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NAS CECIL FIELD, FL  
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CONFIRMATORY SAMPLING REPORT FOR BUILDING 190 TANK G190 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 190, TANK G190**  
**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:**

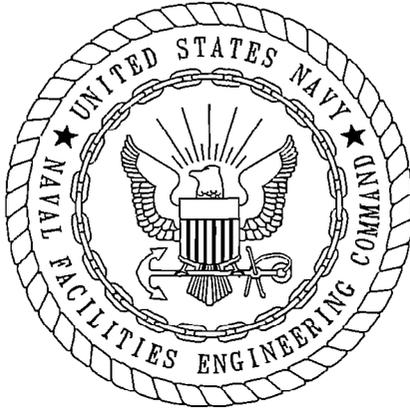
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**Prepared for:**

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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: November 20, 1997

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(DFAR 252.227-7036)

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## GLOSSARY

ABB-ES	ABB Environmental Services, Inc.
AST	aboveground storage tank
bls	below land surface
FAC	Florida Administrative Code
OVA	organic vapor analyzer
ppm	parts per million
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 G190 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 G190 is an aboveground storage tank (AST) located at Building 190, which was constructed as the Message Center and Telex Exchange for the Base (Figure 1). The AST, which was installed in 1991, has a 1,500-gallon capacity and is used to store diesel fuel for an emergency generator (ABB-ES, 1997). Records indicate that the AST replaced an underground storage tank (UST), but no tank closure information is available for the UST. A Contamination Assessment Plan for the assessment of soil and groundwater at Tank G190 was prepared by ABB-ES in November 1996 (ABB-ES, 1996).

## 2.0 FIELD INVESTIGATION

The confirmatory sampling for Tank G190 was initiated in February 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.

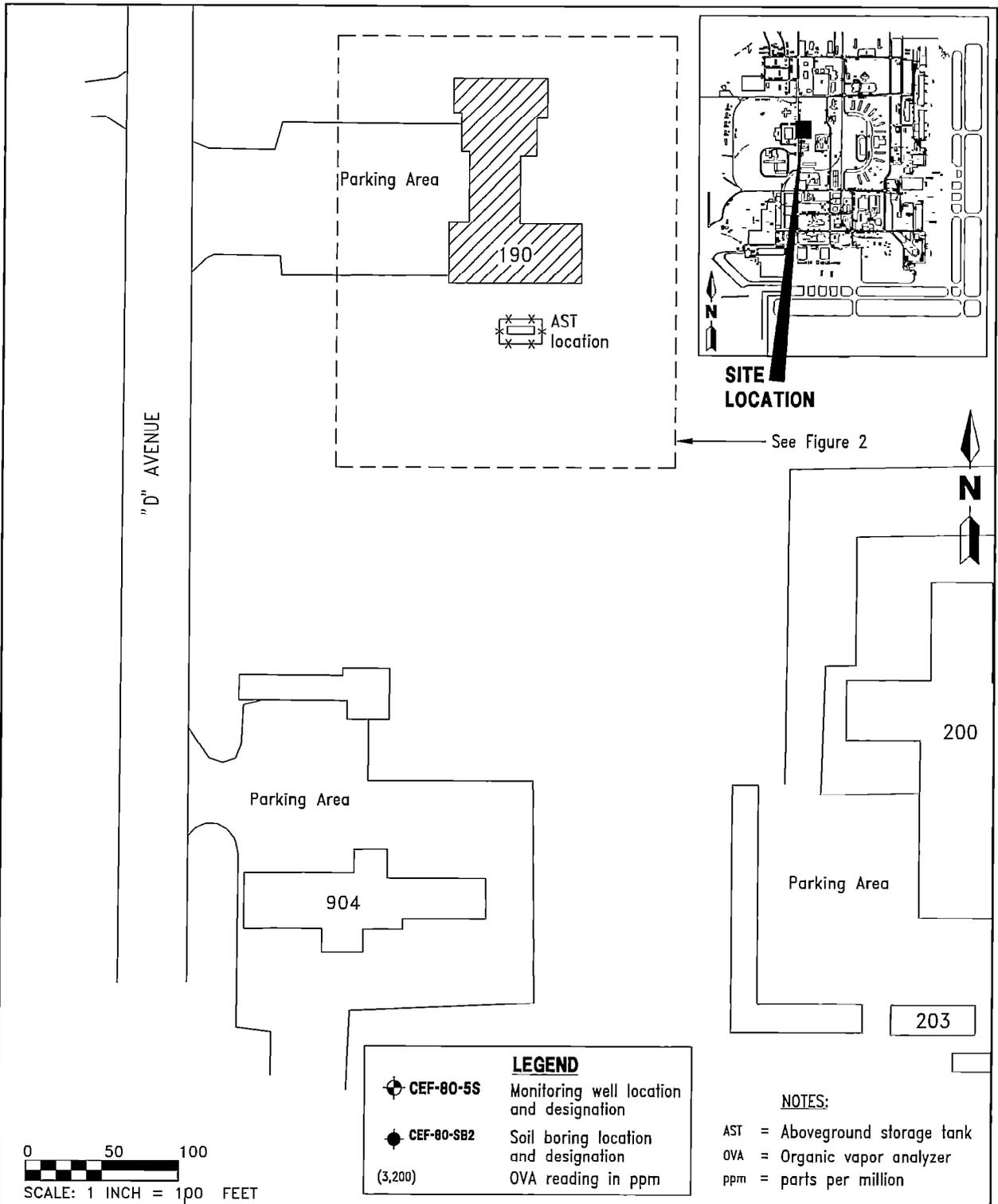
Soil samples were collected from each boring at depth intervals of 1 foot below land surface (bls) and every 2 feet thereafter to the water table. These samples were screened for hydrocarbon vapors with an organic vapor analyzer (OVA).

