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NSA PANAMA CITY  
5090.3a

CLOSURE ASSESSMENT REPORT FOR UNDERGROUND STORAGE TANK 307R1 NSA  
PANAMA CITY FL  
10/1/1998  
NAVY PUBLIC WORKS CENTER

**CLOSURE ASSESSMENT**  
**UNDERGROUND STORAGE TANK**  
**TANK 307R1**

**NAVAL SURFACE WARFARE CENTER**  
**COASTAL SYSTEMS STATION**  
**PANAMA CITY, FLORIDA**

**Unit Identification Code: N61331**

**Prepared by:**

**Navy Public Works Center**  
**Engineering Department (Code 423.3)**  
**310 John Tower Road**  
**Pensacola, Florida, 32508**

**Prepared for:**

**Commanding Officer, Coastal Systems Station**  
**Dahlgren Division, Naval Surface Warfare Center**  
**6703 West Highway 98**  
**Panama City, Florida 32407-7001**

**Mr Mike Clayton, Code WPE**  
**Environmental Engineer**

**October 1998**

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Tank 307R1, Coastal Systems Station  
Panama City, Florida

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## ACRONYMS

AST	Aboveground Storage Tank
CFR	Code of Federal Regulations
CSS	Coastal Systems Station, Panama City, Florida
DRMO	Defense Reutilization and Marketing Office
EPA	Environmental Protection Agency
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
OVA	Organic Vapor Analyzer
PWC	Public Works Center, Pensacola, Florida
UST	Underground Storage Tank

CLOSURE ASSESSMENT REPORT  
UNDERGROUND STORAGE TANK  
TANK 307R1

**1.0 Facility**

Tank 307R1  
Naval Surface Warfare Center  
Coastal Systems Station  
Panama City, Bay County, Florida

**2.0 Operator**

Commanding Officer, Coastal Systems Station  
Dahlgren Division, Naval Surface Warfare Center  
6703 West Highway 98, Code WPE  
Panama City, Florida 32407-7001

**3.0 Site Location**

The Coastal Systems Station (CSS) is located along Highway 98 on the west bank of St Andrew Bay (Figure 1). The Drum Storage Facility, Facility 307 is located near the west dock (Figure 2).

**4.0 Date of Closure**

7 August 1998

**5.0 Project Description**

The Navy Public Works Center (PWC), Pensacola, Florida was tasked by the Coastal Systems Station (CSS), Panama City, Florida to remove and properly close a 6000 gallon underground storage tank (UST) located at the north side of Facility 307, CSS, Panama City, Florida. The UST was removed, cleaned, and rendered unusable by PWC. Photographs of the removal are provided as Attachment A. The UST was properly disposed by Southern Waste Systems, Inc., Panama City, Florida (Attachment B).

The Storage Tank Registration Form, Application for Closure of Pollutant Storage Tank System, Underground Storage Tank Installation and Removal Form, Closure Assessment Form, and Certificate of Decontamination are provided in Attachments C, D, E, F, and G respectively.

**6.0 Tank Contents**

The UST was used to store diesel for water vessel operation. The contents of the UST was emptied by CSS prior to commencement of work.

## **7.0 Tank Condition**

The UST was constructed of double-walled, fiberglass. The UST was in good condition at the time of removal.

## **8.0 Excavation Area**

The size of the excavation, was approximately twelve (12) feet wide by twenty (20) feet long and eight (8) feet deep. The excavation was filled with clean fill and compacted to grade.

## **9.0 Soil Screening**

Eleven (11) soil borings were installed around the UST using a manually operated, hollow stem auger. The soil samples were collected and screened for organic vapor concentrations using the headspace screening technique. The soil samples were extracted at each corner of the UST above the vadose zone. The soil boring locations and screening results are provided in Attachment F.

The soil screening was conducted in accordance with the headspace screening criteria in Chapter 62-770 of the Florida Administrative Code (FAC) using an organic vapor analyzer (OVA). The OVA was manufactured by Thermo Environmental Instruments, Inc (Model 680 HVM) and equipped with a flame ionization detector (FID).

## **10.0 Groundwater Analysis**

A temporary groundwater monitoring well was installed on 24 August 1998 by W Grady Swann, Inc, Pensacola, Florida. The well was constructed with a 2" diameter by 13 foot long, Schedule 40 polyvinyl chloride (PVC) riser pipe. The riser was equipped with a ten foot long by 0.010 inch slotted screen. The well was constructed with a coarse silica sand filter and a bentonite seal. The top of the well was encased with concrete and equipped with a lock and a steel cover. The well location and well construction diagram are provided in Attachment F.

The well was sampled by W. Grady Swann, Inc. on 24 August 1998 in accordance with their Comprehensive Quality Assurance Plan (FDEP #970117). The samples were transported to the PWC Laboratory in Pensacola, Florida and analyzed for volatile content in accordance with Environmental Protection Agency (EPA) Method 8260 and for polycyclic aromatic hydrocarbon (PAH) content accordance with EPA Method 8270. The laboratory analyses were performed in accordance with PWC's Comprehensive Quality Assurance Plan (FDEP #920121G). The groundwater analyses are provided in Attachment F.

## **11.0 Conclusions**

There were no indications of petroleum contamination noted above the state target levels for storage tank closures.

**12.0 Recommendations**

This site is recommended for No Further Action.

**13.0 Closure Assessment**

Performed by the Navy Public Works Center (PWC) Pensacola, Florida.

**14.0 Project Manager**

Paul R. Semmes, P.E.

