21/98
 Date Received : 01/21/98
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>BTEX - 4 items</i>											
Benzene	U	0.00	1.00	2.00	ug/kg	1.0	TCL	01/25/98	0335	115192	
Ethylbenzene	U	0.00	1.00	2.00	ug/kg	1.0					
Toluene	U	0.00	1.00	2.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.00	1.00	4.00	ug/kg	1.0					
Naphthalene	U	0.680	1.00	2.00	ug/kg	1.0					
General Chemistry											
Total Rec. Petro. Hydrocarbons		183	10.0	50.0	mg/kg	1.0	JLP	01/27/98	1300	115404	2

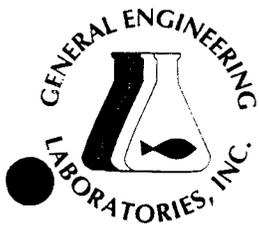
Comments:

The surrogate recovery for Dibromofluoromethane is outside of the acceptable limits range due to matrix interference.

Surrogate Recovery	Test	Percent%	Acceptable Limits
Bromofluorobenzene	BTEX-8260	101.	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	20.0*	(63.4 - 136.)
Toluene-d8	BTEX-8260	111.	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	101.	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	20.0*	(63.4 - 136.)
Toluene-d8	NAP-8260	111.	(72.1 - 137.)

M = Method	Method-Description
M 1	EPA 8260





GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/8.
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: February 03, 1998

Page 2 of 2

Sample ID : SPORT0590-2

M = Method	Method-Description
M 2	EPA 9071A

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

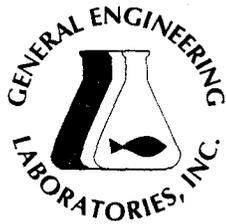
• indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.

Reviewed By







GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/8
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: February 03, 1998

Page 1 of 2

Sample ID : SPORT0590-3 ?
 Lab ID : 9801495-03
 Matrix : Soil
 Date Collected : 01/21/98
 Date Received : 01/21/98
 Priority : Routine
 Collector : Client

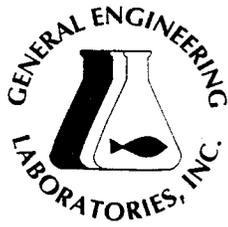
Tip Blank

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>BTEX - 4 items</i>											
Benzene	U	0.00	1.00	2.00	ug/kg	1.0	TCL	01/25/98	0403	115192	
Ethylbenzene	U	0.00	1.00	2.00	ug/kg	1.0					
Toluene	U	0.00	1.00	2.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.00	1.00	4.00	ug/kg	1.0					
Naphthalene	U	0.00	1.00	2.00	ug/kg	1.0					

Surrogate Recovery	Test	Percent%	Acceptable Limits
Bromofluorobenzene	BTEX-8260	102.	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	73.0	(63.4 - 136.)
Toluene-d8	BTEX-8260	110.	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	102.	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	73.0	(63.4 - 136.)
Toluene-d8	NAP-8260	110.	(72.1 - 137.)

M = Method	Method-Description
M 1	EPA 8260





GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: February 03, 1998

Page 2 of 2

Sample ID : SPORT0590-3

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

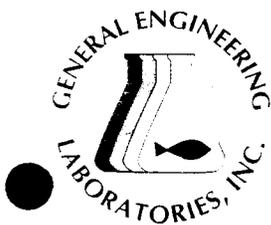
U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.

Karen Blakeney
Reviewed By





GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/874
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 02, 1998

Page 1 of 2

Sample ID : SPORT0599-1
 Lab ID : 9802336-01
 Matrix : Soil
 Date Collected : 02/11/98
 Date Received : 02/11/98
 Priority : Routine
 Collector : Client

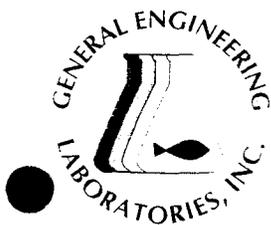
Trip Blank

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>BTEX - 4 items</i>											
Benzene	U	0.00	1.00	2.00	ug/kg	1.0	RMB	02/20/98	1546	116917	1
Ethylbenzene	U	0.00	1.00	2.00	ug/kg	1.0					
Toluene	U	0.222	1.00	2.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.433	1.00	4.00	ug/kg	1.0					
Naphthalene	U	0.00	1.00	2.00	ug/kg	1.0					

Surrogate Recovery	Test	Percent%	Acceptable Limits
Bromofluorobenzene	BTEX-8260	115.	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	85.6	(63.4 - 136.)
Toluene-d8	BTEX-8260	114.	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	115.	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	85.6	(63.4 - 136.)
Toluene-d8	NAP-8260	114.	(72.1 - 137.)

M = Method	Method-Description
M 1	EPA 8260





GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/874
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 02, 1998

Page 2 of 2

Sample ID : SPORT0599-1

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

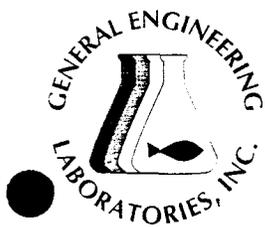
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.


