

N60200.AR.001160  
NAS CECIL FIELD, FL  
5090.3a

CONFIRMATORY SAMPLING REPORT FOR BUILDING 900 TANK 900 BASE  
REALIGNMENT AND CLOSURE UNDERGROUND STORAGE TANK AND ABOVEGROUND  
STORAGE TANK GREY SITES NAS CECIL FIELD FL  
11/1/1997  
ABB ENVIRONMENTAL SERVICES INC

**CONFIRMATORY SAMPLING REPORT**  
**BUILDING 900, TANK 900**  
**BASE REALIGNMENT AND CLOSURE**  
**UNDERGROUND STORAGE TANK AND**  
**ABOVEGROUND STORAGE TANK GREY SITES**  
**NAVAL AIR STATION CECIL FIELD**  
**JACKSONVILLE, FLORIDA**

**Unit Identification Code: N60200**

**Contract No.: N62467-89-D-0317/131**

**Prepared by:**

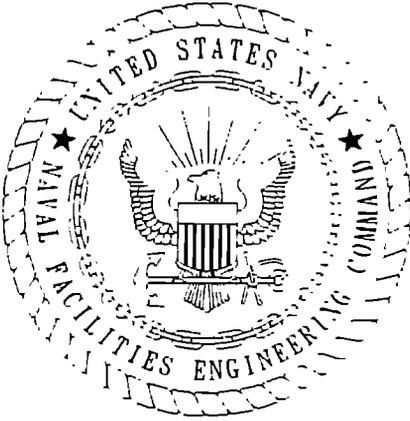
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**Prepared for:**

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**November 1997**



CERTIFICATION OF TECHNICAL  
DATA CONFORMITY (MAY 1987)

The Contractor, ABB Environmental Services, Inc., hereby certifies that, to the best of its knowledge and belief, the technical data delivered herewith under Contract No. N62467-89-D-0317/131 are complete and accurate and comply with all requirements of this contract.

DATE: December 15, 1997

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(DFAR 252.227-7036)

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## GLOSSARY

ABB-ES	ABB Environmental Services, Inc.
bls	below land surface
FAC	Florida Administrative Code
NAS	Naval Air Station
OVA	organic vapor analyzer
UST	underground storage tank

## 1.0 INTRODUCTION

ABB Environmental Services, Inc. (ABB-ES), under contract to the Southern Division, Naval Facilities Engineering Command, has completed the confirmatory sampling for Tank 900 at Naval Air Station Cecil (NAS) Field in Jacksonville, Florida. This report summarizes the related field operations, results, conclusions, and recommendations of the confirmatory sampling.

Tank 900 is reported in the Tank Inventory Management System as a 2,000-gallon underground storage tank (UST) located at Building 900, the NAS Cecil Field bowling alley (Figure 1). The UST was installed in 1968 to store heating oil for the building (ABB-ES, 1997). A contamination assessment plan for the assessment of soil and groundwater at Tank 900 was prepared by ABB-ES in November 1996 (ABB-ES, 1996).

## 2.0 FIELD INVESTIGATION

There is no closure information on the tank, and the date of removal is unknown. ABB-ES personnel performed a geophysical survey in September of 1996 during initial site reconnaissance but did not locate Tank 900. A Building 900 drawing obtained from the NAS Cecil Field Public Works department identified the location of the UST. This location was the basis for the sampling and investigative activities conducted and presented in this report.

The confirmatory sampling for Tank 900 was initiated in January 1997 and included

