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NAS CECIL FIELD, FL
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CONFIRMATORY SAMPLING REPORT FOR BUILDING 423 TANK 423 BASE
REALIGNMENT AND CLOSURE UNDERGROUND STORAGE TANK AND ABOVEGROUND
STORAGE TANK GREY SITES NAS CECIL FIELD FL
4/1/1999
HARDING LAWSON ASSOCIATES

CONFIRMATORY SAMPLING REPORT
BUILDING 423, TANK 423
BASE REALIGNMENT AND CLOSURE
UNDERGROUND STORAGE TANK AND
ABOVEGROUND STORAGE TANK GREY SITES
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

Unit Identification Code: N60200

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

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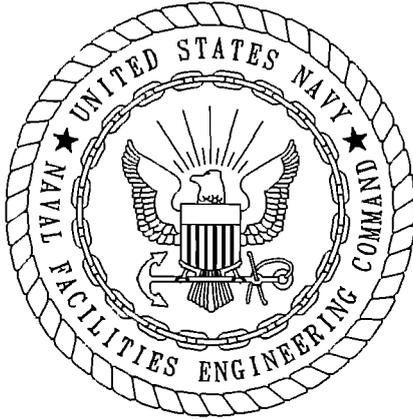
Prepared for:

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April 1999

Revision 0.0



CERTIFICATION OF TECHNICAL
DATA CONFORMITY (MAY 1987)

The Contractor, Harding Lawson Associates, 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: April 5, 1999

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NAME AND TITLE OF CERTIFYING OFFICIAL: Eric A. Blomberg, P.G.
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Naval Air Station Cecil Field
Jacksonville, Florida

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GLOSSARY

ISI Innovative Services International, Inc.
NAS Naval Air Station
UST underground storage tank

1.0 INTRODUCTION

Harding Lawson Associates (HLA), under contract to the Southern Division, Naval Facilities Engineering Command, has completed confirmatory sampling for Tank 423 at Naval Air Station (NAS) Cecil Field in Jacksonville, Florida. This report summarizes the related field operations, results, conclusions, and recommendations.

Tank 423 was an underground storage tank (UST) located on the north side of Building 423, which is a house used for enlisted housing (Figure 1). The UST, which was installed in 1955, had a 350-gallon capacity and was used to store fuel oil for on-site heating. Tank 423 was removed by Innovative Services International, Inc. (ISI), on July 10, 1995. A closure assessment report was prepared for Tank 423 and submitted to the Florida Department of Environmental Protection (ISI, 1995). The closure assessment report indicated that toluene was present in groundwater at a concentration of 75 micrograms per liter ($\mu\text{g}/\ell$) which is above Florida cleanup target level of 40 $\mu\text{g}/\ell$. Therefore, to evaluate the current condition of groundwater at the Tank 423 site, the NAS Cecil Field petroleum subcommittee requested the installation and sampling of a monitoring well at the Tank 423 site.

2.0 FIELD INVESTIGATION

The confirmatory sampling for Tank 423 was initiated in January, 1999 and included

- the installation of one monitoring well, and
- collection and analysis of one groundwater sample.

One monitoring well, CEF-423-1S, was installed to a depth of 11.6 feet bls. A groundwater sample was collected from this well and analyzed for the Kerosene Analytical Group parameters. A general site plan indicating the location of the monitoring well is presented on Figure 2. The monitoring well installation detail is included in Appendix A.