Reviewed By



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/8742
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: February 19, 1998

Page 1 of 2

Sample ID : SPORT0599-2
 Lab ID : 9802336-02
 Matrix : Soil
 Date Collected : 02/11/98
 Date Received : 02/11/98
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Metals Analysis											
Mercury		0.189	0.0151	0.0333	mg/kg	1.0	CRB	02/16/98	1927	116666	N
Silver		861	61.4	495	ug/kg	2.0	MBL	02/14/98	0910	116609	1
Arsenic		5460	295	495	ug/kg	2.0					
Barium		67600	32.9	495	ug/kg	2.0					
Beryllium	J	245	22.1	495	ug/kg	2.0					
Cadmium		2460	20.6	495	ug/kg	2.0					
Chromium		31300	72.2	495	ug/kg	2.0					
Nickel		193000	225	495	ug/kg	2.0					
Lead		127000 ✓	67.1	495	ug/kg	2.0					
Antimony		1400	162	990	ug/kg	2.0					
Selenium		872	138	495	ug/kg	2.0					
General Chemistry											
Total Rec. Petro. Hydrocarbons		8690	10.0	50.0	mg/kg	1.0	JLP	02/17/98	1315	116726	2
Extractable Organic Halides	U	-7.58	3.93	12.2	mg/kg	1.0	LS	02/18/98	1639	116834	3

The following prep procedures were performed:

Mercury CRB 02/14/98 1600 116666 4
 TRACE FGD 02/13/98 1500 116609 5

M = Method

Method-Description

M 1 EPA 6010A
 M 2 EPA 9071A
 M 3 GEL
 M 4 EPA 7471
 EPA 3050

P O Box 30712 • Charleston, SC 29417 • 2040 Savage Road • 29414

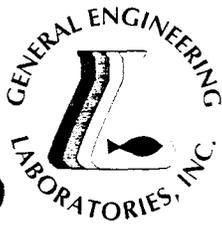
(803) 556-8171 • Fax (803) 766-1178



9802336-02



Printed on recycled paper.



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87-
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: February 19, 1998

Page 2 of 2

Sample ID : SPORT0599-2

M = Method Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

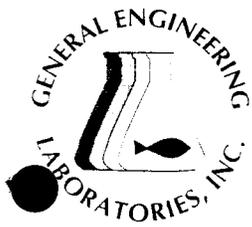
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.

Karen Blakeney
Reviewed By



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/8745
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 02, 1998

Page 1 of 2

Sample ID : SPORT0599-3
 Lab ID : 9802336-03
 Matrix : Soil
 Date Collected : 02/11/98
 Date Received : 02/11/98
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>Polynuclear Aromatic Hydrocarbons - 16 items</i>											
Benaphthene	U	0.00	166	331	ug/kg	1.0	JCB	02/20/98	0935	116419	1
Acenaphthylene	U	0.00	166	331	ug/kg	1.0					
Anthracene	U	0.00	166	331	ug/kg	1.0					
Benzo(a)anthracene	U	0.00	166	331	ug/kg	1.0					
Benzo(a)pyrene	U	0.00	166	331	ug/kg	1.0					
Benzo(b)fluoranthene	U	0.00	166	331	ug/kg	1.0					
Benzo(ghi)perylene	U	0.00	166	331	ug/kg	1.0					
Benzo(k)fluoranthene	U	0.00	166	331	ug/kg	1.0					
Chrysene	U	0.00	166	331	ug/kg	1.0					
Dibenzo(a,h)anthracene	U	0.00	166	331	ug/kg	1.0					
Fluoranthene	U	0.00	166	331	ug/kg	1.0					
Fluorene	U	0.00	166	331	ug/kg	1.0					
Indeno(1,2,3-c,d)pyrene	U	0.00	166	331	ug/kg	1.0					
Naphthalene	U	0.00	166	331	ug/kg	1.0					
Phenanthrene	U	0.00	166	331	ug/kg	1.0					
Pyrene	U	0.00	166	331	ug/kg	1.0					

The following prep procedures were performed:

GC/MS Base/Neutral Compounds

RDH 02/12/98 1430 116419 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
2-Fluorobiphenyl	M610	84.8	(30.0 - 115.)
Nitrobenzene-d5	M610	83.1	(23.0 - 120.)
Terphenyl-d14	M610	90.5	(37.3 - 128.)

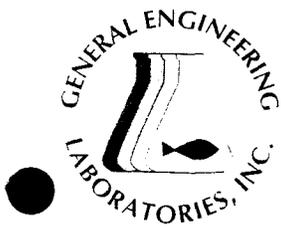
P O Box 30712 • Charleston, SC 29417 • 2040 Savage Road • 29414

(803) 556-8171 • Fax (803) 766-1178

Printed on recycled paper.



