N60200.AR.008969
NAS CECIL FIELD
5090.3a

REMEDIAL ACTION REPORT TRUCK STAND SITE NAS CECIL FIELD FL
6/1/1996
ABB ENVIRONMENTAL

REMEDIAL ACTION REPORT
TRUCK STAND SITE

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

UNIT IDENTIFICATION CODE: N60200
CONTRACT NO. N62467-89-D-0317/090

JUNE 1996

SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORTH CHARLESTON, SOUTH CAROLINA
29419-9010

PRINTED ON RECYCLED PAPER

REMEDIAL ACTION REPORT
TRUCK STAND SITE

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

Unit Identification Code: N60200

Contract No. N62467-89-D-0317/090

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

June 1996

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-0317/090 are complete and accurate and comply with all requirements of this contract.

DATE: June 26, 1996

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

NAME AND TITLE OF CERTIFYING OFFICIAL: Robert C. Lunardini, Jr., P.E.
Project Technical Lead

(DFAR 252.227-7036)

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Truck Stand Site
Naval Air Station Cecil Field
Jacksonville, Florida

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Truck Stand Site
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GLOSSARY

ABB-ES	ABB Environmental Services, Inc.
BCT	Base Realignment and Closure (BRAC) cleanup team
BEI	Bechtel Environmental, Inc.
bls	below land surface
FAC	Florida Administrative Code
LNAPL	light nonaqueous-phase liquid
LTTD	low temperature thermal desorption
NAS	Naval Air Station
OVA	organic vapor analyzer
QCP	Quality Control Program
QCPA	Quality Control Program Plan Addendum
ROICC	resident officer in charge of construction
TRPH	total recoverable petroleum hydrocarbons

1.0 INTRODUCTION

The North Fuel Farm Area Truck Stand site is located on Loop Road south of the North Fuel Farm at Naval Air Station (NAS) Cecil Field, Jacksonville, Florida. It is used as a loading station for the flightline refueling tanker trucks.

Groundwater and soil contamination at the Truck Stand site is due to releases of JP-5 jet fuel from leaking pipelines and stormwater runoff from the fueling bays. In two areas, lighter than water non-aqueous- phase liquids (LNAPL) have been detected. From April 11 through April 25, 1996, remedial actions were conducted at the Truck Stand site to remove LNAPL from these areas.

This remedial action report is divided into six sections including this introduction. The section titles and subjects are as follows:

- Chronology of Events: Summary of the events preceding the remedial action.
- Performance Standards and Construction Quality Control: A listing of the quality control used during remedial actions.
- Construction Activities: Summary of the remedial activities and dates throughout the duration of project.
- Final Inspection: Includes results of the postconstruction inspection.
- Construction Costs: An estimate of construction costs.
- Postremedial Activities: A listing of activities performed since construction activities.
- Conclusions and Recommendations: The recommended actions to reach site closure in accordance with Chapter 62-770, Florida Administrative Code (FAC).
- Certification: Certification by the Engineer of Record.

2.0 CHRONOLOGY OF EVENTS

Between June, 1991 and August, 1995, ABB Environmental Services (ABB-ES) assessed contamination associated with the groundwater and soil in the Truck Stand area which exceeded requirements set forth in Chapter 62-770, FAC. LNAPLs were detected in monitoring wells from two separate areas, the retention pond area to the northeast of the site and along the abandoned fuel lines southwest of the site (Figure 1). ABB-ES recommended that a remedial action plan be prepared to address groundwater and soil contamination.

On January 16, 1996, members of the Base Realignment and Closure Team (BCT) met to discuss remedial alternatives for the Truck Stand site. It was agreed to excavate free-product saturated soil for low temperature thermal desorption (LTTD) treatment before the LTTD unit was demobilized from NAS Cecil Field. Excavation below the groundwater table was recommended to capture the free-product-saturated soil in the capillary zone.

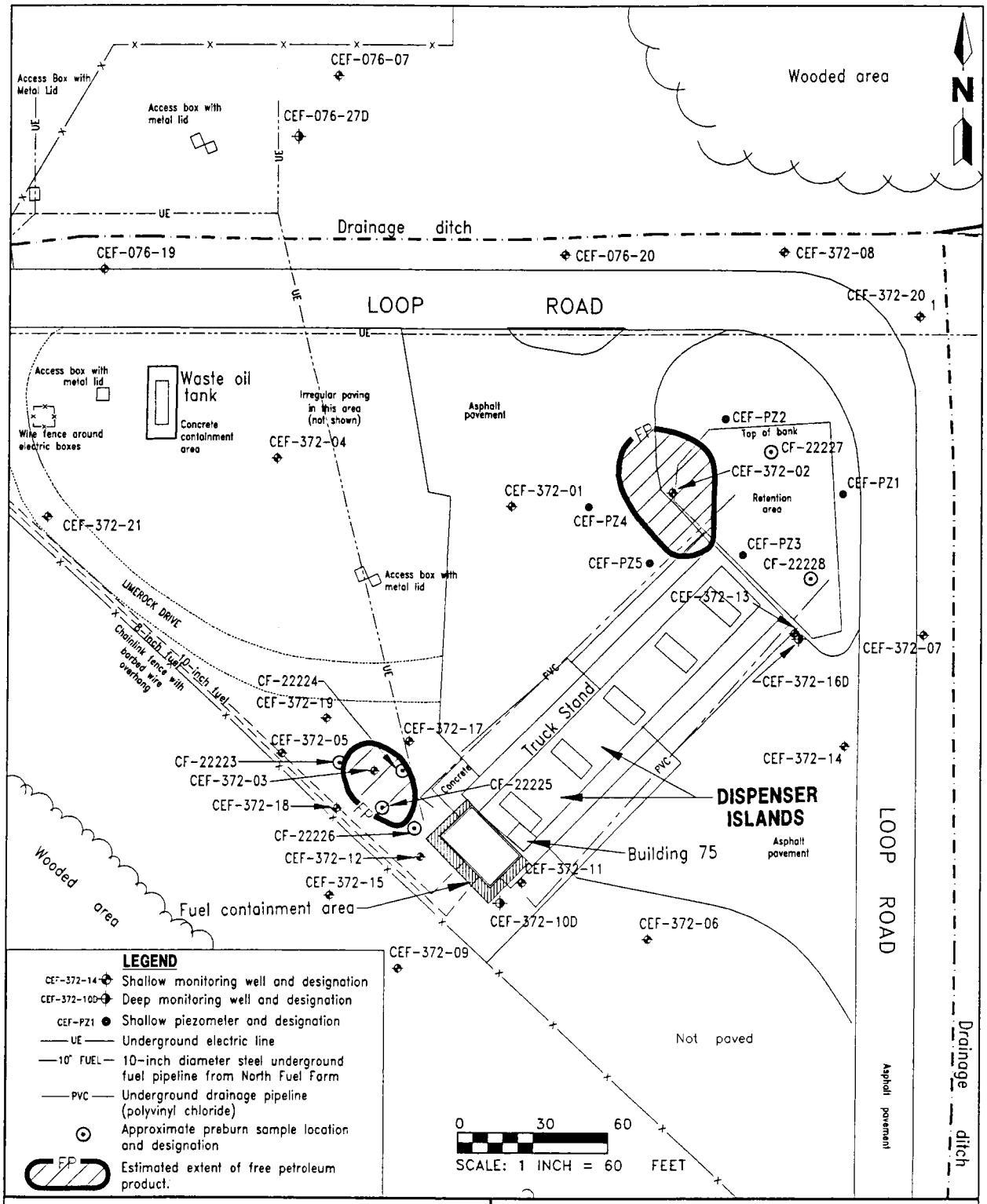

FIGURE 1
SITE MAP

REMEDIAL ACTION REPORT
NORTH FUEL FARM AREA
TRUCK STAND SITE

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

H:\CEF\NFF\TRUCKSTD\IRA\PS-NAB-NP\06-12-96

From April 11 through April 25, 1996, Bechtel Environmental Incorporated (BEI) excavated soil areas associated with the free-product plumes. Preburn soil samples were collected by BEI prior to the excavation (Figure 1). The soil was thermally treated onsite in the LTTD unit. ABB-ES provided construction oversight services during remedial activities. Preburn and postburn sample analyses results are included in Attachment 1.

All postburn sample results met the requirements of Chapter 62.775.400 FAC except sample NTFFT 141, collected on May 3, 1996, which had a total recoverable petroleum hydrocarbons (TRPH) concentration of 90 milligrams per kilogram. According to Trent Rogers, BEI, this soil was retreated and resampled on May 7, 1996. The resample, NFFT 142, indicated nondetect for TRPH.

3.0 PERFORMANCE STANDARDS AND CONSTRUCTION QUALITY CONTROL

The remedial action goal for this work was to remove and treat free product-contaminated soil. ABB-ES relied on a combination of visual observation and organic vapor analyzer (OVA) readings to determine the extent of free product-contaminated soil. OVA readings and sample designations are presented in Attachment 2.

Appropriate quality control criteria were followed as developed and included in the site-specific addendum to the Quality Control Program (QCP) prepared by BEI. This site-specific plan, called the Quality Control Program Plan Addendum (QCPA), was based on the Navy-approved QCP for the basic contract and the site-specific QCPA.

Field screening samples collected by ABB-ES were collected in accordance with ABB-ES's Florida Department of Environmental Protection-approved Comprehensive Quality Assurance Program Plan. Site details and sample locations are shown on Figures 2 and 3.

4.0 CONSTRUCTION ACTIVITIES

Construction activities at the Truck Stand site began on April 11, 1996. BEI was the prime remedial contractor, and Dustcoatings, Inc., was the subcontractor operating the LTTD unit. J.R. Metts, BEI, was the construction foreman, and Trent Rogers, BEI, was the Health and Safety officer onsite. Joseph Ullo and Srinivas Kuchibotla of ABB-ES performed construction oversite on behalf of Southern Division. A total of 982 tons of soil were removed from the site. The groundwater table at the time of excavation was between 4 and 5 feet below land surface (bls). Excessive groundwater was not encountered during the excavation as the low permeability of the surrounding soils gave sufficient time for backfilling prior to groundwater equalization. Daily construction activities are summarized below.

April 11, 1996 (Excavation of Area 1 [Figure 2], 590 cubic yards):

- BEI began excavation at the southern end of the retention pond. The original excavation depth was 3 feet bls. Excavation proceeded northward.

