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NAS CECIL FIELD, FL  
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CONFIRMATORY SAMPLING REPORT FOR BUILDING 880 TANK G880B 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 880, TANK G880B**  
**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:**

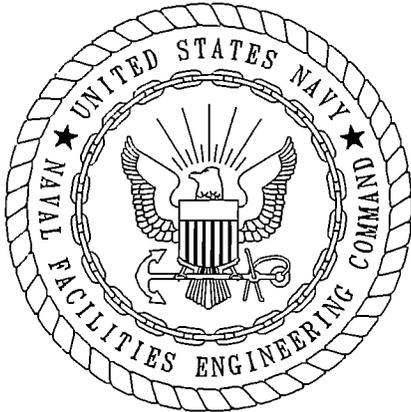
**ABB Environmental Services, Inc.**  
**2590 Executive Center Circle, East**  
**Tallahassee, Florida 32301**

**Prepared for:**

**Department of the Navy, Southern Division**  
**Naval Facilities Engineering Command**  
**2155 Eagle Drive**  
**North Charleston, South Carolina 29418**

**Bryan Kizer, Code 1842, Engineer-in-Charge**

**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: November 11, 1997

NAME AND TITLE OF CERTIFYING OFFICIAL: Rao Angara  
Task Order Manager

NAME AND TITLE OF CERTIFYING OFFICIAL: Eric A. Blomberg, P.G.  
Project Technical Lead

(DFAR 252.227-7036)

TABLE OF CONTENTS

Confirmatory Sampling Report  
Building 880, Tank G880B  
Naval Air Station Cecil Field  
Jacksonville, Florida

<u>Chapter</u>	<u>Title</u>	<u>Page No.</u>
1.0	INTRODUCTION . . . . .	1
2.0	FIELD INVESTIGATION . . . . .	1
3.0	SCREENING AND ANALYTICAL RESULTS . . . . .	1
4.0	CONCLUSIONS AND RECOMMENDATIONS . . . . .	5

REFERENCES

APPENDIX

Appendix A: Monitoring Well Installation Detail

Appendix B: Groundwater Analytical Data

LIST OF FIGURES

Confirmatory Sampling Report  
Building 880, Tank G880B  
Naval Air Station Cecil Field  
Jacksonville, Florida

<u>Figure</u>	<u>Title</u>	<u>Page No.</u>
1	Tank G880B, Radar Air Traffic Control Building . . . . .	2
2	Tank G880B, Soil Boring and Monitoring Well Locations . . . . .	3

LIST OF TABLES

<u>Table</u>	<u>Title</u>	<u>Page No.</u>
1	Soil Screening Results . . . . .	4

## GLOSSARY

ABB-ES	ABB Environmental Services, Inc.
BEI	Bechtel Environmental, Inc.
bls	below land surface
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 G880B at Naval Air Station Cecil Field in Jacksonville, Florida. This report summarizes the related field operations, results, conclusions, and recommendations of the confirmatory sampling.

Tank G880B was an underground storage tank (UST) located at Building 880, a cinderblock building used to house electronic equipment and operations for Radar Air Traffic Control (Figure 1). The UST, which was installed in 1976, had a 275-gallon capacity and was used to store diesel fuel (ABB-ES, 1997). A Contamination Assessment Plan for the assessment of soil and groundwater at Tank G880B was prepared by ABB-ES in November 1996 (ABB-ES, 1996).

Tank G880B was removed by Bechtel Environmental, Inc. (BEI), on May 12, 1997. No excessively contaminated soil was removed at that time. A Closure Report was prepared for Tank G880B and submitted to the Florida Department of Environmental Protection (BEI, 1997).