9802336-03



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/8
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 02, 1998

Page 2 of 2

Sample ID : SPORT0599-3

Surrogate Recovery	Test	Percent%	Acceptable Limits
--------------------	------	----------	-------------------

M = Method	Method-Description
M 1	EPA 8270
M 2	EPA 3550

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

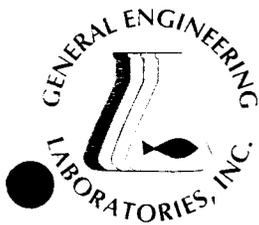
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.

Karen Blakeney
Reviewed By



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/874
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 02, 1998

Page 1 of 2

Sample ID : SPORT0599-4
 Lab ID : 9802336-04
 Matrix : Soil
 Date Collected : 02/11/98
 Date Received : 02/11/98
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Extractable Organics											
<i>Polynuclear Aromatic Hydrocarbons - 16 items</i>											
Acenaphthene	U	0.00	165	330	ug/kg	1.0	JCB	02/20/98	1008	116419	1
Acenaphthylene	U	0.00	165	330	ug/kg	1.0					
Anthracene	U	0.00	165	330	ug/kg	1.0					
Benzo(a)anthracene	U	0.00	165	330	ug/kg	1.0					
Benzo(a)pyrene	U	0.00	165	330	ug/kg	1.0					
Benzo(b)fluoranthene	U	0.00	165	330	ug/kg	1.0					
Benzo(ghi)perylene	U	0.00	165	330	ug/kg	1.0					
Benzo(k)fluoranthene	U	0.00	165	330	ug/kg	1.0					
Chrysene	U	0.00	165	330	ug/kg	1.0					
Dibenzo(a,h)anthracene	U	0.00	165	330	ug/kg	1.0					
Fluoranthene	U	0.00	165	330	ug/kg	1.0					
Fluorene	U	0.00	165	330	ug/kg	1.0					
Indeno(1,2,3-c,d)pyrene	U	0.00	165	330	ug/kg	1.0					
Naphthalene	U	0.00	165	330	ug/kg	1.0					
Phenanthrene	U	0.00	165	330	ug/kg	1.0					
Pyrene	U	0.00	165	330	ug/kg	1.0					

The following prep procedures were performed:

GC/MS Base/Neutral Compounds

RDH 02/12/98 1430 116419 2

Surrogate Recovery	Test	Percent%	Acceptable Limits
2-Fluorobiphenyl	M610	89.8	(30.0 - 115.)
Nitrobenzene-d5	M610	85.8	(23.0 - 120.)
Terphenyl-d14	M610	96.8	(37.3 - 128.)

P O Box 30712 • Charleston, SC 29417 • 2040 Savage Road • 29414

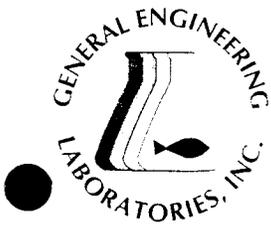
(803) 556-8171 • Fax (803) 766-1178



Printed on recycled paper.



9802336-04



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/8
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 02, 1998

Page 2 of 2

Sample ID : SPORT0599-4

Surrogate Recovery	Test	Percent%	Acceptable Limits
--------------------	------	----------	-------------------

M = Method	Method-Description
M 1	EPA 8270
M 2	EPA 3550

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.

Karen Blakeney
Reviewed By



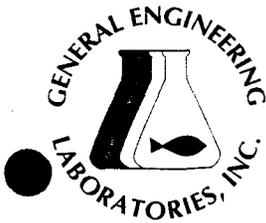
CHAIN OF CUSTODY RECORD

9802336

2040 Savage Road
 Charleston, South Carolina 29407
 P.O. Box 30712
 Charleston, South Carol 17
 (803) 556-8171

Client Name/Facility Name				SAMPLE ANALYSIS REQUIRED (x) - use remarks area to specify specific compounds or methods														Use F or P in the boxes to indicate whether sample was filtered and/or preserved					
Collected by/Company				# OF CONTAINERS	pH, conductivity	TOC/DOC	TOX/EOX	Chloride, Fluoride, Sulfide	Nitrite/Nitrate	VOC - Specify Method required	METALS - specify	Pesticides	Herbicide	Total Phenol	Acid Extractables	B/N Extractables	PAH	Cyanide	Coliform - specify type	SP/EC/ATC	T.O.H	Remarks	
SAMPLE ID	DATE	TIME	WELL																				SOIL
SPORTEN VDETCHASN																							
SPORTEN VDETCHASN																							
-01	SPORT0599-1	2-11-98	0900	✓	✓							X										Soil T.P. Blank	.1
-02	SPORT0599-2	2-11-98	0940	✓	✓					X									X	X		Soil AST 3909-4	.2
-03	SPORT0599-3	2-11-98	1005	✓	✓											X						Soil AST 3909-5	.3
-04	SPORT0599-4	2-11-98	1025	✓	✓											X						Soil AST 3909-6	.3
-05	SPORT0599-5	2-11-98	1045	✓	✓							X				X						Soil AST NS 6-1	.4
-06	SPORT0599-6	2-11-98	1100	✓	✓							X				X						Soil AST NS 6-2	.4
Relinquished by: <i>[Signature]</i>				Date: 2-11-98	Time: 1320	Received by: <i>[Signature]</i>				Relinquished by: <i>[Signature]</i>				Date: 2/11/98	Time: 1420	Received by: <i>[Signature]</i>							
Relinquished by: <i>[Signature]</i>				Date: 2/11/98	Time: 1600	Received by lab by: Karen Blakeney				Date: 2/11/98	Time: 1600	Remarks:											

