

N60200.AR.009163
NAS CECIL FIELD
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SAMPLING AND ANALYSIS OUTLINE AND REPORT FOR BUILDING 810 NAS CECIL FIELD
FL
3/1/1996
ABB ENVIRONMENTAL

**SAMPLING AND ANALYSIS OUTLINE
BUILDING 810
BASE REALIGNMENT AND CLOSURE
ZONE H, UNDEVELOPED EASTERN AREA
GROUP VII
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA**

Unit Identification No. N60200

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

Prepared by:

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March 1996

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Zone H, Undeveloped Eastern Area Group VII
Naval Air Station Cecil Field
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GLOSSARY

ABB-ES	ABB Environmental Services, Inc.
AST	aboveground storage tank
BRAC	Base Realignment and Closure
EBS	Environmental Baseline Survey

objectives, quality control requirements, and sample handling and shipping procedures are outlined in the BRAC Project Operations Plan (ABB-ES, 1994b). Analytical results, a contamination assessment, and recommendations for reclassification of the property will be reported in a draft Site Summary report for Building 810. The project team will seek concurrence from the BRAC cleanup team before submitting a final Site Summary report. Proposed sample locations are shown on Figure 1.

Surface soil samples will be collected at an interval of 0 to 1 foot below land surface. One surface soil sample will be collected near the edge of the concrete pavement downslope from the transformer. The soil sample will be analyzed for total petroleum hydrocarbons.

An additional sample will be collected from the surface soil at the former location of the abandoned 55-gallon drum described in the EBS Report. This sample will be analyzed for the full Contract Laboratory program suite of target compound list organics and target analyte list inorganics.

4.0 SELECTED REFERENCES

ABB Environmental Services, Inc. (ABB-ES), 1994a, Base Realignment and Closure Environmental Baseline Survey Report, Naval Air Station (NAS) Cecil Field, Jacksonville, Florida: prepared for Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOM), November.

ABB-ES, 1994b, Project Operations Plan for Cecil Field and Health and Safety Plan: prepared for SOUTHNAVFACENGCOM, December.

ABB-ES, in press, Base Realignment and Closure Tank Management Plan for NAS Cecil Field, Jacksonville, Florida: prepared for SOUTHNAVFACENGCOM.

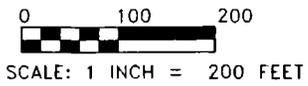
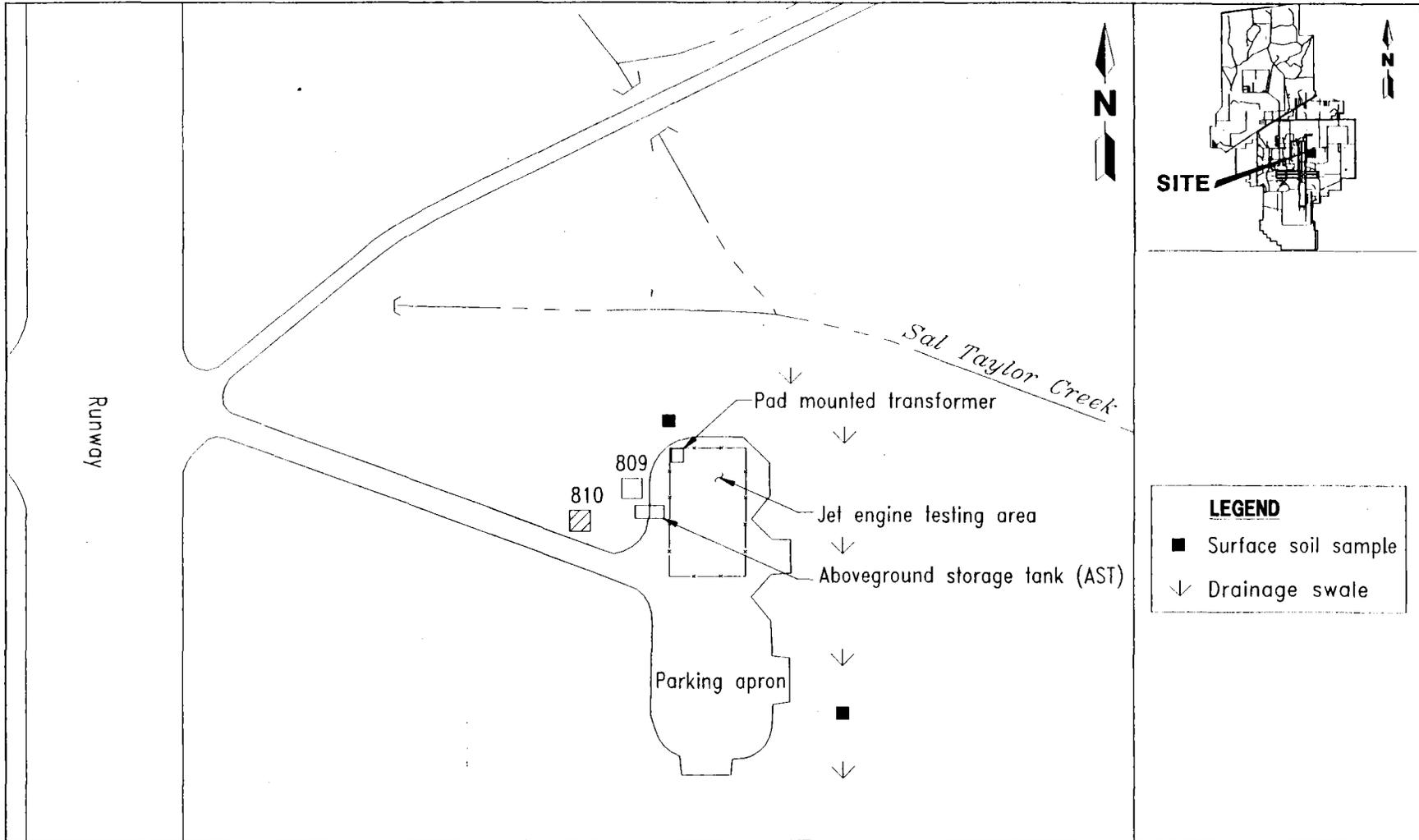
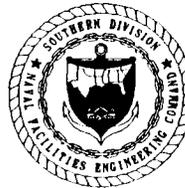