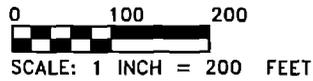
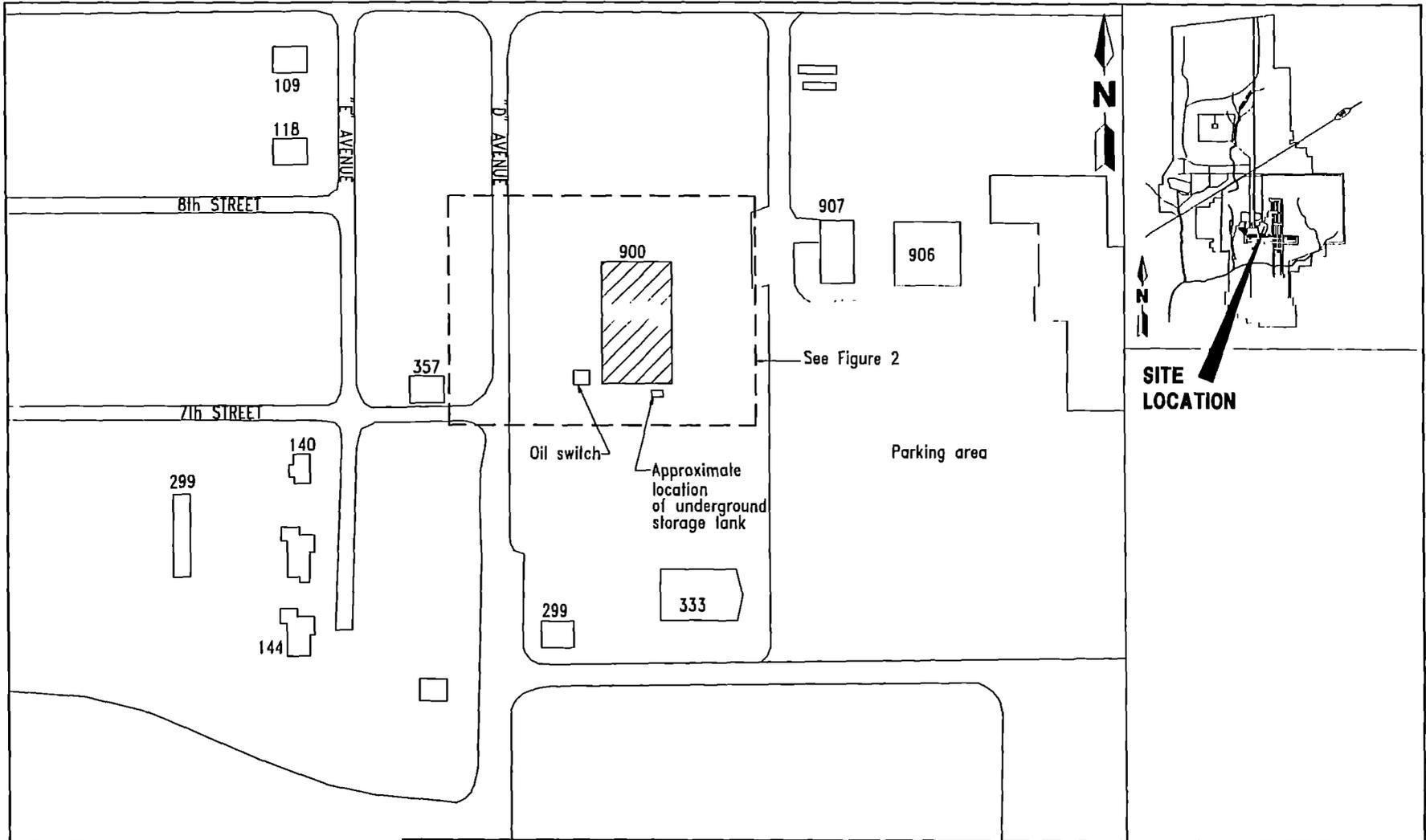
- the advancement of four soil borings to the water table,
- the installation of one shallow groundwater monitoring well, and
- collection and analysis of one groundwater sample.

Soil samples were collected from each boring at depth intervals of 1 foot below land surface (bls) and every 2 feet thereafter to the water table. These samples were screened for hydrocarbon vapors with an organic vapor analyzer (OVA).

A monitoring well, CEF-900-1S, was installed east of the estimated UST location near the location of soil boring CEF-900-SB2 to a depth of 14 feet bls. One groundwater sample was collected from the well and analyzed for the Kerosene Analytical Group parameters. A general site plan indicating the location of the soil borings and the monitoring well is presented on Figure 2. The monitoring well installation detail is included as Appendix A.

## 3.0 SCREENING AND ANALYTICAL RESULTS

Excessively contaminated soil was not detected in soil samples collected from the unsaturated zone during the confirmatory sampling. The soil OVA data collected during the confirmatory sampling are summarized in Table 1 and presented on Figure 2.



