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CONFIRMATORY SAMPLING REPORT FOR BUILDING 222LS TANK G222 BASE
REALIGNMENT AND CLOSURE NAS CECIL FIELD FL
9/1/2000
TETRA TECH NUS INC

Confirmatory Sampling Report
for
Building 222LS, Tank G222

Base Realignment and Closure

Naval Air Station Cecil Field
Jacksonville, Florida



Southern Division
Naval Facilities Engineering Command
Contract Number N62467-94-D-0888
Contract Task Order 0121

September 2000

**CONFIRMATORY SAMPLING REPORT
FOR
BUILDING 222LS, TANK G222
BASE REALIGNMENT AND CLOSURE**

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

**COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT**

**Submitted to:
Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
North Charleston, South Carolina 29406**

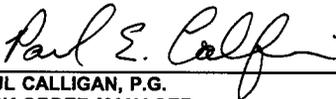
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**CONTRACT NUMBER N62467-94-D-0888
CONTRACT TASK ORDER 0121**

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for

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 INTRODUCTION.....	1
2.0 FIELD INVESTIGATION.....	1
3.0 SITE SCREENING RESULTS	3
4.0 CONCLUSIONS AND RECOMMENDATIONS.....	3
5.0 PROFESSIONAL REVIEW CERTIFICATION	5
REFERENCES	R-1

TABLES

<u>NUMBER</u>	<u>PAGE</u>
3-1 Summary of Soil Screening Data.....	4

FIGURES

<u>NUMBER</u>	<u>PAGE</u>
2-1 Soil Boring Locations Data.....	2

ACRONYMS

ABB-ES	ABB Environmental Services, Inc.
AST	Above Ground Storage Tank
BLS	Below Land Surface
CSR	Confirmatory Sampling Report
FID	Flame Ionization Detector
NAS	Naval Air Station
NFA	No Further Action
OVA	Organic Vapor Analyzer
POA	Plan of Action
SAP	Sampling and Analysis Plan
SOUTHNAVFACENGCOM	Southern Division Naval Facilities Engineering Command
TtNUS	Tetra Tech NUS, Inc.

1.0 INTRODUCTION

Tetra Tech NUS, Inc. (TtNUS) was authorized by Southern Division Naval Facilities Engineering Command (SOUTHNAVFACENGCOM) to conduct a site investigation and develop a Confirmatory Sampling Report (CSR) for Tank G222 at Naval Air Station (NAS) Cecil Field in Jacksonville, Duval County, Florida. A Sampling and Analysis Plan (SAP) for the assessment of soil and possibly groundwater at various tank sites including Tank G222 was submitted by TtNUS (2000a).

Tank G222 is an aboveground storage tank (AST) in a concrete secondary containment structure, which is attached to the southeastern end of Building 222LS. Building 222LS is located near the southeast corner of Poolside Avenue and Lake Newman Street. Building 222LS was used as a pump station to house electric and diesel-powered pumps. The AST has an approximate capacity of 150 gallons and was used to store diesel fuel for the lift station pumps [ABB-Environmental Services, Inc. (ABB-ES), 1994].

Confirmatory soil screening conducted by ABB-ES (1998) consisted of soil screening at three locations around the AST with an organic vapor analyzer (OVA). The results of that investigation indicated that contaminated soil was not present at that time, and a recommendation of no further action (NFA) was made in the report.

2.0 FIELD INVESTIGATION

The investigation was conducted between June 7 and 15, 2000 and included:

- Utility location prescribed for underground work.
- Five hand auger soil borings.
- Soil screening at prescribed intervals (TtNUS, 2000a).

The methodologies and equipment that were used during this investigation are in accordance with the TtNUS Comprehensive Quality Assurance Plan No. 980038, as approved by the Florida Department of Environmental Protection. A site location map is provided inset to Figure 2-1.

Following utility location protocols and an initial site visit, five hand auger borings were advanced in the soil around Tank G222 (Figure 2-1). The soil borings were advanced to the water table, general soil lithology was recorded, and soil samples were collected at depth intervals of 1 foot below land surface (bls) and every 2 feet thereafter to the water table. Soil screening was conducted with an OVA-flame