FIGURE 1
BUILDING 810
WATER TREATMENT FACILITIES BUILDING



GROUP VII SAMPLING AND ANALYSIS OUTLINE

NAS CECIL FIELD
JACKSONVILLE, FLORIDA

SAMPLING AND ANALYSIS REPORT
FACILITY 810
BASE REALIGNMENT AND CLOSURE
ZONE H, UNDEVELOPED EASTERN AREA

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

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August 1998

Revision 0.0

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Zone H, Undeveloped Eastern Area
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GLOSSARY

ABB-ES	ABB Environmental Services, Inc
AST	aboveground storage tank
EBS	environmental baseline survey
ELCR	excess lifetime cancer risk
FDEP	Florida Department of Environmental Protection
HLA	Harding Lawson Associates
HQ	hazard quotient
NAS	Naval Air Station
PRE	preliminary risk evaluation
RBC	risk-based concentration
SCTL	soil cleanup target level
USEPA	U.S. Environmental Protection Agency

1.0 INTRODUCTION

Harding Lawson Associates (HLA) has completed the Phase II Sampling and Analysis program for Facility 810 at Naval Air Station (NAS) Cecil Field. This report summarizes the field operations, results, conclusions, and recommendations.

Facility 810 is referred to as a Water Treatment Facilities Building in the Environmental Baseline Survey (EBS) Report (ABB Environmental Services, Inc. [ABB-ES], 1994a) and is located approximately 200 feet east of Runway 36R. Facility 810 is a pump house for a shallow nonpotable water supply well at an open air jet engine test facility. There is no specific facility identification number associated with the jet engine test area; therefore, it has been associated with Facility 810.

