

N61165.AR.005727  
CNC CHARLESTON  
5090.3a

UNDERGROUND STORAGE TANK (UST) ASSESSMENT REPORT FOR BUILDING 760 CNC  
CHARLESTON SC  
05/29/1998  
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Li 7.28.98  
Lo 8.20.98

**RECEIVED**

South Carolina Department of Health and Environmental Control  
Underground Storage Tank (UST) Assessment Report

Water C.D.H.E. **JUL 28 1998**  
Water Monitoring, Assessment & Protection Division

Submit Completed Form to:

Date Received  
  
State Use Only

UST Regulatory Section  
SCDHEC  
2600 Bull Street  
Columbia, South Carolina 29201  
Telephone (803) 734-5331

# 0118

**I OWNERSHIP OF UST(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, Building 760  
Street Address: 849 Avenue "F"  
City: North Charleston, 29405-2413 County: Charleston

**III CLOSURE INFORMATION**

Closure Started: 29 May 1998 Closure Completed: 29 May 1998  
Number of USTs Closed: 1  
N/A Consultant SPORTENVDETCNASN 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.  
Henry Shepard II, P. E.  
Name (Type or Print)  
Signature *Henry N. Shepard II PE 7/15/98*

**V. UST INFORMATION**

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

	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5
Fuel oil					
1,000 gal					
Unk.					
Steel					
3/98					
6' 6"					
N					
N					
R					
Y					
N					

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

UST 760 was removed, drained, cut open at both ends, and cleaned with a steam cleaner. It was then cut up for recycling as scrap metal. (See Attachment III.)

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

The sludge, waste water, and residual fuel oil from UST 760 were recycled.

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

UST 760 had patches of severe corrosion where the tank's thin protective coating was missing. No holes were found.

## VI. PIPING INFORMATION

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

Note 1: UST 761 provided heating fuel oil to building 761.

	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5
Copper & Steel					
13' See note 1					
1 see note 1					
S					
Y					
Y					
N					
Unk.					

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

The steel fill pipe and the steel ventilation pipe were corroded throughout their length, but no holes were found in either pipe. The copper supply and return lines were in good condition.

## VII. BRIEF SITE DESCRIPTION AND HISTORY

Building 760 is also known as Naval Hospital building NH-"D." The building was constructed in 1917, and served as housing for Naval families until base closure.

## VIII. SITE CONDITIONS

Yes No Unk

	Yes	No	Unk
<p>A. Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate depth and location on the site map.</p>		X	
<p>B. Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells?</p> <p>If yes, indicate location on site map and describe the odor (strong, mild, etc.)</p>		X	
<p>C. Was water present in the UST excavation, soil borings, or trenches?</p> <p>If yes, how far below land surface (indicate location and depth)?</p> <p>_____</p>		X	
<p>D. Did contaminated soils remain stockpiled on site after closure?</p> <p>If yes, indicate the stockpile location on the site map.</p> <p>Name of DHEC representative authorizing soil removal:</p> <p>_____</p>		X*	
<p>E. Was a petroleum sheen or free product detected on any excavation or boring waters?</p> <p>If yes, indicate location and thickness.</p>		X**	

\* All excavated soil was returned to the tank pit.

\*\* No groundwater was encountered.



## **X. SAMPLING METHODOLOGY**

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

After the removal of UST 760, 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 extracted at the tank ends and from beneath the piping at the mechanical connections.

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 SPORTENVDETCNASN until they were transferred to General Engineering Laboratories for analysis as documented in the attached Chain-of-Custody Record.

