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NAS CECIL FIELD, FL
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CONFIRMATORY SAMPLING REPORT FOR BUILDING 271 TANK 271-OW 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 271, TANK 271-OW
BASE REALIGNMENT AND CLOSURE
UNDERGROUND STORAGE TANK AND
ABOVEGROUND STORAGE TANK GREY SITES
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

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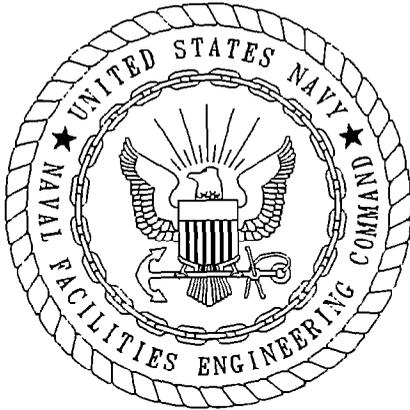
ABB Environmental Services, Inc.
2590 Executive Center Circle, East
Tallahassee, Florida 32301

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 24, 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 271, Tank 271-OW
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 | 1 |

REFERENCES

APPENDICES

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

LIST OF FIGURES

Confirmatory Sampling Report
Building 271, Tank 271-OW
Naval Air Station Cecil Field
Jacksonville, Florida

| <u>Figure</u> | <u>Title</u> | <u>Page No.</u> |
|---------------|--|-----------------|
| 1 | Tank 271-OW, Service Station (Base Gas Station) | 2 |
| 2 | Tank 271-OW, 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
bls below land surface
FAC Florida Administrative Code
NAS Naval Air Station
OVA organic vapor analyzer

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 the oil-water separator, 271-OW, at Naval Air Station (NAS) Cecil Field in Jacksonville, Florida. This report summarizes the related field operations, results, conclusions, and recommendations of the confirmatory sampling.

Tank 271-OW is an oil-water separator located east of Building 271. Building 271 serves as the gasoline service station for NAS Cecil Field (Figure 1). The oil-water separator has a 500-gallon capacity and is used to separate and store waste oil (ABB-ES, 1997). A Contamination Assessment Plan for the assessment of soil and groundwater at Tank 271-OW was prepared by ABB-ES in November 1996 (ABB-ES, 1996).

2.0 FIELD INVESTIGATION

The confirmatory sampling for Tank 271-OW was initiated in February 1997. It included the advancement of four soil borings to the water table and the collection and analysis of one groundwater sample from monitoring well CEF-271-2S.

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).

One groundwater sample was collected from an existing monitoring well (CEF-271-2S) 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 construction is presented in Appendix A.

3.0 SCREENING AND ANALYTICAL RESULTS

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

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 271-OW 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-271-2S. Therefore, no further action is recommended for the Tank 271-OW site until proper tank removal and closure is performed.