White = sample collector Yellow = file Pink = with report



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 11, 1998

Page 1 of 1

Sample ID : SPORT0612-1
 Lab ID : 9803067-01
 Matrix : TCLP
 Date Collected : 02/11/98
 Date Received : 03/03/98
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Metals Analysis											
Lead	J	23.8	3.39	25.0	ug/l	5.0	MBL	03/06/98	1937	117761	

The following prep procedures were performed:

TCLP Prep for Metals

JL 03/04/98 1505 117610 2

M = Method	Method-Description
M 1	EPA 6010A
M 2	EPA 1311

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.

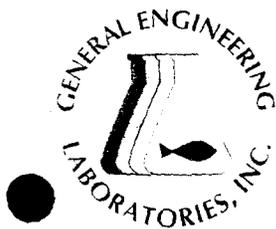

 Reviewed By

P O Box 30712 • Charleston, SC 29417 • 2040 Savage Road • 29414

(803) 556-8171 • Fax (803) 766-1178



9803067-01



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 23, 1998

Page 1 of 2

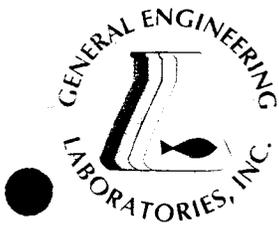
Sample ID : SPORT0616-1
 Lab ID : 9803208-01
 Matrix : Soil
 Date Collected : 03/09/98
 Date Received : 03/10/98
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>BTEX - 4 items</i>											
Benzene	U	0.00	1.00	2.00	ug/kg	1.0	JEB	03/18/98	1747	118575	
Ethylbenzene	U	0.00	1.00	2.00	ug/kg	1.0					
Toluene	U	0.00	1.00	2.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.00	1.00	4.00	ug/kg	1.0					
Naphthalene	U	0.00	1.00	2.00	ug/kg	1.0					

Surrogate Recovery	Test	Percent%	Acceptable Limits
Bromofluorobenzene	BTEX-8260	99.7	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	97.6	(63.4 - 136.)
Toluene-d8	BTEX-8260	97.2	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	99.7	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	97.6	(63.4 - 136.)
Toluene-d8	NAP-8260	97.2	(72.1 - 137.)

M = Method	Method-Description
M 1	EPA 8260





GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 23, 1998

Page 1 of 2

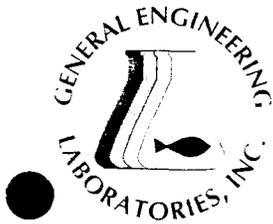
Sample ID : SPORT0616-1
 Lab ID : 9803208-01
 Matrix : Soil
 Date Collected : 03/09/98
 Date Received : 03/10/98
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>BTEX - 4 items</i>											
Benzene	U	0.00	1.00	2.00	ug/kg	1.0	JEB	03/18/98	1747	118575	
Ethylbenzene	U	0.00	1.00	2.00	ug/kg	1.0					
Toluene	U	0.00	1.00	2.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.00	1.00	4.00	ug/kg	1.0					
Naphthalene	U	0.00	1.00	2.00	ug/kg	1.0					

Surrogate Recovery	Test	Percent%	Acceptable Limits
Bromofluorobenzene	BTEX-8260	99.7	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	97.6	(63.4 - 136.)
Toluene-d8	BTEX-8260	97.2	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	99.7	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	97.6	(63.4 - 136.)
Toluene-d8	NAP-8260	97.2	(72.1 - 137.)

M = Method	Method-Description
M 1	EPA 8260





GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/874
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 23, 1998

Page 2 of 2

Sample ID : SPORT0616-1

M = Method	Method-Description
------------	--------------------

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

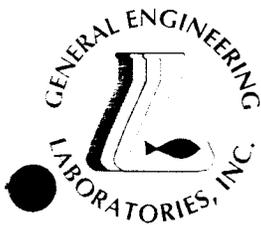
U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.