## 2.0 FIELD INVESTIGATION

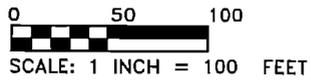
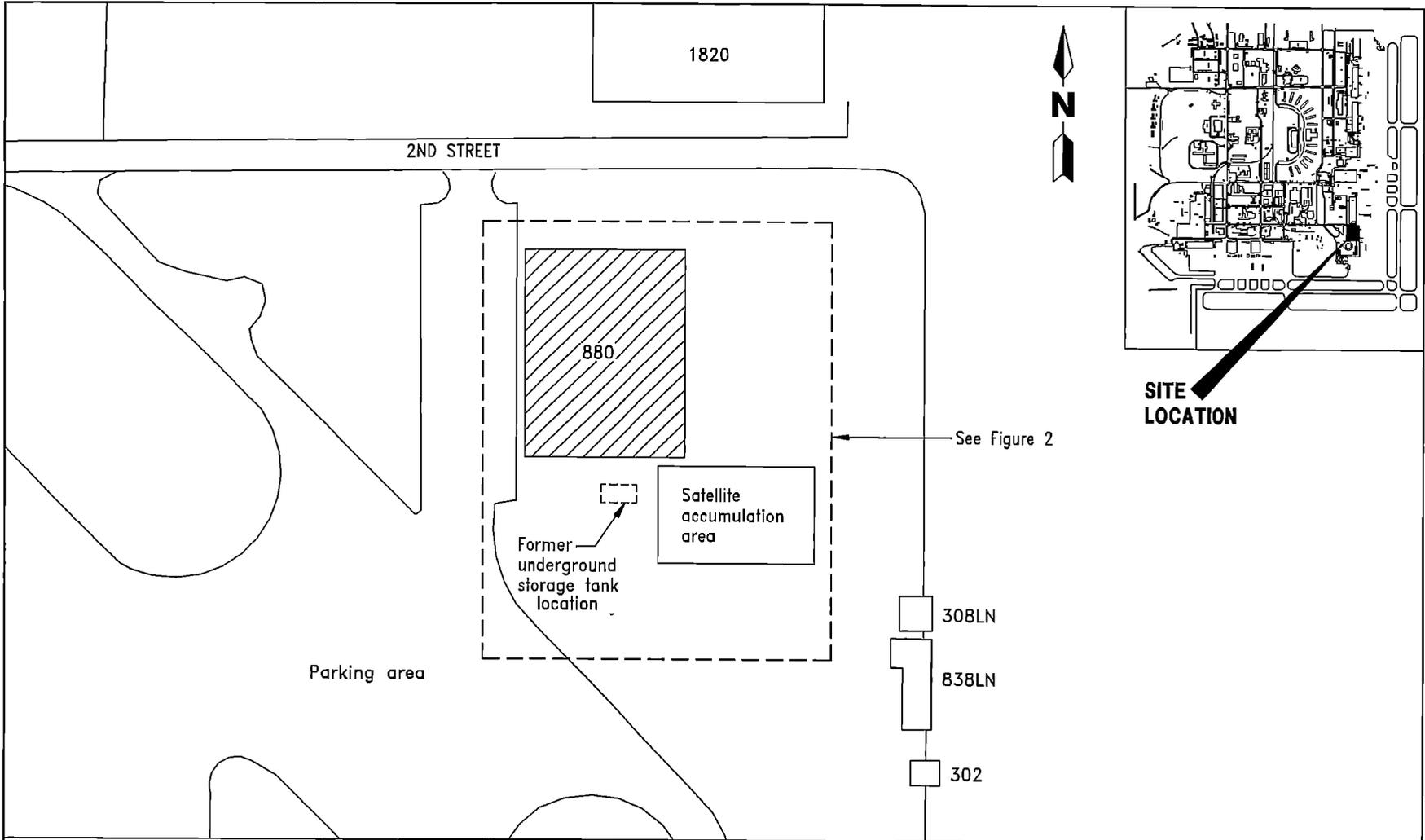
The confirmatory sampling of Tank G880B was initiated in February 1997 (before the AST was removed) and included the advancement of four soil borings to the water table. Soil samples were collected at depth intervals of 1 foot below land surface (bls) and every 2 feet thereafter to the water table and screened for hydrocarbon vapors with an organic vapor analyzer (OVA).

A monitoring well, CEF-880-1S, was installed south of the UST near the location of soil boring CEF-880B-SB3 to a depth of 16 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 in Appendix A.

## 3.0 SCREENING AND ANALYTICAL RESULTS

Excessively contaminated soil (greater than 50 parts per million[ppm] on an OVA) was detected in one soil boring. The highest OVA reading (440 ppm) was detected at 7 feet bls from a moist sample collected from soil boring CEF-880B-SB3. The soil OVA data are summarized in Table 1.

Groundwater contamination was not detected at concentrations exceeding requirements specified in Chapter 62-770 of the Florida Administrative Code. The complete analytical data set is presented in Appendix B.