# XI. RECEPTORS

Yes No

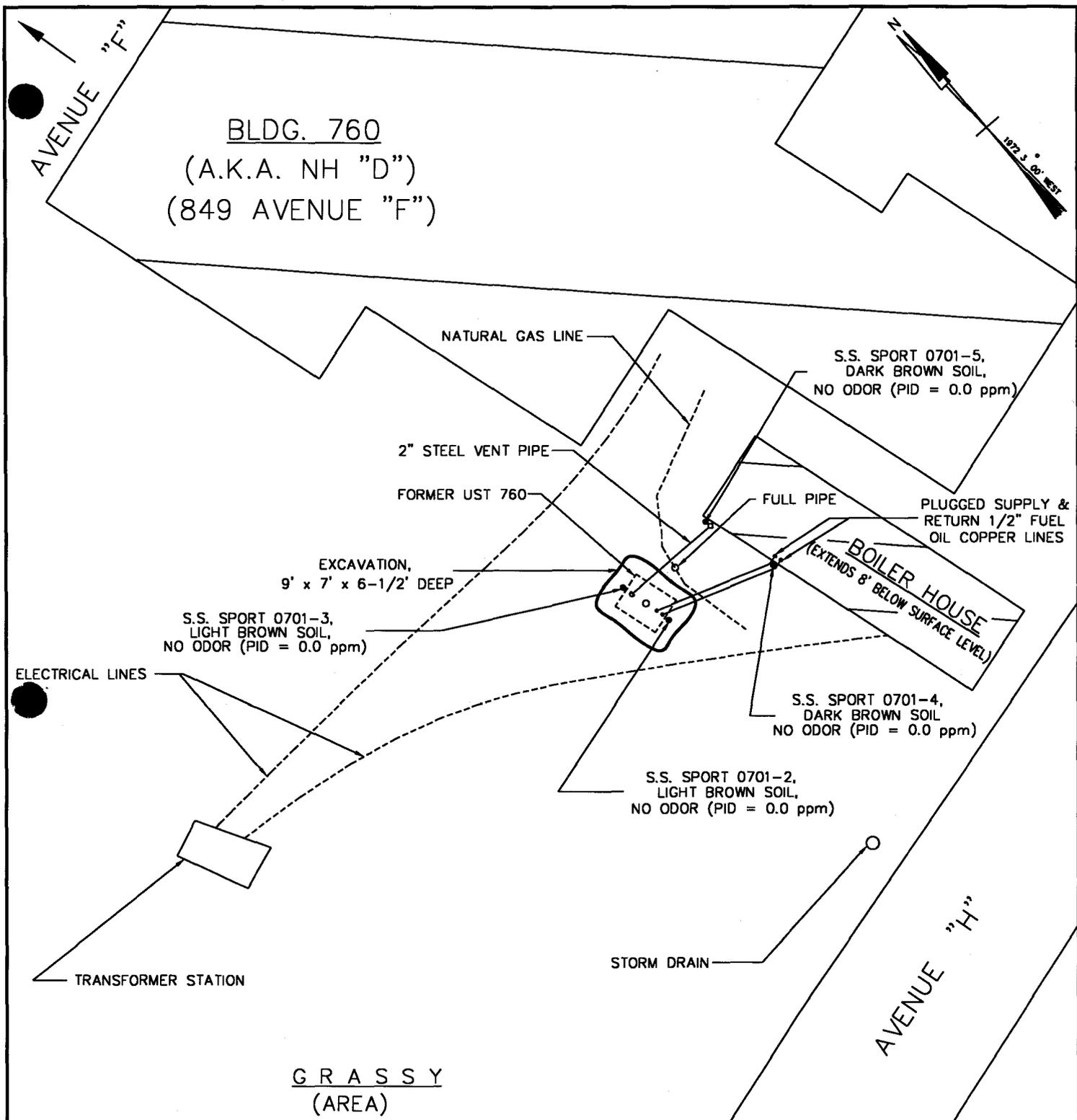
<p>A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system?</p> <p>If yes, indicate type of receptor, distance, and direction on site map.</p>		X
<p>B. Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system?</p> <p>If 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 UST system?</p> <p style="text-align: center;">[basement 13']</p> <p>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 UST system that could potentially come in contact with the contamination?</p> <p style="text-align: center;">[electric, storm drain, &amp; natural gas ]</p> <p>If yes, indicate the type of utility, distance, and direction on the site map.</p>	X	
<p>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?</p> <p>If yes, indicate the area of contaminated soil on the site map.</p>		X

**SITE MAP**

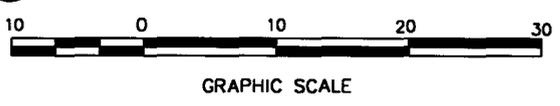
You must supply a scaled site map. It should include all buildings, road names, utilities, tank and pump island locations, sample locations, extent of excavation, and any other pertinent information.