**FIGURE 1**  
**TANK 900**  
**BOWLING ALLEY**

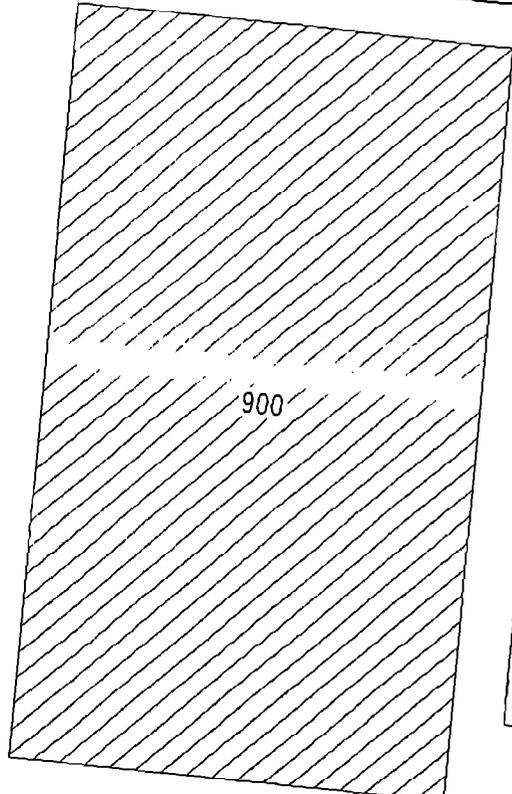


**CONFIRMATORY SAMPLING REPORT**  
**BUILDING 900, TANK 900**

**NAVAL AIR STATION CECIL FIELD**  
**JACKSONVILLE, FLORIDA**



"D" AVENUE



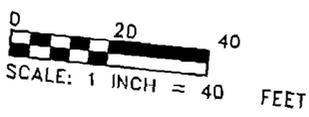
Oil switch

**CEP-900-SB2 LEGEND**

- Soil boring location and designation
- ⊕ CEP-900-1S  
Monitoring well location and designation
- (25) Organic vapor analyzer reading in parts per million

- CEP-900-SB1
- CEP-900-SB2 (10)
- ⊕ CEP-900-1S (25)
- CEP-900-SB3

Approximate location of former underground storage tank



**FIGURE 2  
TANK 900  
SOIL BORING LOCATIONS**



**CONFIRMATORY SAMPLING REPORT  
BUILDING 900, TANK 900**

**NAVAL AIR STATION CECIL FIELD  
JACKSONVILLE, FLORIDA**

**Table 1  
Soil Screening Results**

Confirmatory Sampling Report  
Building 900, Tank 900  
Naval Air Station Cecil Field  
Jacksonville, Florida

Location	OVA Concentration (ppm)			
	Depth (feet bls)	Unfiltered	Filtered	Actual
CEF-900-SB1	1	0	-	0
	2 (refusal)	-	-	-
CEF-900-SB2	1	0	-	0
	3	0	-	0
	5	0	-	0
	7	10	0	10
CEF-900-SB3	1	0	-	0
	3	0	-	0
	3.5 (refusal)	-	-	-
CEF-900-1S	1	25	-	25
	3	0	-	0
	5	0	-	0
	11 (wet)	5	-	5

Notes: All soil samples were collected on January 29, 1997.  
All concentrations are in ppm.  
Soil samples were filtered with carbon to determine the methane concentration.

OVA = organic vapor analyzer.

ppm = parts per million.

bls = below land surface.

- = filtered readings were not collected.

refusal = a subsurface obstruction prevented the collection of additional samples at this location.

wet = soil sample was completely saturated when analyzed.

Contaminant concentrations in groundwater were below the regulatory standards specified in Chapter 62-770 of the Florida Administrative Code (FAC). The complete analytical data set is presented in Appendix B.

#### 4.0 CONCLUSIONS AND RECOMMENDATIONS

Data obtained during the confirmatory sampling at the Tank 900 site did not indicate the presence of contaminated soil. No contaminants were detected above regulatory standards specified in Chapter 62-770, FAC, in the groundwater sample collected from monitoring well CEF-900-1S. Therefore, no further action is recommended for the Tank 900 site.

## REFERENCES

ABB Environmental Services, Inc. (ABB-ES). 1996. *Contamination Assessment Plan, Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOM), North Charleston, South Carolina (November).

ABB-ES. 1997. *Base Realignment and Closure Tank Management Plan, Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina (January).

**APPENDIX A**  
**MONITORING WELL INSTALLATION DETAIL**

TITLE: NAS Cecil Field		LOG of WELL: CEF-900-IS	BORING NO. CEF-900-IS
CLIENT: SOUTH DIVNAVFACENCOM			PROJECT NO: 8542-03
CONTRACTOR: GEOTEK		DATE STARTED: 3-10-97	COMPLTD: 3-10-97
METHOD: 6.25" HSA	CASE SIZE: 2"	SCREEN INT.: 3-13	PROTECTION LEVEL: D
TOC ELEV.: FEET.	MONITOR INST.: FID	TOT DPTH: 14 FEET.	DPTH TO $\nabla$ 5.05 FEET.
LOGGED BY: J Tarr	WELL DEVELOPMENT DATE: 3-10-97		SITE: Building 900

DEPTH FT.	LABORATORY SAMPLE ID.	SAMPLE RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
20				SILTY SAND: Grey, fine-grained, poorly graded, wood & organics.		SM	posthole	
0			As above.	posthole				
5		100%	0	SILTY SAND: Grey, fine-grained, saturated with soft wood & organics.		1,1,1,1		
10		100%	5	SILTY SAND: Dark grey to brown, fine-grained, saturated.		2,6,18,11		
15								
20								

