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CNC CHARLESTON
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ABOVE GROUND STORAGE TANK (AST) ASSESSMENT REPORT BUILDING 1177 CNC
CHARLESTON SC
09/29/1997
ENVIRONMENTAL DETACHMENT CHARLESTON

Li 3.9.98
LA 3.9.98

RECEIVED

FEB 10 1998

Aboveground Storage Tank (AST) Assessment Report

Date Received
State Use Only

Submit Completed Form to: **Water Monitoring, Assessment & Protection Division**
 SCDHEC
 2600 Bull Street
 Columbia, South Carolina 29201
 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: 803	Telephone Number: 743-9985	Contact Person: LCDR Paul Rose	

II. SITE IDENTIFICATION AND LOCATION

Site I.D. #:	Unregulated	H. 02 01028
Facility Name:	Charleston Naval Base Complex, Building 1177	
Street Address:	Hobson Avenue	
City:	North Charleston, 29405-2413	County: Charleston

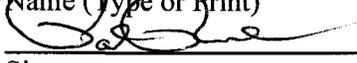
III. CLOSURE INFORMATION

Closure Started: 29 Sept 1997	Closure Completed: 26 Nov 97
Number of ASTs Closed: 1	
N/A Consultant	SPORTENVDETCNASN AST Removal Contractor

V. 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.

LCDR Paul Rose
 Name (Type or Print)


 Signature

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.....

1177	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
Fuel oil					
560 gal					
Unk					
Steel					
Unk					
N					
N					
R					
N					
N					

- L. Method of disposal for any ASTs removed.

AST 1177 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 ASTs.

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

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

AST 1177 was in very good condition. No pitting or holes were found. The only corrosion present was where the tank rested on its foundation.

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.....

1177	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
Copper					
5'					
1 See note 1					
S					
Y					
N					
N					
Unk					

Note 1: AST 1177 provided heating fuel oil to building 1177.

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

The copper tubing supply and return lines for AST 1177 were in good condition and had no corrosion, pitting, or holes.

VII. BRIEF SITE DESCRIPTION AND HISTORY

Building 1177 is known as Fire Station Number 3. The fire station was constructed in 1942 and had been modified on several occasions. While AST 1177's age is not known, documentation states that the berm around the tank was constructed in 1977.

The tank and its associated piping were found in sound condition.

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 0571-3	South end of berm, below drain valve	Soil	15"	18 Nov 97 1035	William Nesbit	38.5 ppm

* = Depth Below the Surrounding Land Surface

X. SAMPLING METHODOLOGY

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

After the removal of AST 1177, a soil sample was taken beneath the cinder block berm's drain valve outlet. Sampling was performed in accordance with SCDHEC R.61-92 Part 280 and SCDHEC 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. The soil sample was extracted from the southern side of the tank berm, below the berm drain valve.

The sample jars 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 sample remained in the custody of SPORTENVDETCHASN until it was transferred to General Engineering Laboratories for analysis as documented in the attached Chain-of-Custody Record.