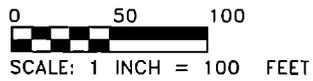
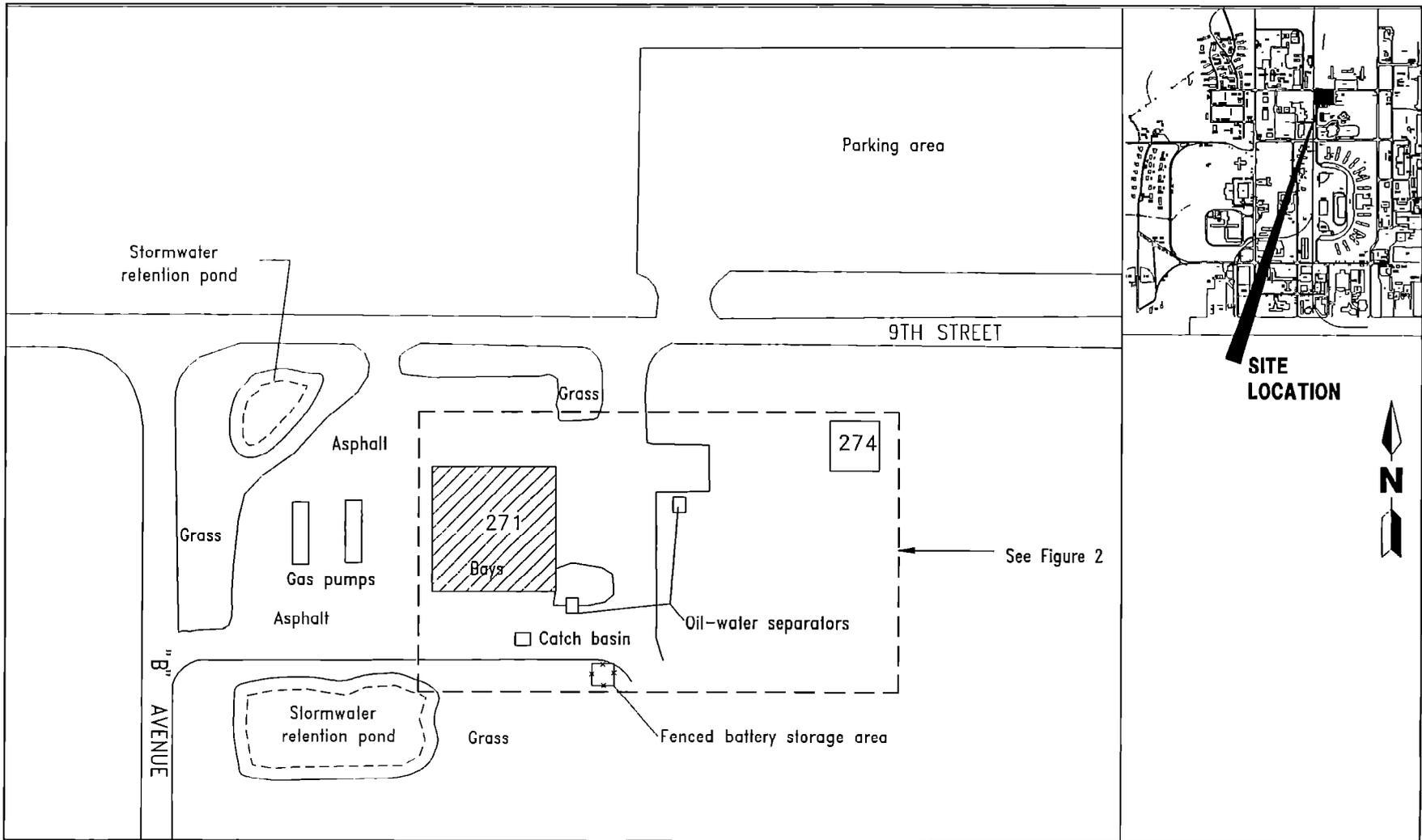
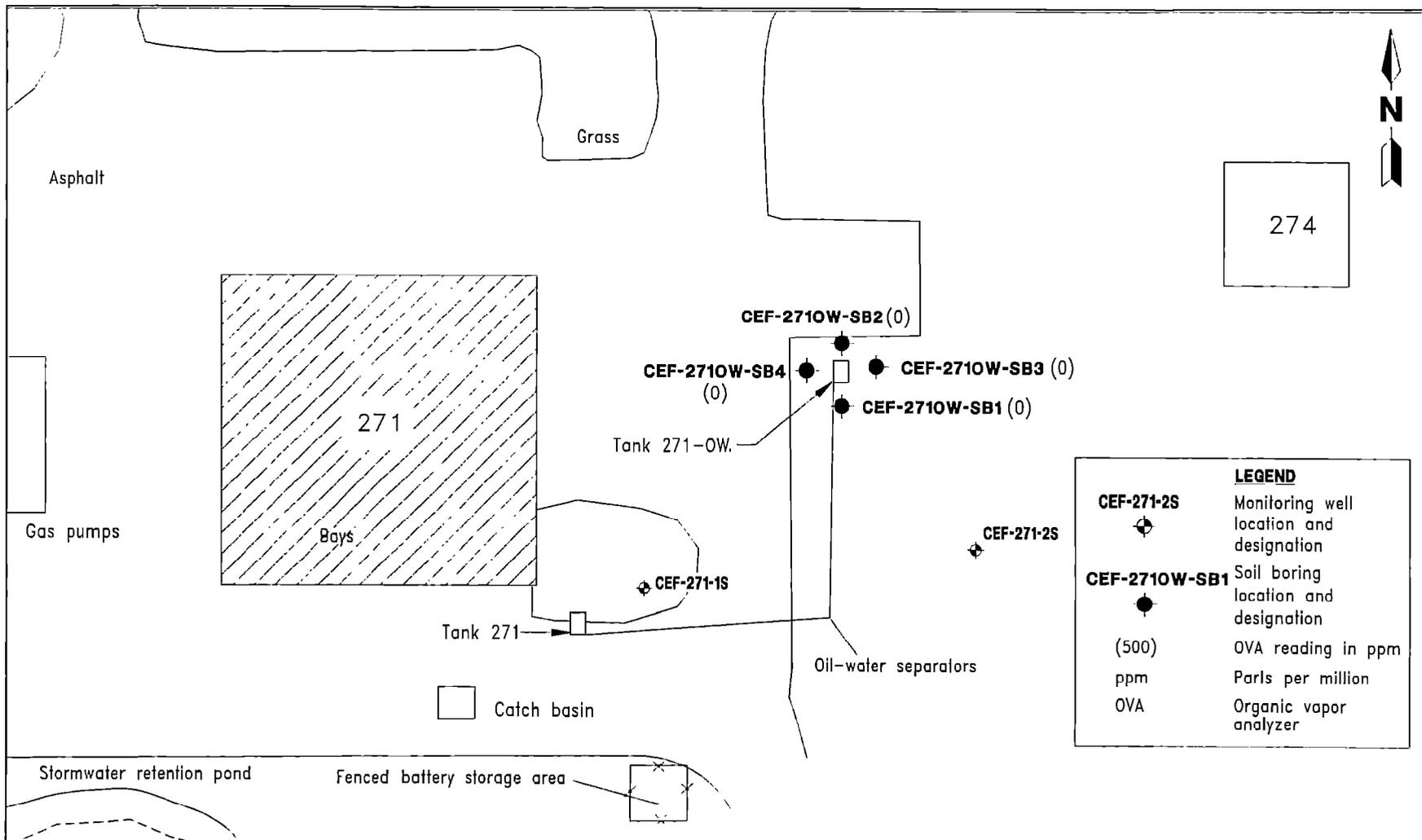