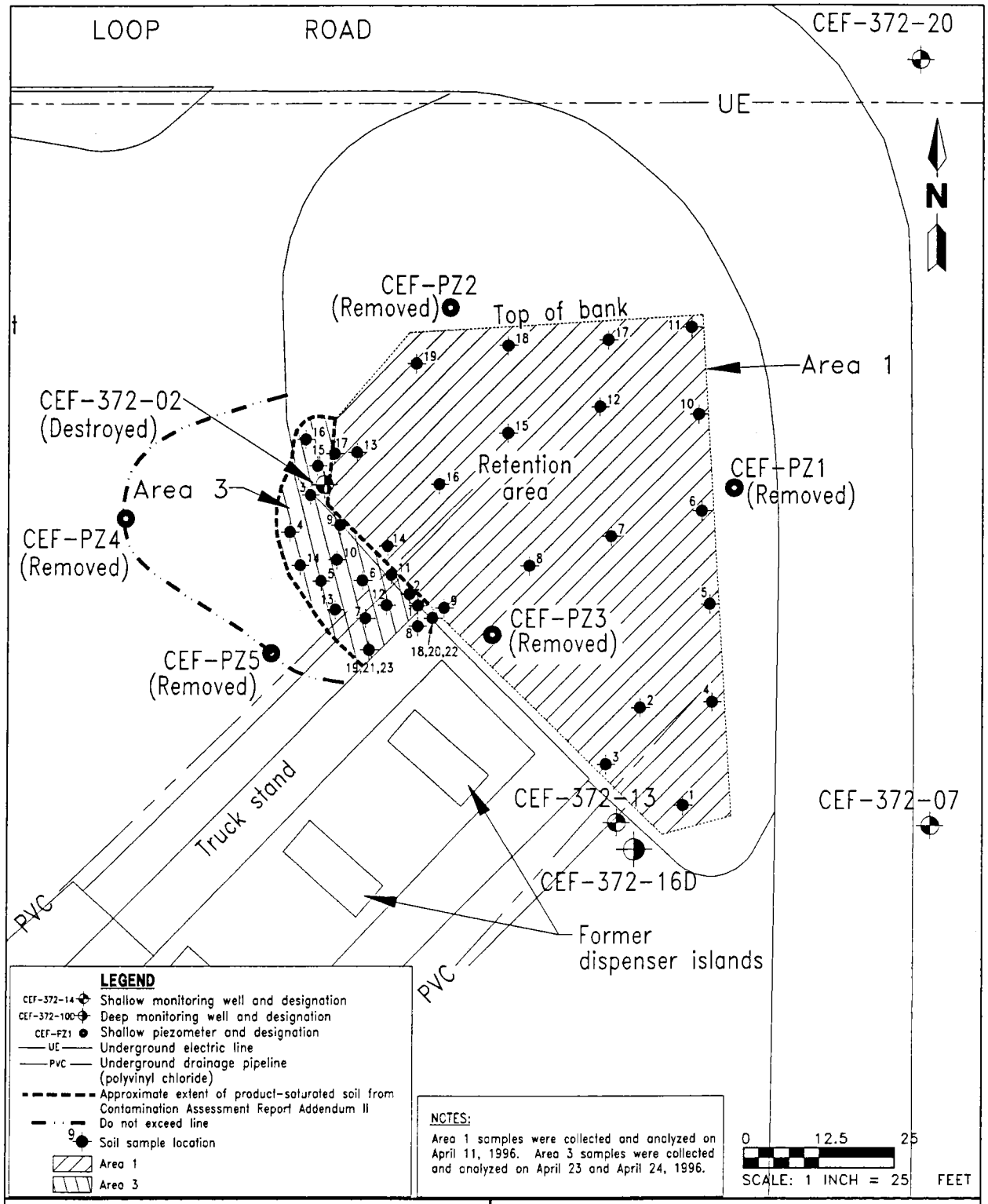

FIGURE 2
EXCAVATION ON THE EAST SIDE, APRIL 11, APRIL 23, AND APRIL 25, 1996

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REMEDIAL ACTION REPORT
NORTH FUEL FARM AREA
TRUCK STAND SITE

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

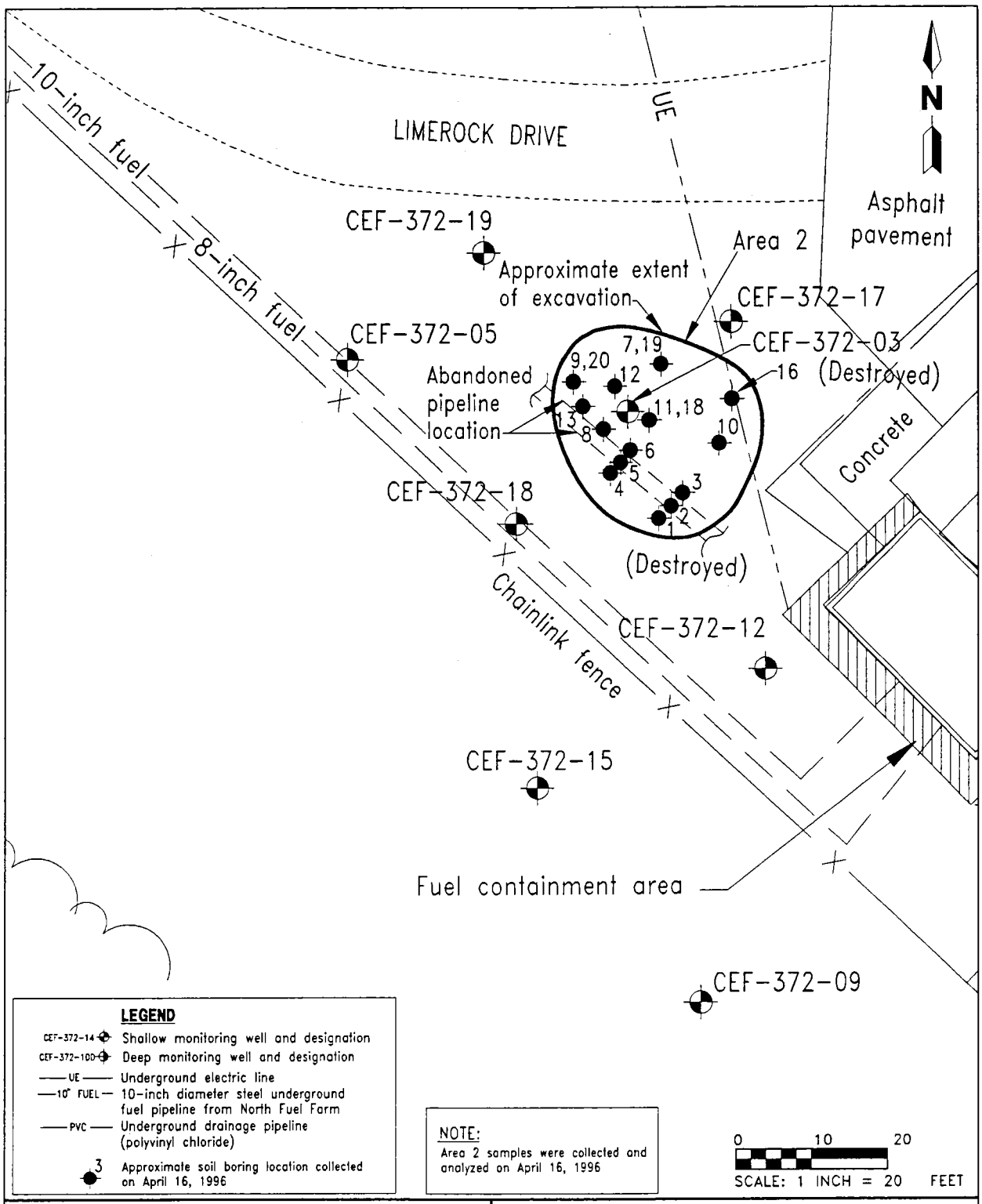

FIGURE 3
EXCAVATION ON THE WEST SIDE, APRIL 16, 1996

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REMEDIAL ACTION REPORT
NORTH FUEL FARM AREA
TRUCK STAND SITE

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

- Following visual inspection, it was determined that the water table had not been breached. ABB-ES recommended excavation to the mean low water table, which was approximately 4.5 feet bls.

- Following agreement from the resident officer in charge of construction (ROICC) and BEI, excavation was continued to 4.5 feet bls.

- BEI experienced mechanical difficulties with the track-hoe. BEI replaced a worn belt onsite with minimal time loss.

- Excavation in the immediate area of monitoring well CEF-372-MW2 (MW-2) was extended to a depth of approximately 10 feet bls. MW-2, a shallow monitoring well with a total depth of 12 feet bls, was removed.

- ABB-ES collected screening samples throughout the remedial activity.

- BEI removed approximately 590 cubic yards of product-saturated and excessively contaminated soils. The excavation did not extend underneath the asphalt.

- BEI placed visqueen lining in the former area of MW-2 surrounding the northwest corner of the excavation to prevent free-product migration into the clean backfill. Backfill material was soil from the North Fuel Farm that had been treated in the LTTD unit.

- BEI performed site restoration backfilling and seeding of the retention pond area. BEI compacted the backfilled soils through repeated bulldozer passes.

April 12 through April 15, 1996: Weekend and one rain day (Monday, April 15).

April 16, 1996 (Excavation of Area 2 [Figure 3], 170 cubic yards):

- BEI excavated contaminated soil to a depth of 4 feet bls to expose two abandoned fuel lines.

- BEI continued the excavation in the vicinity of monitoring well CEF-372-MW3 (MW-3). The depth of excavation was approximately 4 feet bls. MW3, a shallow monitoring well with a total depth of 12 feet bls, was removed during this activity.

- Based on visual inspection of soil screening samples, ABB-ES recommended extending the excavation 1 foot in the excavated areas to a total depth of 5 feet bls except in the area adjacent to the exposed pipelines.

- Upon approval from the ROICC, BEI extended the excavation.

- ABB-ES collected soil screening samples throughout the remedial activity.

- BEI excavated approximately 11.5 truck loads of product-saturated and excessively contaminated soils in the vicinity of MW3. Each truck load contained approximately 15 cubic yards.

- BEI performed site restoration backfilling to grade and seeding.

April 17, 1996:

- BEI demobilized from the site.

- At Area 3 (Figure 2), ABB-ES marked the approximate extent of product-saturated soil underneath the asphalt as defined in the Contamination Assessment Report Addendum for the Truck Stand Site, dated December 1995. ABB-ES also marked a "do not exceed" line for product verification.

April 18 through April 22, 1996: BEI and ABB-ES awaited recommendation from the BCT on excavation beneath the asphalt area.

April 23, 1996 (Excavation of Area 3 [Figure 2], 120 cubic yards):

- BEI cut asphalt along the extent line marked by ABB-ES on April 17, 1996.

- BEI excavated to a uniform depth of approximately 6 feet bls.

- Based on visual inspection of field screening samples, ABB-ES recommended extending the excavation 1 foot throughout to a depth of 7 feet bls.

- Upon approval from the ROICC, BEI extended the excavation.

- ABB-ES collected screening samples throughout the remedial activity.

- Based on visual inspection and field measurements, ABB-ES recommended further excavation in the northern and southern areas of Excavation 3.

- BEI placed visqueen lining in these areas and performed site restoration in the remaining areas.

April 24, 1996 (Continued Excavation in Area 3):

- BEI excavated to a depth of approximately 7 feet in the area corresponding to field screening samples 424-SS16 and 424-SS17.

- Based on soil screening, ABB-ES recommended ceasing excavation in the northern area.

- BEI excavated to a depth of 6 feet in the area corresponding to screening samples 424-SS18 through 424-SS23.

- Based on soil screening, ABB-ES recommended extending the excavation to a depth of 7 feet, with potential undercutting beneath the concrete canopy.

- Following the direction of the ROICC, BEI extended the excavation to a depth of 7.5 feet.

- Following soil screening, the excavation depth was increased to approximately 10 feet. Approximately 2 feet of soil beneath the concrete canopy in the excavation area were removed.

- Based on soil screening, visual observations, and direction from ABB-ES and the ROICC, BEI began site restoration.

- Soils were placed in the excavation area in lifts of 12 inches and compacted using tampers. Soils in the top layers (just below the limerock) and underneath the concrete canopy were mixed with cement in an attempt to improve the soil strength. BEI placed approximately 8 to 10 inches of limerock above the soil in the excavated area.

- BEI removed approximately 8 truckloads of product-saturated and excessively contaminated soil from this area. Each truck load contained approximately 15 cubic yards.

April 29, 1996:

- BEI placed and compacted approximately 2 inches of asphalt above the limerock in Excavation 3.

5.0 FINAL INSPECTION

Following inspection of the site restoration activities by Srinivas Kuchibotla, ABB-ES, on April 30, 1996, it was noted that flow channels had developed in the retention pond.

At a construction meeting on April 30, 1996, BEI informed the meeting personnel that water runoff from the asphalt had created two channels of flow into the retention pond. The retention pond had recently been seeded and there was no vegetation to prevent the limerock erosion (underneath the asphalt) into the pond. The ROICC requested Bechtel to monitor the site conditions until the pond was revegetated.

6.0 CONSTRUCTION COST

Construction activities for this work were estimated to be $93,000. Actual costs incurred were not available at the time of this report.

7.0 POSTREMEDIAL ACTIVITIES

ABB-ES completed the following:

- On May 29, 1996, a piezometer, PZ-001, was installed in the former location of monitoring well CEF-372-2.

- On June 10, 1996, PZ-001 was checked for the presence of free product. No free product was detected.

- On June 11, 1996, piezometer PZ-001 and monitoring well CEF-372-13S were sampled for the Kerosene and Mixed Product analytical group in accordance with Chapter 62-770.600. Analytical results are included as Attachment 3.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Piezometer PZ-001 and monitoring well CEF-372-13 are located in a former source area of the groundwater plume, and each monitoring point meets the monitoring only contaminant levels for consideration for source wells with no potable wells downgradient. Table 1 provides a comparison between analytical results, contaminant levels considered appropriate for monitoring only, and regulatory standards for class G-II groundwater.

Two sources of petroleum contamination at the Truck Stand Site were (1) the retention pond which accumulated surface runoff and releases from the Truck Stand and (2) leaks from underground pipes leading to the Truck Stand from the North Fuel Farm tank mound. These sources were abated during this remedial action. Wells located on the perimeter of the former source areas were below the monitoring only criteria prior to this remedial action and presumably have not changed.

From June through December 1994, many improvements were made to the Truck Stand Site. A new impervious concrete fuel containment area consisting of new fuel monitors, high speed refuelers, filters, pipes, valves and other equipment was installed to prevent and contain fuel releases. This combined with the removal of known source areas should aid in the natural restoration of the surficial aquifer in the Truck Stand area. Contaminant migration has not been significant since the contamination assessment began in 1992, and, based on basewide average hydraulic conductivities, migration offsite is not expected. Vertical migration is also unlikely due to the nature of the contaminants.

Based on the analytical results presented herein and site specific considerations, ABB-ES recommends the development of a monitoring only plan for the Truck Stand Site in accordance with Chapter 62-770, FAC.

Table 1
Summary of Groundwater Analytical Results, June 12, 1996

Remedial Action Report
Truck Stand Site
Naval Air Station Cecil Field
Jacksonville, Florida

Contaminant	PZ-001	CEF-372-13S	Regulatory Standards, Class G-II Groundwater[1]	Monitoring Only Guidance for source wells with no potable wells[2]
Volatile Organic Aromatics (VOAs) (USEPA Method 601/602), µg/ℓ				
Benzene	2.1	7.7	1	500
Ethylbenzene	29	46		
Toluene	34	ND		
Xylenes, total	98	62		
Methyl tert-butyl ether	ND	ND	50	
Total VOAs	163.1	115.7	50	1000
1,4-Dichlorobenzene	ND	ND		
Polynuclear Aromatic Hydrocarbons (USEPA Method 625), µg/ℓ				
1-Methylnaphthalene	180	110		
2-Methylnaphthalene	200	150		
Naphthalene	180	150		
Total naphthalenes	560	410	100	2000
Total Recoverable Petroleum Hydrocarbons (TRPH) (USEPA Method 418.1), mg/ℓ				
TRPH	27	ND	5	100
Ethylene Dibromide (EDB) (USEPA Method 601 Modified), µg/ℓ				
EDB	ND	ND	0.02	0.4
Lead (USEPA Method 239.2), µg/ℓ				
Lead	27.4	5.5	50	1000

[1] Chapter 62-770.730(5a), Florida Administrative Code (FAC).
[2] **No Further Action and Monitoring Only Guidelines for Petroleum Contaminated Sites**, FDEP, October, 1990.

Notes: USEPA = U.S. Environmental Protection Agency.
µg/ℓ = micrograms per liter.
ND = not detected.
Total VOAs = total volatile organic aromatics.
mg/ℓ = milligrams per liter.
FDEP = Florida Department of Environmental Protection.

9.0 CERTIFICATION

By signature, the signer certifies that the Truck Stand soil remediation was completed as described in this report and in accordance with Chapter 62-770 and 62-775, FAC. One exception noted to compliance with the above is that the shallow monitoring wells CEF-372-MW-2 and CEF-372-MW-3 were destroyed during the excavation rather than abandoned in place in accordance with Chapter 40C-3, FAC.