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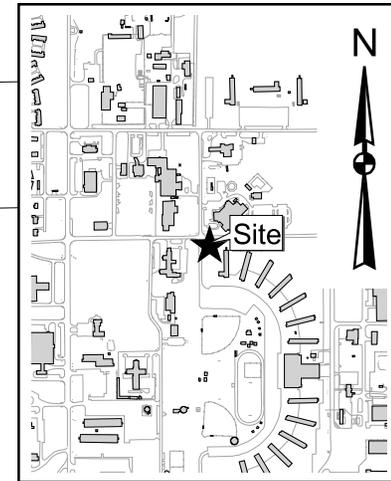
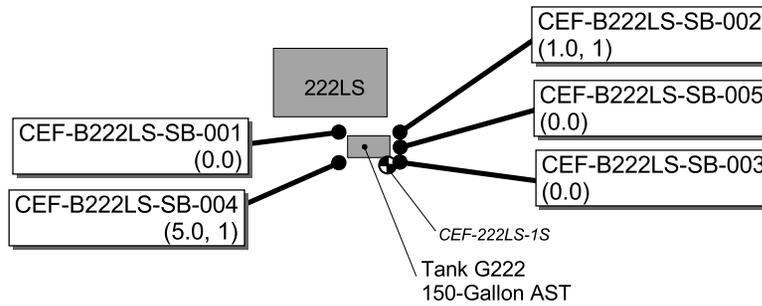
- ⊕ Existing Monitoring Well Locations
- Soil Boring Locations

(0.0, 1) Indicates highest OVA reading in PPM, and the depth interval (feet, bls) of reading

NOTE: AST - Aboveground Storage Tank
 OVA - Organic Vapor Analyzer
 PPM - parts per million
 bls - Below Land Surface
 CEF-B222LS-SB-005 located under secondary containment drain valve

Lake Newman Street(Formerly 6th Street)

Pool Side Avenue(Formerly "B" Circle)



30 0 30 Feet

DRAWN BY	DATE
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SCALE AS NOTED	



SOIL BORING LOCATIONS DATA
 CONFIRMATORY SAMPLING REPORT
 BUILDING 222LS, TANK G222
 NAVAL AIR STATION CECIL FIELD
 JACKSONVILLE, FLORIDA

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ionization detector (OVA-FID). As agreed in the Plan of Action (POA) (TtNUS, 2000b), no soil samples were collected for laboratory analysis.

3.0 SITE SCREENING RESULTS

Excessively contaminated soil was not detected in soil samples collected from the unsaturated zone during the confirmatory sampling. The general lithology of the soils excavated were silty fine-grained sands in various shades of gray and brown. The depth of the water table at the site ranged from 5 to 5.5 feet bls. The soil OVA-FID data collected during the investigation are summarized in Table 3-1 and presented on Figure 2-1.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Since excessively contaminated soil was not detected during the investigation and in accordance with the SAP (TtNUS, 2000a) and the POA (TtNUS, 2000b), no groundwater investigation followed the soil screening. Supported by the previous investigation's similar findings (ABB-ES, 1998), TtNUS recommends NFA for Tank G222.

**Table 3-1
Summary of Soil Screening Data**

Confirmatory Sampling Report
Building 222, Tank G222
Naval Air Station Cecil Field
Jacksonville, Florida

Location	OVA-FID Concentration (ppm)			
	Depth (feet bls)	Unfiltered	Filtered	Actual
CEF-B222LS-SB-001	1	1.0	1.0	0.0
	3	0.0	0.0	0.0
	5	0.0	0.0	0.0
CEF-B222LS-SB-002	1	1.0	0.0	1.0
	3	0.0	0.0	0.0
	5	0.0	0.0	0.0
CEF-B222LS-SB-003	1	0.0	0.0	0.0
	3	0.0	0.0	0.0
	5	0.0	0.0	0.0
CEF-B222LS-SB-004	1	10.0	5.0	5.0
	3	0.0	0.0	0.0
	5	4.0	4.0	0.0
CEF-B222LS-SB-005	1	1.0	1.0	0.0
	3	1.0	1.0	0.0
	5	0.5	0.5	0.0
<p>Notes: The soil samples were collected on June 15, 2000. Soil samples were filtered with carbon to determine the methane concentration. The water table was encountered at 5.5 feet bls in SB-001 and at 5 feet bls in the other borings.</p> <p>Acronyms: OVA-FID = organic vapor analyzer-flame ionization detector. ppm = parts per million. bls = below land surface.</p>				

5.0 PROFESSIONAL REVIEW CERTIFICATION

The data contained in this report was prepared using sound hydrogeologic principles and judgement. This assessment is based on the geologic investigation and associated information detailed in the text and appended to this report. If conditions are determined to exist that differ from those described, the undersigned geologist should be notified to evaluate the effects of any additional information on the assessment described in this report. This CSR was developed for Tank G222 at the former NAS Cecil Field, Jacksonville, Florida, and should not be construed to apply to any other site.



Mervin Dale
Florida Professional Geologist
P.G. No. 0001917

Date



REFERENCES

ABB-ES, 1994. *Base Realignment and Closure Environmental Baseline Survey Report, Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina, November.

ABB-ES, 1998. *Confirmatory Sampling Report, Building 222, Tank G222, Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina, April.

TtNUS, 2000a. *Sampling and Analysis Plan for Site Assessment and Confirmatory Sampling at Various UST and AST Sites, Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina, March.

TtNUS, 2000b. *Plan of Action No. GH01. Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina, January.