XI. RECEPTORS

Yes No

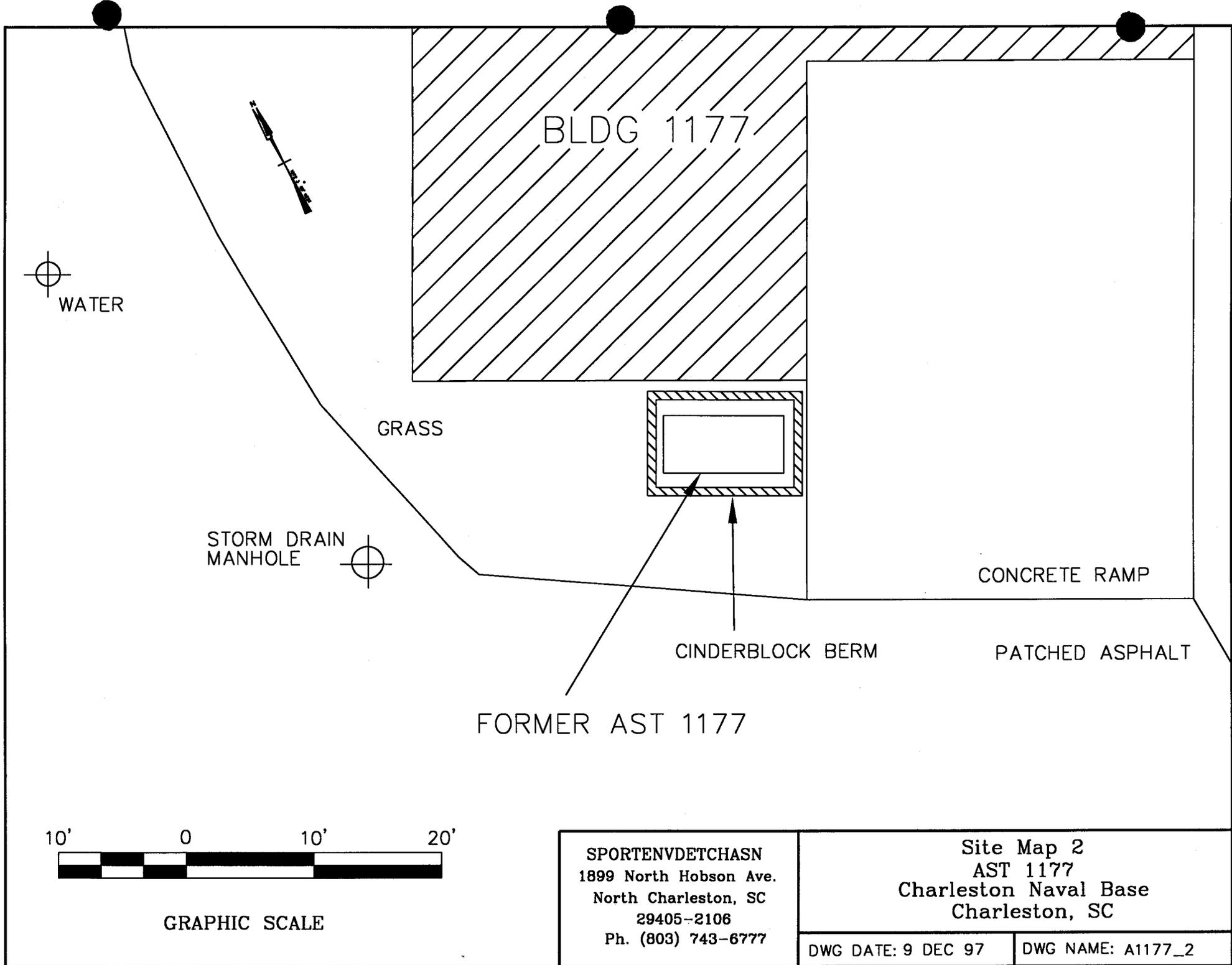
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the AST system?		X
If yes, indicate type of receptor, distance, and direction on site map.			
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the AST system?		X
If yes, indicate type of well, distance, and direction on site map.			
C.	Are there any underground structures (e.g., basements) located within 100 feet of the AST system?		X
If yes, indicate the type of structure, distance, and direction on site map.			
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.		X	
[water, storm drain]			