Site Maps 1 and 2  
Photograph 1 and 2





**LEGEND**  
S.S. - SOIL SAMPLE



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

Site Map 2  
UST 760  
Charleston Naval Base  
Charleston, SC

DWG DATE: 9 JUN 98 | DWG NAME: UST760\_2

UST 760



Photo 1: UST 760 excavation site.

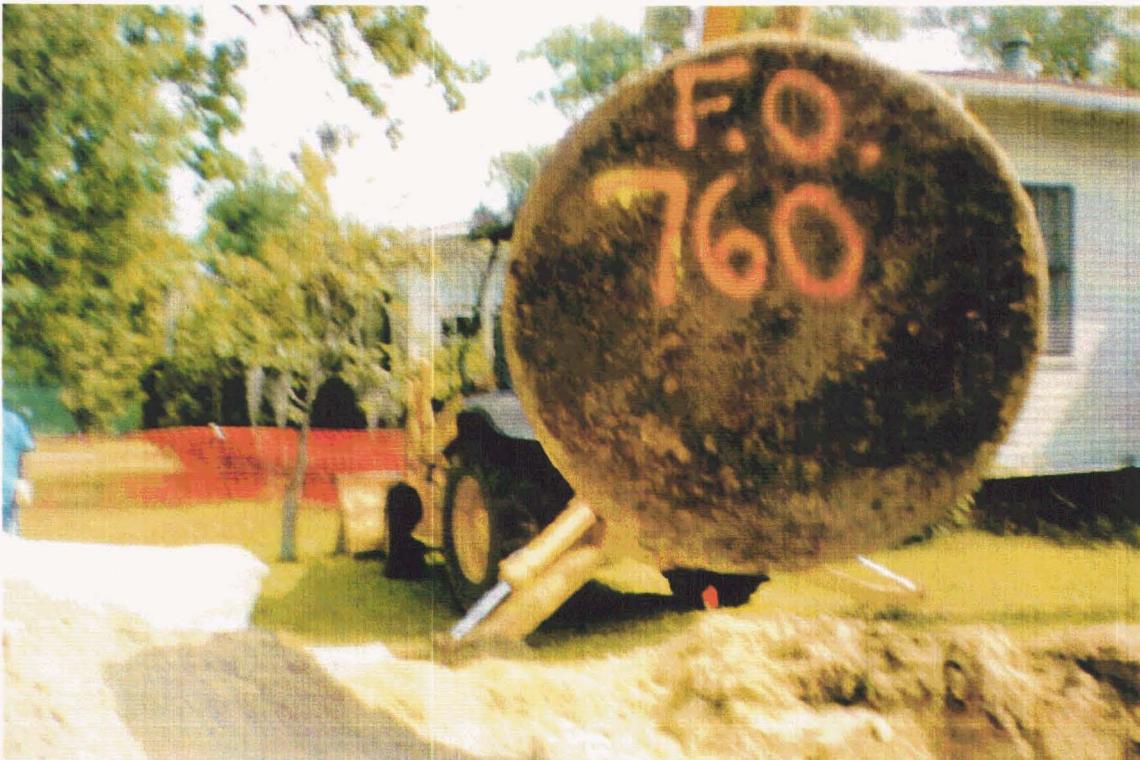


Photo 2: UST 760 being hoisted from the excavation.

**Attachment II**  
**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

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### Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87458
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: June 09, 1998

Page 1 of 2

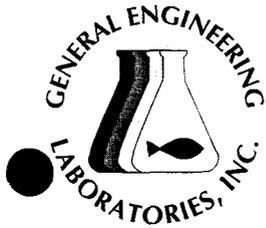
Sample ID : SPORT0701-1  
 Lab ID : 9805831-01  
 Matrix : Soil  
 Date Collected : 05/29/98  
 Date Received : 05/29/98  
 Priority : Routine  
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
<b>Volatile Organics</b>											
<i>BTEX - 4 items</i>											
Benzene	U	0.00	0.250	1.00	ug/kg	1.0	TCL	06/02/98	1540	123272	1
Ethylbenzene	U	0.00	0.230	1.00	ug/kg	1.0					
Toluene	U	0.00	0.220	1.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.00	0.620	2.00	ug/kg	1.0					
Naphthalene	J	0.990	0.420	1.00	ug/kg	1.0					

Surrogate Recovery	Test	Percent%	Acceptable Limits
Bromofluorobenzene	BTEX-8260	86.1	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	71.7	(63.4 - 136.)
Toluene-d8	BTEX-8260	73.9	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	86.1	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	71.7	(63.4 - 136.)
Toluene-d8	NAP-8260	73.9	(72.1 - 137.)