Robert C. Lunardini, Jr.
Professional Engineer No. 46657
Expires February 28, 1997

ATTACHMENT 1

PREBURN AND POSTBURN ANALYTICAL RESULTS

PREBURN ANALYTICAL RESULTS

1/13 9520

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

ENCO Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Bechtel Environmental, Inc.
ADDRESS: P.O. Box 171
Qtrs E Ave G, NAS Cecil
Jacksonville, FL 32215

REPORT # : JR2237
DATE SUBMITTED: April 8, 1996
DATE REPORTED : April 12, 1996

ATTENTION: Greg Olson

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NTFF-Truck Stand

04/08/96

#1 - CF22223 - TS-01 @ 08:51
#2 - CF22224 - TS-02 @ 09:97
#3 - CF22225 - TS-03 @ 09:18
#4 - CF22226 - TS-04 @ 09:35
#5 - CF22227 - TS-05 @ 10:05
#6 - CF22228 - TS-06 @ 10:13

RECEIVED
APR 16 1996
V. HERMANN BAUER

PROJECT MANAGER Scott D Martin
Scott D. Martin

ENCO LABORATORIES
REPORT # : JR2237
DATE REPORTED: April 12, 1996
PROJECT NAME : NTFF-Truck Stand

RESULTS OF ANALYSIS

EPA METHOD 8010A - VOLATILE HALOCARBONS	CF22223	CF22224	CF22225	Units
Dichlorodifluoromethane	125 U	125 U	125 U	µg/Kg
Chloromethane	250 U	250 U	250 U	µg/Kg
Vinyl Chloride	125 U	125 U	125 U	µg/Kg
Bromomethane	125 U	125 U	125 U	µg/Kg
Chloroethane	250 U	250 U	250 U	µg/Kg
Trichlorofluoromethane	250 U	250 U	250 U	µg/Kg
1,1-Dichloroethene	125 U	125 U	125 U	µg/Kg
Methylene Chloride	250 U	250 U	250 U	µg/Kg
t-1,2-Dichloroethene	125 U	125 U	125 U	µg/Kg
1,1-Dichloroethane	125 U	125 U	125 U	µg/Kg
Chloroform	125 U	125 U	125 U	µg/Kg
1,1,1-Trichloroethane	125 U	125 U	125 U	µg/Kg
Carbon Tetrachloride	125 U	125 U	125 U	µg/Kg
1,2-Dichloroethane	125 U	125 U	125 U	µg/Kg
Trichloroethene	125 U	125 U	125 U	µg/Kg
1,2-Dichloropropane	125 U	125 U	125 U	µg/Kg
Bromodichloromethane	125 U	125 U	125 U	µg/Kg
c-1,3-Dichloropropene	125 U	125 U	125 U	µg/Kg
t-1,3-Dichloropropene	125 U	125 U	125 U	µg/Kg
1,1,2-Trichloroethane	125 U	125 U	125 U	µg/Kg
Tetrachloroethene	125 U	125 U	125 U	µg/Kg
Dibromochloromethane	125 U	125 U	125 U	µg/Kg
Chlorobenzene	125 U	125 U	125 U	µg/Kg
Bromoform	125 U	125 U	125 U	µg/Kg
1,1,2,2-Tetrachloroethane	125 U	125 U	125 U	µg/Kg
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	80	80	100	30-153
Date Analyzed	04/08/96	04/08/96	04/09/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2237
DATE REPORTED: April 12, 1996
PROJECT NAME : NTFF-Truck Stand

RESULTS OF ANALYSIS

EPA METHOD 8020A - VOLATILE AROMATICS	CF22223	CF22224	CF22225	Units
Methyl tert-butyl ether	250 U	250 U	250 U	µg/Kg
Benzene	125 U	125 U	125 U	µg/Kg
Toluene	125 U	125 U	125 U	µg/Kg
Chlorobenzene	125 U	125 U	125 U	µg/Kg
Ethylbenzene	125 U	125 U	125 U	µg/Kg
m-Xylene & p-Xylene	**625**	125 U	125 U	µg/Kg
o-Xylene	125 U	125 U	125 U	µg/Kg
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
Surrogate:	% RECOV	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	80	*	*	39-125
Date Analyzed	04/08/96	04/08/96	04/09/96	

EPA METHOD 9073 - TRPH	CF22223	CF22224	CF22225	Units
Total Petr. Hydrocarbons	**692**	**221**	**416**	mg/Kg
Date Analyzed	04/11/96	04/11/96	04/11/96	

* = Surrogate recovery unavailable due to matrix interference.
U = Compound was analyzed for but not detected to the level shown.

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PROJECT NAME : NTFF-Truck Stand

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	CF22223	CF22224	CF22225	Units
Arsenic Date Analyzed	6010	2 U 04/09/96	2 U 04/09/96	2 U 04/09/96	mg/Kg
Barium Date Analyzed	6010	20 U 04/09/96	20 U 04/09/96	20 U 04/09/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 04/09/96	1 U 04/09/96	1 U 04/09/96	mg/Kg
Chromium Date Analyzed	6010	1 U 04/09/96	**1.52** 04/09/96	**1.60** 04/09/96	mg/Kg
Lead Date Analyzed	6010	1 U 04/09/96	1 U 04/09/96	**2.73** 04/09/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 04/09/96	0.01 U 04/09/96	0.01 U 04/09/96	mg/Kg
Selenium Date Analyzed	6010	2 U 04/09/96	2 U 04/09/96	2 U 04/09/96	mg/Kg
Silver Date Analyzed	6010	2 U 04/09/96	2 U 04/09/96	2 U 04/09/96	mg/Kg

J = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2237
DATE REPORTED: April 12, 1996
PROJECT NAME : NTFF-Truck Stand

RESULTS OF ANALYSIS

EPA METHOD 8010A - VOLATILE HALOCARBONS	CF22226	CF22227	CF22228	Units
Dichlorodifluoromethane	125 U	125 U	125 U	µg/Kg
Chloromethane	250 U	250 U	250 U	µg/Kg
Vinyl Chloride	125 U	125 U	125 U	µg/Kg
Bromomethane	125 U	125 U	125 U	µg/Kg
Chloroethane	250 U	250 U	250 U	µg/Kg
Trichlorofluoromethane	250 U	250 U	250 U	µg/Kg
1,1-Dichloroethene	125 U	125 U	125 U	µg/Kg
Methylene Chloride	250 U	250 U	250 U	µg/Kg
t-1,2-Dichloroethene	125 U	125 U	125 U	µg/Kg
1,1-Dichloroethane	125 U	125 U	125 U	µg/Kg
Chloroform	125 U	125 U	125 U	µg/Kg
1,1,1-Trichloroethane	125 U	125 U	125 U	µg/Kg
Carbon Tetrachloride	125 U	125 U	125 U	µg/Kg
1,2-Dichloroethane	125 U	125 U	125 U	µg/Kg
Trichloroethene	125 U	125 U	125 U	µg/Kg
1,2-Dichloropropane	125 U	125 U	125 U	µg/Kg
Bromodichloromethane	125 U	125 U	125 U	µg/Kg
c-1,3-Dichloropropene	125 U	125 U	125 U	µg/Kg
t-1,3-Dichloropropene	125 U	125 U	125 U	µg/Kg
1,1,2-Trichloroethane	125 U	125 U	125 U	µg/Kg
Tetrachloroethene	125 U	125 U	125 U	µg/Kg
Dibromochloromethane	125 U	125 U	125 U	µg/Kg
Chlorobenzene	125 U	125 U	125 U	µg/Kg
Bromoform	125 U	125 U	125 U	µg/Kg
1,1,2,2-Tetrachloroethane	125 U	125 U	125 U	µg/Kg
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	80	90	100	30-153
Date Analyzed	04/09/96	04/09/96	04/09/96	

J = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2237
DATE REPORTED: April 12, 1996
PROJECT NAME : NTFF-Truck Stand

RESULTS OF ANALYSIS

EPA METHOD 8020A - VOLATILE AROMATICS	CF22226	CF22227	CF22228	Units
Methyl tert-butyl ether	250 U	250 U	250 U	µg/Kg
Benzene	125 U	125 U	125 U	µg/Kg
Toluene	125 U	125 U	125 U	µg/Kg
Chlorobenzene	125 U	125 U	125 U	µg/Kg
Ethylbenzene	125 U	125 U	125 U	µg/Kg
m-Xylene & p-Xylene	1000	125 U	125 U	µg/Kg
o-Xylene	125 U	125 U	125 U	µg/Kg
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
Surrogate:	% RECOV	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	*	*	*	39-125
Date Analyzed	04/09/96	04/09/96	04/09/96	

EPA METHOD 9073 - TRPH	CF22226	CF22227	CF22228	Units
Total Petr. Hydrocarbons	2588 D25	2063 D25	1475 D25	mg/Kg
Date Analyzed	04/11/96	04/11/96	04/11/96	

D25 = Analyzed @ 1:25 dilution
* = Surrogate recovery unavailable due to matrix interference
U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2237
DATE REPORTED: April 12, 1996
PROJECT NAME : NTFF-Truck Stand

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	CF22226	CF22227	CF22228	Units
Arsenic	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		04/09/96	04/09/96	04/09/96	
Barium	6010	20 U	20 U	20 U	mg/Kg
Date Analyzed		04/09/96	04/09/96	04/09/96	
Cadmium	6010	1 U	1 U	1 U	mg/Kg
Date Analyzed		04/09/96	04/09/96	04/09/96	
Chromium	6010	**1.28**	**1.56**	**2.32**	mg/Kg
Date Analyzed		04/09/96	04/09/96	04/09/96	
Lead	6010	1 U	1 U	**1.88**	mg/Kg
Date Analyzed		04/09/96	04/09/96	04/09/96	
Mercury	7471	0.01 U	0.01 U	0.01 U	mg/Kg
Date Analyzed		04/09/96	04/09/96	04/09/96	
Selenium	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		04/09/96	04/09/96	04/09/96	
Silver	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		04/09/96	04/09/96	04/09/96	

U = Compound was analyzed for but not detected to the level shown.

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ENCO LABORATORIES
REPORT # : JR2237
DATE REPORTED: April 12, 1996
PROJECT NAME : NTFF-Truck Stand

RESULTS OF ANALYSIS

EPA METHOD 8010A - VOLATILE HALOCARBONS	LAB BLANK	Units
Dichlorodifluoromethane	125 U	µg/Kg
Chloromethane	250 U	µg/Kg
Vinyl Chloride	125 U	µg/Kg
Bromomethane	125 U	µg/Kg
Chloroethane	250 U	µg/Kg
Trichlorofluoromethane	250 U	µg/Kg
1,1-Dichloroethene	125 U	µg/Kg
Methylene Chloride	250 U	µg/Kg
t-1,2-Dichloroethene	125 U	µg/Kg
1,1-Dichloroethane	125 U	µg/Kg
Chloroform	125 U	µg/Kg
1,1,1-Trichloroethane	125 U	µg/Kg
Carbon Tetrachloride	125 U	µg/Kg
1,2-Dichloroethane	125 U	µg/Kg
Trichloroethene	125 U	µg/Kg
1,2-Dichloropropane	125 U	µg/Kg
Bromodichloromethane	125 U	µg/Kg
c-1,3-Dichloropropene	125 U	µg/Kg
t-1,3-Dichloropropene	125 U	µg/Kg
1,1,2-Trichloroethane	125 U	µg/Kg
Tetrachloroethene	125 U	µg/Kg
Dibromochloromethane	125 U	µg/Kg
Chlorobenzene	125 U	µg/Kg
Bromoform	125 U	µg/Kg
1,1,2,2-Tetrachloroethane	125 U	µg/Kg
1,3-Dichlorobenzene	125 U	µg/Kg
1,4-Dichlorobenzene	125 U	µg/Kg
1,2-Dichlorobenzene	125 U	µg/Kg
		µg/Kg

Surrogate:	% RECOV	LIMITS
Bromofluorobenzene	90	30-153
Date Analyzed	04/08/96	

U = Compound was analyzed for but not detected to the level shown.

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ENCO LABORATORIES
REPORT # : JR2237
DATE REPORTED: April 12, 1996
PROJECT NAME : NTFF-Truck Stand

RESULTS OF ANALYSIS

EPA METHOD 8020A - VOLATILE AROMATICS	LAB BLANK	Units
Methyl tert-butyl ether	250 U	µg/Kg
Benzene	125 U	µg/Kg
Toluene	125 U	µg/Kg
Chlorobenzene	125 U	µg/Kg
Ethylbenzene	125 U	µg/Kg
m-Xylene & p-Xylene	125 U	µg/Kg
o-Xylene	125 U	µg/Kg
1,3-Dichlorobenzene	125 U	µg/Kg
1,4-Dichlorobenzene	125 U	µg/Kg
1,2-Dichlorobenzene	125 U	µg/Kg
		µg/Kg
Surrogate:	**% RECOV**	**LIMITS**
Bromofluorobenzene	130	39-125
Date Analyzed	04/08/96	

EPA METHOD 9073 - TRPH	LAB BLANK	Units
Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	04/11/96	

J = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2237
DATE REPORTED: April 12, 1996
PROJECT NAME : NTFF-Truck Stand

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	Units
Arsenic	6010	2 U	mg/Kg
Date Analyzed		04/09/96	
Barium	6010	20 U	mg/Kg
Date Analyzed		04/09/96	
Cadmium	6010	1 U	mg/Kg
Date Analyzed		04/09/96	
Chromium	6010	1 U	mg/Kg
Date Analyzed		04/09/96	
Lead	6010	1 U	mg/Kg
Date Analyzed		04/09/96	
Mercury	7471	0.01 U	mg/Kg
Date Analyzed		04/09/96	
Selenium	6010	2 U	mg/Kg
Date Analyzed		04/09/96	
Silver	6010	2 U	mg/Kg
Date Analyzed		04/09/96	

U = Compound was analyzed for but not detected to the level shown.