Attachment I

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 and 2



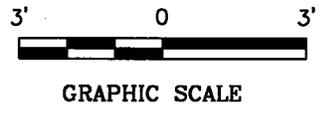
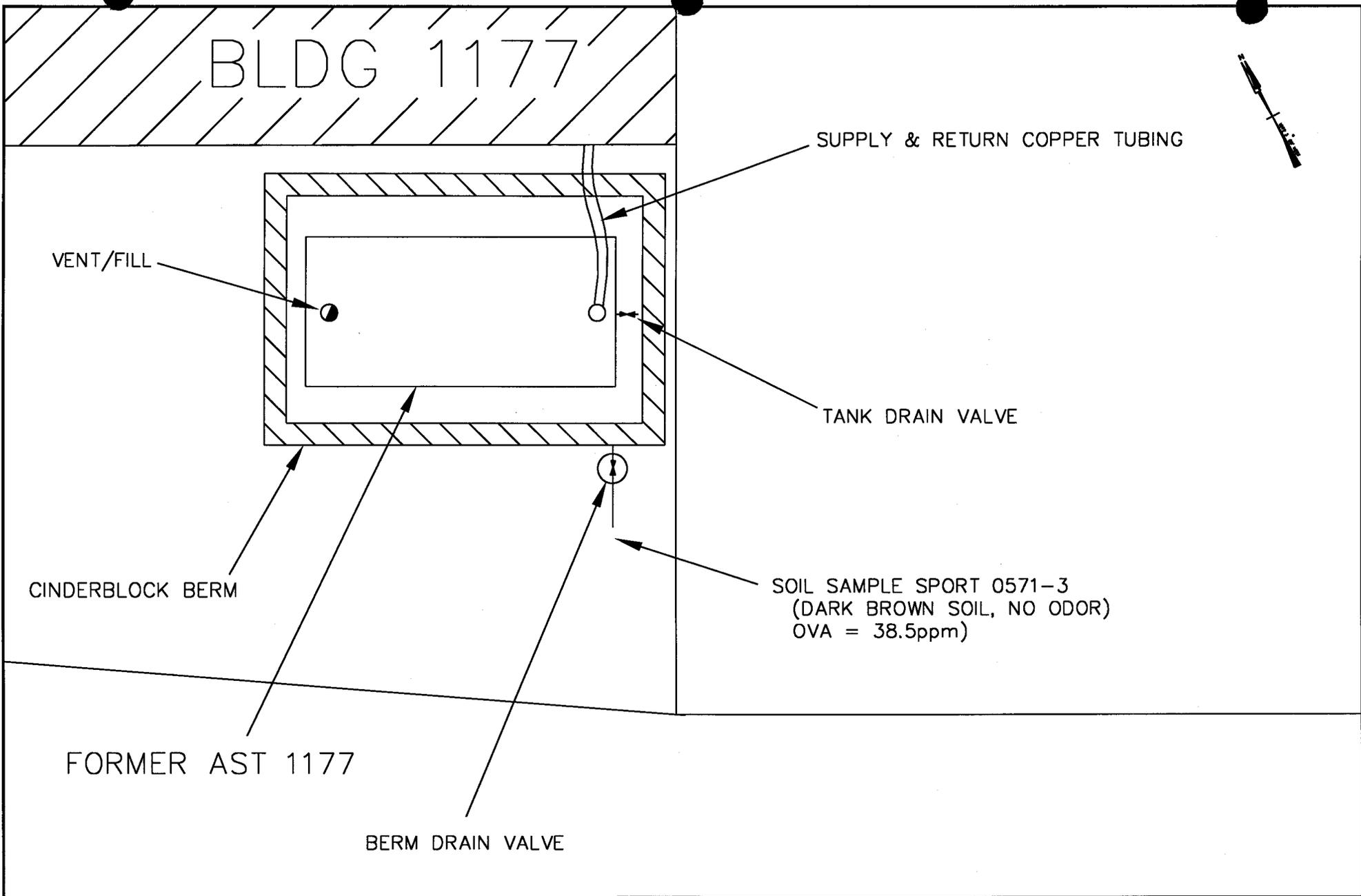
SPORTENVDETCHASN
 1899 North Hobson Ave.
 North Charleston, SC
 29405-2106
 Ph. (803) 743-6777

Site Map 2
 AST 1177
 Charleston Naval Base
 Charleston, SC

DWG DATE: 9 DEC 97

DWG NAME: A1177_2

GRAPHIC SCALE



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

Site Map 3
AST 1177
Charleston Naval Base
Charleston, SC

DWG DATE: 9 DEC 97	DWG NAME: A1177_3
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AST 1177

