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SAMPLING AND ANALYSIS OUTLINE FOR AREA OF INTEREST 21 BASE REALIGNMENT
AND CLOSURE ZONE B GOLF COURSE AREA GROUP 8 NAS CECIL FIELD FL
6/1/1996
ABB ENVIRONMENTAL SERVICES INC

SAMPLING AND ANALYSIS OUTLINE

AREA OF INTEREST 21

BASE REALIGNMENT AND CLOSURE

**ZONE B, GOLF COURSE AREA
GROUP VIII**

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

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Prepared by:

**ABB Environmental Services, Inc.
2590 Executive Center Circle, East
Tallahassee, Florida 32301**

Prepared for:

**Department of the Navy, Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
North Charleston, South Carolina 29419**

Steve Wilson, Code 18B9, BRAC Environmental Coordinator

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GLOSSARY

ABB-ES ABB Environmental Services, Inc.
AOI area of interest

BCT Base Realignment and Closure (BRAC) cleanup team

EBS environmental baseline survey

NAS Naval Air Station

PRE preliminary risk evaluation

TAL target analyte list
TCL target compound list

1.0 INTRODUCTION

This Base Realignment and Closure (BRAC) Program Phase II Sampling and Analysis Outline briefly describes and proposes a plan for additional assessment of Area of Interest 21 (AOI 21). AOI 21 is referred to as the Golf Course Maintenance Area and is located at the north end of I Avenue at Naval Air Station (NAS) Cecil Field (Figure 1). AOI 21 includes Buildings 238, 370, 371, 397, 398, and 874, and the surrounding land area. With the exception of Building 397, which was built in 1981, the facilities at AOI 21 date back to the early 1950s.

2.0 ENVIRONMENTAL BASELINE SURVEY COLOR DESIGNATION

AOI 21 was identified as a potential environmental concern by the installation restoration program manager for NAS Cecil Field. The primary environmental concerns identified for AOI 21 were related to a long history of mixing and storage of pesticides, herbicides, fungicides, and fertilizers in the general area of AOI 21. Activities at AOI 21 included routine cleanout and rinsing of chemical-dispensing equipment at two locations along a drainage ditch north of Building 238. Surface disposal of chemical containers was also noted at an open area located northwest of building 238.

A preliminary site investigation of the area was completed in August 1992 to determine the need for additional investigative activities (ABB Environmental Services, Inc. [ABB-ES], 1992). Six surface soil samples and three sediment samples were collected during the preliminary site investigation and analyzed for target compound list (TCL) volatile organic compounds, semi-volatile organic compounds, pesticide/polyvinyl chloride compounds, and target analyte list (TAL) inorganics (Figure 2). The Preliminary Site Investigation Report indicated several compounds and analytes were detected at elevated concentrations, and recommended collecting and analyzing additional samples to define the nature and extent of contamination.

AOI 21 was color-coded Red in the Environmental Baseline Survey (EBS) Report (ABB-ES, 1994a), due to the concerns related above. The potential for release from two aboveground storage tanks and one underground storage tank was also noted as a concern in the EBS Report.

Additional environmental concerns were identified during a subsequent ABB-ES site reconnaissance walkover in November 1995. The BRAC Cleanup Team (BCT) regards septic tank and leachfield systems as potential pathways for contaminants to enter the groundwater, if improperly used. A septic tank is associated with an abandoned public toilet located in the vicinity of former pesticide mixing and storage facilities. Building 397 is a pesticide and herbicide mixing facility and is also connected to a septic leach field. A drain in the concrete spill-containment area on the north side of Building 397 is indirectly connected to the septic system. According to the facility contact, operators are instructed to close a valve in the drain system before mixing chemicals. Any spillage would then be captured in a sub-slab underground storage tank and removed. A potential exists for chemical discharge to the leach field, if proper procedures are not followed.