M = Method	Method-Description
M 1	EPA 8260





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Page 2 of 2

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Sample ID : SPORT0701-1

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M = Method	Method-Description
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### Notes:

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

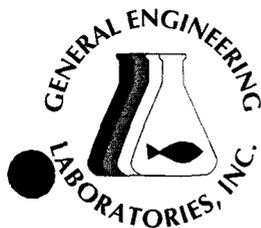
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U indicates that the analyte was not detected at a concentration greater than the detection limit.

\* 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



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SC	10120	10582
TN	02934	02934

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 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

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Page 1 of 2

Sample ID : SPORT0701-2  
 Lab ID : 9805831-02  
 Matrix : Soil  
 Date Collected : 05/29/98  
 Date Received : 05/29/98  
 Priority : Routine  
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
<b>Volatile Organics</b>											
<i>BTEX - 4 items</i>											
Benzene	U	0.00	0.250	1.00	ug/kg	1.0	TCL	06/02/98	1613	123272	1
Ethylbenzene	U	0.00	0.230	1.00	ug/kg	1.0					
Toluene	U	0.00	0.220	1.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.00	0.620	2.00	ug/kg	1.0					
Naphthalene	U	0.00	0.420	1.00	ug/kg	1.0					
<b>Extractable Organics</b>											
<i>Polynuclear Aromatic Hydrocarbons - 16 items</i>											
Acenaphthene	U	0.00	86.6	333	ug/kg	1.0	RLC	06/03/98	1805	123205	2
Acenaphthylene	U	0.00	93.2	333	ug/kg	1.0					
Anthracene	U	0.00	63.3	333	ug/kg	1.0					
Benzo(a)anthracene	U	0.00	59.9	333	ug/kg	1.0					
Benzo(a)pyrene	U	0.00	56.6	333	ug/kg	1.0					
Benzo(b)fluoranthene	U	0.00	103	333	ug/kg	1.0					
Benzo(ghi)perylene	U	0.00	59.9	333	ug/kg	1.0					
Benzo(k)fluoranthene	U	0.00	86.6	333	ug/kg	1.0					
Chrysene	U	0.00	46.6	333	ug/kg	1.0					
Dibenzo(a,h)anthracene	U	0.00	56.6	333	ug/kg	1.0					
Fluoranthene	U	0.00	79.9	333	ug/kg	1.0					
Fluorene	U	0.00	79.9	333	ug/kg	1.0					
Indeno(1,2,3-c,d)pyrene	U	0.00	140	333	ug/kg	1.0					
Naphthalene	U	0.00	76.6	333	ug/kg	1.0					
Phenanthrene	U	0.00	76.6	333	ug/kg	1.0					
Pyrene	U	0.00	63.3	333	ug/kg	1.0					

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

CPU 06/01/98 2050 123205 3

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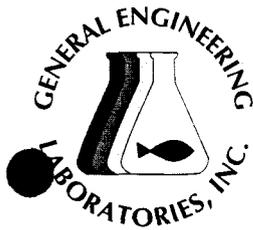
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\*9805831-02\*



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NC	233	
SC	10120	10582
TN	02934	02934

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North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: June 09, 1998

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Sample ID : SPORT0701-2

Surrogate Recovery	Test	Percent%	Acceptable Limits
2-Fluorobiphenyl	M610	64.3	(30.0 - 115.)
Nitrobenzene-d5	M610	61.9	(23.0 - 120.)
p-Terphenyl-d14	M610	93.7	(37.3 - 128.)
Bromofluorobenzene	BTEX-8260	83.6	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	73.2	(63.4 - 136.)
Toluene-d8	BTEX-8260	76.0	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	83.6	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	73.2	(63.4 - 136.)
Toluene-d8	NAP-8260	76.0	(72.1 - 137.)