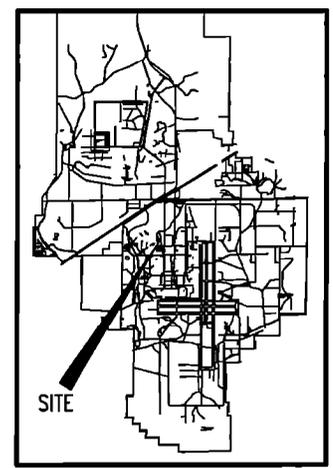
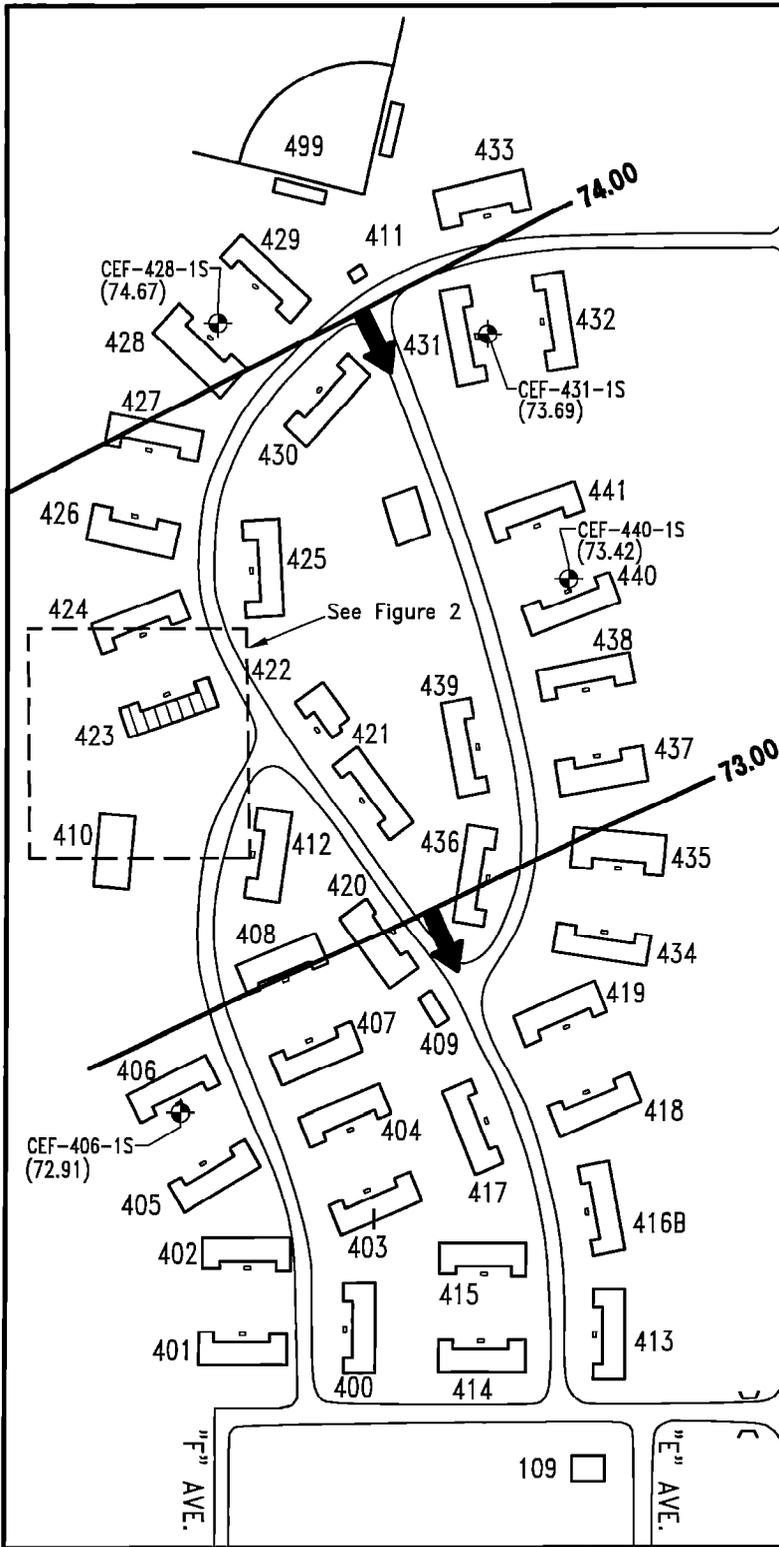
3.0 SCREENING AND ANALYTICAL RESULTS

No contaminants were detected in the groundwater samples collected from monitoring well CEF-423-1S. A summary of the groundwater analytical results is presented in Table 1. The complete analytical data set is presented in Appendix B.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Data obtained during the confirmatory sampling of Tank 423 did not indicate the presence of contaminated groundwater at concentrations above cleanup target levels.