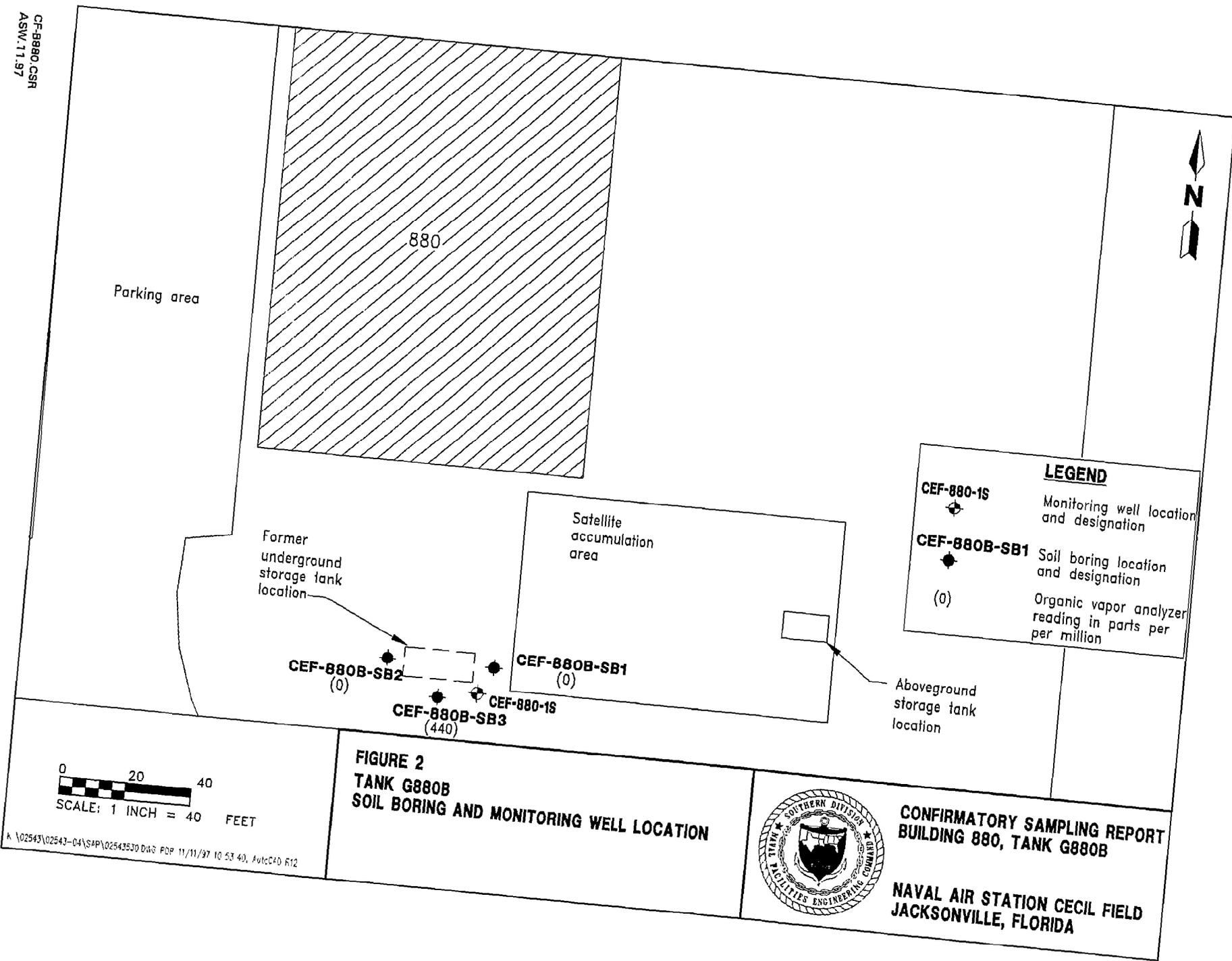


**FIGURE 1**  
**TANK G880B**  
**RADAR AIR TRAFFIC CONTROL BUILDING**



**CONFIRMATORY SAMPLING REPORT**  
**BUILDING 880, TANK G880B**

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



**LEGEND**

- CEF-880-1S  Monitoring well location and designation
- CEF-880B-SB1  Soil boring location and designation
- (0)  Organic vapor analyzer reading in parts per million

