N61165.AR.005692
CNC CHARLESTON
5090.3a

UNDERGROUND STORAGE TANK (UST) ASSESSMENT REPORT FOR UST NS-200 CNC CHARLESTON SC

09/03/1996

ENVIRONMENTAL DETACHMENT CHARLESTON

L: 10.25.94
Lo 11.12.94
TLW

UST ASSESSMENT REPORT
UST NS 200
NAVAL BASE CHARLESTON
CHARLESTON SC

17624

Prepared for:

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON SC

Prepared by:

SUPERVISOR OF SHIPBUILDING, CONVERSION
AND REPAIR, USN, PORTSMOUTH DETACHMENT
ENVIROMENTAL CHARLESTON, SC
1899 NORTH HOBSON AVE.
NORTH CHARLESTON SC 29405-2106

September 3, 1996

RECEIVED
OCT 2 1996
Groundwater Protection
Division

South Carolina Department of Health and Environmental Control (S.C.D.H.E.C.)
Underground Storage Tank (UST) Assessment Report

Date Received
State Use Only

Submit Completed Form to:
UST Regulatory Section
SCDHEC
2600 Bull Street
Columbia, South Carolina 29201
Telephone (803) 734-5331

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: 803 Telephone Number: 743-9985 Contact Person: LCDR Paul Rose

II SITE IDENTIFICATION AND LOCATION

Site I.D. #: N/A Unregulated

Facility Name: NOAA Coastal Service Center, CSC 2 (Charleston Naval Base, NS 200)

Street Address: 2224 South Hobson Avenue

City: North Charleston, 29405-2413 County: Charleston

III CLOSURE INFORMATION

Closure Started: 16 April 1996 Closure Completed: 29 April 1996

Number of USTs Closed: 1

N/A
Consultant

SPORTENVDETCHASN
UST Removal Contractor

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

I certify that I have personally examined and am familiar with the information submitted in this and all attached documents; and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate and complete.

PAUL M. ROSE
Name (Type or Print)

Signature

RECEIVED
OCT 2 1996
Groundwater Protection Division

V. UST INFORMATION

		Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
A.	Product.....	Fuel Oil					
B.	Capacity.....	1,000 gal.					
C.	Age.....	1953					
D.	Construction Material.....	Steel					
E.	Month/Year of Last Use.....	Unknown					
F.	Depth (ft.) To Base of Tank.....	6.0 feet					
G.	Spill Prevention Equipment Y/N.....	N					
H.	Overfill Prevention Equipment Y/N.....	N					
I.	Method of Closure Removed/Filled.....	R					
J.	Visible Corrosion or Pitting Y/N.....	N					
K.	Visible Holes Y/N.....	N					

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

The UST was removed, drained, and cleaned. It was then cut up for recycling as scrap (see Attachment III). Asphalt and concrete removed during excavation were disposed of as construction debris.

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

Residual petroleum/sludge, approximately three inches deep, was pumped into one 55 gallon drum and disposed of by Tri-State Steel Drum, Inc.; P.O. Box 9; Graysville, GA 30726. See Attachment III, manifest number 13101, paragraph 28b.

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

The UST at NS 200 was intact. Inspection of its exterior surfaces revealed no holes or leaks.

VI. PIPING INFORMATION

	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
A. Construction Material.....	Copper					
B. Distance from UST to Dispenser...(Bldg NS200)..	11'					
C. Number of Dispensers....(Bldg NS 200).....	1					
D. Type of System P/S.....	S					
E. Was Piping Removed from the Ground? Y/N....	N					
F. Visible Corrosion or Pitting Y/N.....	N					
G. Visible Holes Y/N.....	N					
H. Age.....	1953					

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

The UST at NS 200 utilized two 5/8" copper lines, one for supply and one for return, running through a 3" cast iron pipe as a protective sleeve into building NS 200. The exposed sections of both copper lines were in good condition and contained no holes or pits. Because the lines run under 11' of asphalt and enter Bldg NS 200's furnace room, they were not removed. Each line passed an air drop test of 20 psi for fifteen minutes. The lines were rinsed, capped, and left in the ground.

A buried, abandoned ventilation line was found attached to the UST. The line was open to the subsurface; therefore, when the tank was filled (topped-off) a portion of the fuel oil discharged into the soil. This is the probable source of contaminated soil that was found throughout the excavation from 18" to the bottom as well as the 2'x2'x1" deep puddle of free product that was found at the bottom of the excavation pit. See Site Map 2.

VII. BRIEF SITE DESCRIPTION AND HISTORY

The UST at NS 200 is located at the ex-Charleston Naval Base in Charleston, South Carolina. Building NS 200 functioned as the Fleet Training Center but now serves as the headquarters for the National Oceanographic Atmospheric Administration Coastal Service Center. NOAA has renamed NS 200 as CSC Building 2.

NS 200 is a two story, cream colored, stuccoed office building set in a row with several red brick office buildings on the banks of the Cooper River. The UST site is in the asphalt paved parking lot on the right-hand side of NS 200, adjacent to the watch tower that dominates the skyline.

