

N60200.AR.002646
NAS CECIL FIELD, FL
5090.3a

"CONFIRMATORY SAMPLING REPORT FOR BUILDING 1826 TANKS G1826 A, B AND C
BASE REALIGNMENT AND CLOSURE NAS CECIL FIELD FL"

9/1/2000

TETRA TECH NUS INC

Confirmatory Sampling Report
for
Building 1826,
Tanks G1826 A, B & C

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 1826, TANKS G1826 A, B & C
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**

**Submitted by:
Tetra Tech NUS, Inc.
Foster Plaza 7
661 Andersen Drive
Pittsburgh, Pennsylvania 15220-2745**

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

SEPTEMBER 2000

PREPARED UNDER THE SUPERVISION OF:



**PAUL CALLIGAN, P.G.
TASK ORDER MANAGER
TETRA TECH NUS, INC.
TALLAHASSEE, FLORIDA**

APPROVED FOR SUBMITTAL BY:



**DEBBIE WROBLEWSKI
PROGRAM MANAGER
TETRA TECH NUS, INC.
PITTSBURGH, PENNSYLVANIA**

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 Tanks G1826 A, B & C 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 Tanks G1826 A, B & C was submitted by TtNUS (2000a).

Tanks G1826 A, B & C are aboveground storage tanks (AST) located on concrete on the south side of Building 1826. Building 1826 is located west of the runway complex near the intersection of Aviation Avenue, Skillside Street, and Lake Fretwell Street. It houses the water heating and cooling systems for Aircraft Hangar 1820. Each AST has a 275-gallon capacity and they are used to store diesel fuel for the emergency backup power for three firemain pumps [ABB Environmental Services, Inc. (ABB-ES), 1994].

Confirmatory soil screening conducted by ABB-ES (1997) consisted of soil screening at two 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 ABB-ES recommended no further action (NFA) for the site in their report.