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ENCO LABORATORIES
REPORT # : JR2237
DATE REPORTED: April 12, 1996
PROJECT NAME : NTFF-Truck Stand

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 8010A				
Methylene Chloride	105/115/110	13-191	9	27
Chloroform	105/120/110	46-152	13	18
Carbon Tetrachloride	105/110/110	53-151	5	20
Trichloroethene	110/105/100	28-164	5	25
Chlorobenzene	110/115/105	60-137	4	20
EPA Method 8020A				
Benzene	95/100/ 95	49-149	5	20
Toluene	95/100/ 95	43-144	5	14
Ethylbenzene	90/ 80/100	40-135	12	14
m-Xylene & p-Xylene	92/100/ 98	23-167	8	10
EPA Method 9073				
TRPH	104/ 98/112	59-134	6	23
Total Metals				
Arsenic, 6010	81/ 82/ 89	70-118	1	12
Barium, 6010	84/ 86/ 85	69-120	2	17
Cadmium, 6010	84/ 86/ 86	69-117	2	14
Chromium, 6010	87/ 89/ 88	75-120	2	20
Lead, 6010	85/ 84/ 86	60-130	1	31
Mercury, 7471	108/111/109	70-138	3	12
Selenium, 6010	84/ 85/ 85	58-122	1	14
Silver, 6010	93/ 95/ 96	69-116	2	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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NAVY RAC CHAIN OF CUSTODY RECORD

Facility Name: Navy RAC Civil Field
Site Name: NTFF-Truck Stand
Delivery Order No.:
Cooler/Crate No.:
Sampling Event:: Truck Stand / Pre-burn / Thermal Treatment

SEIR No.:
COC Number:
Lab:
Field Logbook No.:
Logbook Pg. No.:

Sampled by: Trent J Rogers (Print) Trent J Rogers (Sign) (Print) (Sign)

Legend

SAMPLE TYPE

- PSB Preservative Blank
- FDP Field Duplicate
- ENV Environmental
- FDB Field Blank
- GEO Geotechnical Sample
- MXD Matrix Spike Duplicate
- MXS Matrix Spike
- BLS Blind Spike
- BLB Blind Blank
- PTS Point Source
- FRP Field Replicate
- RSB Rinsate Blank
- SPL Split
- TRP Trip Blank

MATRIX

- AIR Air
- FLO Flora
- FAU Fauna
- GWT Groundwater
- LCH Leachate
- OIL Oil
- DIW Deionized Water
- DFW Deionized Organic Free Water
- SBS Subsurface Soil
- SED Sediment
- SFS Surface Soil
- SFW Surface Water
- SLG Sludge
- SLW Solid Waste
- OFW Organic Free Water
- PTW Potable Water
- SEP Seeps
- SOL Solid
- WWT Waste Water
- SLW Solid Waste
- SST Surface Water Storm Event

QC LEVELS

- C Sample results and QC reported
- D Sample results, QC and raw data reported
- E Sample results, blanks, and calibration reported
- S Screening level analysis; sample results and QC as reported

Station ID	BEI Sample ID	Sample Type	Matrix Code	Collection Date/Time	Container ID	Preservative	Pay Item	Parameter	Priority	QC Code
TS-01	CF22223	ENV	SBS	4/8/96 0851	01	Cool/4°C		TPH/RCRA		C
↓	↓	↓	↓	↓ ↓	02	↓		8010/8020		↓
TS-02	CF22224			4/8/96 0907	01			TPH/RCRA		
↓	↓			↓ 0907	02			8010/8020		
TS-03	CF22225			4/8/96 0918	01			TPH/RCRA		
↓	↓	↓	↓	↓ ↓	02	↓		8010/8020		

RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR TRANSFER
Trent J Rogers	[signature]	4-9-96	1200	Transfer to Lab

COMMENTS/INSTRUCTIONS

CONTAMINATION	YES	NO
Radiological		X
Chemical JP-5	X	

Shipper: Bechtel Environmental, Inc.

Ship to: ENCO

Airbill No. Traffic Report No.

This package conforms to the conditions and limitations specified in 49 CFR 173.421 for excepted radioactive material, limited quantity, n.o.s. UN2910

O:\NAVY-RAC\COCR.NUM

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9520

CHAIN OF CUSTODY RECORD (Continued)

Station ID	BEI Sample ID	Sample Type	Matrix Code	Collection Date/Time	Container ID	Preservative	Pay Item	Parameter	Priority	QC Level
TS-04	CF22226	ENV	SBS	4/8/96 0935	01	Cool 4°C		TPH/RCRA		
↓	↓			↓ ↓	02			8010/8020		
TS-05	CF22227			4/8/96 1005	01			TPH/RCRA		
↓	↓			↓ ↓	02			8010/8020		
TS-06	CF22228			4/8/96 1013	01			TPH/RCRA		
↓	↓	↓	↓	↓ ↓	02	↓		8010/8020		

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POSTBURN ANALYTICAL RESULTS

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

ENCO Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2397
DATE SUBMITTED: April 25, 1996
DATE REPORTED : April 30, 1996

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

04/25/96

#1 - NTFFT 130 @ 14:45

PROJECT MANAGER

Scott D. Martin

RECEIVED
APR 30 1996
V. HERMAN BAUER

ENCO LABORATORIES
REPORT # : JR2397
DATE REPORTED: April 30, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020 - VOLATILE AROMATICS	NTFFT 130	LAB BLANK	Units
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	7	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	6	5 U	µg/Kg
m-Xylene & p-Xylene	33	5 U	µg/Kg
o-Xylene	13	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Surrogate:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	106	124	39-125
Date Analyzed	04/26/96	04/26/96	

EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS	NTFFT 130	LAB BLANK	Units
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Extracted		04/26/96	
Date Analyzed	04/29/96	04/29/96	

U = Compound was analyzed for but not detected to the level shown.

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ENCO LABORATORIES
REPORT # : JR2397
DATE REPORTED: April 30, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	NTFFT 130	LAB BLANK	Units
Arsenic	6010	2 U	2 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Barium	6010	20 U	20 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Cadmium	6010	1 U	1 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Chromium	6010	3.3	1 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Lead	6010	4.2	1 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Selenium	6010	2 U	2 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Silver	6010	2 U	2 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	

U = Compound was analyzed for but not detected to the level shown.

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ENCO LABORATORIES
REPORT # : JR2397
DATE REPORTED: April 30, 1996
PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 8020				
Benzene	99/100/109	49-149	1	20
Toluene	72/ 74/ 84	43-144	3	14
Ethylbenzene	65/ 65/ 78	40-135	<1	14
m-Xylene & p-Xylene	49/ 50/ 62	23-167	2	10
EPA Method 9073				
Total Petr. Hydrocarbons	105/108/108	59-134	3	23
Total Metals				
Arsenic, 6010	84/ 85/ 89	70-118	1	12
Barium, 6010	82/ 83/ 87	69-120	1	17
Cadmium, 6010	77/ 78/ 83	69-117	1	14
Chromium, 6010	82/ 84/ 88	75-120	2	20
Lead, 6010	84/ 85/ 83	60-130	1	31
Selenium, 6010	83/ 84/ 82	58-122	1	14
Silver, 6010	83/ 86/ 89	69-116	4	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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ENVIRONMENTAL CONSERVATION LABORATORIES

4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
Ph. (904) 296-3007 - Fax (904) 296-6210

10207 General Drive
Orlando, Florida 32824
Ph. (407) 826-5314 - Fax (407) 850-6945

QSARF #_____

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: NTFPT Cecil Field
PROJECT NO.:
P.O. NUMBER:
PROJECT LOC. (State): Fl
SAMPLER(s) NAME: Cliff White
PHONE:
FAX:
CLIENT NAME: Dust Coating
CLIENT PROJECT MANAGER:
CLIENT ADDRESS (CITY, STATE, ZIP):

PAGE ___ OF ___

☐ STANDARD REPORT DELIVERY
☐ EXPEDITED REPORT DELIVERY (surcharge)
Date Due: _____

SAMPLE DATE	SAMPLE TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID	AIR	SLUDGE	OTHER	8020	9073	RCRA Metals	PRESERVATIVE	REMARKS
NTFPT 130	4/25/96	1445		✓					✓					✓	✓	✓		72hr turnaround

SAMPLE KIT PREPARED BY: ☐ JACKSONVILLE ☐ ORLANDO

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Cliff White	4/25/96	1530			
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED FOR LABORATORY BY: (SIGNATURE) ☒ Jacksonville ☐ Orlando	DATE 4/25/96	TIME 15:50	CUSTODY INTACT ☒ YES ☐ NO	ENCO LOG NO. J 12397	REMARKS

ENCO LABORATORIES-JAX 9042966210 P.05

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Environmental Conservation Laboratories
4010 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

ENCO Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2412
DATE SUBMITTED: April 26, 1996
DATE REPORTED : May 1, 1996

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

04/26/96

#1 - NTFFT 131 @ 14:45

PROJECT MANAGER Scott D. Martin

Scott D. Martin

7/41

ENCO LABORATORIES
REPORT # : JR2412
DATE REPORTED: May 1, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020 - VOLATILE AROMATICS	NTFFT 131	LAB BLANK	Units
Methyl tert-butyl ether	17 D5	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	5 I	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	6 D5	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	105	123	39-125
Date Analyzed	04/29/96	04/29/96	

EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS	NTFFT 131	LAB BLANK	Units
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	04/29/96	04/29/96	

D5 - Analyte value determined from a 1:5 dilution.
I = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).
U = Compound was analyzed for but not detected to the level shown.

8/41

ENCO LABORATORIES
REPORT # : JR2412
DATE REPORTED: May 1, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	NTFFT 131	LAB BLANK	Units
Arsenic	6010	2 U	2 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Barium	6010	20 U	20 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Cadmium	6010	1 U	1 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Chromium	6010	3.7	1 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Lead	6010	4.2	1 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Mercury	7471	0.01 U	0.01 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	
Selenium	6010	2 U	2 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Silver	6010	2 U	2 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	

U = Compound was analyzed for but not detected to the level shown.

9/41

ENCO LABORATORIES
REPORT # : JR2412
DATE REPORTED: May 1, 1996
PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 8020				
Benzene	108/113/111	49-149	4	20
Toluene	81/ 87/ 93	43-144	7	14
Ethylbenzene	71/ 77/ 87	40-135	8	14
m-Xylene & p-Xylene	51/ 56/ 68	23-167	9	10
EPA Method 9073				
Total Petr. Hydrocarbons	105/108/108	59-134	3	23
Total Metals				
Arsenic, 6010	84/ 85/ 89	70-118	1	12
Barium, 6010	82/ 83/ 87	69-120	1	17
Cadmium, 6010	77/ 78/ 83	69-117	1	14
Chromium, 6010	82/ 84/ 88	75-120	2	20
Lead, 6010	84/ 85/ 83	60-130	1	31
Mercury, 7471	98/107/111	70-138	9	12
Selenium, 6010	83/ 84/ 82	58-122	1	14
Silver, 6010	83/ 86/ 89	69-116	4	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

< = Less Than
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MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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10207 General Drive
Orlando, Florida 32824
Ph. (407) 826-5314 • Fax (407) 850-6945

QSARF #_____

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: NTFFT Cecil Field
PROJECT NO:
P.O. NUMBER:
PROJECT LOC. (State): Fl
SAMPLER(s) NAME: Cliff White
PHONE:
FAX:
CLIENT NAME: Dust Coating
CLIENT PROJECT MANAGER:
CLIENT ADDRESS (CITY, STATE, ZIP):
PAGE: OF

☐ STANDARD REPORT DELIVERY
☐ EXPEDITED REPORT DELIVERY (surcharge)
Date Due:

SAMPLE ID	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID (oil, solvent, etc)	AIR	SLUDGE	OTHER	5020	9073	Rcra Metals							REMARKS
															PRESERVATIVE									
															NUMBER OF CONTAINERS SUBMITTED									
NTFFT 131	4/26/96	1445		✓						✓					✓	✓	✓							72hr turnaround

SAMPLE KIT PREPARED BY: ☐ JACKSONVILLE ☐ ORLANDO	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
RECEIVED FOR LABORATORY BY: (SIGNATURE) ☐ Jacksonville ☐ Orlando	DATE 4/26/96	TIME 13:37	CUSTODY INTACT ☐ YES ☐ NO	ENCO LOG NO. JR2412	REMARKS			

10/96

11/41

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

ENCO Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2427
DATE SUBMITTED: April 27, 1996
DATE REPORTED : May 1, 1996

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

04/27/96

#1 - NTFFT-132 @ 14:47

PROJECT MANAGER Scott D Martin

Scott D. Martin

12/41

ENCO LABORATORIES
REPORT # : JR2427
DATE REPORTED: May 1, 1996
REFERENCE : NTFFT
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020 - VOLATILE AROMATICS	NTFFT-132	LAB BLANK	Units
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 D5	5 U	µg/Kg
Toluene	5 I	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	95	123	39-125
Date Analyzed	04/29/96	04/29/96	

EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS	NTFFT-132	LAB BLANK	Units
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	04/29/96	04/29/96	

D5 = Analyte value determined from a 1:5 dilution.
I = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).
U = Compound was analyzed for but not detected to the level shown.