0 20 40  
SCALE: 1 INCH = 40 FEET

**FIGURE 2**  
**TANK G880B**  
**SOIL BORING AND MONITORING WELL LOCATION**



**CONFIRMATORY SAMPLING REPORT**  
**BUILDING 880, TANK G880B**  
**NAVAL AIR STATION CECIL FIELD**  
**JACKSONVILLE, FLORIDA**

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**Table 1  
Soil Screening Results**

Confirmatory Sampling Report  
Building 880, Tank G880B  
Naval Air Station Cecil Field  
Jacksonville, Florida

Location	OVA Concentration (ppm)			
	Depth (feet bls)	Unfiltered	Filtered	Actual
CEF-880B-SB1	1	0	--	0
	3	0	--	0
	5	0	--	0
	7	0	--	0
	9 (wet)	130	0	130
CEF-880B-SB2	1	0	--	0
	3	0	--	0
	5	0	--	0
	7	0	--	0
	9 (wet)	38	0	38
CEF-880B-SB3	1	0	--	0
	3	140	0	140
	5	270	0	270
	7	440	0	440
	9 (wet)	1,100	--	1,100
CEF-880-IS	1	0	--	0
	3	50	--	50
	5	340	--	340
	7	0	--	0
	10 (wet)	70	--	70

Notes: All soil samples were collected on January 24, 1997.  
Monitoring well CEF-880-1S was installed on March 5, 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.  
wet = soil sample was completely saturated when analyzed.

#### 4.0 CONCLUSIONS AND RECOMMENDATIONS

Data obtained during the confirmatory sampling at the Tank G880 site did not provide an adequate assessment of the horizontal and vertical extent of excessively contaminated soil. No contaminants were detected above the regulatory standard specified in Chapter 62-770, FAC in the groundwater sample collected from monitoring well CEF-880-1S.

It is recommended that additional soil sampling be conducted to assess the extent of excessively contaminated soil at the Tank G880 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).
- Bechtel Environmental Incorporated. 1997. DO #59: *Closure Report for Aboveground Storage Tank/Underground Storage Tank Removals, Naval Air Station Cecil Field, Jacksonville, Florida*. (July).

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

PROJECT: NAS Cecil Field		LOG of WELL: CEF-880-IS	BORING NO. CEF-880-IS
CLIENT: SOUTHDIVNAVFACENGCOM	PROJECT NO: 8542-03	DATE STARTED: 3-5-97	COMPLETED: 3-5-97
DRILLING SUBCONTRACTOR: GEOTEK		SITE: Building 880	MONITOR INST. FID
METHOD: 8.25" HSA	WELL CASE DIAM.: 2"	SCREEN INT.: 5-15 FT.	SCREEN SLOT SIZE: D
TOC ELEVATION: FT. NGVD	GROUND ELEV.: FT. NGVD	NORTHING: 2141922	EASTING: 377943.1
WELL DEVELOP. DATE: 3-5-97	TOTAL DEPTH: 18 FT. BLS	DEPTH TO $\nabla$ 8.80 FT. BLS	LOGGED BY: J Koch

DEPTH FT.	SAMPLE INTERVAL RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/8-IN	WELL DATA
0			SILTY SAND: Light brown to dark brown, fine grained.		SM	posthole	
50		SILTY SAND: As above, petroleum odor.	posthole				
5 340	100%	SILTY SAND: Medium brown to dark brown, fine grained, slight petroleum odor.	6,7,7,9				
10 70	100%	SILTY SAND: Dark brown, hard pan, fine grained, slight petroleum odor.	3,3,3,5				
15							
20							

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

NAS CECIL FIELD -- TANK G880  
 UST GREY ANALYTICAL PARAMETERS -- REPORT NO. 9454

Lab Sample Number: B7C2501210  
 Site: BRACGREY  
 Locator: CEF8801S  
 Collect Date: 24-MAR-97

VALUE QUAL UNITS DL

BRACGREY ANALYTICAL PARAMETERS

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	1 U	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 G880  
 UST GREY ANALYTICAL PARAMETERS -- REPORT NO. 9454

Lab Sample Number: B7C2501210  
 Site BRACGREY  
 Locator CEF8801S  
 Collect Date: 24-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

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