A monitoring well, CEF-190-1S, was installed east of the UST near the location of soil boring CEF-190-SB3 to a depth of 13 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 (greater than 50 parts per million [ppm] on an OVA) was detected in one soil boring. The highest OVA reading (900 ppm) was detected at 3 feet bls from a sample collected from soil boring CEF-190-SB3. The soil OVA data are summarized in Table 1 and presented on Figure 2.

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



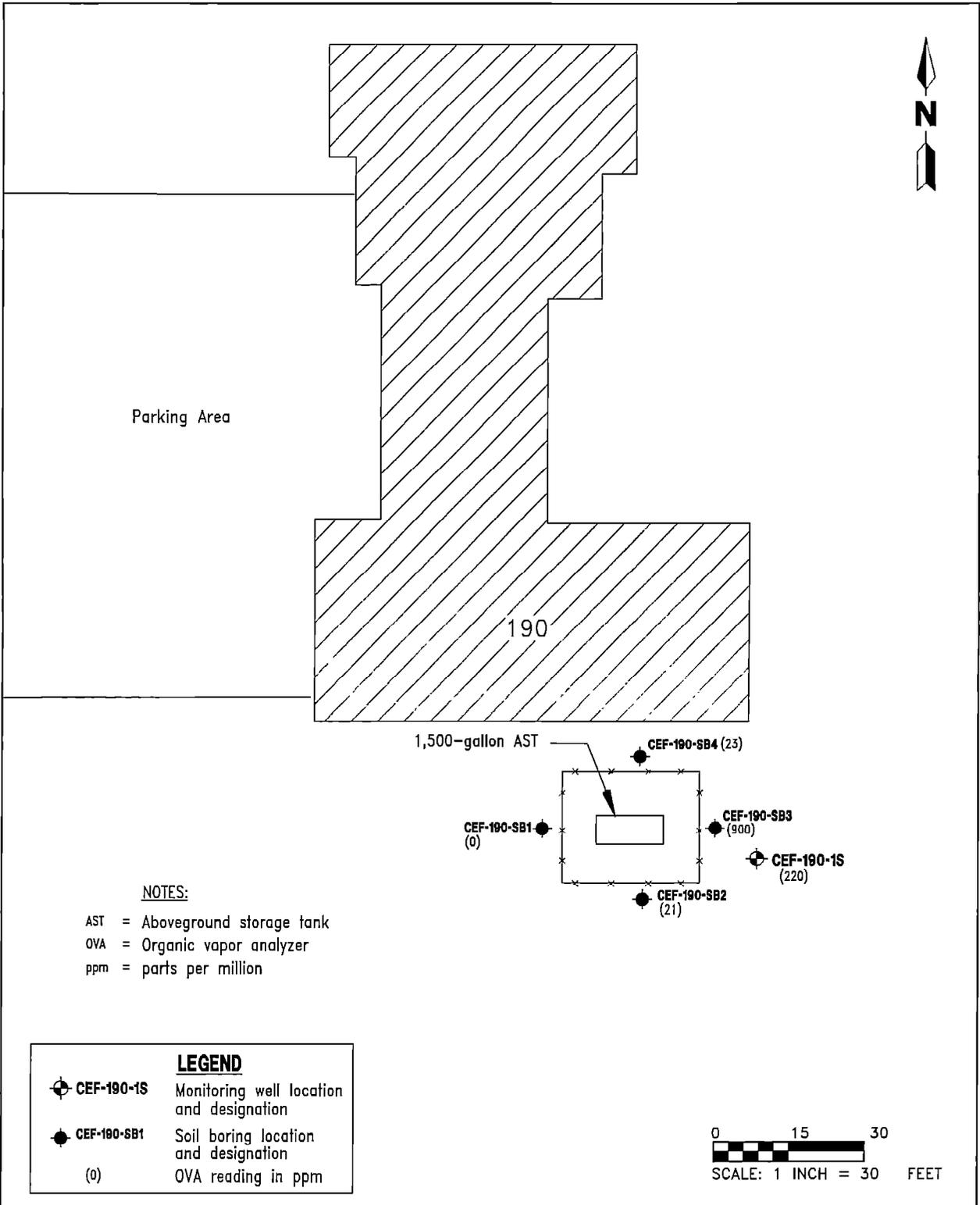
**FIGURE 1**  
**TANK G190**  
**TELEPHONE SERVICE BUILDING**



**CONFIRMATORY SAMPLING REPORT**  
**BUILDING 190, TANK G190**

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

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**FIGURE 2**  
**TANK G190**  
**SOIL BORING AND MONITORING WELL LOCATIONS**



**CONFIRMATORY SAMPLING REPORT**  
**BUILDING 190, TANK G190**

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

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**Table 1  
Soil Screening Results**

Confirmatory Sampling Report  
Building 190, Tank G190  
Naval Air Station Cecil Field  
Jacksonville, Florida

Location	OVA Concentration (ppm)			
	Depth (feet bls)	Unfiltered	Filtered	Actual
CEF-190-SB1	1	0	--	0
	3	0	--	0
	5 (wet)	310	0	310
CEF-190-SB2	1	0	--	0
	3	21	0	21
	5 (wet)	12	0	12
CEF-190-SB3	1	0	--	0
	3	900	0	900
	5 (wet)	240	0	240
CEF-190-SB4	1	0	--	0
	3	0	--	0
	5 (moist)	23	0	23
CEF-190-1S	1	0	--	0
	3	220	0	220
	5 (wet)	350	0	350
	11 (wet)	50	0	50

Notes: All soil samples were collected on February 11, 1997.  
Monitoring well CEF-190-1S was installed on February 27, 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.  
moist = soil sample was partially saturated when analyzed.