The UST at NS 200 was an unregulated underground storage tank for heating fuel oil. The fuel was consumed on the premises. A water tower, now non-existent, stood directly above the UST.

VIII. SITE CONDITIONS

		Yes	No	Unk
A.	Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitoring wells? If yes, indicate depth and location on the site map.	X		
B.	Were any petroleum odors detected in the excavation, soil borings, trenches, or monitoring wells? If yes, indicate location on site map and describe the odor (strong, mild, etc.)	X		
C.	Was water present in the UST excavation, soil borings, or trenches? If yes, how far below land surface (indicate location and depth)? 5' below land surface, less than 1" deep.	X		
D.	Did contaminated soils remain stockpiled on site after closure? If yes, indicate the stockpile location on the site map. Name of DHEC representative authorizing soil removal: See Note 1.	X		
E.	Was a petroleum sheen or free product detected on any excavation or boring waters? If yes, indicate location and thickness.	X		

Note 1: The contaminated soil is located at Bldg 1601. Per conversation with DHEC, Mr. Tim Mettlen, and SouthDiv, Mr. Gabriel Magwood, the entire naval complex is considered the site.

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#
NS200-1.	Bottom of pit near tower end of tank.	Soil	5'	4/17/96 @ 2:20PM	Bruce Murray	186 ppm
NS200-2.	Bottom of pit underneath tank.	Soil	5'	4/17/96 @ 2:40PM	Bruce Murray	30ppm
NS200-3.	Bottom of pit near river end of tank.	Soil	5'	4/17/96 @ 2:30PM	Bruce Murray	26 ppm
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						

* = Depth Below the Surrounding Land Surface

X. SAMPLING METHODOLOGY

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

After the removal of the UST, soil samples NS 200-1, NS 200-2, and NS 200-3 were taken from the bottom of the excavation from native soils at a depth of five feet below land surface as shown in Site Map Number 2. Sampling was performed in accordance with SC DHEC R.61-92 Part 280 and SC DHEC UST Assessment Guidelines.

The soil samples are identified as follows:

NS 200-1 = SPORT - 0009-1
NS 200-2 = SPORT - 0009-2
NS 200-3 = SPORT - 0009-3

Eight ounce glass jars used for the soil samples 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 NS 200-1 and NS 200-3 were extracted where the ends of the tank had rested; sample NS 200-2 was taken from the side of the pit wall below an open abandoned vent line.

The samples were marked, logged, and immediately placed in coolers packed with ice to maintain an approximate temperature of 4° C.

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

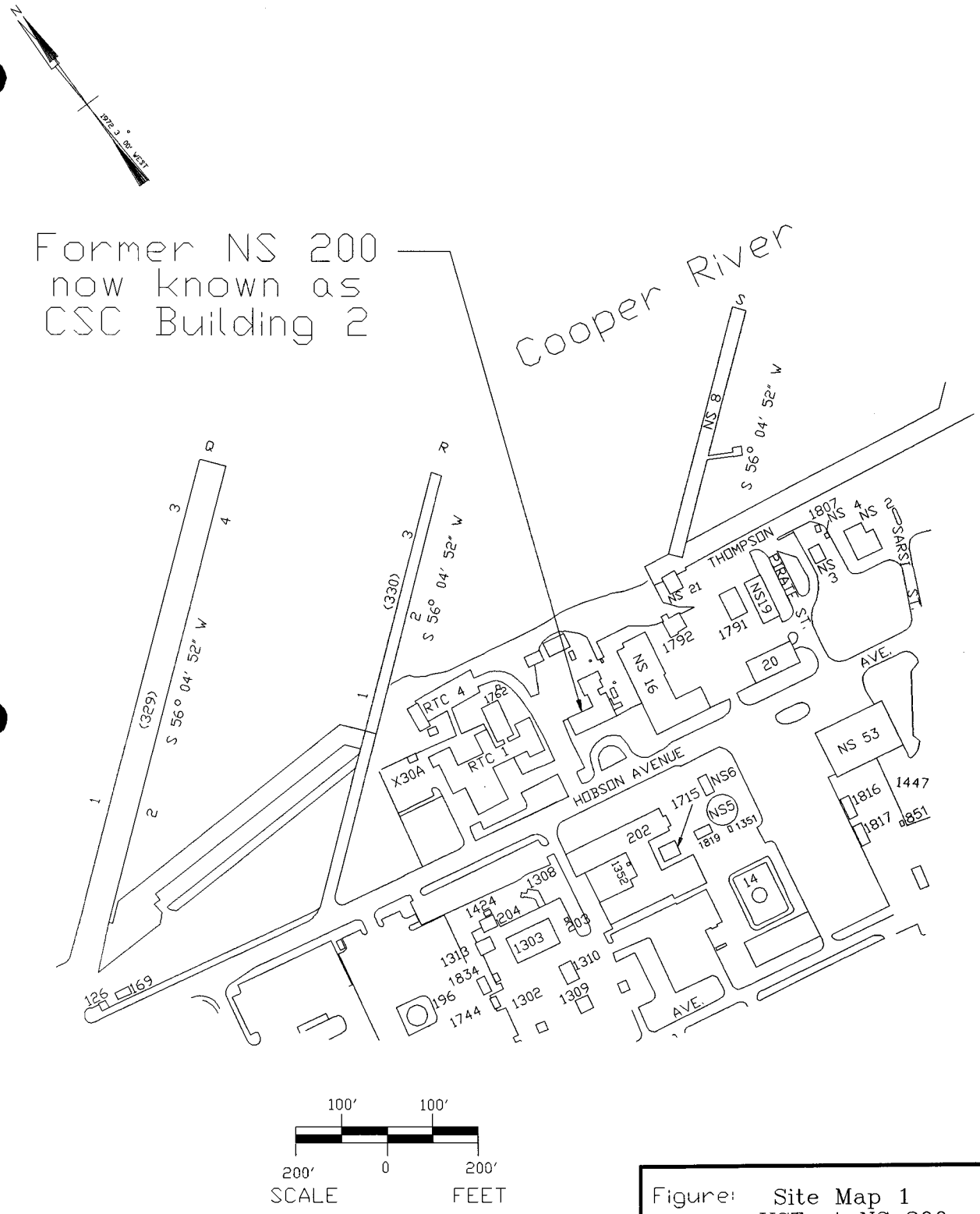
		Yes	No
A.	Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the UST system? [*the Cooper River] If yes, indicate type of receptor, distance, and direction on site map.	X*	
B.	Are there any public, private, or irrigation water supply wells within 1000 feet of the UST system? If yes, indicate type of well, distance, and direction on site map.		X
C.	Are there any underground structures (e.g., basements) located within 100 feet of the UST system? [*sewer & deactivated oil/water separator] If yes, indicate the type of structure, distance, and direction on site map.	X*	
D.	Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the UST system that could potentially come in contact with the contamination? [*telephone & sewer] If yes, indicate the type of utility, distance, and direction on the site map.	X*	
E.	Has contaminated soil been identified at a depth of less than 3 feet below land surface in an area that is not capped by asphalt or concrete? If yes, indicate the area of contaminated soil on the site map.	X	