13/41

ENCO LABORATORIES
REPORT # : JR2427
DATE REPORTED: May 1, 1996
REFERENCE : NTFFT
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	NTFFT-132	LAB BLANK	Units
Arsenic Date Analyzed	6010	2 U 04/29/96	2 U 04/29/96	mg/Kg
Barium Date Analyzed	6010	20 U 04/29/96	20 U 04/29/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 04/29/96	1 U 04/29/96	mg/Kg
Chromium Date Analyzed	6010	4.2 04/29/96	1 U 04/29/96	mg/Kg
Lead Date Analyzed	6010	4.6 04/29/96	1 U 04/29/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 04/30/96	0.01 U 04/30/96	mg/Kg
Selenium Date Analyzed	6010	2 U 04/29/96	2 U 04/29/96	mg/Kg
Silver Date Analyzed	6010	2 U 04/29/96	2 U 04/29/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

14/41

ENCO LABORATORIES
REPORT # : JR2427
DATE REPORTED: May 1, 1996
REFERENCE : NTFFT
PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 8020				
Benzene	108/113/111	49-149	4	20
Toluene	81/ 87/ 93	43-144	7	14
Ethylbenzene	71/ 77/ 87	40-135	8	14
m-Xylene & p-Xylene	51/ 56/ 68	23-167	9	10
EPA Method 9073				
Total Petr. Hydrocarbons	105/108/108	59-134	3	23
Total Metals				
Arsenic, 6010	88/ 89/ 89	70-118	1	12
Barium, 6010	95/ 96/ 96	69-120	1	17
Cadmium, 6010	97/ 98/ 99	69-117	1	14
Chromium, 6010	90/ 91/ 92	75-120	1	20
Lead, 6010	97/ 98/ 99	60-130	1	31
Mercury, 7471	120/114/117	70-138	5	12
Selenium, 6010	91/ 91/ 89	58-122	<1	14
Silver, 6010	92/ 93/ 94	69-116	1	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
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Fax 904 / 296-6210

ENCO Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2438
DATE SUBMITTED: April 30, 1996
DATE REPORTED : May 2, 1996

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

#1	-	NTFFT-1330	4/29/96	08:48
#2	-	NTFFT-1340	4/29/96	16:50
#3	-	NTFFT-1350	4/30/96	11:15

PROJECT MANAGER Scott D. Martin

Scott D. Martin

ENCO LABORATORIES
REPORT # : JR2438
DATE REPORTED: May 2, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020 - VOLATILE AROMATICS	NTFFT-133	NTFFT-134	NTFFT-135	Units
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	6	5	7	µg/Kg
Toluene	5 I	5 I	8 I	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
Surrogate:	% RECOV	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	94	100	108	39-125
Date Analyzed	05/01/96	05/01/96	05/01/96	

EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS	NTFFT-133	NTFFT-134	NTFFT-135	Units
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	05/01/96	05/01/96	05/01/96	

I = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).
U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2438
DATE REPORTED: May 2, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	NTFFT-133	NTFFT-134	NTFFT-135	Units
Arsenic	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	
Barium	6010	20 U	20 U	20 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	
Cadmium	6010	1 U	1 U	1 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	
Chromium	6010	4.6	4.9	4.4 5	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	
Lead	6010	4.7	4.5	4.4	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	
Mercury	7471	0.01 U	0.01 U	0.01 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	
Selenium	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	
Silver	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	

U = Compound was analyzed for but not detected to the level shown.

18/41

ENCO LABORATORIES
REPORT # : JR2438
DATE REPORTED: May 2, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020 - VOLATILE AROMATICS	LAB BLANK	Units
Methyl tert-butyl ether	10 U	µg/Kg
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg
Surrogate:	**% RECOV**	**LIMITS**
Bromofluorobenzene	123	39-125
Date Analyzed	04/29/96	

EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS	LAB BLANK	Units
Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	04/30/96	

U = Compound was analyzed for but not detected to the level shown.

19/41

ENCO LABORATORIES
REPORT # : JR2438
DATE REPORTED: May 2, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	Units
Arsenic	6010	2 U	mg/Kg
Date Analyzed		04/30/96	
Barium	6010	20 U	mg/Kg
Date Analyzed		04/30/96	
Cadmium	6010	1 U	mg/Kg
Date Analyzed		04/30/96	
Chromium	6010	1 U	mg/Kg
Date Analyzed		04/30/96	
Lead	6010	1 U	mg/Kg
Date Analyzed		04/30/96	
Mercury	7471	0.01 U	mg/Kg
Date Analyzed		04/30/96	
Selenium	6010	2 U	mg/Kg
Date Analyzed		04/30/96	
Silver	6010	2 U	mg/Kg
Date Analyzed		04/30/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2438
DATE REPORTED: May 2, 1996
PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 8020				
Benzene	108/113/111	49-149	4	20
Toluene	81/ 87/ 93	43-144	7	14
Ethylbenzene	71/ 77/ 87	40-135	8	14
m-Xylene & p-Xylene	51/ 56/ 68	23-167	9	10
EPA Method 9073				
Total Petr. Hydrocarbons	94/ 80/ 89	59-134	16	23
Total Metals				
Arsenic, 6010	102/106/101	70-118	4	12
Barium, 6010	100/100/ 96	69-120	<1	17
Cadmium, 6010	104/106/102	69-117	2	14
Chromium, 6010	99/104/ 98	75-120	5	20
Lead, 6010	100/104/ 99	60-130	4	31
Mercury, 7471	89/104/108	70-138	16	12
Selenium, 6010	101/105/101	58-122	4	14
Silver, 6010	104/107/103	69-116	3	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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10207 General Drive
Orlando, Florida 32824
Ph. (407) 826-5314 - Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: TFFT NAS CECIL FIELD
PROJECT NO.:
P.O. NUMBER:
PROJECT LOC.: FL
SAMPLER(s) NAME: C. WHITE, C. PARSONS
PHONE:
FAX:
CLIENT NAME: SICOATINGS
CLIENT PROJECT MANAGER:
CLIENT ADDRESS (CITY, STATE, ZIP):

PAGE 1 OF 1

☐ STANDARD REPORT DELIVERY
☐ EXPEDITED REPORT DELIVERY (surcharge)
Date Due:

SAMPLE LOCATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID (oil, solvent, etc.)	AIR	SLUDGE	OTHER	8020 (N/A)	9073 TPH (N/A)	RCRA METALS (N/A)							REMARKS
TFFT-133	29APR96	0848		X	NTFFT-133					X					1	1	1							72hr turnaround
TFFT-134	29APR96	1651		X	NTFFT-134					X					1	1	1							
TFFT-135	30APR96	1115		X	NTFFT-135					X					1	1	1							

PRESERVATIVE
NUMBER OF CONTAINERS SUBMITTED

SAMPLE KIT PREPARED BY: ☐ JACKSONVILLE ☐ ORLANDO — DATE — TIME

RELINQUISHED BY: (SIGNATURE) Chris Parsons — DATE 30APR96 — TIME 1221

RECEIVED BY: (SIGNATURE) — DATE — TIME

RELINQUISHED BY: (SIGNATURE) — DATE — TIME

RECEIVED BY: (SIGNATURE) — DATE — TIME

RELINQUISHED BY: (SIGNATURE) — DATE — TIME

RECEIVED BY: (SIGNATURE) — DATE — TIME

RECEIVED FOR LABORATORY BY: (SIGNATURE) — DATE 4-30-96 — TIME 1221

☒ Jacksonville ☐ Orlando

CUSTODY INTACT: ☒ YES ☐ NO

ENCO LOG NO.: JL2438

REMARKS:

21/41

22/41

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

ENCO Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: 7217 128th Street West
Savage, MN 55378

REPORT # : JR2456
DATE SUBMITTED: May 1, 1996
DATE REPORTED : May 3, 1996

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

#1 - NTFFT 136 (04/30/96) @ 19:45
#2 - NTFFT 137 (05/01/96) @ 03:45
#3 - NTFFT 138 (05/01/96) @ 14:59

PROJECT MANAGER Scott D. Martin

ENCO LABORATORIES
REPORT # : JR2456
DATE REPORTED: May 3, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020 - VOLATILE AROMATICS	NTFFT 136	NTFFT 137	NTFFT 138	Units
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
Surrogate:	% RECOV	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	87	93	86	39-125
Date Analyzed	05/02/96	05/02/96	05/02/96	

EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS	NTFFT 136	NTFFT 137	NTFFT 138	Units
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	05/02/96	05/02/96	05/02/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2456
DATE REPORTED: May 3, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	NTFFT 136	NTFFT 137	NTFFT 138	Units
Arsenic	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		05/02/96	05/02/96	05/02/96	
Barium	6010	20 U	20 U	20 U	mg/Kg
Date Analyzed		05/02/96	05/02/96	05/02/96	
Cadmium	6010	1 U	1 U	1 U	mg/Kg
Date Analyzed		05/02/96	05/02/96	05/02/96	
Chromium	6010	**4.1**	**4.6**	**5.2**	mg/Kg
Date Analyzed		05/02/96	05/02/96	05/02/96	
Lead	6010	**4.5**	**5.1**	**5.3**	mg/Kg
Date Analyzed		05/02/96	05/02/96	05/02/96	
Mercury	7471	0.01 U	0.01 U	0.01 U	mg/Kg
Date Analyzed		05/02/96	05/02/96	05/02/96	
Selenium	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		05/02/96	05/02/96	05/02/96	
Silver	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		05/02/96	05/02/96	05/02/96	

U = Compound was analyzed for but not detected to the level shown.

25/41

ENCO LABORATORIES
REPORT # : JR2456
DATE REPORTED: May 3, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020 - VOLATILE AROMATICS	LAB BLANK	Units
Methyl tert-butyl ether	10 U	µg/Kg
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg
Surrogate:	**% RECOV**	**LIMITS**
Bromofluorobenzene	119	39-125
Date Analyzed	05/02/96	

EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS	LAB BLANK	Units
Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	05/02/96	

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2456
DATE REPORTED: May 3, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	Units
Arsenic	6010	2 U	mg/Kg
Date Analyzed		05/02/96	
Barium	6010	20 U	mg/Kg
Date Analyzed		05/02/96	
Cadmium	6010	1 U	mg/Kg
Date Analyzed		05/02/96	
Chromium	6010	1 U	mg/Kg
Date Analyzed		05/02/96	
Lead	6010	1 U	mg/Kg
Date Analyzed		05/02/96	
Mercury	7471	0.01 U	mg/Kg
Date Analyzed		05/02/96	
Selenium	6010	2 U	mg/Kg
Date Analyzed		05/02/96	
Silver	6010	2 U	mg/Kg
Date Analyzed		05/02/96	

= Compound was analyzed for but not detected to the level shown.

27/41

ENCO LABORATORIES
REPORT # : JR2456
DATE REPORTED: May 3, 1996
PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 8020				
Benzene	90/ 82/ 88	49-149	9	20
Toluene	94/ 83/ 88	43-144	12	14
Ethylbenzene	106/ 93/101	40-135	13	14
m-Xylene & p-Xylene	94/ 87/100	23-167	8	10
EPA Method 9073				
Total Petr. Hydrocarbons	94/ 80/ 89	59-134	16	23
Total Metals				
Arsenic, 6010	92/ 92/ 95	70-118	<1	12
Barium, 6010	88/ 93/ 95	69-120	6	17
Cadmium, 6010	95/ 98/ 98	69-117	3	14
Chromium, 6010	92/ 96/ 96	75-120	4	20
Lead, 6010	94/ 94/ 97	60-130	<1	31
Mercury, 7471	115/115/113	70-138	<1	12
Selenium, 6010	89/ 90/ 91	58-122	1	14
Silver, 6010	102/108/ 98	69-116	6	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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Orlando, Florida 32824
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QSARF #____

CHAIN OF CUSTODY RECOR

PROJECT REFERENCE: NTFFT Cecil Field
PROJECT NO.:
P.O. NUMBER:
PROJECT LOC. (State): Fl
SAMPLER(s) NAME: C. White, C. Parsons
PHONE:
FAX:
CLIENT NAME: Dust Coatings
CLIENT PROJECT MANAGER:
CLIENT ADDRESS (CITY, STATE, ZIP):

PAGE ___ OF ___

☐ STANDARD REPORT DELIVERY
☐ EXPEDITED REPORT DELIVERY (surcharge)
Date Due: ____

SAMPLE STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID (oil, solvent, etc.)	AIR	SLUDGE	OTHER	8020	9073	RCRA Metals							REMARKS
															PRESERVATIVE									
															NUMBER OF CONTAINERS SUBMITTED									
NTFFT 136	4/30/96	1945		✓	NTFFT-136					✓					1	1	1							24
NTFFT 137	5/1/96	0345		✓	NTFFT-137					✓					1	1	1							~~72 hr~~ turnaround
NTFFT 138	5/1/96	1459		✓	NTFFT-138					✓					1	1	1							24 hr turnaround
																								24 HR TURNAROUND

SAMPLE KIT PREPARED BY: ☐JACKSONVILLE ☐ORLANDO	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
			[signature]	5/1/96	1659			
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
							2/96	

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	ENCO LOG NO.	REMARKS
[signature]	5/1/96	1659			

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

ENCO Laboratories

DHRS Certification No. E82277, 82417

29/41

CLIENT : Dustcoating Inc.
ADDRESS: 7217 128th Street West
Savage, MN 55378

REPORT # : JR2458
DATE SUBMITTED: May 1, 1996
DATE REPORTED : May 3, 1996

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

05/01/96

#1 - NTFFT-139 @ 20:00

Sample identification changed per request of RUST.

PROJECT MANAGER Scott D Martin

Scott D. Martin

30/41

ENCO LABORATORIES
REPORT # : JR2458
DATE REPORTED: May 3, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020 - VOLATILE AROMATICS	NTFFT-139	LAB BLANK	Units
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	89	119	39-125
Date Analyzed	05/02/96	05/02/96	

EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS	NTFFT-139	LAB BLANK	Units
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	05/02/96	05/02/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2458
DATE REPORTED: May 3, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	NTFFT-139	LAB BLANK	Units
Arsenic	6010	2 U	2 U	mg/Kg
Date Analyzed		05/02/96	05/02/96	
Barium	6010	20 U	20 U	mg/Kg
Date Analyzed		05/02/96	05/02/96	
Cadmium	6010	1 U	1 U	mg/Kg
Date Analyzed		05/02/96	05/02/96	
Chromium	6010	3.6	1 U	mg/Kg
Date Analyzed		05/02/96	05/02/96	
Lead	6010	6.0	1 U	mg/Kg
Date Analyzed		05/02/96	05/02/96	
Mercury	7471	0.01 U	0.01 U	mg/Kg
Date Analyzed		05/02/96	05/02/96	
Selenium	6010	2 U	2 U	mg/Kg
Date Analyzed		05/02/96	05/02/96	
Silver	6010	2 U	2 U	mg/Kg
Date Analyzed		05/02/96	05/02/96	

U = Compound was analyzed for but not detected to the level shown.

