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NAS CECIL FIELD
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CONFIRMATORY SAMPLING REPORT FOR BUILDING 16 TANK G16-A NAS CECIL FIELD
FL
9/1/2000
TETRA TECH

Confirmatory Sampling Report
for
Building 16, Tank G16-A

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 16, TANK G16-A
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
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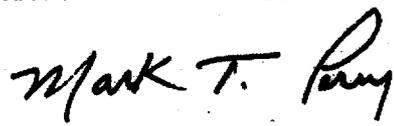
SEPTEMBER 2000

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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 the Tank G16-A 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 G16-A was submitted by TtNUS (2000a).

Tank G16-A is an existing aboveground storage tank (AST) located just west of Building 16. Building 16 was used as one of the water treatment plants for the NAS Cecil Field potable water distribution systems. The AST has a 1,000-gallon capacity and was used to store diesel fuel for the plant generator [ABB Environmental Services, Inc. (ABB-ES), 1997].

Confirmatory soil screening conducted by ABB-ES (1998) consisted of soil screening at four 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) at that time.

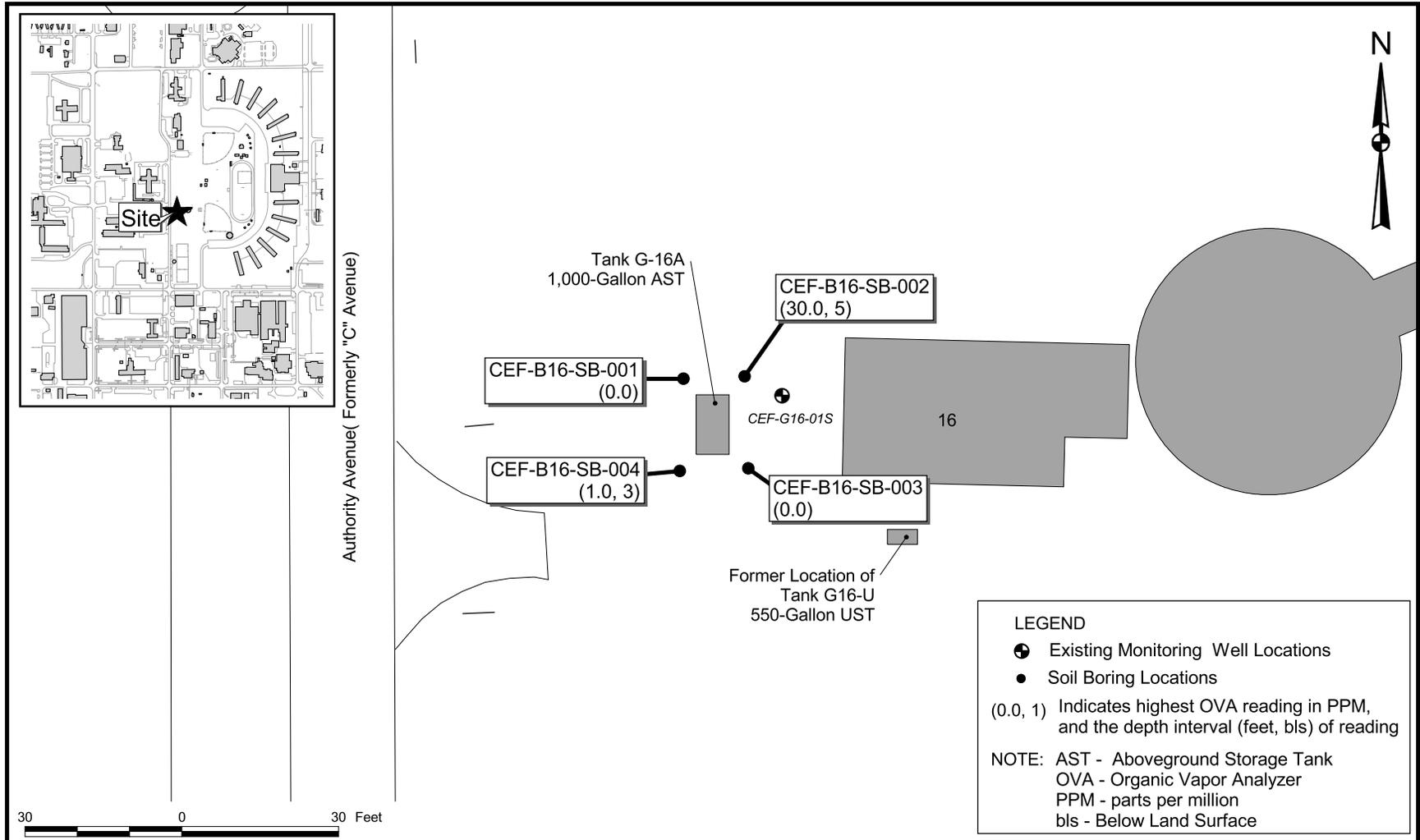
2.0 FIELD INVESTIGATION

The investigation was conducted between June 7 and 14, 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 Tank G16-A (Figure 2-1). A fifth hand auger boring was not made since the AST is a concrete vault structure without 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



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SOIL BORING LOCATIONS DATA
 CONFIRMATORY SAMPLING REPORT
 BUILDING 16, TANK G16-A
 NAVAL AIR STATION CECIL FIELD
 JACKSONVILLE, FLORIDA

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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 approximately 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 no excessively contaminated soil was 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 G16-A.

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

Confirmatory Sampling Report
Building 16, Tank G16-A
Naval Air Station Cecil Field
Jacksonville, Florida

Location	OVA-FID Concentration (ppm)			
	Depth (feet bls)	Unfiltered	Filtered	Corrected
CEF-B16-SB-001	1	150.0	300.0	0.0
	3	10.0	180.0	0.0
	5	10.0	100.0	0.0
CEF-B16-SB-002	1	20.0	50.0	0.0
	3	20.0	15.0	5.0
	5	100.0	70.0	30.0
CEF-B16-SB-003	1	3.0	3.0	0.0
	3	0.0	0.0	0.0
	5	0.0	0.0	0.0
CEF-B16-SB-004	1	4.0	4.0	0.0
	3	1.0	0.0	1.0
	5	0.0	0.0	0.0

Notes: The soil samples were collected on June 14, 2000.
Soil samples were filtered with carbon to determine the methane concentration.
The water table was encountered at 5 feet bls in the all borings.

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

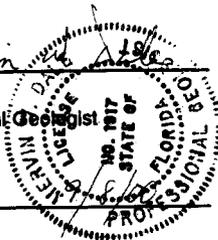
5.0 PROFESSIONAL REVIEW CERTIFICATION

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 Tank G16-A at the former NAS Cecil Field, Jacksonville, Florida, and should not be construed to apply to any other site.

Mervin Dale

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

Date



REFERENCES

ABB-ES, 1997. *Base Realignment and Closure Tank Management Plan, Naval Air Station Cecil Field, Jacksonville, Florida.* Prepared SOUTHNAVFACENGCOM, North Charleston, South Carolina, January.

ABB-ES, 1998. *Confirmatory Sampling Report, Building 16, Tank G16-A, 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.