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.
No photographs are available because the film was underexposed.



100′ 100′

200′ 0 200′

SCALE FEET

Figure: Site Map 1
UST at NS 200
Charleston Naval Base
Charleston, SC

SPORTENVDETCHASN
1899 North Hobson Avenue
North Charleston, SC 29405-2106

DWG DATE: 20 May 96

DWG NAME: ANS200_1

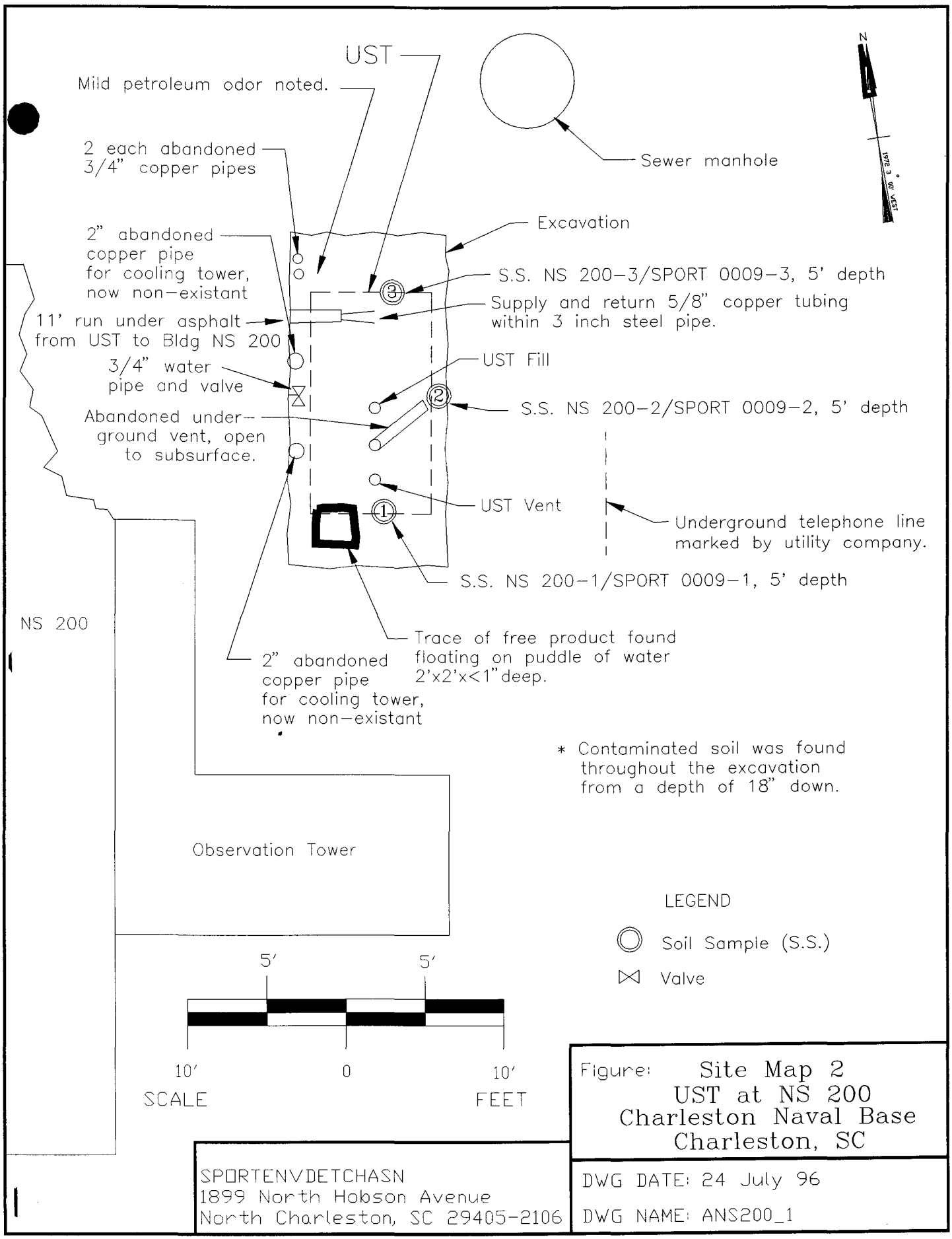


Figure: Site Map 2
UST at NS 200
Charleston Naval Base
Charleston, SC

SPORTENVDETCHASN
1899 North Hobson Avenue
North Charleston, SC 29405-2106

DWG DATE: 24 July 96

DWG NAME: ANS200_1

200

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CERTIFICATE OF ANALYSIS

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: NPWC00196 Report Date: April 26, 1996

Sample ID	: SPORT-0009-1
Lab ID	: 9604369-01
Matrix	: Soil
Date Collected	: 04/17/96
Date Received	: 04/18/96
Priority	: Routine
Collector	: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
BTEX - 4 items											
Benzene	U	0.00	10.0	20.0	ug/kg	10.	RLC	04/23/96	1547	83765	1
Ethylbenzene		31.7	10.0	20.0	ug/kg	10.					
Toluene	U	0.00	10.0	20.0	ug/kg	10.					
Xylenes (TOTAL)		126	10.0	20.0	ug/kg	10.					
Naphthalene		1710	10.0	20.0	ug/kg	10.					
Extractable Organics											
Polynuclear Aromatic Hydrocarbons - 16 items											
Acenaphthene	U	0.00	6600	13200	ug/kg	40.	BDG	04/24/96	1535	83668	2
Acenaphthylene	U	0.00	6600	13200	ug/kg	40.					
Anthracene	U	0.00	6600	13200	ug/kg	40.					
Benzo(a)anthracene	U	0.00	6600	13200	ug/kg	40.					
Benzo(a)pyrene	U	0.00	6600	13200	ug/kg	40.					
Benzo(b)fluoranthene	U	0.00	6600	13200	ug/kg	40.					
Benzo(ghi)perylene	U	0.00	6600	13200	ug/kg	40.					
Benzo(k)fluoranthene	U	0.00	6600	13200	ug/kg	40.					