Reviewed By





GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/874
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 23, 1998

Page 1 of 3

Sample ID : SPORT0616-2
 Lab ID : 9803208-02
 Matrix : Soil
 Date Collected : 03/09/98
 Date Received : 03/10/98
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>BTEX - 4 items</i>											
Benzene	U	0.00	1.00	2.00	ug/kg	1.0	JEB	03/18/98	2001	118575	1
Ethylbenzene	U	0.00	1.00	2.00	ug/kg	1.0					
Toluene	U	0.00	1.00	2.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.00	1.00	4.00	ug/kg	1.0					
Naphthalene	U	0.00	1.00	2.00	ug/kg	1.0					
Extractable Organics											
<i>Polynuclear Aromatic Hydrocarbons - 16 items</i>											
Acenaphthene	U	0.00	4900	9800	ug/kg	10.	RLC	03/16/98	2206	118154	2
Acenaphthylene	U	0.00	4900	9800	ug/kg	10.					
Anthracene	U	0.00	4900	9800	ug/kg	10.					
Benzo(a)anthracene	U	0.00	4900	9800	ug/kg	10.					
Benzo(a)pyrene	U	0.00	4900	9800	ug/kg	10.					
Benzo(b)fluoranthene	U	0.00	4900	9800	ug/kg	10.					
Benzo(ghi)perylene	U	0.00	4900	9800	ug/kg	10.					
Benzo(k)fluoranthene	U	0.00	4900	9800	ug/kg	10.					
Chrysene	U	0.00	4900	9800	ug/kg	10.					
Dibenzo(a,h)anthracene	U	0.00	4900	9800	ug/kg	10.					
Fluoranthene	U	0.00	4900	9800	ug/kg	10.					
Fluorene	U	0.00	4900	9800	ug/kg	10.					
Indeno(1,2,3-c,d)pyrene	U	0.00	4900	9800	ug/kg	10.					
Naphthalene	U	0.00	4900	9800	ug/kg	10.					
Phenanthrene	U	0.00	4900	9800	ug/kg	10.					
Pyrene	U	0.00	4900	9800	ug/kg	10.					

Following prep procedures were performed:
 GC/MS Base/Neutral Compounds

MAL 03/13/98 1120 118154 3

P O Box 30712 • Charleston, SC 29417 • 2040 Savage Road • 29414

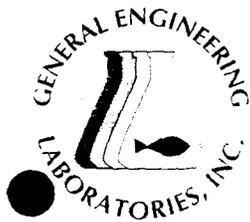
(803) 556-8171 • Fax (803) 766-1178



Printed on recycled paper.



9803208-02



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/874
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 23, 1998

Page 2 of 3

Sample ID : SPORT0616-2

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
-----------	-----------	--------	----	----	-------	----	---------	------	------	-------	---

Comments:

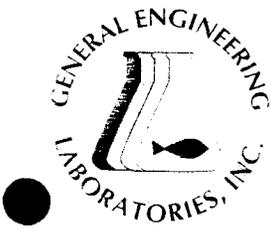
A dilution was required for Extractable Organics due to matrix interference. As a result, the detection limits are elevated.

Surrogate Recovery	Test	Percent%	Acceptable Limits
2-Fluorobiphenyl	M610	0.00*	(30.0 - 115.)
Bromobenzene-d5	M610	0.00*	(23.0 - 120.)
p-Terphenyl-d14	M610	0.00*	(37.3 - 128.)
Bromofluorobenzene	BTEX-8260	76.3	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	106.	(63.4 - 136.)
Toluene-d8	BTEX-8260	114.	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	76.3	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	106.	(63.4 - 136.)
Toluene-d8	NAP-8260	114.	(72.1 - 137.)

M = Method	Method-Description
M 1	EPA 8260
M 2	EPA 8270
M 3	EPA 3550

Notes:

The qualifiers in this report are defined as follows:
 ND indicates that the analyte was not detected at a concentration greater than the detection limit.
 J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).
 U indicates that the analyte was not detected at a concentration greater than the detection limit.
 * indicates that a quality control analyte recovery is outside of specified acceptance criteria.



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 23, 1998

Page 3 of 3

Sample ID : SPORT0616-2

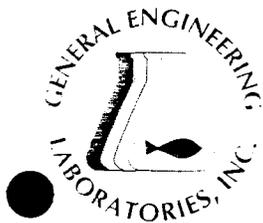
M = Method

Method-Description

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.

Karen Blakeney
Reviewed By





GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/872
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 23, 1998