**15.0 Project Number**

1396007

**16.0 Report Date**

5 October 1998

## FIGURES

**FIGURE 1**  
**Vicinity Map**

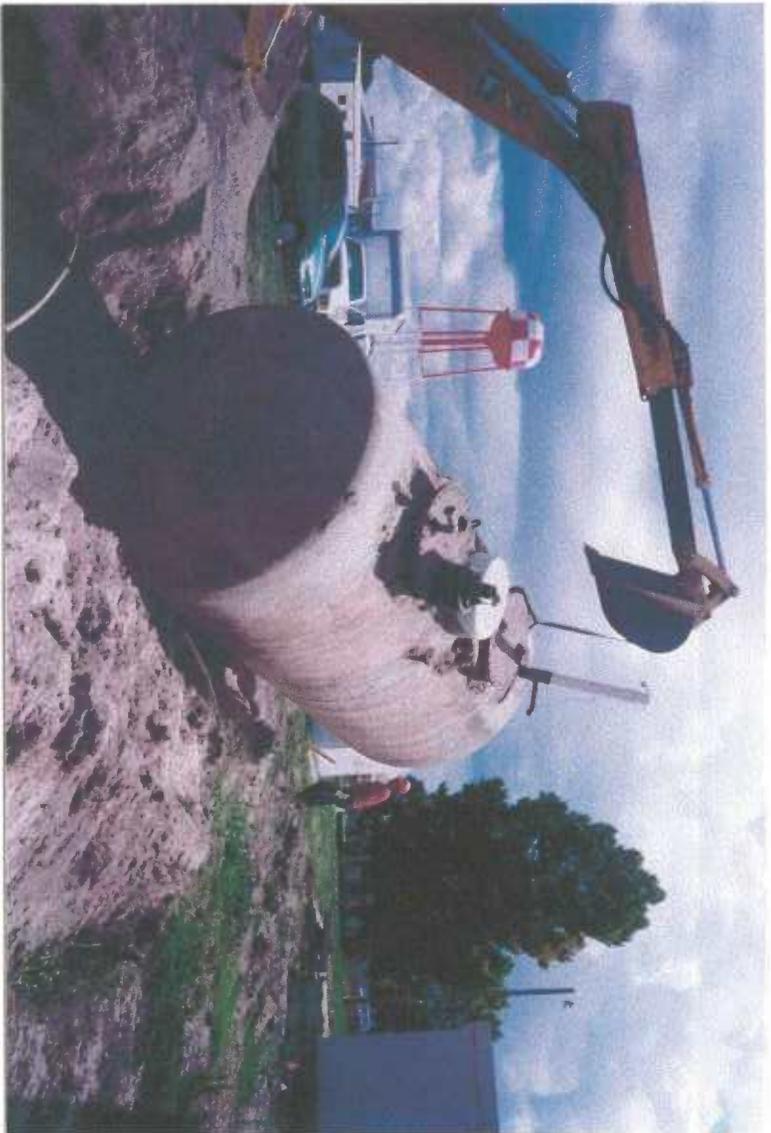
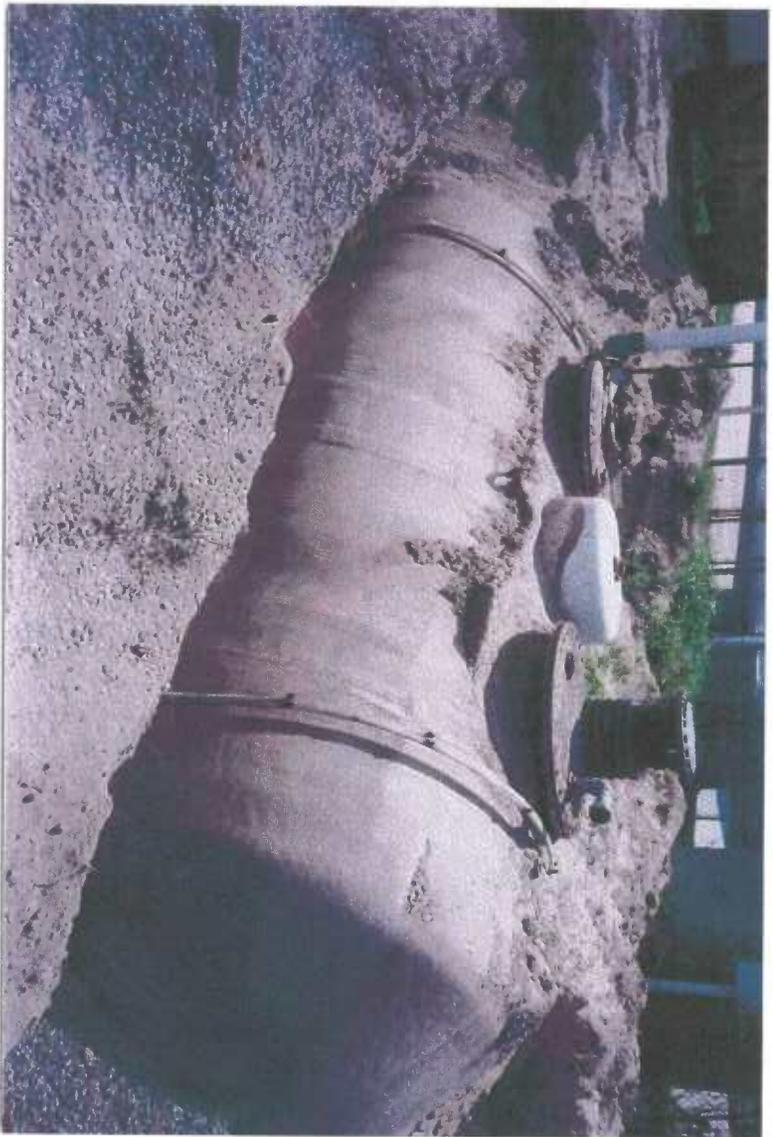