Chrysene	U	0.00	6600	13200	ug/kg	40.					
Dibenzo(a,h)anthracene	U	0.00	6600	13200	ug/kg	40.					
Fluoranthene	U	0.00	6600	13200	ug/kg	40.					
Fluorene	U	0.00	6600	13200	ug/kg	40.					
Indeno(1,2,3-c,d)pyrene	U	0.00	6600	13200	ug/kg	40.					
Naphthalene	U	0.00	6600	13200	ug/kg	40.					
Phenanthrene	U	0.00	6600	13200	ug/kg	40.					
Pyrene	U	0.00	6600	13200	ug/kg	40.					
Metals Analysis											
Mercury	J	0.0202	0.00148	0.200	mg/kg	1.0	RMJ	04/24/96	1347	83673	N
Silver	U	-138	122	500	ug/kg	1.0	NRM	04/24/96	0041	83623	3
Arsenic		3760	91.1	500	ug/kg	1.0					

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North Charleston, South Carolina 29405-2106
Contact: Mr. Bill Hiers
Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196 Report Date: April 26, 1996

Sample ID : SPORT-0009-1

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Barium		6490	3.25	500	ug/kg	1.0					
Cadmium		381	4.75	250	ug/kg	1.0	NRM	04/24/96	0041	83623	3
Chromium		27100	29.2	500	ug/kg	1.0					
Lead		2630	55.4	250	ug/kg	1.0					
Selenium		1110	70.1	250	ug/kg	1.0					
General Chemistry											
Total Rec. Petro. Hydrocarbons		5250	10.0	50.0	mg/kg	1.0	TSM	04/22/96	0845	83590	4

The following prep procedures were performed:

GC/MS Base/Neutral Compounds	TMK	04/22/96	1330	83668	5
Mercury	RMJ	04/22/96	1400	83673	6
TRACE	DVW	04/19/96	1950	83623	7

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.)
Nitrobenzene-d5	M610	0.00*	(23.0 - 120.)
p-Terphenyl-d14	M610	0.00*	(37.3 - 128.)
Bromofluorobenzene	BTEX-8260	116.	(59.7 - 159.)
Dibromofluoromethane	BTEX-8260	107.	(74.0 - 128.)
Toluene-d8	BTEX-8260	115.	(53.4 - 163.)
Bromofluorobenzene	NAP-8260	116.	(59.7 - 159.)
Dibromofluoromethane	NAP-8260	107.	(74.0 - 128.)
Toluene-d8	NAP-8260	115.	(53.4 - 163.)