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

### Notes:

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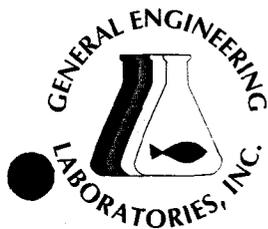
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 North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: June 09, 1998

Page 1 of 2

Sample ID : SPORT0701-3  
 Lab ID : 9805831-03  
 Matrix : Soil  
 Date Collected : 05/29/98  
 Date Received : 05/29/98  
 Priority : Routine  
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
<b>Volatile Organics</b>											
<i>BTEX - 4 items</i>											
Benzene	U	0.00	0.250	1.00	ug/kg	1.0	TCL	06/02/98	1647	123272	1
Ethylbenzene	U	0.00	0.230	1.00	ug/kg	1.0					
Toluene	U	0.00	0.220	1.00	ug/kg	1.0					
Xylenes (TOTAL)	J	0.840	0.620	2.00	ug/kg	1.0					
Naphthalene	U	0.00	0.420	1.00	ug/kg	1.0					
<b>Extractable Organics</b>											
<i>Polynuclear Aromatic Hydrocarbons - 16 items</i>											
Acenaphthene	U	0.00	86.6	333	ug/kg	1.0	RLC	06/03/98	1835	123205	2
Acenaphthylene	U	0.00	93.2	333	ug/kg	1.0					
Anthracene	J	221	63.3	333	ug/kg	1.0					
Benzo(a)anthracene		1920	59.9	333	ug/kg	1.0					
Benzo(a)pyrene		1470	56.6	333	ug/kg	1.0					
Benzo(b)fluoranthene		1640	103	333	ug/kg	1.0					
Benzo(ghi)perylene		568	59.9	333	ug/kg	1.0					
Benzo(k)fluoranthene		1460	86.6	333	ug/kg	1.0					
Chrysene		2000	46.6	333	ug/kg	1.0					
Dibenzo(a,h)anthracene	J	255	56.6	333	ug/kg	1.0					
Fluoranthene		2870	79.9	333	ug/kg	1.0					
Fluorene	U	0.00	79.9	333	ug/kg	1.0					
Indeno(1,2,3-c,d)pyrene		640	140	333	ug/kg	1.0					
Naphthalene	U	0.00	76.6	333	ug/kg	1.0					
Phenanthrene		1190	76.6	333	ug/kg	1.0					
Pyrene		3140	63.3	333	ug/kg	1.0					

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

CPU 06/01/98 2050 123205 3

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

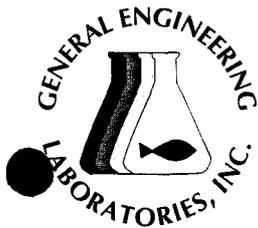
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\*9805831-03\*



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Report Date: June 09, 1998

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Sample ID : SPORT0701-3

Surrogate Recovery	Test	Percent%	Acceptable Limits
2-Fluorobiphenyl	M610	62.5	(30.0 - 115.)
Nitrobenzene-d5	M610	59.5	(23.0 - 120.)
p-Terphenyl-d14	M610	102.	(37.3 - 128.)
Bromofluorobenzene	BTEX-8260	86.6	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	73.6	(63.4 - 136.)
Toluene-d8	BTEX-8260	75.9	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	86.6	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	73.6	(63.4 - 136.)
Toluene-d8	NAP-8260	75.9	(72.1 - 137.)

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

### Notes:

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

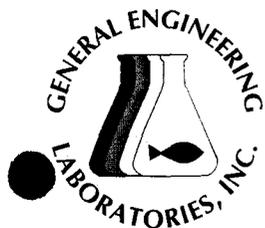
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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: June 09, 1998