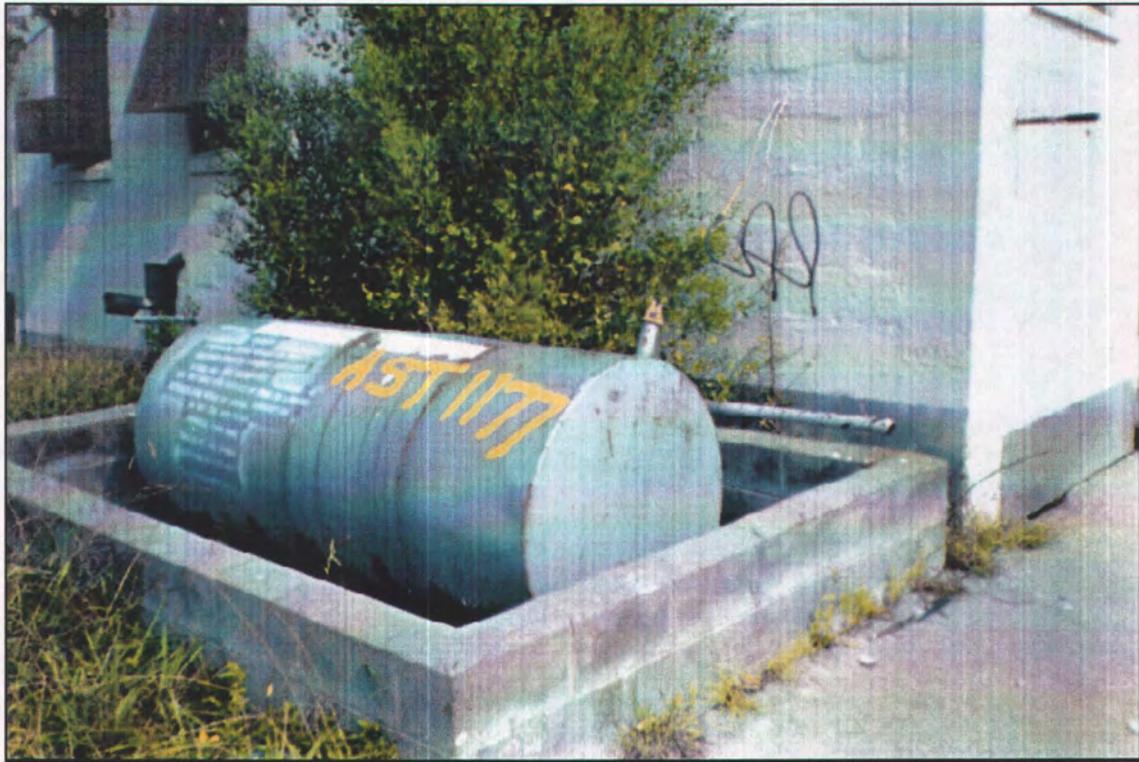


Photo 1: AST 1177 in the berm prior to removal.

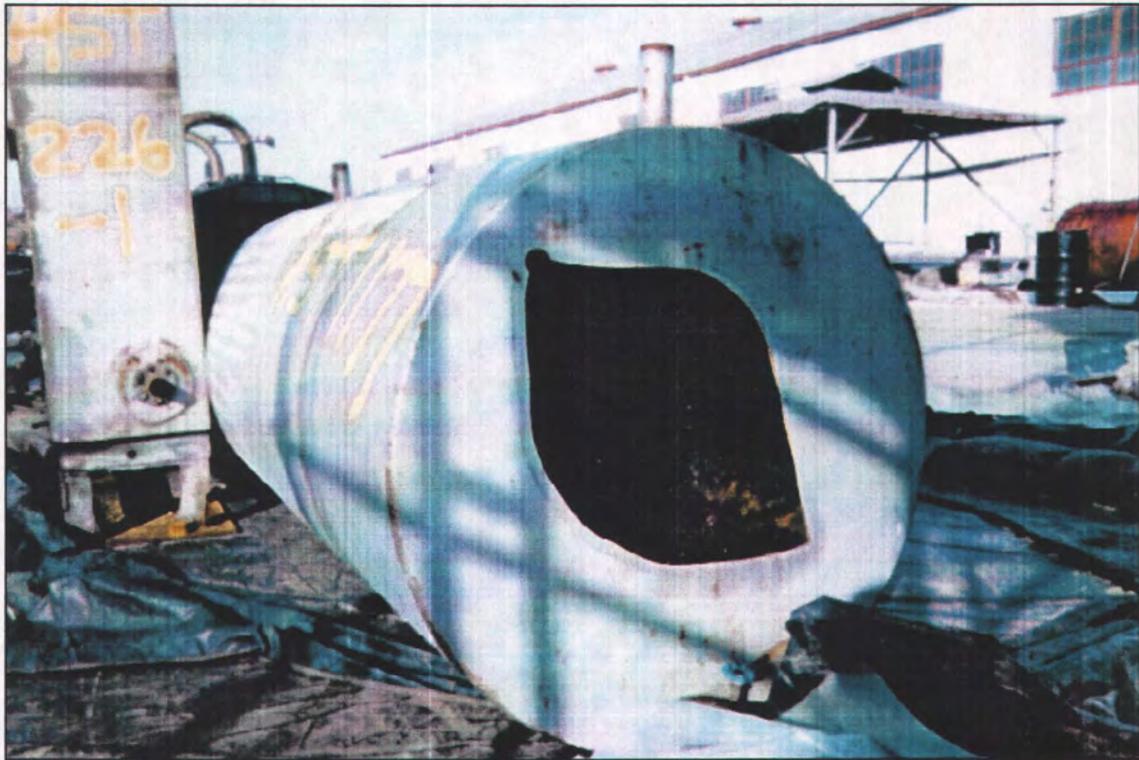
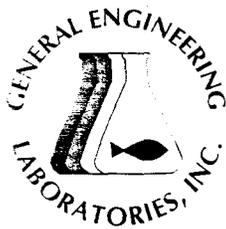


Photo 2: AST 1177 in the cutting pad berm during cutting and cleaning.

