

N60200.AR.001159
NAS CECIL FIELD, FL
5090.3a

CONFIRMATORY SAMPLING REPORT FOR BUILDING 9 TANK G9 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 9, TANK G9
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

TABLE OF CONTENTS

Confirmatory Sampling Report
Building 9, Tank G9
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

APPENDICES

- Appendix A: Monitoring Well Installation Detail
- Appendix B: Groundwater Analytical Data

LIST OF FIGURES

Confirmatory Sampling Report
Building 9, Tank G9
Naval Air Station Cecil Field
Jacksonville, Florida

<u>Figure</u>	<u>Title</u>	<u>Page No.</u>
1	Tank G9, Main Fire Station	2
2	Tank G9, 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
FAC	Florida Administrative Code
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 G9 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 G9 was an underground storage tank (UST) located east of the northeastern corner of Building 9, the main fire station at Cecil Field (Figure 1). The UST, which was installed in 1976, had a 250-gallon capacity and was used to store diesel fuel for an emergency generator at this facility (ABB-ES, 1997; ABB-ES, 1994). A Contamination Assessment Plan for the assessment of soil and groundwater at Tank G9 was prepared by ABB-ES in November 1996 (ABB-ES, 1996).

Tank G9 was removed by Bechtel Environmental, Inc. (BEI), on April 15, 1997. No soil was removed from the site at that time. A Closure Report was prepared for Tank G9 and submitted to the Florida Department of Environmental Protection (BEI, 1997).

2.0 FIELD INVESTIGATION

The confirmatory sampling at Tank G9 was initiated in January 1997 (before the UST was removed) 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.

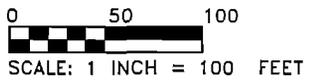
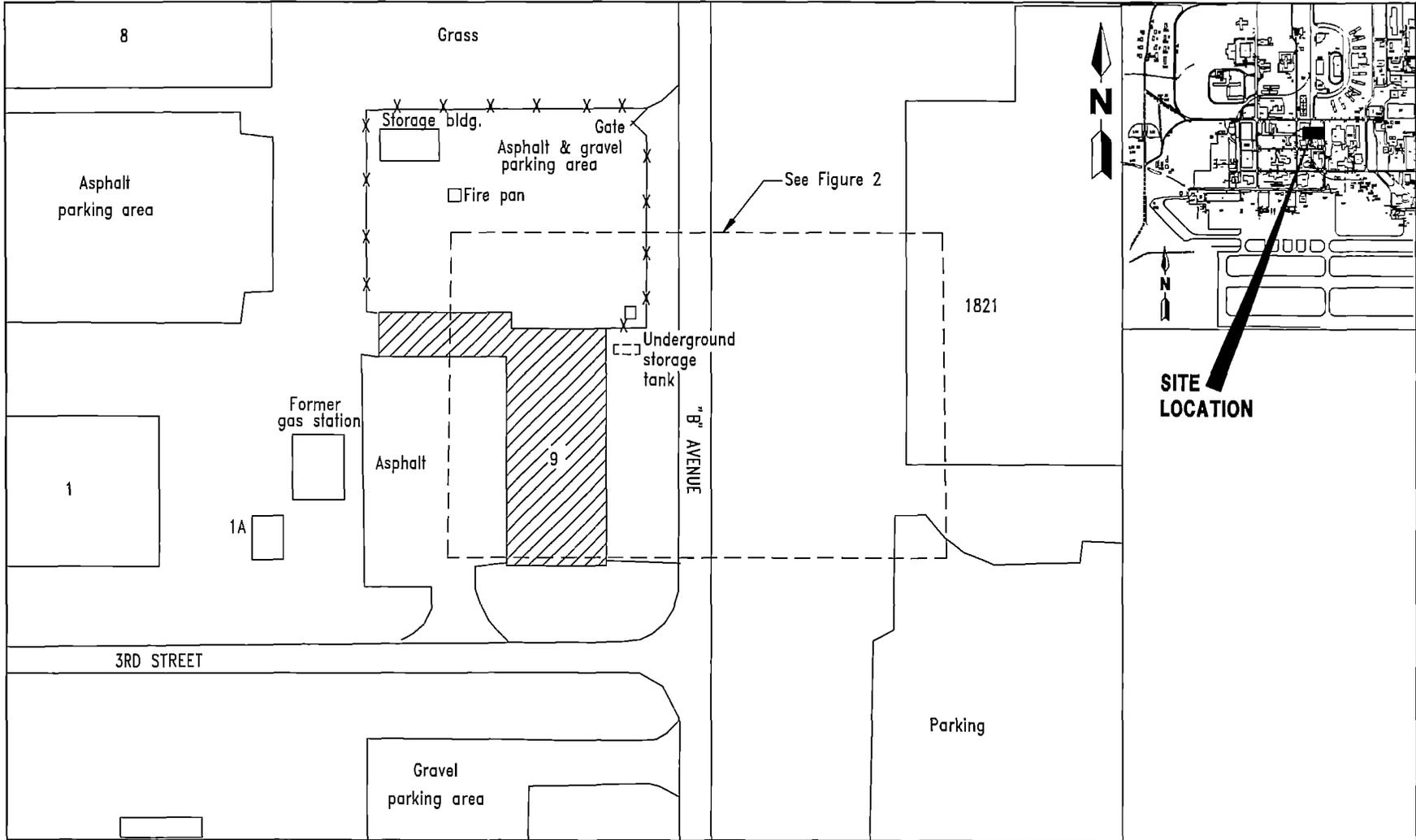
Soil samples were collected at depth intervals of 1 foot below land surface (bls) and every 2 feet thereafter to the water table. These samples were screened for hydrocarbon vapors with an organic vapor analyzer (OVA).