It is recommended that no further action take place at the Tank 423 site.



GENERAL LOCATION PLAN
Not to scale

LEGEND

- CEF-406-1S
 Monitoring well location and designation
- 73.00**
 Groundwater elevation contour
- Groundwater flow direction
- (72.91)
 Groundwater elevation (June 1998)
- Former location of 350-gallon underground storage tank

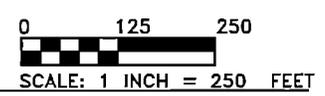
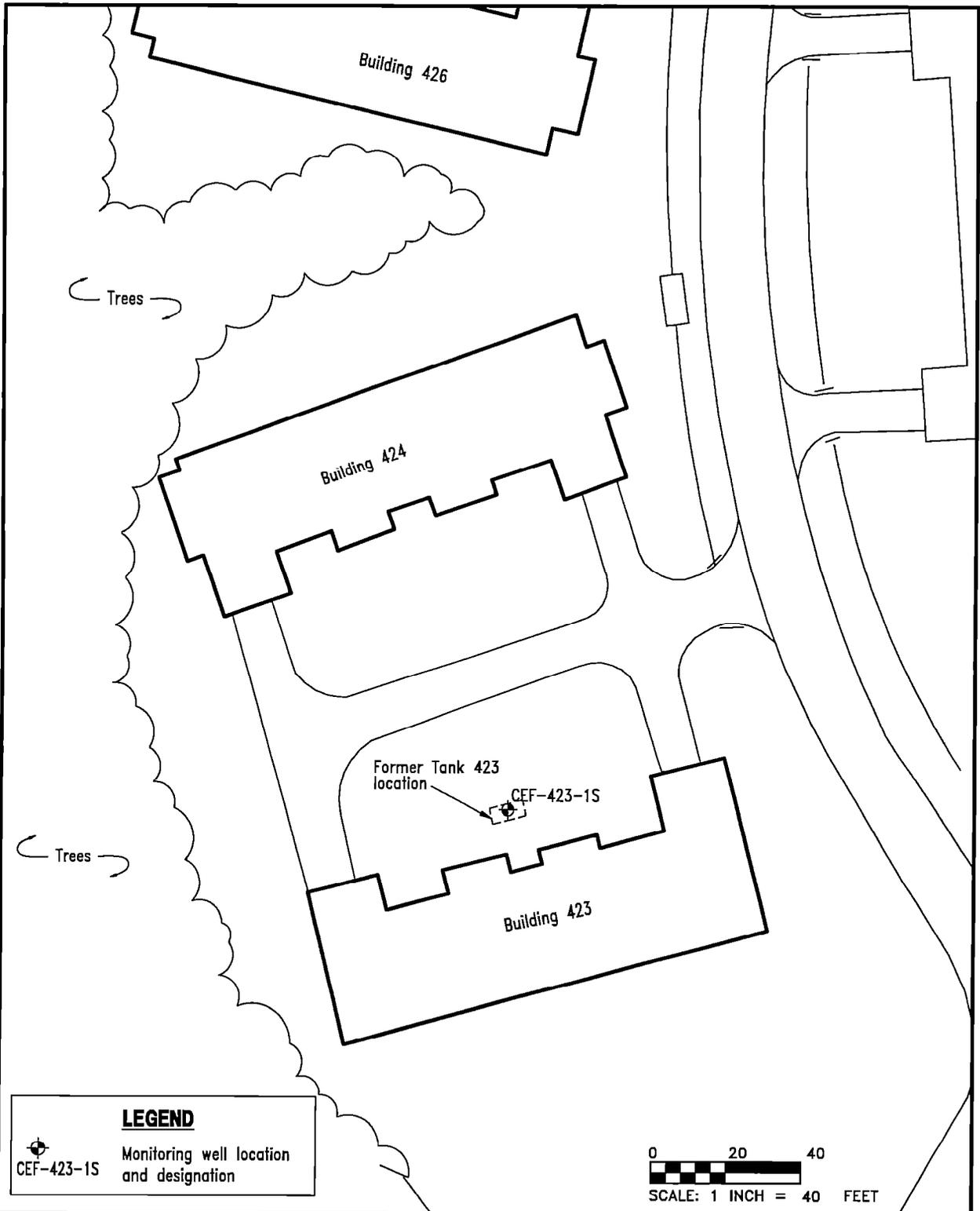