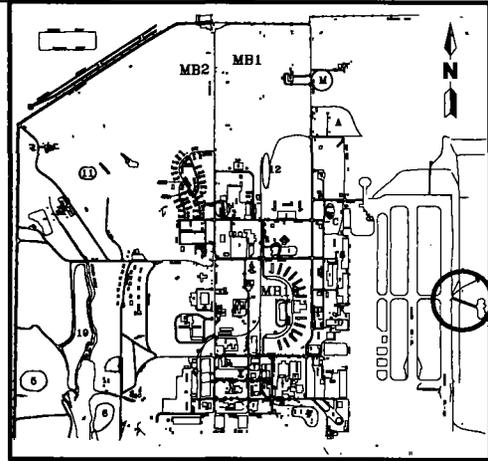
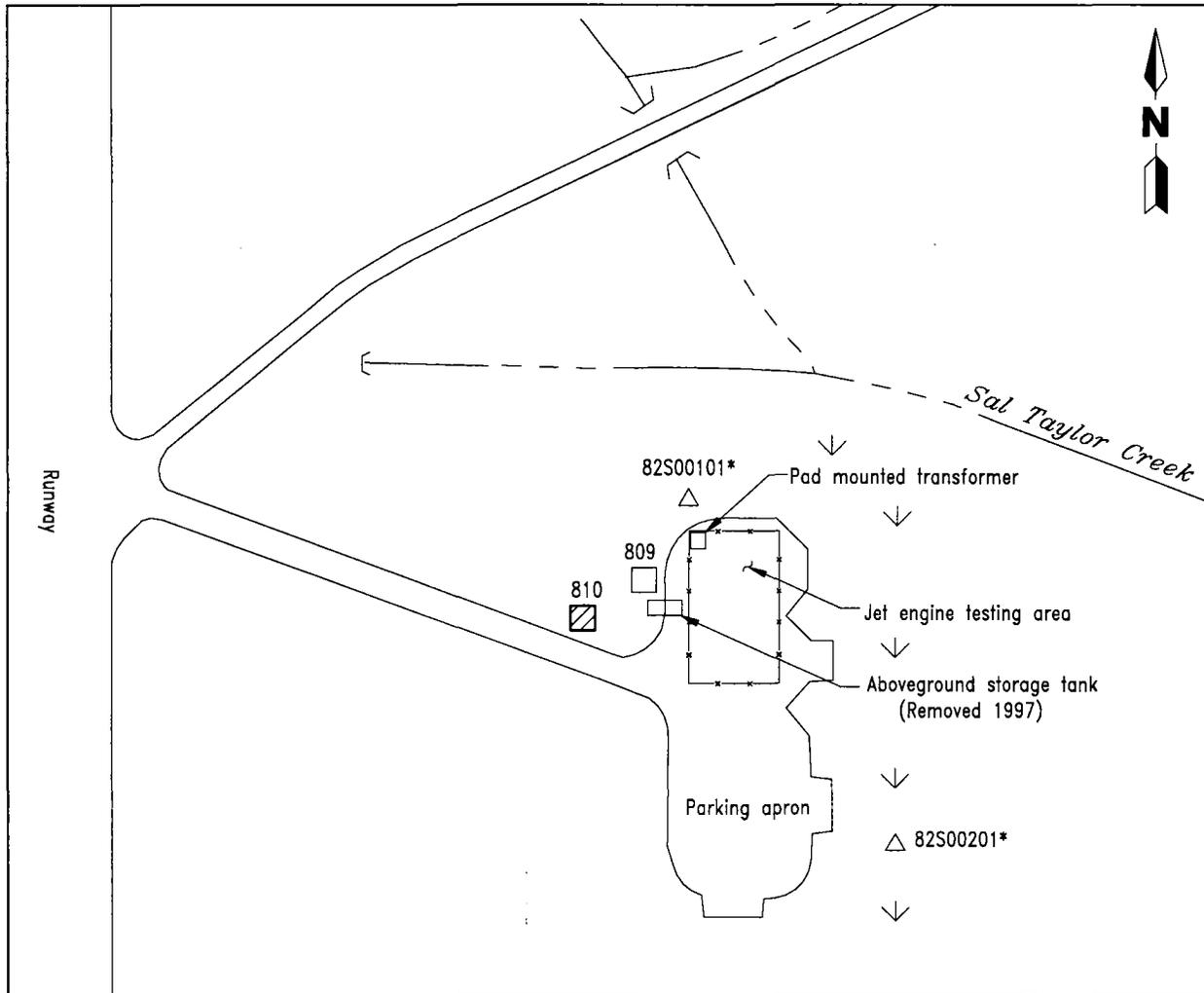
Facility 810 was color-coded Grey in the EBS Report because of concerns related to stressed vegetation, fuel storage, oil sheens on standing surface water, and an abandoned empty 55-gallon drum. Jet fuel was stored in an 8,000-gallon aboveground storage tank (AST) with a concrete secondary containment structure. A transformer with a black tar-like substance at its base was also noted in the EBS Report. These concerns are associated with the jet engine test area. No specific environmental concerns were identified in association with Facility 810.