#### 4.0 CONCLUSIONS AND RECOMMENDATIONS

Data obtained during the confirmatory sampling at the Tank G190 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-190-1S.

It is recommended that additional soil samples be collected to assess the extent of excessively contaminated soil at the Tank G190 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-190-IS	BORING NO. CEF-190-IS
CLIENT: SOUTHDIYNAVFACENCOM			PROJECT NO: 8542-03
CONTRACTOR: GEOTEK		DATE STARTED: 2-27-97	COMPLTD: 2-27-97
METHOD: 6.25" HSA	CASE SIZE: 2"	SCREEN INT.: 2-12	PROTECTION LEVEL: D
TOC ELEV.: FEET.	MONITOR INST.: FID	TOT DPTH: 13 FEET.	DPTH TO $\nabla$ 4.20 FEET.
LOGGED BY: J Koch	WELL DEVELOPMENT DATE: 3-4-97		SITE: Building 190

DEPTH FT.	LABORATORY SAMPLE ID.	SAMPLE	RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
0					SILTY SAND: Dark brown, fine grain, no apparent petroleum odor.		SM	posthole	
220				SILTY SAND: Brown, fine grain, no petroleum odor.	posthole				
5 350			80%	SILTY SAND: Brown, fine grain with wood roots and organics, no petroleum odor, saturated.	5,5,5,4				
10 50			100%	SILTY SAND: Light brown to dark brown, fine grain with rotten egg odor (sulfur).	1,1,1,1				

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

NAS CECIL FIELD -- TANK G190  
 UST GREY ANALYTICAL PARAMETERS -- REPORT NO. 9418

Lab Sample Number:	B7C2701410	B7C2701410
Site	BRACGREY	BRACGREY
Locator	CEF1901S	CEF1901S
Collect Date:	26-MAR-97	26-MAR-97
VALUE	QUAL UNITS	DL
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	2 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 G190  
 UST GREY ANALYTICAL PARAMETERS -- REPORT NO. 9418

Lab Sample Number:	B7C2701410	B7C2701410
Site	BRACGREY	BRACGREY
Locator	CEF1901S	CEF1901S
Collect Date:	26-MAR-97	26-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