9770 ==

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ENCO LABORATORIES
REPORT # : JR2458
DATE REPORTED: May 3, 1996
PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 8020				
Benzene	90/ 82/ 88	49-149	9	20
Toluene	94/ 83/ 88	43-144	12	14
Ethylbenzene	106/ 93/101	40-135	13	14
m-Xylene & p-Xylene	94/ 87/100	23-167	8	10
EPA Method 9073				
Total Petr. Hydrocarbons	94/ 80/ 89	59-134	16	23
Total Metals				
Arsenic, 6010	92/ 92/ 95	70-118	<1	12
Barium, 6010	88/ 93/ 95	69-120	6	17
Cadmium, 6010	95/ 98/ 98	69-117	3	14
Chromium, 6010	92/ 96/ 96	75-120	4	20
Lead, 6010	94/ 94/ 97	60-130	<1	31
Mercury, 7471	121/123/126	70-138	2	12
Selenium, 6010	89/ 90/ 91	58-122	1	14
Silver, 6010	102/108/ 98	69-116	6	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

PRELIMINARY

ECLO Laboratories

DHRS Certification No. E62277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: 7217 128th Street West
Savage, MN 55378

REPORT # : JR2476
DATE SUBMITTED: May 3, 1996
DATE REPORTED : May 6, 1996

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

05/03/96

#1 - NTFFT 140 @ 03:05
#2 - NTFFT 141 @ 09:04

PROJECT MANAGER Scott D. Martin

PRELIMINARY

ENCO LABORATORIES
REPORT # : JR2476
DATE REPORTED: May 6, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020 - VOLATILE AROMATICS	NTFFT 140	NTFFT 141	LAB BLANK	Units
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
rrogate:	**% RECOV**	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	97	97	122	39-125
Date Analyzed	05/03/96	05/03/96	05/02/96	

EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS	NTFFT 140	NTFFT 141	LAB BLANK	Units
Total Petr. Hydrocarbons	5 U	90	5 U	mg/Kg
Date Analyzed	05/06/96	05/06/96	05/06/96	

U - Compound was analyzed for but not detected to the level shown.

PRELIMINARY

ENCO LABORATORIES
REPORT # : JR2476
DATE REPORTED: May 6, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	NTFFT 140	NTFFT 141	LAB BLANK	Units
Arsenic Date Analyzed	6010	2 U 05/06/96	2 U 05/06/96	2 U 05/06/96	mg/Kg
Barium Date Analyzed	6010	20 U 05/06/96	20 U 05/06/96	20 U 05/06/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 05/06/96	1 U 05/06/96	1 U 05/06/96	mg/Kg
Chromium Date Analyzed	6010	5.3 05/06/96	5.8 05/06/96	1 U 05/06/96	mg/Kg
Lead Date Analyzed	6010	5.5 05/06/96	5.4 05/06/96	1 U 05/06/96	mg/Kg
Mercury	DTF				
Selenium Date Analyzed	6010	2 U 05/06/96	2 U 05/06/96	2 U 05/06/96	mg/Kg
Silver Date Analyzed	6010	2 U 05/06/96	2 U 05/06/96	2 U 05/06/96	mg/Kg

DTF Data To Follow
" = Compound was analyzed for but not detected to the level shown.

PRELIMINARY

ENCO LABORATORIES
REPORT # : JR2476
DATE REPORTED: May 6, 1996
PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 8020				
Benzene	90/ 82/ 88	49-149	9	20
Toluene	94/ 83/ 88	43-144	12	14
Ethylbenzene	106/ 93/101	40-135	13	14
m-Xylene & p-Xylene	94/ 87/100	23-167	8	10
Total Metals				
Arsenic, 6010	99/ 98/ 96	70-118	1	12
Barium, 6010	97/ 97/ 94	69-120	<1	17
Cadmium, 6010	101/101/ 98	69-117	<1	14
Chromium, 6010	98/ 97/ 94	75-120	1	20
Lead, 6010	102/101/ 98	60-130	<1	31
Selenium, 6010	96/ 95/ 90	58-122	1	14
Silver, 6010	102/103/ 98	69-116	<1	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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Fax 904 / 296-6210

ENCO Laboratories

DHRS Certification No. E82277, 82417

37/41

CLIENT : Dustcoating Inc.
ADDRESS: 7217 128th Street West
Savage, MN 55378

REPORT # : JR2512
DATE SUBMITTED: May 7, 1996
DATE REPORTED : May 8, 1996

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

05/07/96

#1 - NTFFT-142 @ 14:20

PROJECT MANAGER

Scott D. Martin

ENCO LABORATORIES
REPORT # : JR2512
DATE REPORTED: May 8, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020 - VOLATILE AROMATICS	NTFFT-142	LAB BLANK	Units
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	84	* 134	39-125
Date Analyzed	05/07/96	05/07/96	

EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS	NTFFT-142	LAB BLANK	Units
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	05/08/96	05/08/96	

* = Surrogate recovery exceeds extablished limits; all associated data below detection limits.
U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2512
DATE REPORTED: May 8, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	NTFFT-142	LAB BLANK	Units
Arsenic	6010	2 U	2 U	mg/Kg
Date Analyzed		05/07/96	05/07/96	
Barium	6010	20 U	20 U	mg/Kg
Date Analyzed		05/07/96	05/07/96	
Cadmium	6010	1 U	1 U	mg/Kg
Date Analyzed		05/07/96	05/07/96	
Chromium	6010	4.7	1 U	mg/Kg
Date Analyzed		05/07/96	05/07/96	
Lead	6010	5.5	1 U	mg/Kg
Date Analyzed		05/07/96	05/07/96	
Mercury	7471	0.01 U	0.01 U	mg/Kg
Date Analyzed		05/08/96	05/08/96	
Selenium	6010	2 U	2 U	mg/Kg
Date Analyzed		05/07/96	05/07/96	
Silver	6010	2 U	2 U	mg/Kg
Date Analyzed		05/07/96	05/07/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2512
DATE REPORTED: May 8, 1996
PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 8020				
Benzene	98/ 86/ 95	49-149	13	20
Toluene	99/ 86/ 95	43-144	14	14
Ethylbenzene	109/ 95/105	40-135	14	14
m-Xylene & p-Xylene	104/ 90/100	23-167	14	10
Total Metals				
Arsenic, 6010	94/ 96/ 88	70-118	2	12
Barium, 6010	97/ 97/ 91	69-120	<1	17
Cadmium, 6010	100/100/ 94	69-117	<1	14
Chromium, 6010	96/ 96/ 90	75-120	<1	20
Lead, 6010	96/ 96/ 89	60-130	<1	31
Mercury, 7471	113/112/109	70-138	<1	12
Selenium, 6010	92/ 95/ 84	58-122	3	14
Silver, 6010	99/100/ 89	69-116	1	10
EPA Method 9073				
Total Petr. Hydrocarbons	NA/ NA/ 97	59-134	NA	23

Environmental Conservation Laboratories Comprehensive QA Plan #960038

NA = Not Available
< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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QSARF #_____

ENVIRONMENTAL CONSERVATION LABORATORIES

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CHAIN OF CUSTODY RECORD

PROJECT REFERENCE	PROJECT NO.	P.O. NUMBER
NTFFT Cecil Field		

PROJECT LOC. (State)	SAMPLER(s) NAME	PHONE / FAX
Fl	C. White	

CLIENT NAME: Dust Coating

CLIENT PROJECT MANAGER:

CLIENT ADDRESS (CITY, STATE, ZIP):

PAGE ___ OF ___

☐ STANDARD REPORT DELIVERY

☐ EXPEDITED REPORT DELIVERY (surcharge)

Date Due: _____

MATRIX TYPE / REQUIRED ANALYSIS / PRESERVATIVE / NUMBER OF CONTAINERS SUBMITTED

SAMPLE DATE	SAMPLE TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID (specify)	AIR	SLUDGE	OTHER	8020	9073	RCRA Metals							REMARKS
NTFFT 142	5/7/96	1420		✓					✓					✓	✓	✓							24hr rush

SAMPLE KIT PREPARED BY: ☐JACKSONVILLE ☐ORLANDO	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
			C. White	5/7/96	1400			
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	ENCO LOG NO.	REMARKS
☐ Jacksonville ☐ Orlando Scott D Mantz	5/8/96	1600	☐ YES ☐ NO	JR2512	

4/4

ATTACHMENT 2

SOIL SAMPLE ORGANIC VAPOR ANALYSES RESULTS, APRIL 11, 16, 23, AND 24, 1996

Table 2-1
Soil Sample Organic Vapor Analyses Results, April 11, 16, 23, and 24, 1996

Remedial Action Report
Truck Stand Site
Naval Air Station Cecil Field
Jacksonville, Florida

Boring Designation	Depth (feet)	Concentration			Visual Evidence of Product
		Unfiltered	Filtered	Actual	
411-SS1	2.6	1000	200	800	-
	3.5	1500	20	1480	-
411-SS2	3	800	14	786	-
	3.5	250	0	250	-
411-SS3	3.5	1700	5	1695	+
411-SS4	3.5	1100	10	1090	-
411-SS5	3.5	50	0	50	-
411-SS6	3-4	100	0	100	-
411-SS7	4.5-5.5	0	0	0	+
411-SS8	4.5	250	0	250	+
411-SS9	3.5	1000	20	980	+
411-SS10	3.5-4.5	250	0	250	+
411-SS11	3.5-4.5	700	9	691	+
411-SS12	4.5-5.0	700	15	685	+
411-SS13	5.5	1100	0	1100	+
411-SS14	3.5-4.5	2800	1	2799	+
411-SS15	4.5-5.0	500	0	500	+
411-SS16	4.5-5.0	1000	0	1000	+
411-SS17	4.5-5.0	500	0	500	+
411-SS18	4.5-5.0	800	0	800	+
411-SS19	4.5-5.5	120	0	120	+
416-SS1	4.0	50	15	35	-
416-SS2	4.0	200	100	100	-
416-SS3	4.0	1500	150	1350	-
416-SS4	4.0	300	60	240	-
416-SS5	4.0	1200	60	1140	-
416-SS6	4.0	3000	200	2800	+
416-SS7	4.0-4.5	250	50	200	-
416-SS8	4.0-4.5	50	15	35	-
416-SS9	4.0-4.5	225	20	205	-
416-SS10	4.0-4.5	1100	100	1000	-
416-SS11	4.0-4.5	1500	100	1400	+
416-SS12	4.0-4.5	1300	25	1275	+
416-SS13	4.0-4.5	280	20	260	NR
416-SS14	5.0-5.5	1200	40	1160	-
416-SS15	5.0-5.5	1000	150	850	-
416-SS16	5.0-5.5	350	45	305	-

See notes at end of table.

Table 2-1 (Continued)
Soil Sample Organic Vapor Analyses Results, April 11, 16, 23, and 24, 1996

Remedial Action Report
Truck Stand Site
Naval Air Station Cecil Field
Jacksonville, Florida

Boring Designation	Depth (feet)	Concentration			
		Unfiltered	Filtered	Actual	Visual Evidence of Product
416-SS17	5.0-5.5	60	10	50	-
416-SS18	5.0-5.5	130	30	100	-
416-SS19	5.0-5.5	100	20	80	-
416-SS20	5.0-5.5	35	10	25	-
423-SS1	1.5-2.0	10	0	10	-
423-SS2	1.5-2.0	90	5	85	-
423-SS3	5.5-6.0	40	5	35	-
423-SS4	5.5-6.0	10	10	0	-
423-SS5	5.5-6.0	80	10	70	-
423-SS6	5.5-6.0	10	10	0	-
423-SS7	5.5-6.0	30	15	15	-
423-SS8	5.5-6.0	1600	20	1580	+
423-SS9	5.5-6.0	2400	90	2310	+
423-SS10	5.5-6.0	2000	50	1950	+
423-SS11	5.5-6.0	250	15	235	-
423-SS12	5.5-6.0	900	10	890	-
423-SS13	6.5-7.0	400	35	365	-
423-SS14	6.5-7.0	190	50	140	-
423-SS15	6.5-7.0	1100	45	1055	-
424-SS16	6.0-6.5	350	5	345	-
424-SS17	6.0-6.5	300	5	295	-
424-SS18	6.5-7.0	2200	110	2090	+
424-SS19	6.5-7.0	2000	100	1900	+
424-SS20	7.0-7.5	1200	50	1150	-
424-SS21	7.0-7.5	1200	100	1100	-
424-SS22	10.0-10.5	450	100	350	-
424-SS23	10.0-10.5	1200	110	1090	-

Visual inspection was performed by observing a product sheen when screening samples were saturated in water. A positive sign indicates that a petroleum sheen was observed.

Notes: Sample designations include the month and date of sample collection.
All concentrations are expressed in parts per million.
NR = Not recorded.
+ = petroleum sheen observed.
- = no petroleum sheen observed.