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	E87472/874
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: November 26, 1997

Page 1 of 3

Sample ID : SPORT0571-3
 Lab ID : 9711511-03
 Matrix : Soil
 Date Collected : 11/18/97
 Date Received : 11/18/97
 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	JAS	11/25/97	1231	111983	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	654	1310	ug/kg	4.0	WAM	11/24/97	1909	111600	2
Acenaphthylene	U	0.00	654	1310	ug/kg	4.0					
Anthracene	U	0.00	654	1310	ug/kg	4.0					
Benzo(a)anthracene	U	0.00	654	1310	ug/kg	4.0					
Benzo(a)pyrene	U	0.00	654	1310	ug/kg	4.0					
Benzo(b)fluoranthene	U	0.00	654	1310	ug/kg	4.0					
Benzo(ghi)perylene	U	0.00	654	1310	ug/kg	4.0					
Benzo(k)fluoranthene	U	0.00	654	1310	ug/kg	4.0					
Chrysene	U	0.00	654	1310	ug/kg	4.0					
Dibenzo(a,h)anthracene	U	0.00	654	1310	ug/kg	4.0					
Fluoranthene	U	0.00	654	1310	ug/kg	4.0					
Fluorene	U	0.00	654	1310	ug/kg	4.0					
Indeno(1,2,3-c,d)pyrene	U	0.00	654	1310	ug/kg	4.0					
Naphthalene	U	0.00	654	1310	ug/kg	4.0					
Phenanthrene	U	0.00	654	1310	ug/kg	4.0					
Pyrene	U	0.00	654	1310	ug/kg	4.0					

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

GWL 11/19/97 2345 111600 3

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

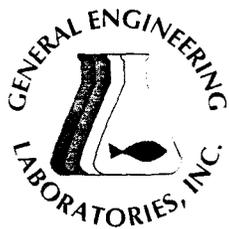
(803) 556-8171 • Fax (803) 766-1178



Printed on recycled paper.



9711511-03



GENERAL ENGINEERING LABORATORIES

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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: November 26, 1997

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Sample ID : SPORT0571-3

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

Volatile Organics contained matrix interferences.

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	55.8	(30.0 - 115.)
Nitrobenzene-d5	M610	48.8	(23.0 - 120.)
p-Terphenyl-d14	M610	60.3	(37.3 - 128.)
Bromofluorobenzene	BTEX-8260	157.*	(53.5 - 154.)
Dibromofluoromethane	BTEX-8260	98.1	(63.4 - 136.)
Toluene-d8	BTEX-8260	147.*	(72.1 - 137.)
Bromofluorobenzene	NAP-8260	157.*	(53.5 - 154.)
Dibromofluoromethane	NAP-8260	98.1	(63.4 - 136.)
Toluene-d8	NAP-8260	147.*	(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	E87472/874
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cc: NPWC00197

Report Date: November 26, 1997

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Sample ID : SPORT0571-3

M = Method

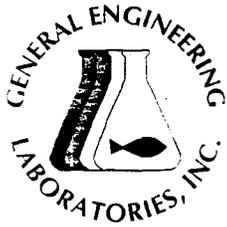
Method-Description

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







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: November 26, 1997

Page 2 of 2

Sample ID : SPORT0571-4

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

Karen Blakeney

CHAIN OF CUSTODY RECORD

9711511

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							
SPORTENVDETCHASN		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/NAF	PAH	Remarks	
SAMPLE ID	DATE																		TIME	WELL
-01 SPORT0571-1	11/18/97	1000	X	X														X	X	AST 590A .1
-02 SPORT0571-2	11/18/97	1115	X	X														X	X	AST 1136 .1
-03 SPORT0571-3	11/18/97	1035	X	X														X	X	AST 1177 .1
-04 SPORT0571-4	11/18/97	0910	X	X														X		Soil TRIP Blank .2
Relinquished by:		Date:	Time:	Received by:		Relinquished by:		Date:	Time:	Received by:		Remarks:								
Cath		11/18/97	1455	Dorian Washington		Dorian Washington		11/18/97	1437	Catherine										
Cath		11/18/97	1455	Karen Blaken		Karen Blaken		11/18/97	1455											

Attachment III

Certificate of Disposal (tank)

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 1177; Charleston Naval Base, Bldg 1177, Hobson Ave., N. Chas, SC 29405

DISPOSAL LOCATION

Bldg. 1601 Tank Cleaning
& Disposal Area
Charleston Naval Complex

TYPE OF TANK

Fuel oil

SIZE (GAL)

560 gal.

CLEANING/DISPOSAL METHOD

The tank was cut open on both ends, 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.


Sidney C. Ladson

1 (12-03-97)
(Date)