One monitoring well, CEF-9-1S, was installed east of the UST near the location of soil boring CEF-9-SB1 to a depth of 14 feet bls. One groundwater sample was collected on March 28, 1997, and analyzed for the Kerosene Analytical Group parameters. A general site plan indicating the location of the soil borings and monitoring well CEF-9-1S is presented on Figure 2. The monitoring well installation detail is included in 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 and tank removal (BEI, 1997). The soil OVA data are summarized in Table 2 and presented on Figure 2.

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

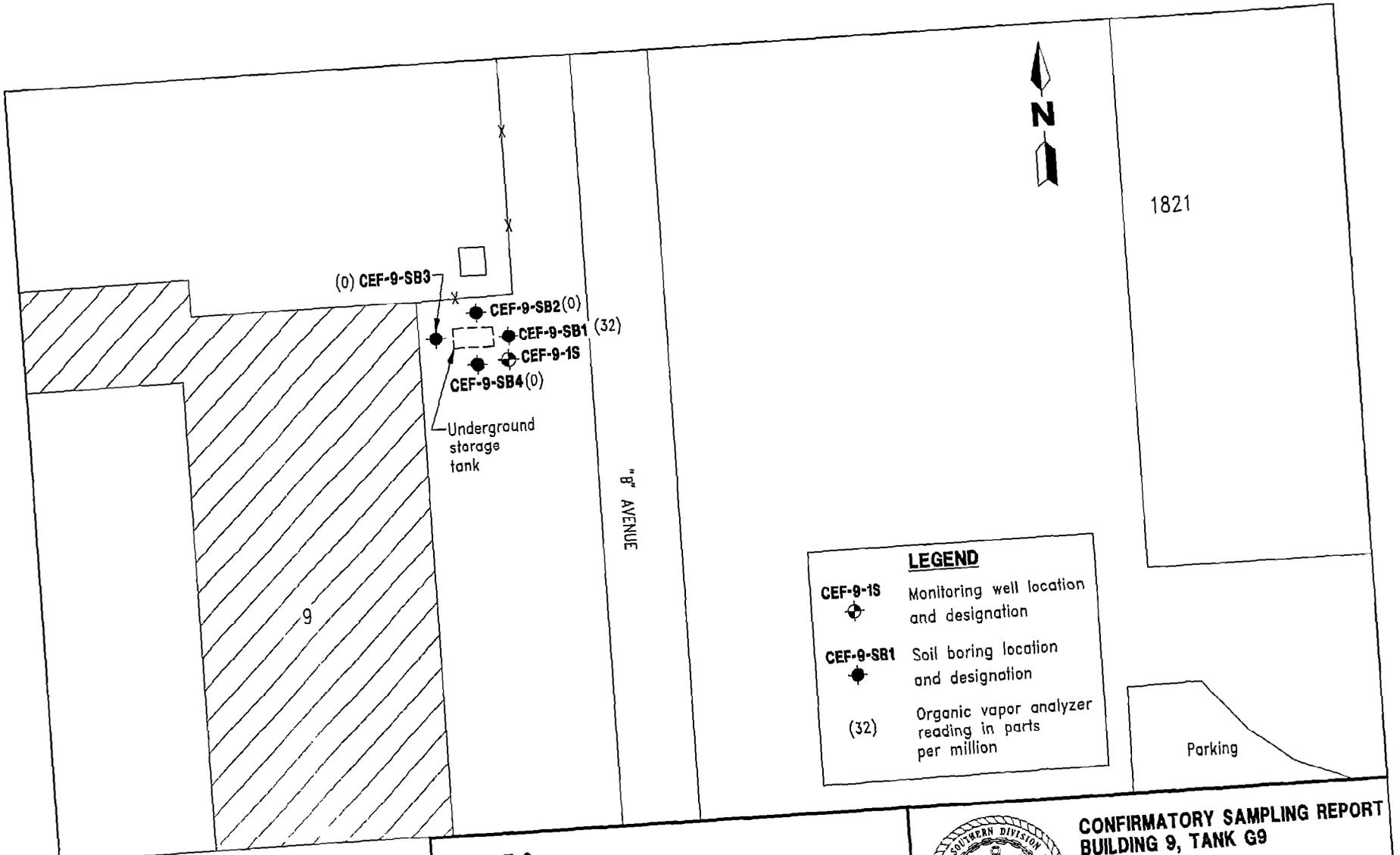


**FIGURE 1
TANK G9
MAIN FIRE STATION**



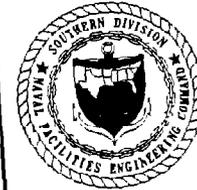
**CONFIRMATORY SAMPLING REPORT
BUILDING 9, TANK G9**

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



0 20 40
SCALE: 1 INCH = 40 FEET

**FIGURE 2
TANK G9
SOIL BORING AND MONITORING WELL LOCATIONS**



**CONFIRMATORY SAMPLING REPORT
BUILDING 9, TANK G9**

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

**Table 1
Soil Screening Results**

Confirmatory Sampling Report
Building 9, Tank G9
Naval Air Station Cecil Field
Jacksonville, Florida

Location	OVA Concentration (ppm)			
	Depth (feet bls)	Unfiltered	Filtered	Actual
CEF-9-SB1	1	0	--	0
	3	0	--	0
	4.5	32	0	32
CEF-9-SB2	1	0	--	0
	3	0	--	0
	4.5	0	--	0
CEF-9-SB3	1	0	--	0
	3	0	--	0
	4.5	0	--	0
CEF-9-SB4	1	0	--	0
	3	0	--	0
	4.5	0	--	0
CEF-9-1S	1	0	--	0
	3	0	--	0
	5 (wet)	0	--	0
	11 (wet)	0	--	0

Notes: All soil samples were collected on January 13, 1997.
Monitoring well CEF-9-1S was installed on March 6, 1997.
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 G9 site does 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-9-1S. Therefore, no further action is recommended for the Tank G9 site.