FIGURE 1
TANK 271-OW
SERVICE STATION (BASE GAS STATION)



CONFIRMATORY SAMPLING REPORT
BUILDING 271, TANK 271-OW

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA



274

| LEGEND | |
|---------------|--|
| CEF-271-2S | Monitoring well location and designation |
| CEF-2710W-SB1 | Soil boring location and designation |
| (500) | OVA reading in ppm |
| ppm | Parts per million |
| OVA | Organic vapor analyzer |

0 15 30
SCALE: 1 INCH = 30 FEET

FIGURE 2
TANK 271-OW
SOIL BORING AND MONITORING WELL LOCATIONS



CONFIRMATORY SAMPLING REPORT
BUILDING 271, TANK 271-OW
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

**Table 1
Soil Screening Results**

Confirmatory Sampling Report
Building 271, Tank 271-OW
Naval Air Station Cecil Field
Jacksonville, Florida

| Location | OVA Concentration (ppm) | | | |
|---------------|-------------------------|------------|----------|--------|
| | Depth (feet bls) | Unfiltered | Filtered | Actual |
| CEF-271OW-SB1 | 1 | 0 | - | 0 |
| | 3 | 0 | - | 0 |
| | 5 | 0 | - | 0 |
| | 7 (moist to wet) | 0 | - | 0 |
| CEF-271OW-SB2 | 1 | 0 | - | 0 |
| | 3 (refusal) | 0 | - | 0 |
| CEF-271OW-SB3 | 1 | 0 | - | 0 |
| | 3 | 0 | - | 0 |
| | 5 (moist) | 0 | - | 0 |
| | 7 | 0 | - | 0 |
| | 8.5 (wet) | 0 | - | 0 |
| CEF-271OW-SB4 | 1 | 0 | - | 0 |
| | 3 | 0 | - | 0 |
| | 5 | 0 | - | 0 |
| | 6 | 0 | - | 0 |

Notes: All soil samples were collected on February 5, 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.

moist = soil sample was partially saturated when analyzed.

refusal = subsurface obstruction encountered; unable to collect further samples at this location.

wet = soil sample was completely saturated when analyzed.