**FIGURE 2**  
**Site Map**

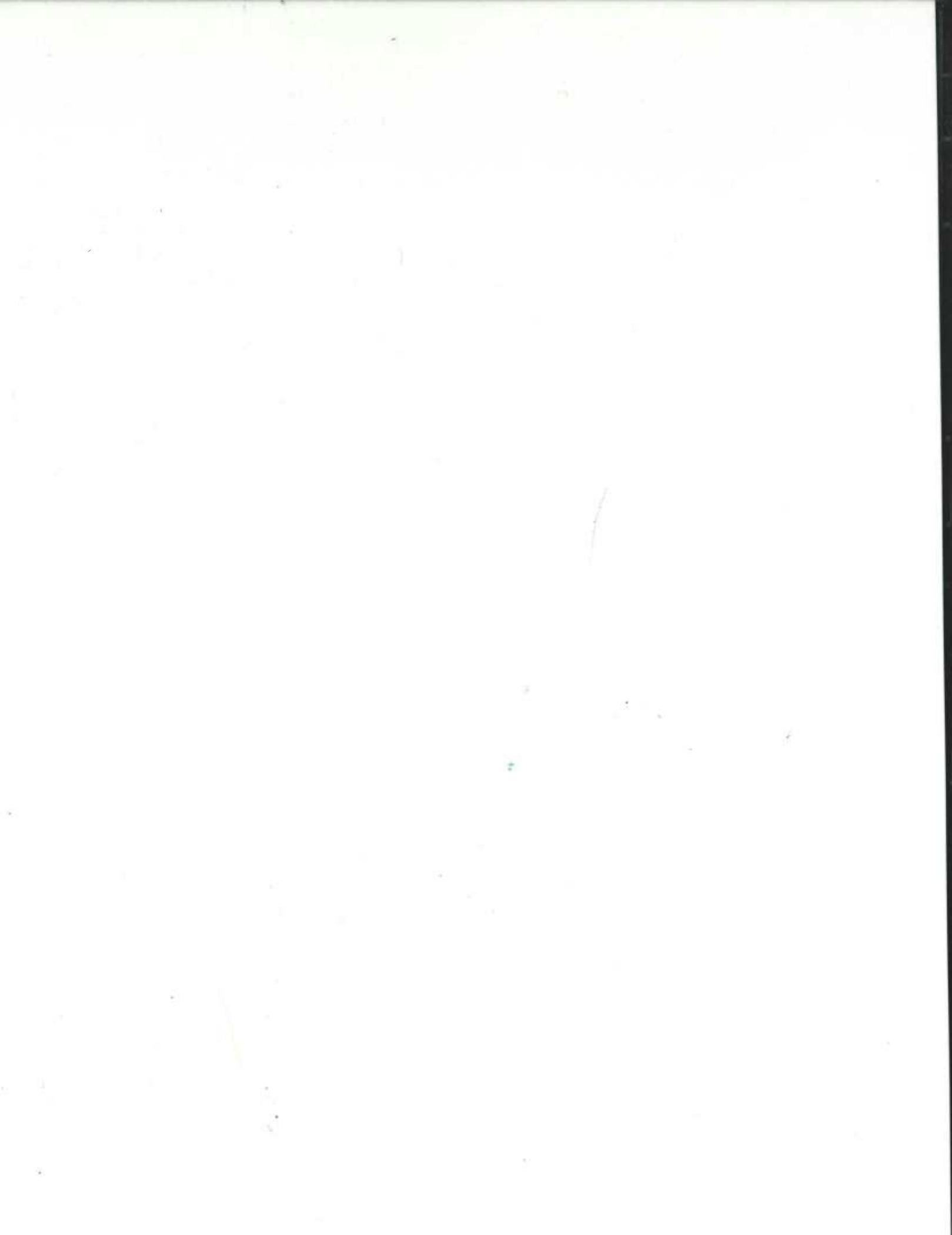


**ATTACHMENTS**

**ATTACHMENT A**  
**Photographs of UST Removal**



**ATTACHMENT B**  
**Disposal Documentation**



COPY

STEELFIELD LANDFILL  
P.O. BOX 1290  
PANAMA CITY, FL 32402

001013  
SOUTHERN WASTE SERVICES  
HARRY MARSH  
1619 MOYLAN ROAD  
PANAMA CITY BEACH FL 32407

SITE	TICKET	GRID
08	117353	
WEIGHMASTER		
BRANNING		
DATE IN	TIME IN	
08/07/98	13:02	
DATE OUT	TIME OUT	
08/07/98	13:40	
VEHICLE	ROLL OFF	
REFERENCE	ORIGIN	
	PCB	

Scale 2 Gross Weight 34820 LB  
Scale 1 Tare Weight 31760 LB  
Net Weight 3060 LB

Inbound - Cash ticket

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
1.53	T	R TRASH NONBURN-TON	25.00	38.25	0.00	38.25

FILE

VEH & CAN NO NUMBERS  
DRIVER WEST

Operating hours...7:00 AM to 4:00 PM Monday through Saturday  
\*\*\* This is to certify that this load does not contain any hazardous materials, medical waste, fluorescent light tubes, motor oils, car batteries or liquids of any type.

SIGNATURE *Wes Halley*

NET AMOUNT	38.25
TENDERED	38.25
CHANGE	0.00
CHECK NO.	9274

002  
SOUTHERN WASTE SERVICES  
10/09/98 FRI 08:08 FAX 904 234 2451

CANDICE  
FAX 234-2451

STEELEFIELD LANDFILL  
P.O. BOX 1290  
PANAMA CITY, FL 32402

001013  
SOUTHERN WASTE SERVICES  
HARRY MARSH  
1619 MOYLAN ROAD  
PANAMA CITY BEACH FL 32407

Scale 2 Gross Weight 34820 LB  
Scale 1 Tare Weight 31760 LB  
Net Weight 3060 LB

QTY 1.53 T  
DESCRIPTION R TRASH NONBURN-TON

Inbound - Cash ticket

SITE	TICKET	CHID
02	117353	
BRANNING		
DATE IN	DATE OUT	TIME IN
08/07/98	08/07/98	13:02
VEHICLE	VEHICLE	ROLL OFF
REFERENCE	ORIGIN	
FCB		

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
1.53	T	R TRASH NONBURN-TON	25.00	38.25	0.00	38.25

VEH & CAN NO NUMBERS  
DRIVER WEST

Operating hours... 7:00 AM to 4:00 PM Monday through Saturday  
\*\*\* This is to certify that this load does not contain any hazardous materials, medical waste, fluorescent light tubes, motor oils, car batteries or liquids of any type.

SIGNATURE *Wes Hally*

NET AMOUNT	38.25
TENDERED	38.25
CHANGE	0.00
CHECK NO	9274

FILE

COPY

12077 2859

### OILY WASTES DISPOSAL FORM

TYPE OF WASTE: DIESEL & WATER  
(BILGEWATER, OIL/WATER SEPARATOR, OIL STORAGE TANK, ETC.)