Page 1 of 2

Sample ID : SPORT0616-3
 Lab ID : 9803208-03
 Matrix : Soil
 Date Collected : 03/09/98
 Date Received : 03/10/98
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>BTEX - 4 items</i>											
Benzene	U	0.00	1.00	2.00	ug/kg	1.0	JEB	03/19/98	1447	118575	
Ethylbenzene	U	0.00	1.00	2.00	ug/kg	1.0					
Toluene	U	0.00	1.00	2.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.00	1.00	4.00	ug/kg	1.0					
Naphthalene	U	0.00	1.00	2.00	ug/kg	1.0					
Extractable Organics											
<i>Polynuclear Aromatic Hydrocarbons - 16 items</i>											
Acenaphthene	U	0.00	165	330	ug/kg	1.0	RLC	03/16/98	2238	118154	2
Acenaphthylene	U	0.00	165	330	ug/kg	1.0					
Anthracene	U	0.00	165	330	ug/kg	1.0					
Benzo(a)anthracene	U	0.00	165	330	ug/kg	1.0					
Benzo(a)pyrene	U	0.00	165	330	ug/kg	1.0					
Benzo(b)fluoranthene	U	0.00	165	330	ug/kg	1.0					
Benzo(ghi)perylene	U	0.00	165	330	ug/kg	1.0					
Benzo(k)fluoranthene	U	0.00	165	330	ug/kg	1.0					
Chrysene	U	0.00	165	330	ug/kg	1.0					
Dibenzo(a,h)anthracene	U	0.00	165	330	ug/kg	1.0					
Fluoranthene	U	0.00	165	330	ug/kg	1.0					
Fluorene	U	0.00	165	330	ug/kg	1.0					
Indeno(1,2,3-c,d)pyrene	U	0.00	165	330	ug/kg	1.0					
Naphthalene	U	0.00	165	330	ug/kg	1.0					
Phenanthrene	U	0.00	165	330	ug/kg	1.0					
Pyrene	U	0.00	165	330	ug/kg	1.0					

Following prep procedures were performed:

GC/MS Base/Neutral Compounds

MAL 03/13/98 1120 118154 3

P O Box 30712 • Charleston, SC 29417 • 2040 Savage Road • 29414

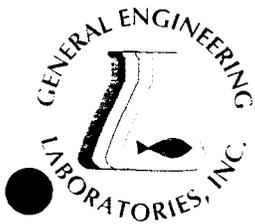
(803) 556-8171 • Fax (803) 766-1178



Printed on recycled paper.



9803208-03



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 23, 1998

Page 2 of 2

Sample ID : SPORT0616-3

Surrogate Recovery	Test	Percent%	Acceptable Limits
2-Fluorobiphenyl	M610	64.3	(30.0 - 115.)
Nitrobenzene-d5	M610	55.7	(23.0 - 120.)
p-Terphenyl-d14	M610	100.	(37.3 - 128.)
Bromofluorobenzene	BTEX-8260	80.0	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	68.3	(63.4 - 136.)
Toluene-d8	BTEX-8260	113.	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	80.0	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	68.3	(63.4 - 136.)
Toluene-d8	NAP-8260	113.	(72.1 - 137.)

M = Method	Method-Description
M 1	EPA 8260
M 2	EPA 8270
M 3	EPA 3550

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

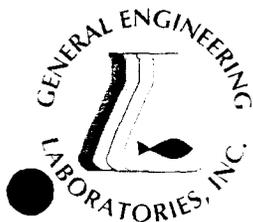
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.

Karen Blakeney
Reviewed By



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/8745
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 23, 1998

Page 1 of 2

Sample ID : SPORT0616-4
 Lab ID : 9803208-04
 Matrix : Soil
 Date Collected : 03/09/98
 Date Received : 03/10/98
 Priority : Routine
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>BTEX - 4 items</i>											
Benzene	U	0.00	1.00	2.00	ug/kg	1.0	JEB	03/18/98	2215	118575	1
Ethylbenzene	U	0.00	1.00	2.00	ug/kg	1.0					
Toluene	U	0.00	1.00	2.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.00	1.00	4.00	ug/kg	1.0					
Naphthalene	U	0.00	1.00	2.00	ug/kg	1.0					
Extractable Organics											
<i>Polynuclear Aromatic Hydrocarbons - 16 items</i>											
Acenaphthene	U	0.00	166	331	ug/kg	1.0	RLC	03/16/98	2309	118154	2
Acenaphthylene	U	0.00	166	331	ug/kg	1.0					
Anthracene	U	0.00	166	331	ug/kg	1.0					
Benzo(a)anthracene	J	173	166	331	ug/kg	1.0					
Benzo(a)pyrene		349	166	331	ug/kg	1.0					
Benzo(b)fluoranthene		358	166	331	ug/kg	1.0					
Benzo(ghi)perylene	J	251	166	331	ug/kg	1.0					
Benzo(k)fluoranthene	U	0.00	166	331	ug/kg	1.0					
Chrysene	J	195	166	331	ug/kg	1.0					
Dibenzo(a,h)anthracene	U	0.00	166	331	ug/kg	1.0					
Fluoranthene	U	0.00	166	331	ug/kg	1.0					
Fluorene	U	0.00	166	331	ug/kg	1.0					
Indeno(1,2,3-c,d)pyrene	J	208	166	331	ug/kg	1.0					
Naphthalene	U	0.00	166	331	ug/kg	1.0					
Phenanthrene	U	0.00	166	331	ug/kg	1.0					
Pyrene	U	0.00	166	331	ug/kg	1.0					

The following prep procedures were performed:
 MS Base/Neutral Compounds

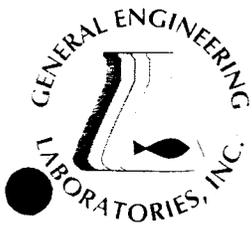
MAL 03/13/98 1120 118154 3

P O Box 30712 • Charleston, SC 29417 • 2040 Savage Road • 29414

(803) 556-8171 • Fax (803) 766-1178



9803208-04



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/874
NC	233	
SC	10120	10582
TN	02934	02934