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

cc: NPWC00196 Report Date: April 26, 1996

Sample ID : SPORT-0009-1

M = Method	Method-Description
M 1	EPA 8260
M 2	EPA 8270
M 3	EPA 6010A
M 4	EPA 9071
M 5	EPA 3550
M 6	EPA 7471
M 7	EPA 3050

Notes:
The qualifiers in this report are defined as follows:
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.
* indicate that a quality control analyte recovery is outside of specified acceptance criteria.

GEL Laboratory Certifications		EPI Laboratory Certifications	
AL - 41040	AZ - AZ0514	AL - 41050	AZ - AZ0514
CA - 2089	CT - PH-0169	CA - I-1023/2056	CT - PH-0175
DE - SC012	FL - E87156/87294	FL - E87472/87458	MS - 29417
ME - SC012	MS - 10120	NY - 11502	RI - 138
NC - 233	NY - 11501	SC - 10582	TN - 02934
RI - 135	SC - 10120	UT - E-227	VA - 00111
TN - 02934	UT - E-251	WA - C225	NJ - 79002

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North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196 Report Date: April 26, 1996

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

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DE - SC012	FL - E87156/87294	FL - E87472/87458	MS - 29417
ME - SC012	MS - 10120	NY - 11502	RI - 138
NC - 233	NY - 11501	SC - 10582	TN - 02934
RI - 135	SC - 10120	UT - E-227	VA - 00111
TN - 02934	UT - E-251	WA - C225	NJ - 79002

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

cc: NPWC00196 Report Date: April 26, 1996

Sample ID : SPORT-0009-1

GEL Laboratory Certifications		EPI Laboratory Certifications	
VA - 00151	WA - C223	PA - 68-485	WV - 235
WI - 999887790			

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.

Analytical Report Specialist

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1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106
Contact: Mr. Bill Hiers
Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196 Report Date: April 26, 1996

Sample ID	: SPORT-0009-2
Lab ID	: 9604369-02
Matrix	: Soil
Date Collected	: 04/17/96
Date Received	: 04/18/96
Priority	: Routine
Collector	: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
BTEX - 4 items											
Benzene	U	0.00	10.0	20.0	ug/kg	10.	RLC	04/23/96	1619	83765	1
Ethylbenzene	U	0.00	10.0	20.0	ug/kg	10.					
Toluene	U	0.00	10.0	20.0	ug/kg	10.					
Xylenes (TOTAL)		23.9	10.0	20.0	ug/kg	10.					
Naphthalene		394	10.0	20.0	ug/kg	10.					
Extractable Organics											
Polynuclear Aromatic Hydrocarbons - 16 items											
Acenaphthene	U	0.00	164	330	ug/kg	1.0	BDG	04/24/96	1715	83668	2
Acenaphthylene	U	0.00	164	330	ug/kg	1.0					
Anthracene	U	0.00	164	330	ug/kg	1.0					
Benzo(a)anthracene	U	0.00	164	330	ug/kg	1.0					
Benzo(a)pyrene	U	0.00	164	330	ug/kg	1.0					
Benzo(b)fluoranthene	U	0.00	164	330	ug/kg	1.0					
Benzo(ghi)perylene	U	0.00	164	330	ug/kg	1.0					
Benzo(k)fluoranthene	U	0.00	164	330	ug/kg	1.0					
Chrysene	U	0.00	164	330	ug/kg	1.0					
Dibenzo(a,h)anthracene	U	0.00	164	330	ug/kg	1.0					
Fluoranthene	U	0.00	164	330	ug/kg	1.0					
Fluorene	U	0.00	164	330	ug/kg	1.0					
Indeno(1,2,3-c,d)pyrene	U	0.00	164	330	ug/kg	1.0					
Naphthalene	U	0.00	164	330	ug/kg	1.0					
Phenanthrene	U	0.00	164	330	ug/kg	1.0					
Pyrene	U	0.00	164	330	ug/kg	1.0					
Metals Analysis											
Mercury	J	0.0642	0.00148	0.200	mg/kg	1.0	RMJ	04/24/96	1349	83673	N
Silver	U	-196	122	500	ug/kg	1.0	NRM	04/24/96	0046	83623	3
Arsenic		4680	91.1	500	ug/kg	1.0					

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SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106
Contact: Mr. Bill Hiers
Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196 Report Date: April 26, 1996

Sample ID : SPORT-0009-2

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Barium		13300	3.25	500	ug/kg	1.0					
Cadmium		18300	4.75	250	ug/kg	1.0	NRM	04/24/96	0046	83623	3
Chromium		31300	29.2	500	ug/kg	1.0					
Lead		8770	55.4	250	ug/kg	1.0					
Selenium		1220	70.1	250	ug/kg	1.0					
General Chemistry											
Total Rec. Petro. Hydrocarbons		210	10.0	50.0	mg/kg	1.0	TSM	04/22/96	0845	83590	4