SOURCE(S): TANK 307 PANAMA CITY  
(LOCATION WASTE COLLECTED)

ESTIMATED QUANTITY: WASTE MORE WATER THAN OIL  
(GALLONS, DRUMS, ETC.)

SOURCE SIGNATURE AND DATE: [Signature]  
(RESPONSIBLE PERSON FROM SOURCE)

ASSUMED CONSTITUENTS: 900 gal Diesel & water  
(WATER, HYDRAULIC FLUID, DIESEL, FUEL OIL, OTHER, ETC.)

TESTS CONDUCTED: NON HOLEPUNED  
(LAB ANALYSIS - METALS, VOLATILES, ETC., HALOGENATED SOLVENTS, ETC.)

RESULTS OF TESTS: NON

SIGNATURE OF PERSON PERFORMING TESTING AND DATE: [Signature]

REVIEWER'S SIGNATURE AND DATE: [Signature] 08/20/98  
(CODE 999 PERSONNEL, BRENDI, TAYLOR OR DAY (MORRES))

WTP SUPERVISOR'S APPROVAL AND DATE: [Signature] 8-20-98

NOTES: \_\_\_\_\_

**ATTACHMENT C**  
**Storage Tank Registration Form**



Florida Department of Environmental Protection  
Twin Towers Office Bldg • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

DEP Form # 17-761 900(2)  
Form Title Storage Tank Registration Form  
Effective Date \_\_\_\_\_  
DEP Application No. \_\_\_\_\_  
(Filled in by DEP)

# Storage Tank Facility Registration Form

Submit a completed form for the facility when registration of storage tanks or compression vessels is required by Chapter 376.303, Florida Statutes

Please review *Registration Instructions* before completing the form.

Please check all that apply	<input type="checkbox"/> New Registration	<input type="checkbox"/> New Owner	<input type="checkbox"/> New Tanks
	<input type="checkbox"/> Facility Info Update/Correction	<input type="checkbox"/> Owner Info Update/Correction	<input checked="" type="checkbox"/> Tank Info Update/Correction

A. FACILITY INFORMATION

County: <u>Bay</u>	DEP Facility ID: <u>03/8518667</u>
--------------------	------------------------------------

Facility Name: Naval Surface Warfare Center, Coastal Systems Station  
 Facility Address: TANK 307, CSS City: Panama City Zip: 32407-7001  
 Facility Contact: Mr Mike Clayton Business Phone: 850 ) 235-5859  
 Facility Type(s): V F NAICS Code: \_\_\_\_\_ Financial Responsibility: C

24 Hour Emergency Contact: _____	Emergency Phone: (_____) _____
----------------------------------	--------------------------------

B. RESPONSIBLE PERSON INFORMATION - Identify Individual(s) or Business(es) responsible for storage tank management, fueling operations, and/or cleanup activities at the facility location named above. Provide additional information in an attachment if necessary.

Name: <u>Commanding Officer, CSS (Code CPE)</u>	Facility - Responsible Person Relation Type:	Effective Date
Mail address: <u>6703 West Highway 98</u>	<input checked="" type="checkbox"/> Facility Account Owner (pays fees)	
City, ST, Zip: <u>Panama City, Florida 32407-7001</u>	Facility Account Owner information must be provided when the facility contains active (in-use) storage tanks on site.	
Contact: <u>Mr Mike Clayton</u>	STCM Account Number (if known)	
Telephone: <u>(850) 235-5859</u>		
Identify other appropriate facility relationships for this party: <input checked="" type="checkbox"/> Facility Owner/Operator <input checked="" type="checkbox"/> Property Owner <input checked="" type="checkbox"/> Storage Tank Owner		

Name: _____	Other owner, relationship type(s)	Effective Date
Mail address: _____	<input type="checkbox"/> Facility Owner/Operator	
City, ST, Zip: _____	<input type="checkbox"/> Property Owner	
Contact: _____	<input type="checkbox"/> Storage Tank Owner	
Telephone: _____	<input type="checkbox"/> Other	

C. TANK/VESSEL INFORMATION - Complete one row for each storage tank or compression vessel system located at this facility.

Tank ID	TV	A/U	Capacity	Installed	Content	Status/Effective Date	Construction	Piping	Monitoring
<u>307R1</u>	<u>T</u>	<u>U</u>	<u>6000</u>	<u>xx/89</u>	<u>D</u>	<u>B 8/7/98</u>	<u>EIMN</u>	<u>CFIJK</u>	<u>FK</u>

Certified Contractor (performing tank installation or removal): US Navy, Public Works DBPR License No.: N/A

Registration Certification: To the best of my knowledge and belief, all information submitted on this form is true, accurate, and complete.

B.D. Pickrell, LEAD, CEC, USN B.D. Pickrell 10/13/98  
 Printed Name & Title PUBLIC WORKS OFFICER Signature Date

DEP 62-761.900(2)

- Northwest District: 160 Governmental Center Blvd., Pensacola, FL 32501
- Northeast District: 7825 Baymeadows Way, Suite B200, Jacksonville, FL 32256
- Central District: 3319 Maguire Blvd., Suite 232, Orlando, FL 32803
- Southwest District: 3804 Coconut Palm Drive, Tampa, FL 33619
- Southeast District: 400 North Congress Ave., W Palm Beach, FL 33416
- South District: 2295 Victoria Ave., Suite 364, Fort Myers, FL 33901
- Marathon Branch Office: 2796 Overseas Hwy., Suite 221, Marathon, FL 33050

**ATTACHMENT D**  
**Application for Closure**  
**of Pollutant Storage Tank System**

**APPLICATION FOR CLOSURE OF POLLUTANT STORAGE TANK SYSTEM**

**Provide the facility information requested below.**

FDEP Facility # 03/8518667 Facility Name U. S. Navy

Facility Location Facility 307, Coastal Systems Station

Property Owner Commanding Officer, Coastal Systems Station (Code EMC)