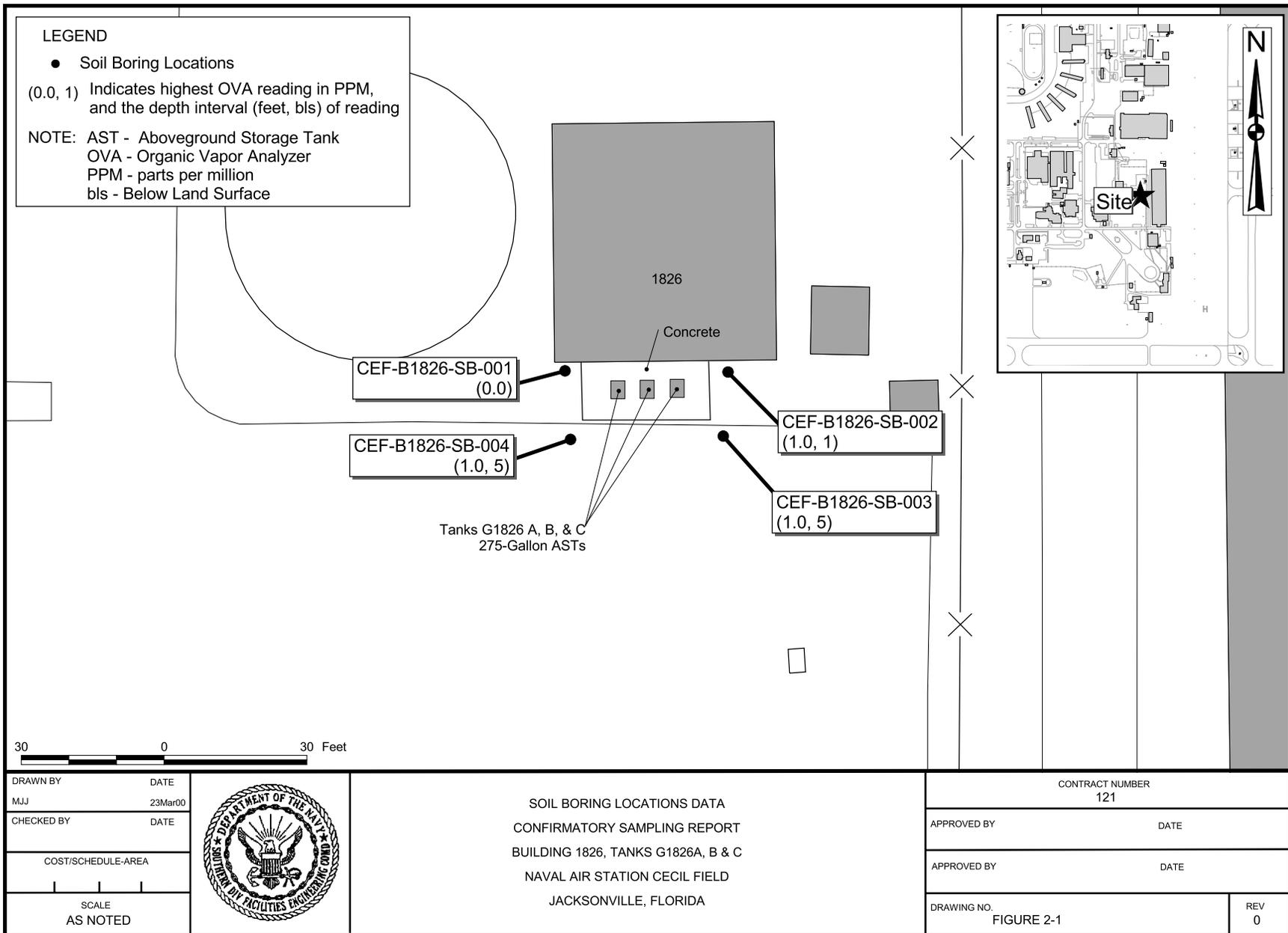
2.0 FIELD INVESTIGATION

The investigation was conducted between June 7 and 16, 2000 and included:

- Utility location prescribed for underground work.
- Four 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, four hand auger borings were advanced in the soil around Tanks G1826 A, B & C (Figure 2-1). A planned, fifth hand auger boring was not performed due to the absence of a secondary containment drain valve. 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 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 was 4.5 feet bls. The soil OVA-FID data collected during the investigation is 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, 1997), TtNUS recommends NFA for Tanks G1826 A, B & C.

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

Confirmatory Sampling Report
Building 1826, Tank G1826 A, B, and C
Naval Air Station Cecil Field
Jacksonville, Florida

Location	OVA-FID Concentration (ppm)			
	Depth (feet bls)	Unfiltered	Filtered	Corrected
CEF-B1826-SB-001	1	0.0	0.0	0.0
	3	0.0	0.0	0.0
	5	0.0	0.0	0.0
CEF-B1826-SB-002	1	1.0	0.0	1.0
	3	0.0	0.0	0.0
	5	0.0	0.0	0.0
CEF-B1826-SB-003	1	0.0	0.0	0.0
	3	0.0	1.0	0.0
	5	2.0	1.0	1.0
CEF-B1826-SB-004	1	0.0	0.0	0.0
	3	0.0	0.0	0.0
	5	2.0	1.0	1.0

Notes: The soil samples were collected on June 16, 2000.
Soil samples were filtered with carbon to determine the methane concentration.
The water table was encountered at 4.5 feet bls in the borings.

Acronyms:
OVA-FID = organic vapor analyzer-flame ionization detector.
ppm = parts per million.
bls = below land surface.

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 Tanks G1826 A, B & C 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, 1997. *Confirmatory Sampling Report, Building 1826, Tanks G1826 A, B & C, Naval Air Station Cecil Field, Jacksonville, Florida*. Prepared for SOUTHNAVFACENGCOM, North Charleston, South Carolina, December.

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.