ATTACHMENT 3

GROUNDWATER ANALYTICAL RESULTS

NAS CECIL FIELD -- TRUCK STAND
KEROSENE ANALYTICAL GROUP -- REPORT REQUEST NO. 7869

Lab Sample Number:	B6F1201350				B6F1201350			
Site	TRUCK STAND				TRUCK STAND			
Locator	CF372MW13S				CF372PZ01			
Collect Date:	11-JUN-96				11-JUN-96			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
UST COMPOUNDS								
Benzene	7.7		ug/l	1	2.1		ug/l	1
Ethylbenzene	46		ug/l	1	29		ug/l	1
Toluene	1	U	ug/l	1	34		ug/l	1
Xylenes (total)	62		ug/l	1	98		ug/l	1
Methyl tert-butyl ether	1	U	ug/l	1	1	U	ug/l	1
1,1,1-Trichloroethane	1	U	ug/l	1	1	U	ug/l	1
1,1,2,2-Tetrachloroethane	1	U	ug/l	1	1	U	ug/l	1
1,1,2-Trichloroethane	1	U	ug/l	1	1	U	ug/l	1
1,1-Dichloroethane	1	U	ug/l	1	1	U	ug/l	1
1,1-Dichloroethene	1	U	ug/l	1	1	U	ug/l	1
1,2-Dichlorobenzene	1	U	ug/l	1	1	U	ug/l	1
1,2-Dichloroethane	1	U	ug/l	1	1	U	ug/l	1
1,2-Dichloropropane	1	U	ug/l	1	1	U	ug/l	1
1,3-Dichlorobenzene	1	U	ug/l	1	1	U	ug/l	1
1,4-Dichlorobenzene	1	U	ug/l	1	1	U	ug/l	1
2-Chloroethyl vinyl ether	-	U	ug/l		-	U	ug/l	
Bromodichloromethane	1	U	ug/l	1	1	U	ug/l	1
Bromoform	1	U	ug/l	1	1	U	ug/l	1
Bromomethane	1	U	ug/l	1	1	U	ug/l	1
Carbon tetrachloride	1	U	ug/l	1	1	U	ug/l	1
Chlorobenzene	1	U	ug/l	1	1	U	ug/l	1
Chloroethane	1	U	ug/l	1	1	U	ug/l	1
Chloroform	1	U	ug/l	1	1	U	ug/l	1
Chloromethane	1	U	ug/l	1	1	U	ug/l	1
Dibromochloromethane	1	U	ug/l	1	1	U	ug/l	1
Dichlorodifluoromethane	1	U	ug/l	1	1	U	ug/l	1
Methylene chloride	1	U	ug/l	1	1	U	ug/l	1
Tetrachloroethene	1	U	ug/l	1	1	U	ug/l	1
Trichloroethene	1	U	ug/l	1	1	U	ug/l	1
Trichlorofluoromethane	1	U	ug/l	1	1	U	ug/l	1
Vinyl chloride	1	U	ug/l	1	1	U	ug/l	1
cis-1,3-Dichloropropene	1	U	ug/l	1	1	U	ug/l	1
trans-1,2-Dichloroethene	1	U	ug/l	1	1	U	ug/l	1
trans-1,3-Dichloropropene	1	U	ug/l	1	1	U	ug/l	1
1-Methylnaphthalene	110		ug/l	5	180		ug/l	10
2-Methylnaphthalene	150		ug/l	5	200		ug/l	10
Acenaphthene	5	U	ug/l	5	10	U	ug/l	10
Acenaphthylene	5	U	ug/l	5	10	U	ug/l	10
Anthracene	5	U	ug/l	5	10	U	ug/l	10
Benzo (a) anthracene	5	U	ug/l	5	10	U	ug/l	10
Benzo (a) pyrene	5	U	ug/l	5	10	U	ug/l	10
Benzo (b) fluoranthene	5	U	ug/l	5	10	U	ug/l	10
Benzo (g,h,i) perylene	5	U	ug/l	5	10	U	ug/l	10
Benzo (k) fluoranthene	5	U	ug/l	5	10	U	ug/l	10
Chrysene	5	U	ug/l	5	10	U	ug/l	10
Dibenzo (a,h) anthracene	5	U	ug/l	5	10	U	ug/l	10
Fluoranthene	5	U	ug/l	5	10	U	ug/l	10
Fluorene	5	U	ug/l	5	10	U	ug/l	10
Indeno (1,2,3-cd) pyrene	5	U	ug/l	5	10	U	ug/l	10
Naphthalene	150		ug/l	5	180		ug/l	10

NAS CECIL FIELD -- TRUCK STAND
KEROSENE ANALYTICAL GROUP -- REPORT REQUEST NO. 7869

Lab Sample Number:	B6F1201350				B6F1201350			
Site	TRUCK STAND				TRUCK STAND			
Locator	CF372MW13S				CF372PZ01			
Collect Date:	11-JUN-96				11-JUN-96			
	VALUE	QUAL	UNITS	DL	VALUE	QUAL	UNITS	DL
Phenanthrene	5	U	ug/l	5	10	U	ug/l	10
Pyrene	5	U	ug/l	5	10	U	ug/l	10
Lead	5.5		ug/l	5	27.4		ug/l	6
Total petroleum hydrocarbons	1	U	mg/l	1	27		mg/l	10
Ethylene dibromide	.02	U	ug/l	.02	.02	U	ug/l	.02

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

ABB

December 6, 1996

8520-3165

Florida Department of Environmental Protection Agency
Attn: Mr. Eric Nuzie
2600 Blairstone Road
Tallahassee, Florida 32301

Dear Mr. Nuzie:

SUBJECT: **Recommendation for Monitoring Only at the Truck Stand site, NAS Cecil Field Jacksonville, Florida Contract No. N62467-89D-0317/090**

INTRODUCTION

ABB Environmental Services, Inc. (ABB-ES), was contracted by Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOM) to prepare a Monitoring Only Plan (MOP) for the Truck Stand site at Naval Air Station (NAS) Cecil Field. This memorandum provides details concerning the Monitoring Only Plan (MOP) and the data required to support this recommendation.

BACKGROUND INFORMATION

The Truck Stand site is located on Loop Road south of the North Fuel Farm area at Naval Air Station (NAS) Cecil Field, Jacksonville, Florida. It is used as a loading station for the flightline refueling tanker trucks. The Truck Stand site consists of a control building (Building 75), a pumping station (truck stand), an asphalt and concrete parking area, and a retention pond (Figure 1).

Between June, 1991 and August, 1995, ABB-ES assessed groundwater and soil contamination in the Truck Stand area. Soil and groundwater contamination was detected at levels exceeding criteria set forth in Chapter 62-770, Florida Administrative Code (FAC). Lighter than water non-aqueous phase liquids (LNAPL) were present in two monitoring wells in areas including the retention pond and an area associated with the abandoned underground JP-5 fuel lines. For more details on the results and conclusions of the contamination assessment, please refer to the Contamination Assessment Report Addendum II submitted in December 1995.

On January 16, 1996, members of the Base Realignment and Closure Cleanup Team (BCT) met to discuss remedial alternatives for the Truck Stand Site. The Truck Stand site was presented by ABB-ES as a site which could be quickly remediated. The contamination at the Truck Stand site was primarily associated with two free product plumes located in the retention pond area to the northeast of the site and along the abandoned fuel lines southwest of the site. The BCT agreed to excavate excessively contaminated soils located in the suspect LNAPL areas. Excavation below the groundwater table in these areas was recommended to capture the LNAPL saturated soil.

From April 11 through April 25, 1996, Bechtel Environmental Incorporated (BEI) excavated contaminated soil form the two areas where LNAPL was present. Approximately 980 tons of petroleum contaminated soils were thermally treated in an onsite thermal desorption unit in accordance with Chapter 62-775 FAC. For more details on the remedial action, please refer to the Remedial Action report submitted in June 1996.

ABB

SUPPLEMENTAL SAMPLING

Upon completion of the initial remedial action, monitoring wells CEF-372-13 and CEF-372-PZ1 were sampled to establish current groundwater quality conditions in the source area. All detected compounds, from the August 26, 1996 sampling event, are presented in Table 1. Data from all sampling events, following the IRA, are provided in Attachment A of this letter memorandum.

Table 1
Summary of Detections in Groundwater
August 26, 1996

Monitoring Only Plan
Truck Stand site
NAS Cecil Field, Jacksoville, Florida

Compound	NFA Criteria[1]	CEF-372-MW-13	CEF-372-PZ-1
Purgeable Aromatics			
Benzene	50	ND	ND
Ethylbenzene	NA	44	14
Toluene	NA	ND	ND
Xylenes (total)	NA	72	26
Total BTEX	50	116	40
Polynuclear Aromatics			
Naphthalene	NA	120	2.8
1-Methylnaphthalene	NA	100	4.9
2-Methylnaphthalene	NA	ND	2.4
Total Naphthalenes	100	220	10.1

Notes: All concentrations are in parts per billion.
[1] No Further Action and Monitoring Only Guidelines for Petroleum Contaminated Sites, FDEP, Oct. 1990.
BTEX = Benzene, Toluene, Ethylbenzene, Xylene
NA = Not Applicable
NFA = No Further Action
ND = not detected.

MONITORING ONLY PLAN (MOP)

Based on the supplemental sampling results, the Navy recommends monitoring only at the Truck Stand site. A MOP for the Truck Stand site would require the sampling of upgradient, source, and downgradient perimeter wells (Figure 1). The groundwater flow direction at the Truck Stand site is south-southeast. The following groundwater monitoring program is recommended for the MOP:

- quarterly sampling of wells CEF-372-01 (upgradient), CEF-372-07 (downgradient), CEF-372-13 (source), CEF-372-14 (downgradient), and CEF-372-20 (downgradient);
- analysis of groundwater samples using U.S. Environmental Protection methods described in Table 2;
- submittal of quarterly analytical results (for one year) in a written report to FDEP within 60 days of sample collection.

ABB

CONCLUSIONS AND RECOMMENDATIONS

It is important to note that the Truck Stand site is a "low risk" site with no obvious receptors within a 5 year travel distance of the plume using groundwater pore velocities. The greatest source of contamination, the petroleum saturated soil, has been removed and the sampling results indicate decreasing trends in groundwater contaminant levels.

Based on the supplemental sampling results, ABB-ES recommends that monitoring only be implemented at the Truck Stand site for a one year period beginning immediately upon approval of this MOP. If concentrations do not show decreasing trends during this time frame, further assessment or a remedial action plan will be developed.

Sincerely,

ABB Environmental Services, Inc.

Rao Angara
Installation Manager

Eric Blomberg
Principal Scientist

cc: NAS Cecil Field Partnering Team
Bryan Kizer, SDIV

ABB

ATTACHMENT A
ANALYTICAL LABORATORY RESULTS

TRKSTD-.MOP
120496

JUNE 11, 1996 - SAMPLING EVENT

QUANTERRA INCORPORATED
PRELIMINARY DATA SUMMARY

Data have NOT been through final levels of review and are subject to change upon this review.
Actions taken on these Data are the responsibility of the Data user.

B6F120135
ABB Environmental Services
NAS CECIL FIELD -NFF

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD
CF 372 PZ01 06/11/96 09:50				
Requested Metals				Reviewed
Lead	27.4	6.0	ug/L	NCAWW 239.2
EDB and DBCP in Water by				Reviewed
Ethylene dibromide	ND	0.020	ug/L	EPA-DW 504
Volatile Organics, GC				Reviewed
Bromodichloromethane	ND	1.0	ug/L	CFR136A 601
Bromoform	ND	1.0	ug/L	CFR136A 601
Bromomethane	ND	1.0	ug/L	CFR136A 601
Carbon tetrachloride	ND	1.0	ug/L	CFR136A 601
Chlorobenzene	ND	1.0	ug/L	CFR136A 601
Chloroethane	ND	1.0	ug/L	CFR136A 601
2-Chloroethyl vinyl ether	ND	--	ug/L	CFR136A 601
Chloroform	ND	1.0	ug/L	CFR136A 601
Chloromethane	ND	1.0	ug/L	CFR136A 601
Dibromochloromethane	ND	1.0	ug/L	CFR136A 601
1,2-Dichlorobenzene	ND	1.0	ug/L	CFR136A 601
1,3-Dichlorobenzene	ND	1.0	ug/L	CFR136A 601
1,4-Dichlorobenzene	ND	1.0	ug/L	CFR136A 601
Dichlorodifluoromethane	ND	1.0	ug/L	CFR136A 601
1,1-Dichloroethane	ND	1.0	ug/L	CFR136A 601
1,2-Dichloroethane	ND	1.0	ug/L	CFR136A 601
1,1-Dichloroethene	ND	1.0	ug/L	CFR136A 601
trans-1,2-Dichloroethene	ND	1.0	ug/L	CFR136A 601
1,2-Dichloropropane	ND	1.0	ug/L	CFR136A 601
cis-1,3-Dichloropropene	ND	1.0	ug/L	CFR136A 601
trans-1,3-Dichloropropene	ND	1.0	ug/L	CFR136A 601
Methylene chloride	ND	1.0	ug/L	CFR136A 601
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	CFR136A 601
Tetrachloroethene	ND	1.0	ug/L	CFR136A 601
1,1,1-Trichloroethane	ND	1.0	ug/L	CFR136A 601
1,1,2-Trichloroethane	ND	1.0	ug/L	CFR136A 601
Trichloroethene	ND	1.0	ug/L	CFR136A 601
Trichlorofluoromethane	ND	1.0	ug/L	CFR136A 601
Vinyl chloride	ND	1.0	ug/L	CFR136A 601
2-CHLOROETHYLVINYL ETHER IS SUSCEPTIBLE TO DEGRADATION UNDER ACID CONDITIONS. THUS, NO QUANTITATION IS AVAILABLE FOR THIS SAMPLE.				
Volatile Organics, GC				Reviewed
Methyl tert-butyl ether	ND	1.0	ug/L	CFR136A 602
Benzene	2.1	1.0	ug/L	CFR136A 602
Ethylbenzene	29	1.0	ug/L	CFR136A 602
Toluene	34	1.0	ug/L	CFR136A 602

QUANTERRA INCORPORATED
PRELIMINARY DATA SUMMARY

Data have NOT been through final levels of review and are subject to change upon this review.
Actions taken on these Data are the responsibility of the Data user.