Property Owner Address 6703 West Highway 98, Panama City, Florida 32407-7001

Phone (850) 235-5859

Method of Tank Closure Removal

**Pollutant Storage Systems Specialty Contractor (PSSSC) who will be on site supervising closure activities. Attach copy of PSSSC license.**

Individual Licensed as PSSSC N/A PSSSC # N/A

Firm U.S. Navy - Public Works Center (PWC)

Address 310 John Tower Road, Pensacola, FL 32508

**Indicate the firm (s) that will degas, remove, and transport the tank(s), and the method of degassification.**

Degassification Method Air Eduction (API 1604-4.2.5)

Firm Removing Tanks U.S. Navy - Public Works Center (PWC)

Contact Mr. Paul Semmes, P.E. Phone (850) 452-4315

Firm Transporting Tanks Southern Waste Systems, Inc

Contact Ms Candace Esparza Phone (850) 234-8428

Firm Receiving Tanks for Ultimate Disposal Southern Waste Systems, Inc

Contact Ms Candace Esparza Phone (850) 234-8428

**Indicate the laboratory that will conduct groundwater analysis.**

Contracted Laboratory U.S. Navy - PWC Phone (850) 452-3180

Contact Mr. Joe Moore FDEP QA/QC 920121G

**Indicate firm(s) transporting and disposing of contaminated soils.**

Firm Transporting Soils N/A

Contact \_\_\_\_\_ Phone \_\_\_\_\_

Firm Remediating/Disposing Soils N/A

Contact \_\_\_\_\_ Phone \_\_\_\_\_

Disposal/Remediation Method \_\_\_\_\_

**Indicate the firm(s) that will transport and ultimately dispose of residual product and sludge from the tanks.**

Firm Transporting Residual Product and Sludge US Navy - Public Works Center

Contact Mr Bobby Hunter Phone (850) 452-2170

Firm Receiving/Disposal Residual Product and Sludge American Environmental Services

Contact Mr Chris Ellswarth Phone (850) 457-8645

**Indicate the firm and names of personnel that will conduct field sampling.**

Contracted Firm U.S. Navy - Public Works Center (PWC)

Contact Mr. Paul Semmes, P.E. Phone (850) 452-4315

Person (s) Sampling Mr. Paul Semmes, P.E.

Equipment used for soil screening (Specific Make and Model) Organic Vapor Analyzer

(OVA) Thermo Environmental (680 HVM) equipped w/Flame Ionization Detector (FID).

**ATTACHMENT E**  
**Underground Storage Tank Installation**  
**and Removal Form**



## Underground Storage System Installation and Removal Form for Certified Contractors

Pollutant Storage Systems Contractor as defined in Section 489.113, Florida Statutes (certified contractors as defined in Section 62-761.200, Florida Administrative Code) shall use this form to certify that the installation, replacement or removal of the underground storage tank system(s) located at the address listed below was performed in accordance with Department Reference Standards. This includes system components such as dispenser liners, piping sumps, and overflow protection devices.

### General Facility Information

Facility Name: <u>NSWC, Coastal Systems Station</u>	DEP Facility Identification No.: <u>03/8518667</u>
Street Address (physical location): <u>Facility 307, Coastal Systems Station</u>	
County: <u>Bay</u>	Telephone #: <u>850 ) 235-5859</u>
Owner Name: <u>Commanding Officer, CSS (Code CPE)</u>	Telephone #: <u>850 ) 235-5859</u>
Owner Address: <u>6703 West Highway 98, Panama City, Florida 32407-7001</u>	

### Storage Tank System Information

Number of Tanks Installed: <u>None</u>	Number of Tanks Removed: <u>One (1)</u>
Date Work Initiated: <u>8/7/98</u>	Date Work Completed: <u>8/7/98</u>
Tank(s) Manufactured by: <u>Unknown</u>	
Description of work Completed: <u>Removed One Double-Walled, Fiberglass UST</u>	

### Certification

I hereby certify and attest that I am familiar with the facility that is registered with the Florida Department of Environmental Protection; that to the best of my knowledge and belief, the storage tank system installation, replacement or removal at this facility was conducted in accordance with Chapter 489, Florida Statutes, Section 376.303, Florida Statutes, and Chapter 62-761, Florida Administrative Code, and its adopted reference standards and documents for underground storage tank systems.

US Navy Public Works Center  
(Type or Print)

Certified Pollutant Tank Contractor Name

*Johnnie W Kizer*  
Certified Tank Contractor Signature

*Johnnie W Kizer*  
Johnnie Kizer  
Field Supervisor Name

N/A

PSSC Number

Pollutant Storage Systems  
Contractor License Number

10-14-98  
Date

10-14-98  
Date

The owner or operator of the facility must register the tanks with the Department upon completion of the installation. The installer must submit this form to the County no more than 30 days after the completion of installation, replacement, or removal of a storage tank system.

**ATTACHMENT F**  
**Closure Assessment Form**  
**Soil and Groundwater Analyses**



Florida Department of Environmental Protection

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

DEP Form # 62-761.800(6)
Form Title Closure Assessment Form
Effective Date December 10, 1990
DEP Application No. (Filled in by DEP)

Closure Assessment Form

Owners of storage tank systems that are replacing, removing or closing in place storage tanks shall use this form to demonstrate that a storage system closure assessment was performed in accordance with Rule 62-761.800(3) or 62-762.800(3), Florida Administrative Code.