Page 1 of 2

Sample ID : SPORT0701-4  
 Lab ID : 9805831-04  
 Matrix : Soil  
 Date Collected : 05/29/98  
 Date Received : 05/29/98  
 Priority : Routine  
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
<b>Volatile Organics</b>											
<i>BTEX - 4 items</i>											
Benzene	U	0.00	0.250	1.00	ug/kg	1.0	TCL	06/05/98	1712	123272	1
Ethylbenzene	U	0.00	0.230	1.00	ug/kg	1.0					
Toluene	U	0.00	0.220	1.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.00	0.620	2.00	ug/kg	1.0					
Naphthalene		2.24	0.420	1.00	ug/kg	1.0					
<b>Extractable Organics</b>											
<i>Polynuclear Aromatic Hydrocarbons - 16 items</i>											
Acenaphthene	U	0.00	86.6	333	ug/kg	1.0	RLC	06/04/98	1054	123205	2
Acenaphthylene	U	0.00	93.2	333	ug/kg	1.0					
Anthracene	U	0.00	63.3	333	ug/kg	1.0					
Benzo(a)anthracene	U	0.00	59.9	333	ug/kg	1.0					
Benzo(a)pyrene	U	0.00	56.6	333	ug/kg	1.0					
Benzo(b)fluoranthene	U	0.00	103	333	ug/kg	1.0					
Benzo(ghi)perylene	U	0.00	59.9	333	ug/kg	1.0					
Benzo(k)fluoranthene	U	0.00	86.6	333	ug/kg	1.0					
Chrysene	U	0.00	46.6	333	ug/kg	1.0					
Dibenzo(a,h)anthracene	U	0.00	56.6	333	ug/kg	1.0					
Fluoranthene	U	0.00	79.9	333	ug/kg	1.0					
Fluorene	U	0.00	79.9	333	ug/kg	1.0					
Indeno(1,2,3-c,d)pyrene	U	0.00	140	333	ug/kg	1.0					
Naphthalene	U	0.00	76.6	333	ug/kg	1.0					
Phenanthrene	U	0.00	76.6	333	ug/kg	1.0					
Pyrene	U	0.00	63.3	333	ug/kg	1.0					

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

CPU 06/01/98 2050 123205 3

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

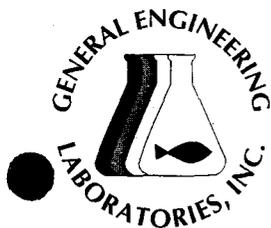
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\*9805831-04\*



# GENERAL ENGINEERING LABORATORIES

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## Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87458
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: June 09, 1998

Page 2 of 2

Sample ID : SPORT0701-4

Surrogate Recovery	Test	Percent %	Acceptable Limits
2-Fluorobiphenyl	M610	55.7	(30.0 - 115.)
Nitrobenzene-d5	M610	51.2	(23.0 - 120.)
p-Terphenyl-d14	M610	75.0	(37.3 - 128.)
Bromofluorobenzene	BTEX-8260	103.	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	87.0	(63.4 - 136.)
Toluene-d8	BTEX-8260	92.8	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	103.	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	87.0	(63.4 - 136.)
Toluene-d8	NAP-8260	92.8	(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).

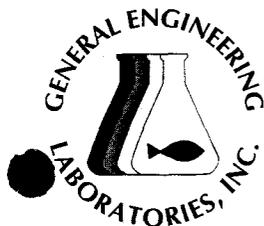
U indicates that the analyte was not detected at a concentration greater than the detection limit.

\* 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.

  
Reviewed By





# GENERAL ENGINEERING LABORATORIES

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## Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87458
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: June 09, 1998

Page 1 of 3

Sample ID : SPORT0701-5  
 Lab ID : 9805831-05  
 Matrix : Soil  
 Date Collected : 05/29/98  
 Date Received : 05/29/98  
 Priority : Routine  
 Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
<b>Volatile Organics</b>											
<i>BTEX - 4 items</i>											
Benzene	U	0.00	0.250	1.00	ug/kg	1.0	TCL	06/02/98	1752	123272	1
Ethylbenzene	U	0.00	0.230	1.00	ug/kg	1.0					
Toluene	U	0.00	0.220	1.00	ug/kg	1.0					
Xylenes (TOTAL)	U	0.00	0.620	2.00	ug/kg	1.0					
Naphthalene	U	0.00	0.420	1.00	ug/kg	1.0					
<b>Extractable Organics</b>											
<i>Polynuclear Aromatic Hydrocarbons - 16 items</i>											
Acenaphthene	U	0.00	173	666	ug/kg	2.0	RLC	06/04/98	1124	123205	2
Acenaphthylene	U	0.00	186	666	ug/kg	2.0					
Anthracene	U	0.00	127	666	ug/kg	2.0					
Benzo(a)anthracene	U	0.00	120	666	ug/kg	2.0					
Benzo(a)pyrene	U	0.00	113	666	ug/kg	2.0					
Benzo(b)fluoranthene	U	0.00	206	666	ug/kg	2.0					
Benzo(ghi)perylene	U	0.00	120	666	ug/kg	2.0					
Benzo(k)fluoranthene	U	0.00	173	666	ug/kg	2.0					
Chrysene	U	0.00	93.2	666	ug/kg	2.0					
Dibenzo(a,h)anthracene	U	0.00	113	666	ug/kg	2.0					
Fluoranthene	U	0.00	160	666	ug/kg	2.0					
Fluorene	U	0.00	160	666	ug/kg	2.0					
Indeno(1,2,3-c,d)pyrene	U	0.00	280	666	ug/kg	2.0					
Naphthalene	U	0.00	153	666	ug/kg	2.0					
Phenanthrene	U	0.00	153	666	ug/kg	2.0					
Pyrene	U	0.00	127	666	ug/kg	2.0					