The following prep procedures were performed:

GC/MS Base/Neutral Compounds	TMK	04/22/96	1330	83668	5
Mercury	RMJ	04/22/96	1400	83673	6
TRACE	DVW	04/19/96	1950	83623	7

Surrogate Recovery	Test	Percent%	Acceptable Limits
2-Fluorobiphenyl	M610	98.2	(30.0 - 115.)
Nitrobenzene-d5	M610	90.2	(23.0 - 120.)
p-Terphenyl-d14	M610	74.0	(37.3 - 128.)
Bromofluorobenzene	BTEX-8260	101.	(59.7 - 159.)
Dibromofluoromethane	BTEX-8260	105.	(74.0 - 128.)
Toluene-d8	BTEX-8260	101.	(53.4 - 163.)
Bromofluorobenzene	NAP-8260	101.	(59.7 - 159.)
Dibromofluoromethane	NAP-8260	105.	(74.0 - 128.)
Toluene-d8	NAP-8260	101.	(53.4 - 163.)

M = Method	Method-Description
M 1	EPA 8260
M 2	EPA 8270
M 3	EPA 6010A
M 4	EPA 9071
M 5	EPA 3550

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GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow.

CERTIFICATE OF ANALYSIS

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: NPWC00196 Report Date: April 26, 1996

Sample ID : SPORT-0009-2

M = Method	Method-Description
M 6	EPA 7471
M 7	EPA 3050

Notes:
The qualifiers in this report are defined as follows:
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.
* indicate that a quality control analyte recovery is outside of specified acceptance criteria.

GEL Laboratory Certifications		EPI Laboratory Certifications	
AL - 41040	AZ - AZ0514	AL - 41050	AZ - AZ0514
CA - 2089	CT - PH-0169	CA - I-1023/2056	CT - PH-0175
DE - SC012	FL - E87156/87294	FL - E87472/87458	MS - 29417
ME - SC012	MS - 10120	NY - 11502	RI - 138
NC - 233	NY - 11501	SC - 10582	TN - 02934
RI - 135	SC - 10120	UT - E-227	VA - 00111
TN - 02934	UT - E-251	WA - C225	NJ - 79002
VA - 00151	WA - C223	PA - 68-485	WV - 235
WI - 999887790			

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

cc: NPWC00196 Report Date: April 26, 1996

Sample ID : SPORT-0009-2

GEL Laboratory Certifications **EPI Laboratory Certifications**

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.

Analytical Report Specialist

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1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106
Contact: Mr. Bill Hiers
Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196 Report Date: April 26, 1996

Sample ID	: SPORT-0009-3
Lab ID	: 9604369-03
Matrix	: Soil
Date Collected	: 04/17/96
Date Received	: 04/18/96
Priority	: Routine
Collector	: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
BTEX - 4 items											
Benzene	U	0.00	1.00	2.00	ug/kg	1.0	RLC	04/23/96	1649	83765	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		7.05	1.00	2.00	ug/kg	1.0					
Extractable Organics											
Polynuclear Aromatic Hydrocarbons - 16 items											
Acenaphthene	U	0.00	165	330	ug/kg	1.0	BDG	04/24/96	1748	83668	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					
Metals Analysis											
Mercury	J	0.0303	0.00148	0.200	mg/kg	1.0	RMJ	04/24/96	1352	83673	N
Silver	U	-125	121	500	ug/kg	1.0	NRM	04/24/96	0050	83623	3
Arsenic		2310	90.2	500	ug/kg	1.0					

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North Charleston, South Carolina 29405-2106
Contact: Mr. Bill Hiers
Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00196 Report Date: April 26, 1996

Sample ID : SPORT-0009-3

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Barium		11500	3.22	500	ug/kg	1.0					
Cadmium		367	4.70	250	ug/kg	1.0	NRM	04/24/96	0050	83623	3
Chromium		26200	28.9	500	ug/kg	1.0					
Lead		8900	54.8	250	ug/kg	1.0					
Selenium		876	69.4	250	ug/kg	1.0					
General Chemistry											
Total Rec. Petro. Hydrocarbons		180	10.0	50.0	mg/kg	1.0	TSM	04/22/96	0845	83590	4

The following prep procedures were performed:

GC/MS Base/Neutral Compounds	TMK	04/22/96	1330	83668	5
Mercury	RMJ	04/22/96	1400	83673	6
TRACE	DVW	04/19/96	1950	83623	7

Surrogate Recovery	Test	Percent%	Acceptable Limits
2-Fluorobiphenyl	M610	86.1	(30.0 - 115.)
Nitrobenzene-d5	M610	78.1	(23.0 - 120.)
p-Terphenyl-d14	M610	65.7	(37.3 - 128.)
Bromofluorobenzene	BTEX-8260	97.2	(59.7 - 159.)
Dibromofluoromethane	BTEX-8260	105.	(74.0 - 128.)
Toluene-d8	BTEX-8260	104.	(53.4 - 163.)
Bromofluorobenzene	NAP-8260	97.2	(59.7 - 159.)
Dibromofluoromethane	NAP-8260	105.	(74.0 - 128.)
Toluene-d8	NAP-8260	104.	(53.4 - 163.)