Please Print or Type
Complete All Applicable Blanks

- 1. Date 10/5/98
2. DEP Facility ID Number: 03/8518667 3. County Bay
4. Facility Name: Naval Surface Warfare Center, Coastal Systems Station
5. Facility Owner: Commanding Officer, Coastal Systems Station (Code WPE)
6. Facility Address: TANK 307, Coastal Systems Station
7. Mailing Address: 6703 West Highway 98, Panama City, Florida 32407-7001
8. Telephone Number: (850) 235-5859 9. Facility Operator: Mr Mike Clayton
10. Are the Storage Tank(s): (Circle one or both) A. Aboveground or B Underground
11. Type of Product(s) Stored: Diesel
12. Were the Tank(s): (Circle one) A. Replaced B Removed C. Closed in Place D. Upgraded (aboveground tanks only)
13. Number of Tanks closed: One (1) 14. Age of Tanks: 9 yrs

Facility Assessment Information

- Yes No Not Applicable
1. Was a Discharge Reporting Form submitted to the Department?
If yes, When: Where:
2. Is the depth to ground water less than 20 feet?
3. Are monitoring wells present around the storage system?
If yes, please specify Vapor Monitoring Water Monitoring
4. Is there free product present in the monitoring wells or within the excavation?
5. Were the petroleum hydrocarbon vapor levels in the soil greater than 500 parts per million for gasoline?
Specify sample type: Vapor Monitoring wells Soil sample(s)
6. Were the petroleum hydrocarbon vapor levels in the soils greater than 50 parts per million for diesel/kerosene?
Specify sample type: Vapor Monitoring wells Soil sample(s)
7. Were the analytical laboratory results of the ground water sample(s) greater than the allowable state target levels?
(See target levels on reverse side of this form and supply laboratory data sheet(s).
8. If a used oil storage system, did a visual inspection detect any discolored soil indicating a release?
9. Are any potable wells located within 1/4 of a mile radius of the facility?
10. Is there a surface water body within 1/4 mile radius of the site? If yes, indicate distance: 300'
11. A detailed drawing or sketch of the facility that includes the storage system location, monitoring wells, buildings, storm drains, sample locations, and dispenser locations must accompany this form.
12. If a facility has a pollutant storage tank system that has both gasoline and kerosine/diesel stored on site, both EPA method 602 and EPA method 610 must be performed on the ground water samples.



**Summary of OVA Readings**

**Closure Assessment Report  
Underground Storage Tank  
Tank 307R1  
Coastal Systems Station  
Panama City, Florida**

Hand Auger Sample No.	Depth (Feet)	Unfiltered (ppm)	Filtered (ppm)	Total Hydrocarbon Readings (ppm)
SS-1	2	1	<1	1
SS-2	8	28	<1	28
SS-3	3	<1	<1	0
SS-4	7	<1	<1	0
SS-5	7	2	<1	2
SS-6	7	<1	<1	0
SS-7	7	<1	<1	0
SS-8	2	<1	<1	0
SS-9	2	<1	<1	0
SS-10	2	<1	<1	0
SS-11	2	<1	<1	0

*Readings for unfiltered samples are total hydrocarbon readings including methane; readings for filtered samples are methane only.*

*Notes: ppm = parts per million.*

**Navy Public Works Center  
Environmental Laboratory**

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

Client: NPWC Environmental  
Address: Bldg. 3887, Code 910  
NAS Pensacola, FL 32508  
Phone #: 452-4728  
Contact: Paul Semmes

**Analytical Report**

**Total Volatiles by Method 8260**

Lab Report Number: 83303  
Sample Date: 26 Aug 98  
Received Date: 27 Aug 98  
Sample Site: Naval Coastal Systems  
Job Order No.: 139 6007

LAB Sample ID#	1- <b>83303</b>		
Sample Name / Location	Replacement Well Tank Closure Assessment		
Collector's Name	Grady Swann		
Date & Time Collected	26 Aug 98 @ 1320		
Sample Type (composite or grab)	Grab		
Analyst	J. Moore		
Date of Extraction / Initials	10 Sep 98 JM		
Date of Analysis	10 Sep 98		
Sample Matrix	Groundwater		
Dilution	X 1		
<b>Compound Name</b>	<b>1- 83303</b>	<b>units</b>	<b>Det. Limit</b>
			<b>Flags</b>
Benzene	BDL	ug/L	1
Ethylbenzene	BDL	ug/L	1
Toluene	BDL	ug/L	1
m,p-Xylene	BDL	ug/L	1
o-Xylene	BDL	ug/L	1

**SURROGATE SPIKE RECOVERIES**

	Acceptance Limits	Percent Recovery
1,2-Dichloroethane-d4	75-133	90
Toluene-d8	86-119	102
Bromoflourobenzene	85-116	103

Explanation of Flags:

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COMMENTS :

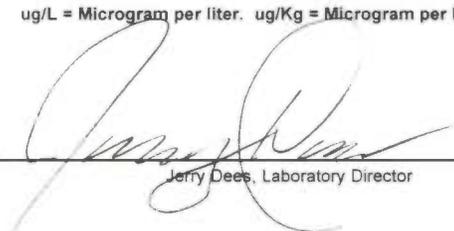
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BDL = Below Detection Limit. ug/L = Microgram per liter. ug/Kg = Microgram per kilogram. \* = FL HRS certification pending.

Approved by :



\_\_\_\_\_  
Jerry Dees, Laboratory Director

Date: 9/29/98

Report Generated

# Navy Public Works Center Environmental Laboratory

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

Client: NPWC Environmental  
Address: Bldg. 3887, Code 910  
NAS Pensacola, FL 32508  
Phone #: 452-4728  
Contact: Paul Semmes

## Analytical Report

610 PAH's by Method 8270

Lab Report Number: 83303  
Sample Date: 26 Aug 98  
Received Date: 27 Aug 98  
Sample Site: Naval Coastal Systems  
Job Order No.: 139 6007

LAB Sample ID#	1- <b>83303</b>				
Sample Name / Location	Replacement Well Tank Closure Assessment				
Collector's Name	Grady Swann				
Date & Time Collected	26 Aug 98				
Sample Type (composite or grab)	Grab				
Analyst	J. Moore				
Date of Extraction / Initials	31 Aug 98 JM				
Date of Analysis	11 Sep 98				
Sample Matrix	Groundwater				
Dilution	X 1				
Compound Name	1-	83303	units	MDL	Flags
Acenaphthene	BDL		ug/L	2	
Acenaphthylene	BDL		ug/L	2	
Anthracene	BDL		ug/L	2	
Benzo(a)anthracene	BDL		ug/L	2	
Benzo(a)pyrene	BDL		ug/L	2	
Benzo(b)fluoranthene	BDL		ug/L	2	
Benzo(g,h,i)perylene	BDL		ug/L	2	
Benzo(k)fluoranthene	BDL		ug/L	3	
Chrysene	BDL		ug/L	2	
Dibenz(a,h)anthracene	BDL		ug/L	2	
Fluoranthene	BDL		ug/L	2	
Flourene	BDL		ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL		ug/L	2	
1-Methylnaphthalene *	BDL		ug/L	2	
2-Methylnaphthalene	BDL		ug/L	3	
Naphthalene	BDL		ug/L	2	
Phenanthrene	BDL		ug/L	2	
Pyrene	BDL		ug/L	2	