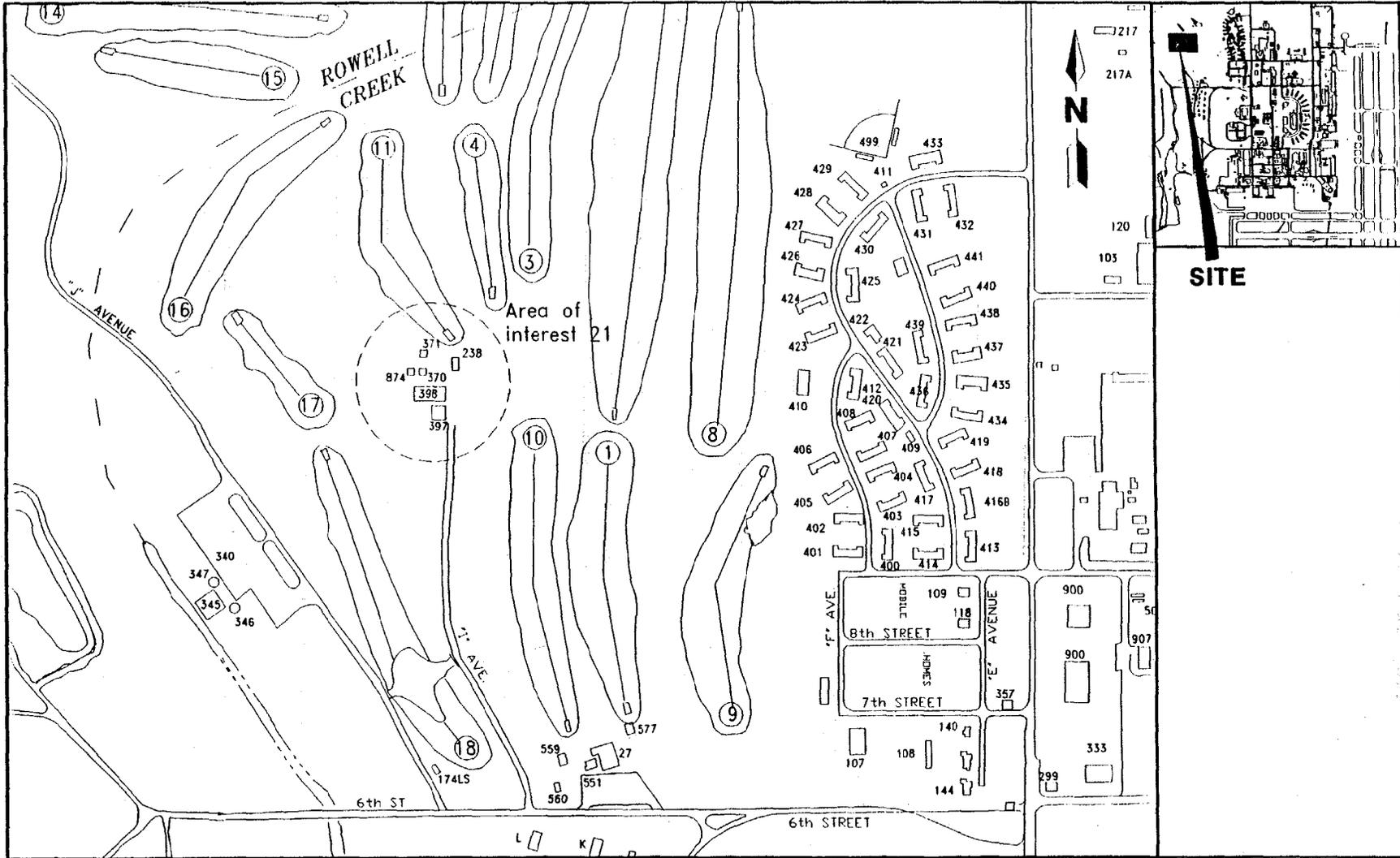
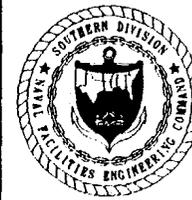
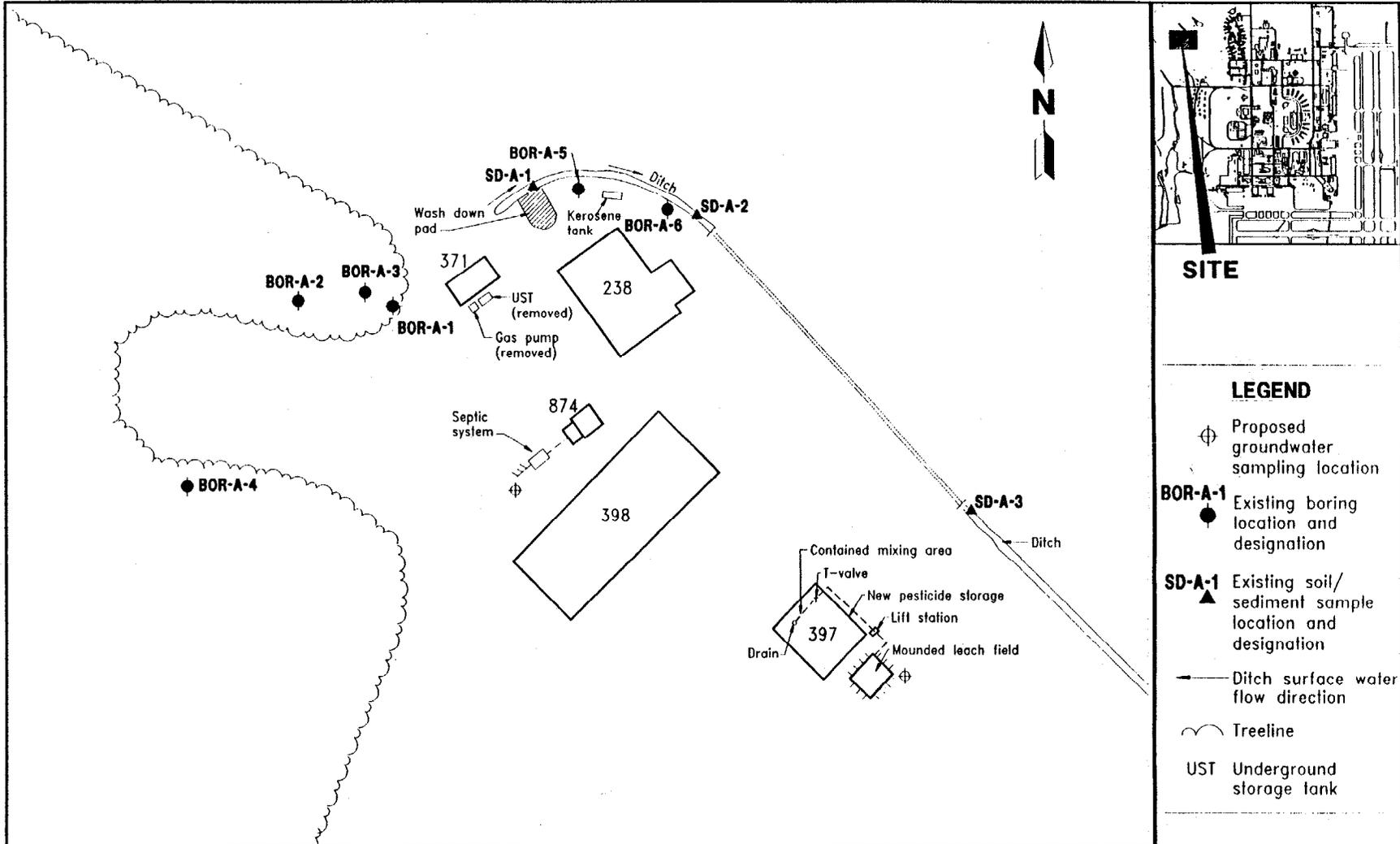


