

N60200.AR.001786  
NAS CECIL FIELD, FL  
5090.3a

CONFIRMATORY SAMPLING REPORT FOR QUARTERS Q TANK QUARTERS Q 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**  
**QUARTERS Q, TANK QUARTERS Q**  
**BASE REALIGNMENT AND CLOSURE**  
**UNDERGROUND STORAGE TANK AND**  
**ABOVEGROUND STORAGE TANK GREY SITES**  
**NAVAL AIR STATION CECIL FIELD**  
**JACKSONVILLE, FLORIDA**

OK

**Unit Identification Code: N60200**

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

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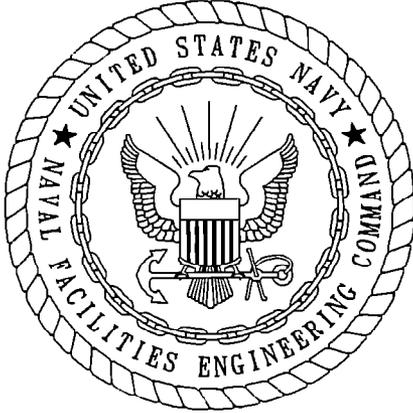
**Prepared for:**

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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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(DFAR 252.227-7036)

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GLOSSARY

ISI Innovative Services International, Inc.

UST underground storage tank

## 1.0 INTRODUCTION

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

Tank Quarters Q was an underground storage tank (UST) located on the east side of Quarters Q, which is a house used for officers 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 Q was removed by Innovative Services International, Inc. (ISI), on May 10, 1995. A closure assessment report (Appendix A) was prepared for Tank Q and submitted to the Florida Department of Environmental Protection (ISI, 1995). The closure assessment report indicated that vinyl chloride was present in groundwater at a concentration of 2 micrograms per liter. Therefore, to evaluate the current condition of groundwater at the Tank Q site, the petroleum subcommittee requested the installation and sampling of a monitoring well at the Tank Q site.

## 2.0 FIELD INVESTIGATION

The confirmatory sampling for Tank Q was initiated in September 1998 and included

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

One monitoring well, CEF-Q-1S, was installed to a depth of 11.9 feet below land surface. 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 1. The monitoring well installation detail is included in Appendix A.

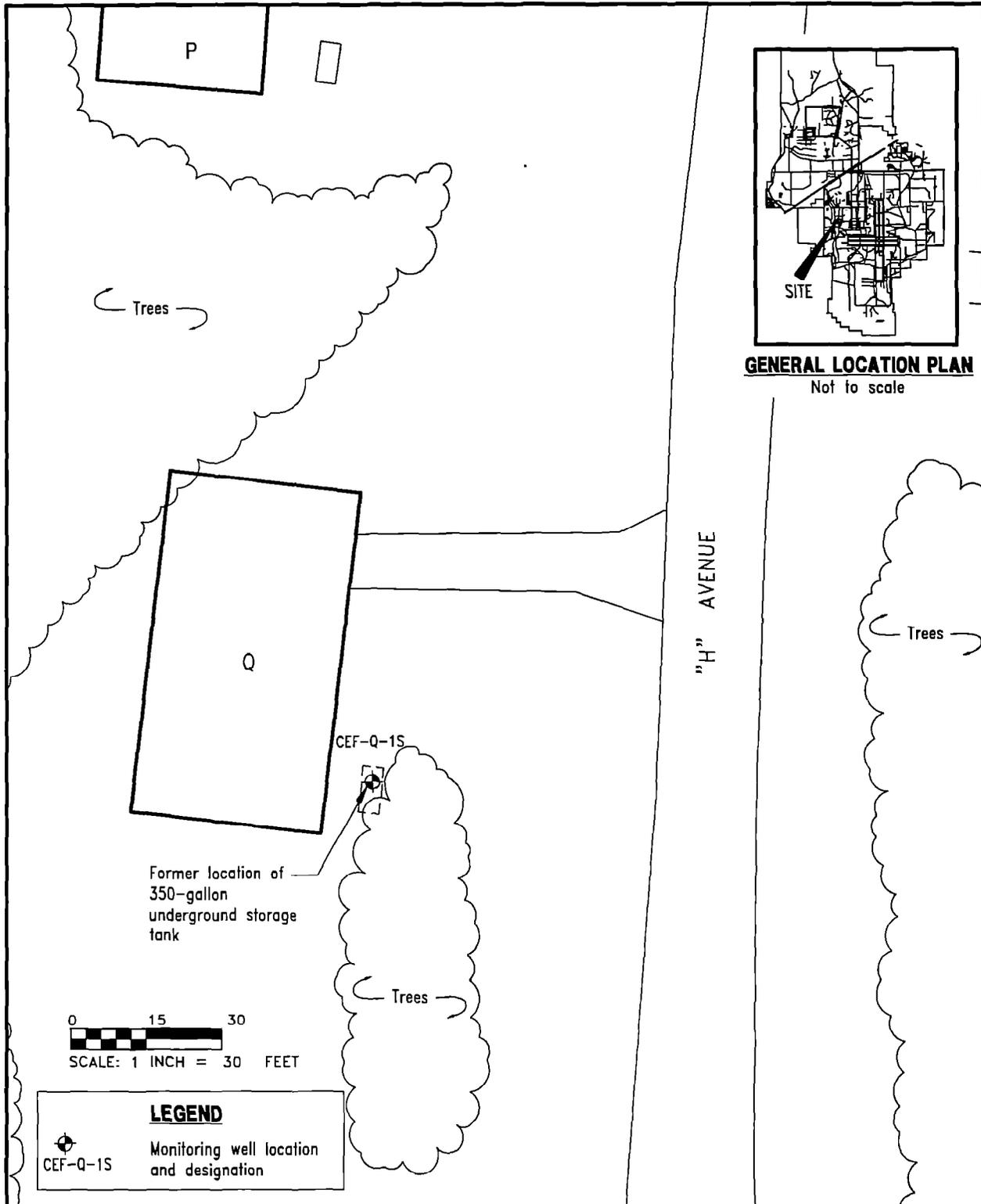
## 3.0 SCREENING AND ANALYTICAL RESULTS

No contaminants were detected above Florida Department of Environmental Protection groundwater cleanup target levels in the groundwater samples collected from monitoring well CEF-Q-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 Q 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 Q site.