### SURROGATE SPIKE RECOVERIES

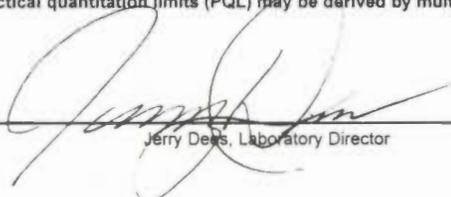
	Acceptance Limits	Percent Recovery
Nitrobenzene -d5	35-114	78
2-Fluorobiphenyl	43-116	81
Terphenyl -d14	33-141	99

Explanation of Flags:

COMMENTS : Surrogate recovery limits derived from EPA OLM01.0 SOW 3/90.

BDL = Below Detection Limit. ug/L = Microgram per liter. ug/Kg = Microgram per kilogram. \* = FL HRS certification pending.  
MDL = Method detection limit. Practical quantitation limits (PQL) may be derived by multiplying the MDL by 4.

Approved by :



Jerry Deans, Laboratory Director

Date: 9/29/98

Report Generated

# HAZARDOUS WASTE CHAIN OF CUSTODY/REQUEST FOR ANALYSIS

**NPWC Environmental Laboratory**

Bldg. 3887, Code 920  
 NAS Pensacola, FL 32508  
 Ph #: (904) 452-4728/3642  
 DSN: 922-4728/3642  
 FAX: (904) 452-2799/2387

Requester: Naval Coastal Systems  
 Address: \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Contact: Paul Sevens  
 Job Order #: 1376207

Report Required? Yes No DEP? Yes No  
 Lab ID Number: \_\_\_\_\_  
 Sample Date: \_\_\_\_\_  
 Received Date: \_\_\_\_\_  
 Sample Site: NAWC/CO  
 Lab Due Date: \_\_\_\_\_

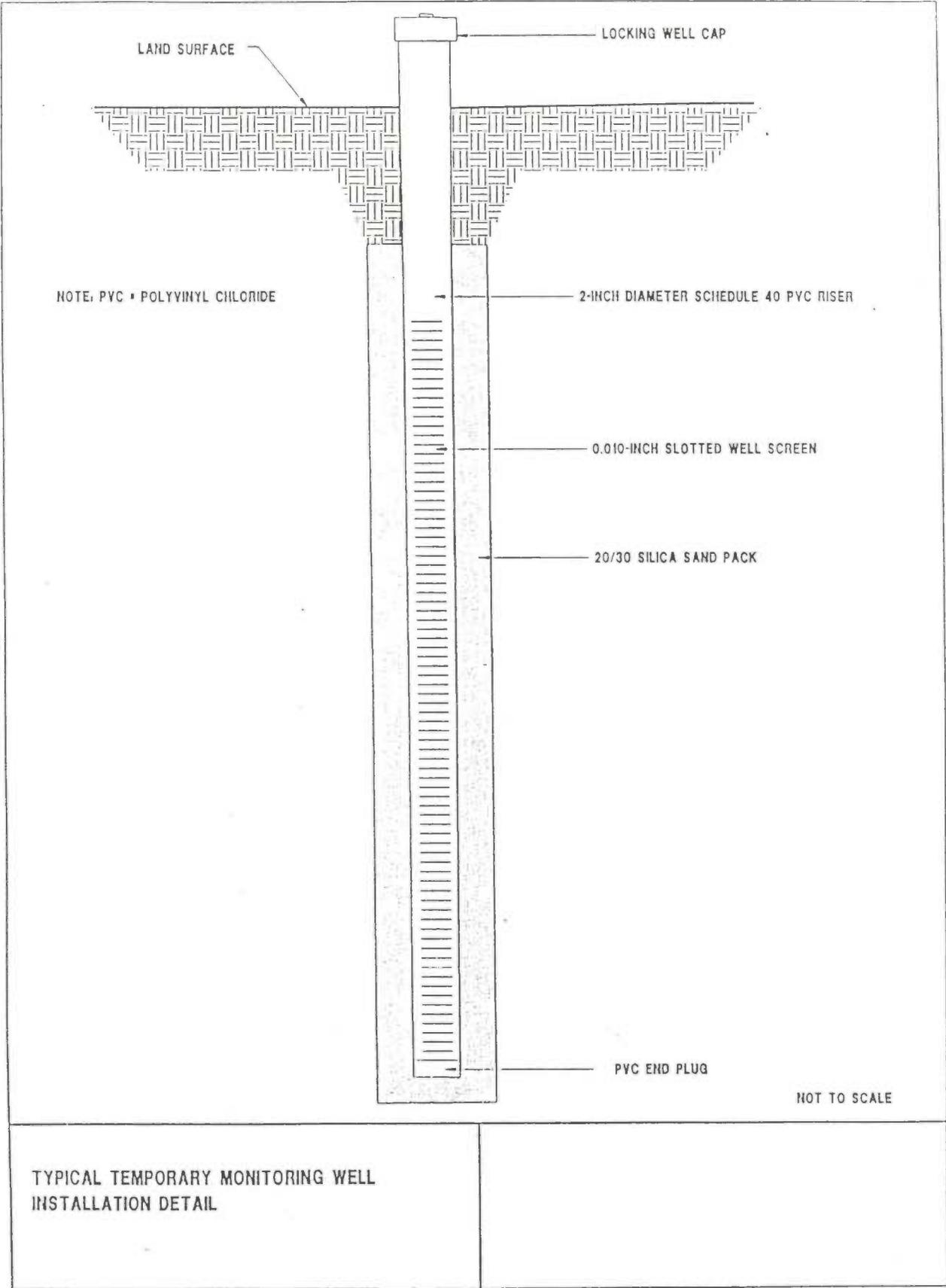
Sample ID #	Lab	#1-	#2-	#3-	#4-	Notes
Sample Name	-----	<u>Replacement well</u>				<p><b>Replacement well</b> <b>Tank Closure Assessment</b></p>
or Location	-----					
Sampled by	-----	<u>Grady Swann</u>				
Collection Date	Date	<u>8/26/98</u>				
Date/Time	Time	<u>1320</u>				
Sample Matrix	-----	<u>GW</u>				