HLA conducted an additional site reconnaissance walkover of Facility 810 and the nearby property. Oil stains were observed on the concrete beneath the transformer. The transformer is labelled as nonpolychlorinated biphenyl. The abandoned 55-gallon drum referenced in the EBS Report was not located during the HLA site reconnaissance walkover and is presumed to have been removed. Stressed vegetation consistent with water-saturated soils was identified in low-lying areas, but did not appear to be related to site activities. The jet fuel AST appeared to be well maintained. No evidence of spills or leaks was observed. Potential environmental concerns associated with the jet fuel AST were addressed separately in accordance with the Tank Management Plan (ABB-ES, 1997).

A more detailed description of environmental concerns is presented in the Environmental Baseline Survey Report (ABB-ES, 1994) and the Sampling and Analysis Outline, Facility 810, for the assessment of soil (ABB-ES 1996).

2.0 PHASE II INVESTIGATION

The investigation included the collection and analysis of two surface soil samples at Facility 810. One of the samples was collected adjacent to the oil-stained concrete beneath the leaking transformer and was analyzed for total petroleum hydrocarbons. The other sample was collected from the location of the rusted 55-gallon drum described in the EBS Report and was analyzed for the full Contract Laboratory Program suite of target compound list organics and target analyte list inorganics analyses. Field activities were undertaken in general conformance with the Project Operations Plan (ABB-ES, 1994b). A site plan indicating the locations of soil samples is presented on Figure 1.



GENERAL LOCATION PLAN

Scale: 1 inch = 2,000 feet

LEGEND

- 82S00101* Surface soil sample location and designation
- △ location and designation
- ∨ Drainage swale
- * Screening criteria not exceeded
- NAS Naval Air Station

NOTE:

Values presented exceed NAS Cecil Field background data set values and State of Florida Cleanup Target Levels (NAS Cecil Field background data set values are applicable to inorganic analytes only).

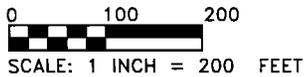


FIGURE 1
FACILITY 810
WATER TREATMENT FACILITIES BUILDING
SAMPLE LOCATION PLAN



SAMPLING AND ANALYSIS REPORT

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

3.0 PRELIMINARY RISK EVALUATION

A preliminary risk evaluation (PRE) was conducted to assess potential risks to human and ecological receptors posed by contaminants in surface soil. Primary exposure pathways were evaluated to determine which potentially contribute to human health and ecological risks. The evaluation was conducted in general conformance with methodology provided in the U.S. Environmental Protection Agency (USEPA) Region IV memorandum entitled "Amended Guidance on Preliminary Risk Evaluations (PREs) for the Purpose of Reaching a Finding of Suitability to Lease (FOSL)" (USEPA, 1994), USEPA Region IV bulletins on ecological risk assessment (USEPA, 1995), and minutes of meetings with the USEPA and the Florida Department of Environmental Protection (FDEP) concerning PREs (ABB-ES, 1995).

3.1 PUBLIC HEALTH PRELIMINARY RISK EVALUATION. All detected analytes were compared to readily available risk-based screening values to assess the likelihood of adverse human health effects associated with potential exposure to surface soil. Risk-based screening values were obtained from USEPA Region III Risk-Based Concentrations (RBCs) (USEPA, 1998), and FDEP soil cleanup target levels (SCTL) (Florida Administrative Code, 1998). Most screening values published in the references listed above are based on toxicity constants and standard human exposure scenarios, and correspond to fixed levels of risk. The designated level of risk for noncarcinogenic chemicals is based on a hazard quotient (HQ) of 1. The level of risk for carcinogenic chemicals is based on an excess lifetime cancer risk (ELCR) of 1×10^{-6} . Cancer and noncancer risks associated with industrial and residential land use are estimated by dividing the maximum detected analyte concentration by the corresponding USEPA Region III RBC value at the designated level of risk (ELCR of 1×10^{-6} or HQ of 1).

The total petroleum hydrocarbon concentration detected in the surface soil collected adjacent to the leaking transformer was 68 milligrams per kilogram. One pesticide compound (aldrin) and 16 inorganic analytes were detected in the surface soil sample collected near the abandoned 55-gallon drum. Calcium, magnesium, and zinc were detected in this sample at concentrations in excess of NAS Cecil Field inorganic background screening values. No inorganic or organic compounds were detected at concentrations in excess of FDEP SCTLs.