B6F120135
ABB Environmental Services
NAS CECIL FIELD -NFF

CF 372 MW13S 06/11/96 10:10

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD
Volatile Organics, GC				Reviewed
Chloroethane	ND	1.0	ug/L	CFR136A 601
2-Chloroethyl vinyl ether	ND	--	ug/L	CFR136A 601
Chloroform	ND	1.0	ug/L	CFR136A 601
Chloromethane	ND	1.0	ug/L	CFR136A 601
Dibromochloromethane	ND	1.0	ug/L	CFR136A 601
1,2-Dichlorobenzene	ND	1.0	ug/L	CFR136A 601
1,3-Dichlorobenzene	ND	1.0	ug/L	CFR136A 601
1,4-Dichlorobenzene	ND	1.0	ug/L	CFR136A 601
Dichlorodifluoromethane	ND	1.0	ug/L	CFR136A 601
1,1-Dichloroethane	ND	1.0	ug/L	CFR136A 601
1,2-Dichloroethane	ND	1.0	ug/L	CFR136A 601
1,1-Dichloroethene	ND	1.0	ug/L	CFR136A 601
trans-1,2-Dichloroethene	ND	1.0	ug/L	CFR136A 601
1,2-Dichloropropane	ND	1.0	ug/L	CFR136A 601
cis-1,3-Dichloropropene	ND	1.0	ug/L	CFR136A 601
trans-1,3-Dichloropropene	ND	1.0	ug/L	CFR136A 601
Methylene chloride	ND	1.0	ug/L	CFR136A 601
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	CFR136A 601
Tetrachloroethene	ND	1.0	ug/L	CFR136A 601
1,1,1-Trichloroethane	ND	1.0	ug/L	CFR136A 601
1,1,2-Trichloroethane	ND	1.0	ug/L	CFR136A 601
Trichloroethene	ND	1.0	ug/L	CFR136A 601
Trichlorofluoromethane	ND	1.0	ug/L	CFR136A 601
Vinyl chloride	ND	1.0	ug/L	CFR136A 601

2-CHLOROETHYLVINYL ETHER IS SUSCEPTIBLE TO DEGRADATION UNDER ACID CONDITIONS. THUS, NO QUANTITATION IS AVAILABLE FOR THIS SAMPLE.

Volatile Organics, GC				Reviewed
Methyl tert-butyl ether	ND	1.0	ug/L	CFR136A 602
Benzene	7.7	1.0	ug/L	CFR136A 602
Ethylbenzene	46	1.0	ug/L	CFR136A 602
Toluene	ND	1.0	ug/L	CFR136A 602
Chlorobenzene	ND	1.0	ug/L	CFR136A 602
1,2-Dichlorobenzene	ND	1.0	ug/L	CFR136A 602
1,3-Dichlorobenzene	ND	1.0	ug/L	CFR136A 602
1,4-Dichlorobenzene	ND	1.0	ug/L	CFR136A 602
Xylenes (total)	62	1.0	ug/L	CFR136A 602
Base/Neutrals and Acids				Reviewed
Acenaphthene	ND	5.0	ug/L	CFR136A 625
Acenaphthylene	ND	5.0	ug/L	CFR136A 625
Anthracene	ND	5.0	ug/L	CFR136A 625

AUGUST 16, 1996 - SAMPLING EVENT

QUANTERRA INCORPORATED
PRELIMINARY DATA SUMMARY

Data have NOT been through final levels of review and are subject to change upon this review.
Actions taken on these Data are the responsibility of the Data user.

A6H170106
ABB Environmental Services
NAS CECIL FIELD TRUCK STAND

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD
TSGWCEF-372-1301 08/16/96 14:30				
Purgeable Aromatics				Reviewed
Benzene	6.9	5.0	ug/L	CFR136A 602
Ethylbenzene	49	5.0	ug/L	CFR136A 602
Toluene	ND	5.0	ug/L	CFR136A 602
Xylenes (total)	120	5.0	ug/L	CFR136A 602
Polynuclear Aromatic				In Review
Acenaphthene	ND	20	ug/L	CFR136A 610
Acenaphthylene	ND	20	ug/L	CFR136A 610
Anthracene	ND	20	ug/L	CFR136A 610
Benzo(a)anthracene	ND	2.0	ug/L	CFR136A 610
Benzo(b)fluoranthene	ND	2.0	ug/L	CFR136A 610
Benzo(k)fluoranthene	ND	1.0	ug/L	CFR136A 610
Benzo(ghi)perylene	ND	2.0	ug/L	CFR136A 610
Benzo(a)pyrene	ND	2.0	ug/L	CFR136A 610
Chrysene	ND	2.0	ug/L	CFR136A 610
Dibenz(a,h)anthracene	ND	2.0	ug/L	CFR136A 610
Fluoranthene	ND	2.0	ug/L	CFR136A 610
Fluorene	ND	20	ug/L	CFR136A 610
Indeno(1,2,3-cd)pyrene	ND	2.0	ug/L	CFR136A 610
Naphthalene	110	20	ug/L	CFR136A 610
Phenanthrene	ND	20	ug/L	CFR136A 610
Pyrene	ND	2.0	ug/L	CFR136A 610
1-Methylnaphthalene	120	20	ug/L	CFR136A 610
2-Methylnaphthalene	71	20	ug/L	CFR136A 610

NOTE(S):

ND Parameter was not detected at or above the stated reporting limit.

AUGUST 26, 1996 - SAMPLING EVENT

QUANTERRA INCORPORATED
PRELIMINARY DATA SUMMARY

Data have NOT been through final levels of review and are subject to change upon this review.
Actions taken on these Data are the responsibility of the Data user.

A6H270113
ABB Environmental Services
NAS CECIL FIELD TRUCK STAND

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD
CEF-372-13 08/26/96 10:15				
Purgeable Aromatics				Reviewed
Benzene	ND	5.0	ug/L	CFR136A 602
Ethylbenzene	44	5.0	ug/L	CFR136A 602
Toluene	ND	5.0	ug/L	CFR136A 602
Xylenes (total)	72	5.0	ug/L	CFR136A 602
Polynuclear Aromatic				Reviewed
Acenaphthene	ND	10	ug/L	CFR136A 610
Acenaphthylene	ND	10	ug/L	CFR136A 610
Anthracene	ND	10	ug/L	CFR136A 610
Benzo(a)anthracene	ND	2.0	ug/L	CFR136A 610
Benzo(b)fluoranthene	ND	2.0	ug/L	CFR136A 610
Benzo(k)fluoranthene	ND	2.0	ug/L	CFR136A 610
Benzo(ghi)perylene	ND	2.0	ug/L	CFR136A 610
Benzo(a)pyrene	ND	2.0	ug/L	CFR136A 610
Chrysene	ND	2.0	ug/L	CFR136A 610
Dibenz(a,h)anthracene	ND	2.0	ug/L	CFR136A 610
Fluoranthene	ND	2.0	ug/L	CFR136A 610
Fluorene	ND	10	ug/L	CFR136A 610
Indeno(1,2,3-cd)pyrene	ND	2.0	ug/L	CFR136A 610
Naphthalene	120	10	ug/L	CFR136A 610
Phenanthrene	ND	10	ug/L	CFR136A 610
Pyrene	ND	2.0	ug/L	CFR136A 610
1-Methylnaphthalene	100	10	ug/L	CFR136A 610
2-Methylnaphthalene	ND	10	ug/L	CFR136A 610
CEF-372-PZ1 08/26/96 11:45				
Purgeable Aromatics				Reviewed
Benzene	ND	5.0	ug/L	CFR136A 602
Ethylbenzene	14	5.0	ug/L	CFR136A 602
Toluene	ND	5.0	ug/L	CFR136A 602
Xylenes (total)	26	5.0	ug/L	CFR136A 602
Polynuclear Aromatic				Reviewed
Acenaphthene	ND	1.0	ug/L	CFR136A 610
Acenaphthylene	ND	1.0	ug/L	CFR136A 610
Anthracene	ND	1.0	ug/L	CFR136A 610

ABB

8520-3153

September 21, 1996

Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Attention: Mr. Eric Nuzie

Subject: Supplemental Sampling
Truck Stand Site, North Fuel Farm Area
NAS Cecil Field, Jacksonville, Fl.
Contract No. N62467-89-D-0317/090

Dear Eric:

Enclosed please find results for the supplemental sampling conducted in August 1996 at the Truck Stand site. This data was presented during the telephone conference on September 3, 1996.

Comments or questions you may have concerning this data should be directed to Mr. Bryan Kizer at SOUTHNAVFACENGCOM, (803) 820-5896.

Very truly yours,

ABB ENVIRONMENTAL SERVICES, INC.

Rao Angara
Installation Manager

cc: B. Kizer
D. Kruzicki
H. Bauer
S. Wilson
D. Vaughn-Wright
L. Routhier
file

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Sponsor Special Olympics World Games Connecticut 1995

ABB Environmental Services Inc.

Berkeley Building
2590 Executive Center Circle East
Tallahassee, Florida 32301

Telephone (904) 656-1293
Fax (904) 877-0742

Quanterra
Environmental Services

Date: 09/03/96
Time: 07:34:16
(Mountain Time)

From: Debbie Hula
Quanterra Inc.
4101 Shuffel Drive NW
North Canton, OH 44720

voice: 330-497-9396
fax: 330-497-0772

To: Joe Ullo
ABB Environmental Services

904-8770742

Number of Pages
Including Cover Sheet: 03

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Quote Number: 016189
Project Number: 08520.54.TKA
Project Name/Site: NAS CECIL FIELD TRUCK STAND

QUANTERRA INCORPORATED
PRELIMINARY DATA SUMMARY

Data have NOT been through final levels of review and are subject to change upon this review.
Actions taken on these Data are the responsibility of the Data user.

A6H270113
ABB Environmental Services
NAS CECIL FIELD TRUCK STAND

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	
CEF-372-13 08/26/96 10:15					
Purgeable Aromatics					Reviewed
Benzene	ND	5.0	ug/L	CFR136A 602	
Ethylbenzene	44	5.0	ug/L	CFR136A 602	
Toluene	ND	5.0	ug/L	CFR136A 602	
Xylenes (total)	72	5.0	ug/L	CFR136A 602	
Polynuclear Aromatic					Reviewed
Acenaphthene	ND	10	ug/L	CFR136A 610	
Acenaphthylene	ND	10	ug/L	CFR136A 610	
Anthracene	ND	10	ug/L	CFR136A 610	
Benzo(a)anthracene	ND	2.0	ug/L	CFR136A 610	
Benzo(b)fluoranthene	ND	2.0	ug/L	CFR136A 610	
Benzo(k)fluoranthene	ND	2.0	ug/L	CFR136A 610	
Benzo(ghi)perylene	ND	2.0	ug/L	CFR136A 610	
Benzo(a)pyrene	ND	2.0	ug/L	CFR136A 610	
Chrysene	ND	2.0	ug/L	CFR136A 610	
Dibenz(a,h)anthracene	ND	2.0	ug/L	CFR136A 610	
Fluoranthene	ND	2.0	ug/L	CFR136A 610	
Fluorene	ND	10	ug/L	CFR136A 610	
Indeno(1,2,3-cd)pyrene	ND	2.0	ug/L	CFR136A 610	
Naphthalene	120	10	ug/L	CFR136A 610	
Phenanthrene	ND	10	ug/L	CFR136A 610	
Pyrene	ND	2.0	ug/L	CFR136A 610	
1-Methylnaphthalene	100	10	ug/L	CFR136A 610	
2-Methylnaphthalene	ND	10	ug/L	CFR136A 610	
CEF-372-PZ1 08/26/96 11:45					
Purgeable Aromatics					Reviewed
Benzene	ND	5.0	ug/L	CFR136A 602	
Ethylbenzene	14	5.0	ug/L	CFR136A 602	
Toluene	ND	5.0	ug/L	CFR136A 602	
Xylenes (total)	26	5.0	ug/L	CFR136A 602	
Polynuclear Aromatic					Reviewed
Acenaphthene	ND	1.0	ug/L	CFR136A 610	
Acenaphthylene	ND	1.0	ug/L	CFR136A 610	
Anthracene	ND	1.0	ug/L	CFR136A 610	

QUANTERRA INCORPORATED
PRELIMINARY DATA SUMMARY

Data have NOT been through final levels of review and are subject to change upon this review.
Actions taken on these Data are the responsibility of the Data user.

A6H270113
ABB Environmental Services
NAS CECIL FIELD TRUCK STAND

CEF-372-PZ1 08/26/96 11:45

PARAMETER	RESULT	REPORTING LIMIT	UNIT	METHOD	
Polynuclear Aromatic					Reviewed
Benzo(a)anthracene	ND	0.20	ug/L	CFR136A	610
Benzo(b)fluoranthene	ND	0.20	ug/L	CFR136A	610
Benzo(k)fluoranthene	ND	0.20	ug/L	CFR136A	610
Benzo(ghi)perylene	ND	0.20	ug/L	CFR136A	610
Benzo(a)pyrene	ND	0.20	ug/L	CFR136A	610
Chrysene	ND	0.20	ug/L	CFR136A	610
Dibenz(a,h)anthracene	ND	0.20	ug/L	CFR136A	610
Fluoranthene	ND	0.20	ug/L	CFR136A	610
Fluorene	ND	0.20	ug/L	CFR136A	610
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	CFR136A	610
Naphthalene	2.8	1.0	ug/L	CFR136A	610
Phenanthrene	ND	0.20	ug/L	CFR136A	610
Pyrene	ND	0.20	ug/L	CFR136A	610
1-Methylnaphthalene	4.9	1.0	ug/L	CFR136A	610
2-Methylnaphthalene	2.4	1.0	ug/L	CFR136A	610

NOTE(S):