FIGURE 1
SITE LOCATION MAP



CONFIRMATORY SAMPLING REPORT
BUILDING 423, TANK 423
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

K:\02565\02565-05\CSR\02565549.DWG, SM-SM 03/11/99 08:48:42, AutoCAD R14



LEGEND
 Monitoring well location and designation
 CEF-423-1S

0 20 40

 SCALE: 1 INCH = 40 FEET

FIGURE 2
MONITORING WELL LOCATION



CONFIRMATORY SAMPLING REPORT
BUILDING 423, TANK 423

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

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**Table 1
Summary of Groundwater Analytical Results**

Confirmatory Sampling Report
Building 423, Tank 423
Naval Air Station Cecil Field
Jacksonville, Florida

Compound	CEF-423-1S	Groundwater Cleanup Target Levels ¹
<u>Volatile Organic Aromatics (USEPA Method 601/602) (µg/l)</u>		
No compounds detected.		
<u>Polynuclear Aromatic Hydrocarbons (USEPA Method 625) (µg/l)</u>		
Benzo(b)fluoranthene	0.12 J	0.2
<u>Total Recoverable Petroleum Hydrocarbons (TRPH) (FL-PRO) (mg/l)</u>		
Not detected		
¹ Chapter 62-770, Florida Administrative Code (FAC). USEPA = U.S. Environmental Protection Agency. µg/l = micrograms per liter. J = estimated value. FL-PRO = Florida Petroleum Residual Organics. mg/l = milligrams per liter.		

REFERENCE

Innovative Services International, Inc. 1995. Closure Report for Underground Storage Tank Removals, Naval Air Station Cecil Field, Jacksonville, Florida.

APPENDIX A
MONITORING WELL INSTALLATION DETAIL

TITLE: NAS Cecil Field, Bldg. 423 Site Assessment Report		LOG of WELL: CEF-423-IS	BORING NO. CEF-423-IS
CLIENT: SOUTH DIVNA V FACENCOM		PROJECT NO: 02523-13	
CONTRACTOR: U.S. Probe and Drill		DATE STARTED: 02-10-99	COMPLTD: 02-10-99
METHOD: HSA	CASE SIZE: 2in.	SCREEN INT.: 1.5-11.5 FT.	PROTECTION LEVEL: D
TOC ELEV.: FT.	MONITOR INST.: FID	TOT DPTH: 11.60FT.	DPTH TO ∇ 1.97 FT.
LOGGED BY: H.Hooper	WELL DEVELOPMENT DATE: 02-10-99		SITE: Building 423

DEPTH FT.	LABORATORY SAMPLE ID.	SAMPLE	RECOVERY	HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION AND COMMENTS	LITHOLOGIC SYMBOL	SOIL CLASS	BLOWS/6-IN	WELL DATA
1					<> See Note		SC		posthole
2					CLAYEY SAND: dark brown slightly clayey silty fine sand.				
3									
4									posthole
5									
6				100					* **
7									
8				70	CLAYEY SAND: dark brown slightly clayey silty fine sand.				
9									
10				50					
11									
12					<> Soil description taken from posthole and auger * no split spoon samples taken ** OVA readings taken at borehole				
13									
14									
15									