A comparison between concentrations of detected analytes in surface soil and USEPA RBCs and FDEP SCTLs is presented in Appendix A. A complete analytical data set is presented in Appendix B. No compounds or analytes were detected at concentrations in excess of background screening values and SCTLs. Therefore, no hazard index or ELCR was calculated.

3.2 ECOLOGICAL PRELIMINARY RISK EVALUATION. Potential exposure pathways and ecological habitat associated with the study area were characterized by HLA (then ABB-ES) ecological risk assessors in June 1996. Facility 810 is located in an active airfield environment and is surrounded by low-lying areas of unmaintained grass.

Pathways of potential contaminant exposure for wildlife receptors include direct contact, incidental ingestion of surface soil, and limited terrestrial food-web model exposure to contaminants in surface soil that may bioaccumulate. Pathways

for soil invertebrates include direct contact and incidental ingestion of surface soil. Pathways for terrestrial plants include direct contact with surface soil.

Calcium, magnesium, and zinc were the only inorganic analytes detected at concentrations in excess of NAS Cecil Field inorganic background screening values. No ecological screening criteria for these analytes were exceeded. Aldrin is the only other analyte detected in surface soil samples collected at this site. The concentration of aldrin detected did not exceed ecological screening criteria. Therefore, no further ecological risk evaluation was conducted.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Aldrin, calcium, magnesium, and zinc were detected in surface soil collected in the study area at concentrations below their respective human health and ecological screening values. The concentrations of analytes detected at Facility 810 do not represent a hazard to human health or the environment. Therefore, the color classification for Facility 810 should be changed to 3/Light Green to indicate that contaminants have been detected, but at concentrations which do not require removal action.

Appropriate site operation and management procedures should be undertaken in order to ensure that current and future site activities do not result in release of hazardous substances to the environment. No further evaluation is recommended for Facility 810.

REFERENCES

- ABB Environmental Services, Inc. (ABB-ES). 1994a. *Base Realignment and Closure Environmental Baseline Survey Report, Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOM), North Charleston, South Carolina (November).
- ABB-ES. 1994b. *Project Operations Plan for Cecil Field and Health and Safety Plan*. Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina (December).
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- ABB-ES. 1996. *Sampling and Analysis Outline, facility 810, Base Realignment and Closure, Zone H, Undeveloped Eastern Area, Group VII, Naval Air Station, Cecil Field, Jacksonville, Florida*. Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina (March).
- 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).
- Florida Administrative Code. 1998. *Brownfield's Cleanup Criteria Rule: Chapter 62-785*. Tallahassee, Florida.
- U.S. Environmental Protection Agency (USEPA). 1994. Region IV memorandum: "Amended Guidance on Preliminary Risk Evaluations (PRE) for the Purpose of Reaching a Finding of Suitability to Lease (FOSL)." Atlanta, Georgia (December 20).
- USEPA. 1995. *Region IV Waste Management Division Preliminary Risk Evaluation, Ecological Risk Assessment, Supplemental Guidance to RAGS*. Region IV Bulletins.
- USEPA. 1998. *Risk-Based Concentration Table*. Region III. Philadelphia, Pennsylvania.

APPENDIX A

PRELIMINARY RISK EVALUATION TABLE

**Preliminary Risk Evaluation Table for Analytes Detected in Surface Soil
Facility 810, Naval Air Station Cecil Field**

Analyte¹	Samples		Screening Values			Calculated Risk Values²	
	82S00101	82S00201	BKGRD	SCTL	RBC(R)	ELCR	HQ
<u>Pesticides/PCBs</u>							
Aldrin		0.00041		0.06	0.038	c	
<u>Inorganic Analytes</u>							
Aluminum		2860	4432.5	72000	78000	n	
Antimony		0.78	9.44	26	31	n	
Barium		7.9	14.4	105	5500	n	
Cadmium		0.27	1.715	75	39	n	
*Calcium		42500	9.44				
Chromium		5.3	7.75	290	390	n	
Copper		1.4	5.965	390	3100	n	
Iron		764	1486	23000	23000	n	
Lead		6.2	196.9	500			
*Magnesium		379	328.65				
Manganese		14.9	21.95	1600	1600	n	
Nickel		2.1	3.89	105	1600	n	
Potassium		67.3	101.8				
Sodium		149	343				
Vanadium		3	6.3	15	550	n	
*Zinc		47.4	36.5	23000	23000	n	
<u>General Chemistry</u>							
Total petroleum		68	110		350		

Notes:

¹ All detected analytes are reported. Concentrations and screening values are expressed in mg/kg

²ELCR and HQ are only calculated for analytes detected at concentrations in excess of BKGRD and SCTL

*= Background screening criteria or SCTLs have been exceeded

BKGRD=NAS Cecil Field Inorganic Background Data Set

SCTL = Soil Cleanup Target Level, Chapter 62-785, Florida Administrative Code

RBC(R)= Risk-based Concentration (Residential), USEPA Region III, April 1998

c=carcinogenic risk

n=non-carcinogenic risk

ELCR = calculated excess lifetime cancer risk, based on RBC(R) values. (ELCR = detected concentration/RBC(R) * 1 E-06)

HQ = calculated Hazard Quotient for non-carcinogenic analytes (HQ=detected concentration/RBC(R))

APPENDIX B

LABORATORY ANALYTICAL DATA

NAS CECIL FIELD -- FACILITY 810
 SURFACE SOIL -- VOLATILES -- REPORT REQUEST NO. 10128

Lab Sample Number: C2XJV
 Site: CECILBRAC2
 Locator: 82S00201
 Collect Date: 09-FEB-96

VALUE QUAL UNITS DL

CLP VOLATILES 90-SOW

Chloromethane	13 U	ug/kg	13
Bromomethane	13 U	ug/kg	13
Vinyl chloride	13 U	ug/kg	13
Chloroethane	13 U	ug/kg	13
Methylene chloride	6 U	ug/kg	6
Acetone	13 U	ug/kg	13
Carbon disulfide	6 U	ug/kg	6
1,1-Dichloroethene	6 U	ug/kg	6
1,1-Dichloroethane	6 U	ug/kg	6
1,2-Dichloroethene (total)	6 U	ug/kg	6
Chloroform	6 U	ug/kg	6
1,2-Dichloroethane	6 U	ug/kg	6
2-Butanone	13 U	ug/kg	13
1,1,1-Trichloroethane	6 U	ug/kg	6
Carbon tetrachloride	6 U	ug/kg	6
Bromodichloromethane	6 U	ug/kg	6
1,2-Dichloropropane	6 U	ug/kg	6
cis-1,3-Dichloropropene	6 U	ug/kg	6
Trichloroethene	6 U	ug/kg	6
Dibromochloromethane	6 U	ug/kg	6
1,1,2-Trichloroethane	6 U	ug/kg	6
Benzene	6 U	ug/kg	6
trans-1,3-Dichloropropene	6 U	ug/kg	6
Bromoform	6 U	ug/kg	6
4-Methyl-2-pentanone	13 U	ug/kg	13
2-Hexanone	13 U	ug/kg	13
Tetrachloroethene	6 U	ug/kg	6
Toluene	6 U	ug/kg	6
1,1,2,2-Tetrachloroethane	6 U	ug/kg	6
Chlorobenzene	6 U	ug/kg	6
Ethylbenzene	6 U	ug/kg	6
Styrene	6 U	ug/kg	6
Xylenes (total)	6 U	ug/kg	6

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

NAS CECIL FIELD -- FACILITY 810
 SURFACE SOIL -- SEMIVOLATILES -- REPORT REQUEST NO. 10129

Lab Sample Number: C2XJV
 Site: CECILBRAC2
 Locator: 82S00201
 Collect Date: 09-FEB-96