**APPENDIX B**  
**GROUNDWATER ANALYTICAL DATA**

NAS CECIL FIELD -- TANK 900  
UST GREY ANALYTICAL PARAMETERS -- REPORT NO. 9457

Lab Sample Number:	B7C2801180	B7C2801180	
Site	BRACGREY	BRACGREY	
Locator	CEF9001S	CEF9001S	
Collect Date:	27-MAR-97	27-MAR-97	
	VALUE	QUAL UNITS	DL

BRACGREY ANALYTICAL PARAMETERS

	VALUE	QUAL UNITS	DL		
1,1,1-Trichloroethane	1 U	ug/l	1	-	
1,1,2,2-Tetrachloroethane	1 U	ug/l	1	-	
1,1,2-Trichloroethane	1 U	ug/l	1	-	
1,1-Dichloroethane	1 U	ug/l	1	-	
1,1-Dichloroethene	1 U	ug/l	1	-	
1,2-Dichlorobenzene	1 U	ug/l	1	-	
1,3-Dichlorobenzene	1 U	ug/l	1	-	
1,4-Dichlorobenzene	1 U	ug/l	1	-	
1,2-Dichloroethane	1 U	ug/l	1	-	
1,2-Dichloropropane	1 U	ug/l	1	-	
1-Methylnaphthalene	2 U	ug/l	2	-	
2-Methylnaphthalene	2 U	ug/l	2	-	
Acenaphthene	2 U	ug/l	2	-	
Acenaphthylene	2 U	ug/l	2	-	
Anthracene	2 U	ug/l	2	-	
Benzene	1 U	ug/l	1	-	
Benzo (a) anthracene	.1 U	ug/l	.1	-	
Benzo (a) pyrene	.1 U	ug/l	.1	-	
Benzo (b) fluoranthene	.1 U	ug/l	.1	-	
Benzo (g,h,i) perylene	.2 U	ug/l	.2	-	
Benzo (k) fluoranthene	.15 U	ug/l	.15	-	
Bromodichloromethane	1 U	ug/l	1	-	
Bromoform	1 U	ug/l	1	-	
Bromomethane	1 U	ug/l	1	-	
Carbon tetrachloride	1 U	ug/l	1	-	
Chlorobenzene	1 U	ug/l	1	-	
Chloromethane	1 U	ug/l	1	-	
Chloroform	1 U	ug/l	1	-	
Chloromethane	1 U	ug/l	1	-	
Chrysene	.1 U	ug/l	.1	-	
Dibenzo (a,h) anthracene	.2 U	ug/l	.2	-	
Dibromochloromethane	1 U	ug/l	1	-	
Dichlorodifluoromethane	1 U	ug/l	1	-	
Ethylbenzene	1 U	ug/l	1	-	
Ethylene dibromide	.02 U	ug/l	.02	-	
Fluoranthene	.2 U	ug/l	.2	-	
Fluorene	2 U	ug/l	2	-	
Indeno (1,2,3-cd) pyrene	.1 U	ug/l	.1	-	
Lead	5 U	ug/l	5	-	
Methyl tert-butyl ether	1 U	ug/l	1	-	
Methylene chloride	4.5	ug/l	1	-	
Naphthalene	2 U	ug/l	2	-	
Phenanthrene	2 U	ug/l	2	-	
Pyrene	.2 U	ug/l	.2	-	
Tetrachloroethene	1 U	ug/l	1	-	
Toluene	1 U	ug/l	1	-	
Total petroleum hydrocarbons	.5 U	mg/l	.5	-	
Trichloroethene	1 U	ug/l	1	-	
Trichlorofluoromethane	1 U	ug/l	1	-	
Vinyl chloride	1 U	ug/l	1	-	

NAS CECIL FIELD -- TANK 900  
 UST GREY ANALYTICAL PARAMETERS -- REPORT NO. 9457

Lab Sample Number:	B7C2801180	B7C2801180
Site	BRACGREY	BRACGREY
Locator	CEF9001S	CEF9001S
Collect Date:	27-MAR-97	27-MAR-97

	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Xylenes (total)	1	U	ug/l	1	-			
cis-1,3-Dichloropropene	1	U	ug/l	1	-			
trans-1,2-Dichloroethene	1	U	ug/l	1	-			
trans-1,3-Dichloropropene	1	U	ug/l	1	-			
Lead-DISS					5	U	ug/l	5

U = NOT DETECTED J = ESTIMATED VALUE  
 UJ = REPORTED QUANTITATION LIMIT IS QUALIFIED AS ESTIMATED  
 R = RESULT IS REJECTED AND UNUSABLE