M = Method	Method-Description
M 1	EPA 8260
M 2	EPA 8270
M 3	EPA 6010A
M 4	EPA 9071
M 5	EPA 3550

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cc: NPWC00196 Report Date: April 26, 1996

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Project Description:	SUPSHIP-Portsmouth Detachment

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Sample ID : SPORT-0009-3

GEL Laboratory Certifications **EPI Laboratory Certifications**

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Analytical Report Specialist

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N° C 00196

CHAIN OF CUSTODY RECORD

KDP
General Engineering Laboratories, Inc.
2040 Savage Road
Charleston, South Carolina 29414
P.O. Box 30712
Charleston, South Carolina 29417
(803) 556-8171

Page 1 of 1 9604369

Client Name/Facility Name: SPORTENVDETCHASN

Collected by/Company: BRUCE MURRAY, SPORTENVDETCHASN

Use F or P in the boxes to indicate whether sample was filtered and/or preserved

CCL 21040

SAMPLE ANALYSIS REQUIRED (x) - use remarks area to specify specific compounds or methods

	SAMPLE ID	DATE	TIME	WELL	SOIL	COMP	GRAB	# OF CONTAINERS	pH, conductivity	TOC/DOC	TOX	Chloride, Fluoride, Sulfide	Nitrite/Nitrate	VOC - Specify Method required	METALS - specify RCRA	Pesticide	Herbicide	Total Phenol	Acid Extractables	B/N Extractables	~~PCBs~~ TPH (9071)	Cyanide	Coliform - specify type	BTEX AND NAPHTHALENE (8260)	PAH (8270)	Remarks
01	SPORT-0009-1	4/17/96	1420		X		X	4							X						X			X	X	UST-NS200-1
02	SPORT-0009-2	4/17/96	1430		X		X	4							X						X			X	X	UST-NS200-2
03	SPORT-0009-3	4/17/96	1440		X		X	4							X						X			X	X	UST-NS200-3

Relinquished by:	Date:	Time:	Received by:	Relinquished by:	Date:	Time:	Received by:
Bruce Murray	4/18/96	0855	W. R. Hiers, Jr.	W. R. Hiers, Jr.	4-18-96	1505	Michael Pa
Relinquished by: Michael Patrick	Date: 4/18/96	Time: 1604	Received by lab by: Stacey Kinard	Date: 4/18/96	Time: 1604	Remarks:	

White = sample collector Yellow = file Pink = with report

ATTACHMENT III

Certificate of Disposal (tank)
Disposal Manifest (sludge)

6-1648

South Carolina Department of Health and Environmental Control

Bureau of Solid & Hazardous Waste Mgt
2600 Bull Street, Columbia, SC 29201
Phone (803) 734-5200
Emergency & Holidays (803)253-6488

PLEASE PRINT or TYPE (Form designed for use on elite [12-pitch] typewriter) Form Approved. OMB No. 2050-0039 Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's U.S. EPA ID No. SC017002256 0 Manifest Document No 13101
2. Page 1 of 2

Information in the shaded areas is not required by Federal law, but is by State law.

3. Generator's Name and Mailing Address
SOUTHDIVNAVFACENGCOM
Caretaker Site Office P.O.Box 190010,N.Charleston,SC. 29419-9010
4. Generator's Phone (803) 743-6444 Rick Nielson

A. State Manifest Document Number 96097
B. State Generator's ID

5. Transporter 1 Company Name: Environmental Transp. Services
6. U.S. EPA ID Number: OKD981605363
C. State Transporter's ID
D. Transporter's Phone 1-800-677-1772

7. Transporter 2 Company Name: M.C. Tank
8. U.S. EPA ID Number: OHD987016003
E. State Transporter's ID
F. Transporter's Phone (423) 629-5607

9. Designated Facility Name and Site Address
Tri-State Steel Drum,Inc.
P.O.Box 9
Graysville,GA. 30726
10. U.S. EPA ID Number: GAD033842543
G. State Facility's ID
H. Facility's Phone 706-891-9726

11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. (RQ) Waste Flammable liquids,n.o.s.,3,UN1993,PG III (D001) (Toner & Despersant w/ Petroleum Solvent)	001	DM	00190	P	D001
b. (RQ) Waste Flammable liquids,n.o.s.,3,UN1993,PG III (D001) (Grease Buster w/	001	DM	00103	P	D001
c. Waste Sodium hydroxide solution,8,UN1824,PG II (D002)	001	DF	00015	P	D002
d. Waste Tetrachloroethylene,6.1,UN1897,PG II (D039)	001	DF	00004	P	D039

J. Additional Descriptions for Materials Listed Above
a) 28126 ERG# 27 Items# 1 1/55
b) ERG# 27 Items# 3 1/30
c) 28386 ERG# 60 Items# 5 1/15
d) 28558 ERG# 74 Items# 6 1/15

K. Handling Codes for Wastes Listed Above
M061, M141
~~Pending QC~~ CD

15. Special Handling Instructions and Additional Information
Forward all invoices and CD' to Tri State Government Services,
24 Hour Emergency # 1-800-673-6604
P.O.C. Michael Johnson
SP4400-95-D-0059,Delivery Order# 97 94
copy to: DRMO Charleston
P.O.Box 5715
N.charleston,SC.29405-0715
ATTN:Joyce Gambrell