VALUE QUAL UNITS DL

CLP SEMIVOLATILES 90-SOW

Phenol	420 U	ug/kg	420
bis(2-Chloroethyl) ether	420 U	ug/kg	420
2-Chlorophenol	420 U	ug/kg	420
1,3-Dichlorobenzene	420 U	ug/kg	420
1,4-Dichlorobenzene	420 U	ug/kg	420
1,2-Dichlorobenzene	420 U	ug/kg	420
2-Methylphenol	420 U	ug/kg	420
2,2-oxybis(1-Chloropropane)	420 U	ug/kg	420
4-Methylphenol	420 U	ug/kg	420
N-Nitroso-di-n-propylamine	420 U	ug/kg	420
Hexachloroethane	420 U	ug/kg	420
Nitrobenzene	420 U	ug/kg	420
Isophorone	420 U	ug/kg	420
2-Nitrophenol	420 U	ug/kg	420
2,4-Dimethylphenol	420 U	ug/kg	420
bis(2-Chloroethoxy) methane	420 U	ug/kg	420
2,4-Dichlorophenol	420 U	ug/kg	420
1,2,4-Trichlorobenzene	420 U	ug/kg	420
Naphthalene	420 U	ug/kg	420
4-Chloroaniline	420 U	ug/kg	420
Hexachlorobutadiene	420 U	ug/kg	420
4-Chloro-3-methylphenol	420 U	ug/kg	420
2-Methylnaphthalene	420 U	ug/kg	420
Hexachlorocyclopentadiene	420 U	ug/kg	420
2,4,6-Trichlorophenol	420 U	ug/kg	420
2,4,5-Trichlorophenol	1000 U	ug/kg	1000
2-Chloronaphthalene	420 U	ug/kg	420
2-Nitroaniline	1000 U	ug/kg	1000
Dimethylphthalate	420 U	ug/kg	420
Acenaphthylene	420 U	ug/kg	420
2,6-Dinitrotoluene	420 U	ug/kg	420
3-Nitroaniline	1000 U	ug/kg	1000
Acenaphthene	420 U	ug/kg	420
2,4-Dinitrophenol	1000 U	ug/kg	1000
4-Nitrophenol	1000 U	ug/kg	1000
Dibenzofuran	420 U	ug/kg	420
2,4-Dinitrotoluene	420 U	ug/kg	420
Diethylphthalate	420 U	ug/kg	420
4-Chlorophenyl-phenylether	420 U	ug/kg	420
Fluorene	420 U	ug/kg	420
4-Nitroaniline	1000 U	ug/kg	1000
4,6-Dinitro-2-methylphenol	1000 U	ug/kg	1000
N-Nitrosodiphenylamine	420 U	ug/kg	420
4-Bromophenyl-phenylether	420 U	ug/kg	420
Hexachlorobenzene	420 U	ug/kg	420
Pentachlorophenol	1000 U	ug/kg	1000
Phenanthrene	420 U	ug/kg	420
Anthracene	420 U	ug/kg	420
Carbazole	420 U	ug/kg	420
Di-n-butylphthalate	420 U	ug/kg	420

NAS CECIL FIELD -- FACILITY 810
 SURFACE SOIL -- SEMIVOLATILES -- REPORT REQUEST NO. 10129

Lab Sample Number: C2XJV
 Site: CECILBRAC2
 Locator: 82S00201
 Collect Date: 09-FEB-96

VALUE QUAL UNITS DL

	VALUE	QUAL	UNITS	DL
Fluoranthene	420	U	ug/kg	420
Pyrene	420	U	ug/kg	420
Butylbenzylphthalate	420	U	ug/kg	420
3,3-Dichlorobenzidine	420	U	ug/kg	420
Benzo (a) anthracene	420	U	ug/kg	420
Chrysene	420	U	ug/kg	420
bis(2-Ethylhexyl) phthalate	420	U	ug/kg	420
Di-n-octyl phthalate	420	U	ug/kg	420
Benzo (b) fluoranthene	420	U	ug/kg	420
Benzo (k) fluoranthene	420	U	ug/kg	420
Benzo (a) pyrene	420	U	ug/kg	420
Indeno (1,2,3-cd) pyrene	420	U	ug/kg	420
Dibenzo (a,h) anthracene	420	U	ug/kg	420
Benzo (g,h,i) perylene	420	U	ug/kg	420

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

NAS CECIL FIELD -- FACILITY 810
 SURFACE SOIL -- PESTICIDES & PCBs -- REPORT REQUEST NO. 10130

Lab Sample Number: C2XJV
 Site: CECILBRAC2
 Locator: 82S00201
 Collect Date: 09-FEB-96