GROUP PARAMETERS								FY97	Containers	Preservatives (s)
by Method Name	METHOD #	X	Bottle ID #'s	X	Bottle ID #'s	X	Bottle ID #'s	Units	Required (L/S)	Used (Liquids)
<b>HW Charact. (complete)</b>	EPA SW 846							56	See below	See below
Ignitability (Flashpoint)	SW 846 1010							2	250ml/4 oz.	4° C
Reactivity (Cyanide & Sulfide)	EPA SW-846							4	1L/4 oz.	4° C
Corrosivity (pH)	SW 846 9040/9045							0.5	250ml/4 oz.	4° C
Toxicity (TCLP) complete	EPA SW-846							50	See below	See below
<b>Toxicity (TCLP) complete</b>	EPA SW-846							50	See below	See below
TCLP Non Volatile Extraction	SW 846 1311							4	40 mix/3/4 oz.	4° C
TCLP Volatile ZHE Extraction	SW 846 1311							4	1Lx4/32 oz.	HCl to pH<2, 4° C
TCLP BNA Extractables	SW 846 8270							16	1Lx3/4 oz.	4° C
TCLP Acid Extractables	SW 846 8270							9	1Lx3/4 oz.	4° C
TCLP B/N Extractables	SW 846 8270							9	1Lx3/4 oz.	4° C
TCLP Pesticides	SW 846 8080							9	1Lx3/4 oz.	4° C
TCLP Herbicides	SW 846 8150							9	1Lx3/4 oz.	4° C
TCLP Volatiles	SW 846 8260							8	40 ml x 3/4 oz.	HCl to pH<2, 4° C
TCLP Metals (8)	EPA SW-846							6.5	500 ml/4 oz.	HNO <sub>3</sub> to pH<2
Multiphasic Samples	EPA SW-846							+50%	See above	See above
<b>Complete Priority Pollutants</b>	EPA SW-846							40	See below	See below
PP Acid Extractables	SW 846 8270							9	1Lx3/4 oz.	4° C
PP B/N Extractables	SW 846 8270							9	1Lx3/4 oz.	4° C
PP Pesticide/PCB's	SW 846 8080							9	1Lx3/4 oz.	4° C
PP Volatiles	SW 846 8260							8	40 ml x 3/4 oz.	HCl to pH<2, 4° C
PP Metals (13)	EPA SW-846							9	500 ml/4 oz.	HNO <sub>3</sub> to pH<2
PP Cyanide/Phenol	EPA SW-846							4	1L Plastic/1L Glass	NaOH/H <sub>2</sub> SO <sub>4</sub>
Toxicity (TCLP) less Pest/Herb	EPA SW-846							36	See below	See below
F001 - F005 Solvents	EPA SW-846							24	1Lx3&40mix/4/16 oz.	4° C
Kerosene Anal. Group (FL-PRO)	SW-846/FL DEP							24	Multiple	As Required
FL-PRO	FL DEP							5	1Lx3/16 oz.	H <sub>2</sub> SO <sub>4</sub> to pH<2, 4° C
Total Volatiles	SW 846 8260							5	40 mix/3/4 oz.	HCl to pH<2, 4° C
Total BNA Extractables	SW 846 8270							16	1Lx2/16 oz.	4° C
Total RCRA Metals (5)	EPA SW-846							6.5	500 ml/4 oz.	HNO <sub>3</sub> to pH<2
Single Metals	EPA SW-846							1	500 ml/4 oz.	HNO <sub>3</sub> to pH<2
PCB's in Oil	SW 846 8080							3	40 ml/4 oz.	None
PCB's in Water/Soil/Wipes	SW 846 8080							4	1L/4 oz.	None

Other: BETX+MTBE (926.0) ✓  
PAH'S (610) (610)

Comments: W/GRADY SWANN  w/QUESTIONS, call Paul SEVENS

Relinquished by: \_\_\_\_\_ Date/Time: 8/27/98 @ 12:50 P  
 Received by: RE J... Date/Time: 8/27/98 12:50



TYPICAL TEMPORARY MONITORING WELL  
INSTALLATION DETAIL

**ATTACHMENT G**  
**Certificate of Decontamination**

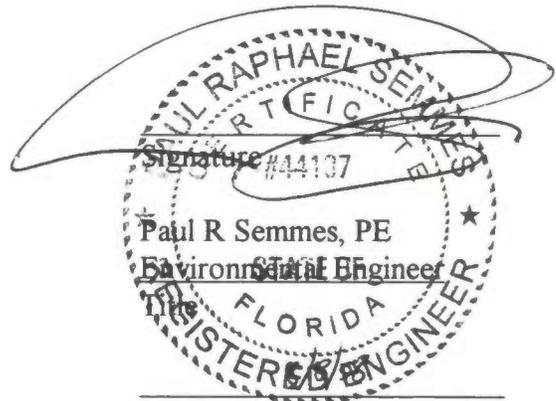
**DEPARTMENT OF THE NAVY  
NAVY PUBLIC WORKS CENTER  
310 JOHN TOWER ROAD  
PENSACOLA, FLORIDA 32508-5303**

**CERTIFICATE  
OF  
DECONTAMINATION**

It is hereby certified that the following Underground Storage Tank located at the Coastal Systems Station, Panama City, Florida has been decontaminated by the Navy Public Works Center (PWC), Pensacola, Florida:

Tank 307R1

The tank has been emptied in accordance with 40 CFR 261.7, vapor freed, triple rinsed, cleaned and has been rendered unusable.



Date \_\_\_\_\_