REFERENCES

- ABB Environmental Services, Inc. (ABB-ES). 1994. *Environmental Baseline Survey Report, Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOM), North Charleston, South Carolina (November).
- ABB-ES. 1996. *Contamination Assessment Plan, Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for 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-9-IS		BORING NO. CEF-9-IS	
CLIENT: SOUTHVIETNAMVACENCOM		PROJECT NO: 8542-03		DATE STARTED: 3-8-97	
DRILLING SUBCONTRACTOR: GEOTEK		SITE: Building 9		MONITOR INST. FID	
METHOD: 6.25" HSA		WELL CASE DIAM.: 2"		SCREEN INT.: 3-13 FT.	
TOC ELEVATION: FT. NGVD		GROUND ELEV.: FT. NGVD		NORTHING: 2142733	
WELL DEVELOP. DATE: 3-10-97		TOTAL DEPTH: 14 FT. BLS		DEPTH TO ∇ 7.50 FT. BLS	
				LOGGED BY: J Koch	

DEPTH FT.	SAMPLE INTERVAL RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
0		0	LIMESTONE WITH SILTY SAND (FILL MATERIAL): Light brown to grey, coarse grain limestone with sand and silt, no petroleum odor.		GM		posthole
0		0	SAND: Light grey, fine grained, no petroleum odor.		SP		posthole
5	100%	0	CLAY: Grey, low plasticity, saturated, no petroleum odor.		CL	11,14	
10	100%	0	CLAYEY SAND: Light grey, fine grained, saturated, no petroleum odor.		SC	23,3,4	∇
15							
20							

APPENDIX B
GROUNDWATER ANALYTICAL DATA

NAS CECIL FIELD -- TANK G9
UST GREY ANALYTICAL PARAMETERS -- REPORT NO. 9453

Lab Sample Number: B7C2901230
 Site BRACGREY
 Locator CEF91S
 Collect Date: 28-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 G9
UST GREY ANALYTICAL PARAMETERS -- REPORT NO. 9453

Lab Sample Number: 87C2901230
Site BRACGREY
Locator CEF91S
Collect Date: 28-MAR-97

	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