VALUE QUAL UNITS DL

CLP PESTICIDES/PCBS 90-S0W

alpha-BHC	2.1 U	ug/kg	2.1
beta-BHC	2.1 U	ug/kg	2.1
delta-BHC	2.1 U	ug/kg	2.1
gamma-BHC (Lindane)	2.1 U	ug/kg	2.1
Heptachlor	2.1 U	ug/kg	2.1
Aldrin	.41 J	ug/kg	2
Heptachlor epoxide	2.1 U	ug/kg	2.1
Endosulfan I	2.1 U	ug/kg	2.1
Dieldrin	4.3 U	ug/kg	4.3
4,4-DDE	4.3 U	ug/kg	4.3
Endrin	4.3 U	ug/kg	4.3
Endosulfan II	4.3 U	ug/kg	4.3
4,4-DDD	4.3 U	ug/kg	4.3
Endosulfan sulfate	4.3 U	ug/kg	4.3
4,4-DDT	4.3 U	ug/kg	4.3
Methoxychlor	21 U	ug/kg	21
Endrin ketone	4.3 U	ug/kg	4.3
Endrin aldehyde	4.3 U	ug/kg	4.3
alpha-Chlordane	2.1 U	ug/kg	2.1
gamma-Chlordane	2.1 U	ug/kg	2.1
Toxaphene	210 U	ug/kg	210
Aroclor-1016	43 U	ug/kg	43
Aroclor-1221	86 U	ug/kg	86
Aroclor-1232	43 U	ug/kg	43
Aroclor-1242	43 U	ug/kg	43
Aroclor-1248	43 U	ug/kg	43
Aroclor-1254	43 U	ug/kg	43
Aroclor-1260	43 U	ug/kg	43

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

NAS CECIL FIELD -- FACILITY 810
 SURFACE SOIL -- INORGANICS -- REPORT REQUEST NO. 10131

Lab Sample Number: C2XJV
 Site: CECILBRAC2
 Locator: 82S00201
 Collect Date: 09-FEB-96

VALUE QUAL UNITS DL

CLP METALS AND CYANIDE

Element	Value	Qualifier	Units	DL
Aluminum	2860		mg/kg	40
Antimony	.78	J	mg/kg	12
Arsenic	.77	U	mg/kg	2
Barium	7.9	J	mg/kg	40
Beryllium	.26	U	mg/kg	1
Cadmium	.27	J	mg/kg	1
Calcium	42500		mg/kg	1000
Chromium	5.3		mg/kg	2
Cobalt	.51	U	mg/kg	10
Copper	1.4	J	mg/kg	5
Iron	764		mg/kg	20
Lead	6.2	J	mg/kg	.6
Magnesium	379	J	mg/kg	1000
Manganese	14.9		mg/kg	3
Mercury	.13	U	mg/kg	.1
Nickel	2.1	J	mg/kg	8
Potassium	67.3	J	mg/kg	1000
Selenium	.77	UJ	mg/kg	1
Silver	.26	U	mg/kg	2
Sodium	149	J	mg/kg	1000
Thallium	1	U	mg/kg	2
Vanadium	3	J	mg/kg	10
Zinc	47.4		mg/kg	4
Cyanide	.12	U	mg/kg	.5

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

NAS CECIL FIELD -- FACILITY 810
 SURFACE SOIL -- TRPH -- REPORT REQUEST NO. 10127

Lab Sample Number:	A6B1001210		A6B1001210		
Site	CECILBRAC2		CECILBRAC2		
Locator	82S00101		82S00201		
Collect Date:	09-FEB-96		09-FEB-96		
	VALUE	QUAL UNITS	DL	VALUE	QUAL UNITS
			DL		

TPH						
Total petroleum hydrocarbons	68	mg/kg	13	110	mg/kg	13

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



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

September 18, 1998

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Commanding Officer
Mr. Mark Davidson, Code 1879
SOUTHNAVFACENGCOM
Post Office Box 190010
North Charleston, SC 29419-9010

RE: Sampling and Analysis Report, Facility 810
Naval Air Station Cecil Field, Florida.

Dear Mr. Davidson:

I have completed the technical review of the Confirmation Sampling Report, dated August 1998 (received August 24, 1998) submitted for the above-referenced facility. FDEP concurs with the recommendation of no further action.

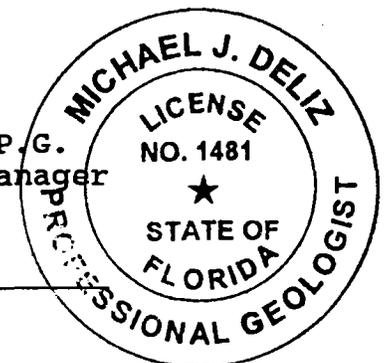
FDEP's concurrence is predicated on the information provided by the SOUTHNAVFACENGCOM. Therefore, any new information contradicting the basis for this concurrence, may require further investigation or remedial actions.

If you have any concerns regarding this letter, please contact me at (904) 921-9991.

Sincerely,

Michael J. Deliz, P.G.
Remedial Project Manager

18-SEPT-98
Date



CC: Debbie Vaughn-Wright, USEPA - Atlanta
John Flowe, City of Jacksonville

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

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