Client: Supervisor of Ship Building & Conversion
 SUPSHIP-Portsmouth Detachment-Env.
 1899 North Hobson Ave.
 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: March 23, 1998

Page 2 of 2

Sample ID : SPORT0616-4

Surrogate Recovery	Test	Percent%	Acceptable Limits
2-Fluorobiphenyl	M610	69.9	(30.0 - 115.)
Nitrobenzene-d5	M610	58.4	(23.0 - 120.)
p-Terphenyl-d14	M610	111.	(37.3 - 128.)
Bromofluorobenzene	BTEX-8260	89.7	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	107.	(63.4 - 136.)
Toluene-d8	BTEX-8260	107.	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	89.7	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	107.	(63.4 - 136.)
Toluene-d8	NAP-8260	107.	(72.1 - 137.)

M = Method	Method-Description
M 1	EPA 8260
M 2	EPA 8270
M 3	EPA 3550

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.

Karen Blakeney
Reviewed By

CHAIN OF CUSTODY RECORD

Page 1 of 1

9803208

Client Name/Facility Name		SAMPLE ANALYSIS REQUIRED (x) - use remarks area to specify specific compounds or methods											Use F or P in the boxes to indicate whether sample was filtered and/or preserved							
SPORTS AND DETACHMENT		pH, conductivity	TOC/DOC	TOX	Chloride, Fluoride, Sulfide	Nitrite/Nitrate	VOC - Specify Method required	METALS - specify	Pesticide	Herbicide	Total Phenol	Acid Extractables	B/N Extractables	PCB's	Cyanide	Coliform - specify type	BTEX/NAH	PAH	Remarks	
Collected by/Company																			# OF CONTAINERS	
SAMPLE ID	DATE	TIME	WELL	SOIL	COMP	GRAB														
01 SPDR0616-1	3/9/98	0850					1										X		AST 3909-8 Soil Trip Box	.1
02 SPDR0616-2	3/9/98	0950					2										X	X	AST 3909-9 Soil	.2
03 SPDR0616-3	3/9/98	1025					2										X	X	AST 3909-10 Soil	.2
04 SPDR0616-4	3/9/98	1059					2										X	X	AST 3909-11 Soil	.2
Relinquished by:		Date:	Time:	Received by:		Date:	Time:	Relinquished by:		Date:	Time:	Received by:								
William D. Jones		3/9/98	1520	W.R. Herring		3/10/98	1414	W.R. Herring		3/10/98	1414	Catherine Velle								
Relinquished by:		Date:	Time:	Received by lab by:		Date:	Time:	Remarks:												
Catherine Velle		3/10/98	1435	Karen Blakemey		3/10/98	1435													

White = sample collector Yellow = file Pink = with report

Attachment III

Certificate of Disposal (tank)
Disposal Manifests

AST 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

AST 3909, South Hobson Ave., N. Charleston, SC

DISPOSAL LOCATION

Bldg. 1601 Tank Cleaning
& Disposal Area
Charleston Naval Complex

TYPE OF TANK

Fuel Oil

SIZE (GAL)

200,000 gal.

CLEANING/DISPOSAL METHOD

The tank was cleaned with a steam cleaner, cut into sections, and disposed of as recyclable scrap metal.

DISPOSAL CERTIFICATION

I certify that the above tank has been properly cleaned and disposed of as recyclable scrap metal.



John Amey

1 4 28 / 98
(Date)

GENERATOR PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

NATIONSWASTE, INC.

P. O. BOX 90723
 COLUMBIA, SC 29290
 1581 WESTVACO ROAD
 EASTOVER, SC 29044
 Phone: 803-353-0563 Fax: 803-353-0519

Internal Use Only

Special Waste Profile Number

Expiration Date: ___/___/___

A. GENERATOR INFORMATION

Generator CHARLESTON NAVAL COMPLEX
 Physical Address 1899 N. HOBSON
 City, State, Zip N. CHARLESTON, SC 29405
 Billing Address (If different from Physical) PENN-VAC, Inc., PO Box 62679
 City, State, Zip N. CHARLESTON, SC 29419
 Contact Name TODD DAILEY Title _____
 Telephone Number (803) 743-6777-224 Fax Number (803) 743-9413
 EPA ID Number N/A
 County CHARLESTON Generator SIC Code N/A

B. WASTE DESCRIPTION (See Instructions)

Name of Waste #2 & #6 oil sludge, virgin
 Original Process Generating Waste sludge build-up in tank
 Category: Type I Special Waste _____ Type II Special Waste _____
 Estimated Volume 30 tons
 Special Handling Instructions/Supplemental Information _____

CONSTITUENT	RANGE Must total at least 100%	CONSTITUENT	RANGE Must total at least 100%
<u>#2 & #6 sludge</u>	<u>50 - 75 %</u>	_____	_____ %
<u>Cement film dust</u>	<u>25 - 50 %</u>	_____	_____ %
_____	_____ %	_____	_____ %
_____	_____ %	_____	_____ %
_____	_____ %	_____	_____ %
_____	_____ %	_____	_____ %
_____	_____ %	_____	_____ %

Does the Waste Contain any of the following?