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

| | | | |
|-----------------------------------|------------------------|--|--------------------------------|
| Project: NAS Cecil Field BRAC | | Well ID: CEF-271-2S | Boring ID: CEF-271-2S |
| Client: SOUTH DIV NAV FAC ENG COM | | Contractor: Alliance Environmental, Inc. | Job No.: 08520-85 |
| Northing/Easting: | | Date started: 12-3-95 | Compltd: 12-3-95 |
| Method: Auger | Casing dia.: 2 in. | Screened Int.: 7 - 17 ft. | Protection level: 0 |
| TOC elev.: Ft. | Type of OVM.: PID | Total dpth: 18.0 Ft. | Dpth to ∇ : 8.0 Ft. |
| ABB Rep.: R. Holloway | Well development date: | | Site: 50 - 271 Service Station |

| Depth Ft. | Laboratory Sample ID. | Sample Recovery | Headspace (ppm) | Soil/Rock Description and comments | Lithologic symbol | Soil class. | Blows/6-in. | Well diag. |
|-----------|-----------------------|-----------------|-----------------|--|-------------------|-------------|-------------|------------|
| 0.5 | | | | SILTY SAND (SM): 100%, very dark gray, quartz, fine- to very fine-grained, subrounded to subangular, well sorted. | | SM | pasthole | |
| 0.9 | | | | | | | pasthole | |
| 1.3 | | | | | | | 3,5,4,4 | |
| 1.8 | | | | CLAY (CL): 100%, gray, soft, moist, plastic. | | CL | 8,9,10,10 | |
| 1.3 | | | | SILTY SAND (SM): 100%, light olive brown, quartz, very fine-grained, subangular to subrounded, well sorted, saturated. | | SM | 7,8,10,11 | |
| 5 | | | | | | | | |
| 10 | | | | | | | | |
| 15 | | | | | | | | |
| 20 | | | | | | | | |
| 25 | | | | | | | | |
| 30 | | | | | | | | |

APPENDIX B
GROUNDWATER ANALYTICAL DATA

NAS CECIL FIELD -- TANK 271-0W
 UST GREY ANALYTICAL PARAMETERS -- REPORT NO. 9501

Lab Sample Number: B7C2901230
 Site BRACGREY
 Locator CEF2712S
 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 | 10 U | ug/l | 10 |
| 1,3-Dichlorobenzene | 10 U | ug/l | 10 |
| 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 | 10 U | ug/l | 10 |
| Acenaphthylene | 10 U | ug/l | 10 |
| Anthracene | 2 U | ug/l | 2 |
| Benzene | 1 U | ug/l | 1 |
| Benzo (a) anthracene | 10 U | ug/l | 10 |
| Benzo (a) pyrene | 10 U | ug/l | 10 |
| Benzo (b) fluoranthene | 10 U | ug/l | 10 |
| Benzo (g,h,i) perylene | 10 U | ug/l | 10 |
| Benzo (k) fluoranthene | 10 U | ug/l | 10 |
| 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 | 10 U | ug/l | 10 |
| Dibenzo (a,h) anthracene | 10 U | ug/l | 10 |
| 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 | 10 U | ug/l | 10 |
| Fluorene | 10 U | ug/l | 10 |
| Indeno (1,2,3-cd) pyrene | 10 U | ug/l | 10 |
| Lead | 5 U | ug/l | 5 |
| Methyl tert-butyl ether | 1 U | ug/l | 1 |
| Methylene chloride | 1 U | ug/l | 1 |
| Naphthalene | 10 U | ug/l | 10 |
| Phenanthrene | 10 U | ug/l | 10 |
| 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 271-OW
UST GREY ANALYTICAL PARAMETERS -- REPORT NO. 9501

Lab Sample Number: B7C2901230
Site BRACGREY
Locator CEF2712S
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 |

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

NAS CECIL FIELD TANK 271-OW
UST GREY ANALYTICAL PARAMETERS -- REPORT NO. 9501

Lab Sample Number: B7C2901230
Site BRACGREY
Locator CEF2712S
Collect Date: 28-MAR-97

VALUE QUAL UNITS DL

| | | | | |
|---------------|-----|---|------|-----|
| Arsenic-DISS | 300 | U | ug/l | 300 |
| Cadmium-DISS | 5 | U | ug/l | 5 |
| Chromium-DISS | 50 | U | ug/l | 50 |
| 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