APPENDIX B
ANALYTICAL DATA

NAS CECIL FIELD -- FACILITY 423 / TANK 423
GROUNDWATER -- ANALYTICAL DATA -- REQUEST NO. 10921

Lab Sample Number: JR53822
Site: UST GREY
Locator: CEF-423-1S
Collect Date: 10-FEB-99

VALUE QUAL UNITS DL

601/602

1,1,1-Trichloroethane	1 U	ug/l	1
1,1,2,2-Tetrachloroethane	1 U	ug/l	1
1,1,2-Trichloroethane	1 U	ug/l	1
1,1-Dichloroethane	1 U	ug/l	1
1,1-Dichloroethene	1 U	ug/l	1
1,2-Dichloroethane	1 U	ug/l	1
1,2-Dichloropropane	1 U	ug/l	1
1,2-Dichlorobenzene	1 U	ug/l	1
1,3-Dichlorobenzene	1 U	ug/l	1
1,4-Dichlorobenzene	1 U	ug/l	1
Benzene	1 U	ug/l	1
Bromodichloromethane	1 U	ug/l	1
Bromoform	1 U	ug/l	1
Bromomethane	1 U	ug/l	1
Carbon tetrachloride	1 U	ug/l	1
Chlorobenzene	1 U	ug/l	1
Chloromethane	2 U	ug/l	2
Chloroform	1 U	ug/l	1
Dibromochloromethane	1 U	ug/l	1
Dichlorodifluoromethane	1 U	ug/l	1
Ethylbenzene	1 U	ug/l	1
Methylene chloride	2 U	ug/l	2
Tetrachloroethene	1 U	ug/l	1
Toluene	1 U	ug/l	1
Trichloroethene	1 U	ug/l	1
Trichlorofluoromethane	2 U	ug/l	2
Vinyl chloride	1 U	ug/l	1
m,p-Xylene	1 U	ug/l	1
o-Xylene	1 U	ug/l	1
cis-1,2-Dichloroethene	1 U	ug/l	1
cis-1,3-Dichloropropene	1 U	ug/l	1
trans-1,2-Dichloroethene	1 U	ug/l	1
trans-1,3-Dichloropropene	1 U	ug/l	1

FLA PRO

TPH C8-C40	.2 U	mg/l	.2
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METHOD 8310

Naphthalene	.5 U	ug/l	.5
Acenaphthylene	1 U	ug/l	1
1-Methylnaphthalene	.5 U	ug/l	.5
2-Methylnaphthalene	.5 U	ug/l	.5
Acenaphthene	.5 U	ug/l	.5
Fluorene	.1 U	ug/l	.1
Phenanthrene	.05 U	ug/l	.05
Anthracene	.05 U	ug/l	.05
Fluoranthene	.1 U	ug/l	.1
Pyrene	.05 U	ug/l	.05
Benzo (a) anthracene	.05 U	ug/l	.05
Benzo (b) fluoranthene	.12 J	ug/l	.1

NAS CECIL FIELD -- FACILITY 423 / TANK 423
GROUNDWATER -- ANALYTICAL DATA -- REQUEST NO. 10921

Lab Sample Number: JR53822
Site: UST GREY
Locator: CEF-423-1S
Collect Date: 10-FEB-99

VALUE QUAL UNITS DL

Benzo (k) fluoranthene	.05 U	ug/l	.05
Chrysene	.05 U	ug/l	.05
Benzo (a) pyrene	.05 U	ug/l	.05
Dibenzo (a,h) anthracene	.1 U	ug/l	.1
Benzo (g,h,i) perylene	.1 U	ug/l	.1
Indeno (1,2,3-cd) pyrene	.05 U	ug/l	.05

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