**FIGURE 1**  
**TANK QUARTERS Q**  
**BASE FAMILY HOUSING**



**CONFIRMATORY SAMPLING REPORT**  
**QUARTER Q, TANK QUARTER Q**

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

**Table 1**  
**Summary of Groundwater Analytical Results**

Confirmatory Sampling Report  
 Quarters Q, Tank Quarters Q  
 Naval Air Station Cecil Field  
 Jacksonville, Florida

Compound	CEF-Q-1S	Groundwater Cleanup Target Levels <sup>1</sup>
<b><u>Volatile Organic Aromatics (USEPA Method 601/602) (<math>\mu\text{g}/\text{L}</math>)</u></b>		
No compounds detected.		
<b><u>Polynuclear Aromatic Hydrocarbons (USEPA Method 625) (<math>\mu\text{g}/\text{L}</math>)</u></b>		
Benzo(k)fluoranthene	0.08 J	0.5
Benzo(a)pyrene	0.05 J	0.2
Chrysene	0.07 J	5
Phenanthrene	0.17	210
<b><u>Total Recoverable Petroleum Hydrocarbons (FL-PRO) (mg/L)</u></b>		
Not detected		
<sup>1</sup> Chapter 62-770, Florida Administrative Code.  Notes: USEPA = U.S. Environmental Protection Agency. $\mu\text{g}/\text{L}$ = micrograms per liter. J = estimated value. FL-PRO = Florida Petroleum Residual Organics. $\text{mg}/\text{L}$ = 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, Quarters Q Site Assessment Report		LOG of WELL: CEF-Q-1S	BORING NO. CEF-Q-1S
CLIENT: SOUTH DIV NAV FAC ENG COM		PROJECT NO: 02523.13	
CONTRACTOR: U.S. Probe and Drill		DATE STARTED: 09-22-98	COMPLTD: 09-22-98
METHOD: HSA	CASE SIZE: 2in.	SCREEN INT.: 2-12 ft.	PROTECTION LEVEL: D
TOC ELEV.: FT.	MONITOR INST.: FID	TOT DPTH: 14.0FT.	DPTH TO $\nabla$ 3.07 FT.
LOGGED BY: H.Hooper	WELL DEVELOPMENT DATE: 09-24-98		SITE: Quarters Q

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		SM	posthole	
2									
3								posthole	
4					SILTY SAND: light to dark gray silty fine sand. Trace of clay.				
5									
6								*	
7								**	
8									
9									
10									
11					<> Soil description taken from posthole and auger				
12					* no split spoon samples taken				
13					** no OVA readings taken				
14									
15									

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

NAS CECIL FIELD -- QUARTERS Q  
GROUNDWATER -- ANALYTICAL DATA -- REPORT REQUEST NO. 10877

Lab Sample Number: JR42221  
Site: UST GREY  
Locator: CEF-Q-1S  
Collect Date: 18-NOV-98

	VALUE	QUAL	UNITS	DL
<b>BETX, MTBE, &amp; DICHLOROBENZENES</b>				
Benzene	1 U		ug/l	1
Ethylbenzene	1 U		ug/l	1
Toluene	1 U		ug/l	1
Chlorobenzene	1 U		ug/l	1
Methyl tert-butyl ether	2 U		ug/l	2
1,2-Dichlorobenzene	1 U		ug/l	1
1,3-Dichlorobenzene	1 U		ug/l	1
1,4-Dichlorobenzene	1 U		ug/l	1
m,p-Xylene	1 U		ug/l	1
o-Xylene	1 U		ug/l	1
<b>FLA PRO</b>				
TPH C8-C40	.2 U		mg/l	.2
<b>PAHs</b>				
Acenaphthene	.5 U		ug/l	.5
Acenaphthylene	1 U		ug/l	1
Anthracene	.05 U		ug/l	.05
Benzo (a) anthracene	.05 U		ug/l	.05
Benzo (b) fluoranthene	.1 U		ug/l	.1
Benzo (k) fluoranthene	.08 J		ug/l	.05
Benzo (a) pyrene	.05 J		ug/l	.05
Chrysene	.07 J		ug/l	.05
Dibenzo (a,h) anthracene	.1 U		ug/l	.1
Fluoranthene	.1 U		ug/l	.1
Fluorene	.1 U		ug/l	.1
Indeno (1,2,3-cd) pyrene	.05 U		ug/l	.05
Benzo (g,h,i) perylene	.1 U		ug/l	.1
Naphthalene	.5 U		ug/l	.5
Phenanthrene	.17		ug/l	.05
Pyrene	.05 U		ug/l	.05
1-Methylnaphthalene	.5 U		ug/l	.5
2-Methylnaphthalene	.5 U		ug/l	.5
Lead	.005 U		mg/l	.005

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