	NO	YES	ACTUAL (If you checked yes)
PCBs	<input checked="" type="checkbox"/>	_____	_____ ppm
Cyanides	<input checked="" type="checkbox"/>	_____	_____ ppm
Sulfides	<input checked="" type="checkbox"/>	_____	_____ ppm

C. PHYSICAL PROPERTIES

Color(s) <u>Brown to</u> <u>Green</u>	Odor (Check One) None <input checked="" type="checkbox"/> Mild _____ Strong _____ Describe <u>Petroleum</u>	Physical State @70°F Liquid _____ Semi Solid _____ Powder _____ Sludge <input checked="" type="checkbox"/> Solid Other: _____
---	---	---

Specific Gravity: <u>N/A</u> (Can use range)	Layers: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Bi-layered <input type="checkbox"/> Multiple #	Free Liquids: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, then) Volume
--	---	---

pH: ≤2 >2 - <4 4 - 10 >10 - <12.5 ≥12.5 N/A

Flash Point: <73°F (73°-99°F) 100°-139°F 140°-199°F ≥200°F N.A. Closed Cup Open Cup

D. TRANSPORTATION INFORMATION

Method of shipment: Bulk Liquid Bulk Sludge Bulk Solid Drum/Box
 Other

Supplemental Shipping Information: N/A

Is this a DOT hazardous Material? No Yes (If yes, complete the following information)

DOT Proper Shipping Name Non Regulated

Technical Name(s) (if applicable) N/A

Hazard Class or Division N/A Identification Number N/A

Packing Group N/A Reportable Quantity (RQ) (Pounds or Kilograms) N/A

Table Label N/A

Emergency Response Contact N/A

24 Hour Emergency Phone # N/A Emergency Guide Book Page # N/A

E. GENERATOR CERTIFICATION

I hereby certify that the information contained in this profile is accurate and true. All relevant information regarding known or suspected hazards in the possession of the Generator have been disclosed. All types and amounts of special wastes provided in incidental amounts have been identified in Section B of this form.

This waste is not a "Hazardous Waste" as defined by USEPA and/or the state regulations.

This waste *does not* contain any of the following:

- a. Regulated radioactive materials.
- b. Regulated concentrations of PCB's (Polychlorinated Biphenyl's).
- c. > 5,000 ppm of TPH (Total Petroleum Hydrocarbon) from Gas, Diesel or PAH (Polynuclear Aromatic Hydrocarbons) Compounds.
- d. > 100 ppm of BTEX (Benzene/Toluene/Ethylbenzene/Xylene).

This material tested below the maximum concentration of contaminants for the toxicity characteristics as specified in the EPA 40 CFR Part 261.24 and for waste being disposed of in SC as specified in South Carolina Hazardous Waste Management Regulations (R61-79.261.24).

The attached analytical data (if any) was derived from a representative sample obtained according to the sampling methods specified in EPA 40 CFR 261.20 (c) or an equivalent method.

If any changes occur in the character of the waste, the Generator shall notify NationsWaste, Inc. at the Northeast Sanitary Landfill prior to providing the waste to NationsWaste, Inc. at the Northeast Sanitary Landfill.

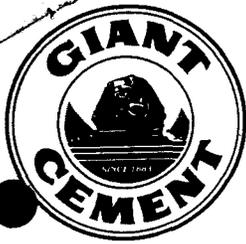
The information provided is based on: (check one or more)

Lab Analysis (please attach) MSDS (please attach) Knowledge of Waste

Other: Explain

Todd M. Dailey WASTE MANAGER
 Generator's Authorized Signatory Title

TODD M. DAILEY May 14, 1997
 Printed Name Date



GIANT CEMENT COMPANY

Post Office Box 218
Harleyville, South Carolina 29448

Plant:
(803)496-5033

Fax:
(803)496-7573

* CERTIFICATE OF MATERIALS REUSE *

June 12, 1997

This certificate is to serve as evidence of total reuse of solvents and/or waste oil received from your company as follows:

	<u>DATE</u>	<u>MAN NO</u>	<u>QUANTITY</u>	<u>POUNDS</u>
F0584				
U. S. Navy-Charleston Env. Detach				
	97/05/23	52297	3762.00	30820.00
	97/05/27	52197	4274.00	33040.00
=====				
TOTAL	2		8036.00	63860.00

This material was used as a fuel in our rotary cement kilns, resulting in its complete destruction, and this meets all requirements as defined in 40 CFR Part 268, Subpart D.

Very truly yours,

Donna M. Davis
Facility Sales Manager

DMD/ssb

cc: Grr!