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

CPU 06/01/98 2050 123205 3

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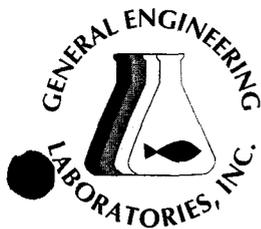
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\*9805831-05\*



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## Laboratory Certifications

STATE	GEL	EPI
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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: June 09, 1998

Page 2 of 3

Sample ID : SPORT0701-5

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	60.9	(30.0 - 115.)
Nitrobenzene-d5	M610	54.0	(23.0 - 120.)
p-Terphenyl-d14	M610	91.7	(37.3 - 128.)
Bromofluorobenzene	BTEX-8260	72.4	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	73.6	(63.4 - 136.)
Toluene-d8	BTEX-8260	77.2	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	72.4	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	73.6	(63.4 - 136.)
Toluene-d8	NAP-8260	77.2	(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:

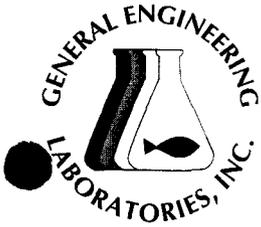
ND indicates that the analyte was not detected at a concentration greater than the detection limit.

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

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## Laboratory Certifications

STATE	GEL	EPI
FL	E87156/87294	E87472/87458
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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: June 09, 1998

Page 3 of 3

---

Sample ID : SPORT0701-5

---

### 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.

Reviewed By





NTWLYPMT

830

General Engineering Laboratories, Inc.  
2040 Savage Road  
Charleston, South Carolina 29407  
P.O. Box 30712  
Charleston, South Carolina 29417  
(803) 556-8171

# CHAIN OF CUSTODY RECORD

9805831

Page 1 of 1

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			
SPORTENU DETCHASN				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/NMP	PAH		Remarks		
Collected by/Company																								
SPORTENU DETCHASN																								
SAMPLE ID	DATE	TIME	WELL	SOIL	COMP	GRAB	# OF CONTAINERS																	
01 SPK70701-1	5/29/98	0800	X	X			1																	
02 SPK70701-2	5/29/98	1025	X	X			2																	
03 SPK70701-3	5/29/98	1030	X	X			2																	
04 SPK70701-4	5/29/98	1035	X	X			2																	
05 SPK70701-5	5/29/98	1040	X	X			2																	
Relinquished by: <i>Randolph Jenkins</i>				Date: 5/29/98	Time: 1300	Received by: <i>Jed E. M... L</i>				Date: 5/29/98	Time: 1550	Received by: <i>Stephanie Beckwith</i>												
Relinquished by: <i>Stephanie Beckwith</i>				Date: 5/29/98	Time: 16:22	Received by lab by: <i>D. ...</i>				Date: 5-25-98	Time: 16:10	Remarks:												

White = sample collector    Yellow = file    Pink = with report

**Attachment III**

Certificate of Disposal (tank)

# UST Certificate of Disposal

## CONTRACTOR

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

Telephone (843) 743-6482

## TANK ID & LOCATION

UST 760; Building 760, 849 Avenue "F", North Charleston SC

---

## DISPOSAL LOCATION

Bldg. 1601 Tank Cleaning  
& Disposal Area  
Charleston Naval Complex

### TYPE OF TANK

Fuel oil

### SIZE (GAL)

1,000 gal

---

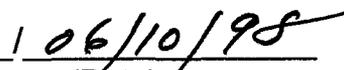
## CLEANING/DISPOSAL METHOD

The tank was cut open on both ends, cleaned with a steam cleaner, 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.

  
Sidney C. Ladson

  
(Date)