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment storage and disposal facilities. This includes time for reviewing instructions, gathering data and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to Chief Information Policy Branch PM-223 U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment, OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. COR [signature] 6/5/96

Printed/Typed Name: ON JOE V. CAMP JR. Signature: Joe V. Camp Jr. Month Day Year: 06 05 96

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ONEIL YORK Signature: [signature] Month Day Year: 06 05 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Leonard D Moran Signature: [signature] Month Day Year: 06 14 96

19. Discrepancy Indication Space
Pending QC
a ____ lbs. c ____ lbs.
b ____ lbs. d ____ lbs.

20. Facility Owner or Operator; Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: TROY DUNCAN Signature: [signature] Month Day Year: 06 20 96

GENERATOR / TRANSPORTER / FACILITY

EPA Form 8700 (Rev. 9/88) Previous Editions are Obsolete [DHEC 1988 (Rev. 5/89)]

107048

epartment of Health and Environmental Control

for use on elite [12-pitch] typewriter) Form approved OMB No. 2050-0039. Expires 9-30-91

...OUS ...FEST ...n Sheet)	21. Generator's U.S. EPA ID No.	Manifest Document No.	22. Page	Information in the shaded areas is not required by Federal Law, but is by State Law.
	SC017002256 0	13101	2 of 2	

...ame
...VFACENGCOM
...er Site Office P.O.Box 190010,N.Charleston,SC,29419-9010

L. State Manifest Document Number 96097

M. State Generator's ID

Transporter _____ Company Name 25. U.S. EPA ID Number

N. State Transporter's ID

O. Transporter's Phone

26. Transporter _____ Company Name 27. U.S. EPA ID Number

P. State Transporter's ID

Q. Transporter's Phone

28. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	29. Containers No.	Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a. Hazardous waste,solid,n.o.s.,9,NA3077,PG III (D007) (MP Cartridge 10 Toner w/ Chromium)	001	DF	00006	P	D007
b. (RQ) Hazaedous waste,liquid,n.o.s.,9,NA3082,PG III (D005,D008) (Fuel Oil Sludge c/w Barium,Lead)	001	DM	00374	P	D005 D008
c. Hazardous waste,liquid,n.o.s.,9,NA3082,PG III (F002) (Cleaner w/ 1,1,2-Trichloro-1,2,2-Trifluoroethane)	001	DF	00001	P	F002
d. Waste Flammable liquids,n.o.s.,3,UN1993,PG II (D001,D007,D008) (See Lab Pack List # 097-1)	001	DF	00012	P	D001 D007 D008
e. Sodium hydroxide,solid,8,UN1823,PG II	001	DF	00002	P	Non RCRA
f. Combustible liquids,n.o.s.,Combustible liquid,NA1993, PG III (Paint)	001	DM	00062	P	Non RCRA
g Non Regulated Material (Sairset Bonding Mortar)	002	DM	00433	P	Non RCRA
h. Non Regulated Material (See Lab Pack List # 079-2)	001	DM	00087	P	Non RCRA
i. NON Regulated material (See Lab Pack List # 094-10	001	DF	00002	P	NON RCRA

S. Additional Descriptions for Materials Listed Above

a b c d e f g h i

T. Handling Codes for Wastes Listed Above

M141, M061

32. Special Handling Instructions and Additional Information

a) 30136 ERG# 31 Items # 7 1/5
b) 30149 ERG# 31 Items # 8 1/55
c) 30141 ERG# 31 Items # 9 1/55
d) 30116 ERG# 27 Items # 2,4 1/5
e) Char0007 ERG# 60 Items # 13 1/5
f) CHAR0085 ERG# 27 Items# 19 1/20
g) 30114 ERG# NA Items# 18 2/55
h) 30115 ERG# NA Items# 11,12,14,15,16,17,20,21,22 1/55
I) ERG# NA Item # 18 1/5

SP4400-95-D-0059
Delivery Order# 97+94

33. Transporter _____ Acknowledgement of Receipt of Materials

Printed/Typed Name Signature Date Month Day Year

34. Transporter _____ Acknowledgement of Receipt of Materials

Printed/Typed Name Signature Date Month Day Year

35. Discrepancy Indication Space

a ____ lbs. d ____ lbs. g ____ lbs.
b ____ lbs. e ____ lbs. h ____ lbs.
c ____ lbs. f ____ lbs. i ____ lbs.

GENERATOR

TRANSPORTER

FACILITY

UST Certificate of Disposal

CONTRACTOR

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

Telephone (803) 743-6482

TANK ID & LOCATION

UST NS 200, NOAA Coastal Service Center, Bldg CSC2, 2224 S. Hobson Ave., N. Charleston, SC

DISPOSAL LOCATION

Bldg. 1601 Tank Cleaning
& Disposal Area
Charleston Naval Complex

TYPE OF TANK	SIZE (GAL)
Fuel oil	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.

G.S. Utthem, 8/8/96
(Name) (Date)