FIGURE 1
AREA OF INTEREST 21
GOLF COURSE MAINTENANCE AREA
GENERAL LOCATION PLAN



**GROUP VIII SAMPLING AND
ANALYSIS OUTLINE**
NAVAL AIR STATION
CECIL FIELD
JACKSONVILLE, FLORIDA



SITE

LEGEND

- ⊕ Proposed groundwater sampling location
- BOR-A-1 ● Existing boring location and designation
- SD-A-1 ▲ Existing soil/sediment sample location and designation
- ← Ditch surface water flow direction
- ⌒ Treeline
- UST Underground storage tank

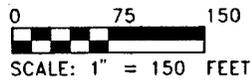


FIGURE 2
AREA OF INTEREST 21
GOLF COURSE MAINTENANCE AREA
EXISTING AND PROPOSED SAMPLE LOCATIONS



GROUP VIII SAMPLING AND ANALYSIS OUTLINE
NAVAL AIR STATION
CECIL FIELD
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3.0 RECOMMENDATIONS

A limited Phase II Sampling and Analysis program is recommended to assess whether or not groundwater has been affected by releases from either of the two identified septic systems on the site. Analytical results will be evaluated together with existing data collected for surface soil, and surface water and sediment. A preliminary risk evaluation (PRE) based upon this data may be sufficient to identify additional data requirements or the need for a comprehensive remedial investigation. Recommendations will be reported in a draft Site Summary report for AOI 21. The project team will seek concurrence from the BCT before submitting a final Site Summary report.

The recommended data quality level for the Phase II Sampling and Analysis program is Level III, to meet the need for input to a PRE. Sample collection techniques, quality assurance objectives, quality control requirements, and sample handling and shipping procedures are outlined in the BRAC Project Operations Plan (ABB-ES, 1994b). Analysis for the full Contract Laboratory program suite of TCL organics, TAL inorganics, and herbicides is recommended.

One groundwater monitoring well will be installed downgradient of each identified septic system. One groundwater sample will be collected from each monitoring well, and analyzed to evaluate whether or not groundwater has been affected by releases from the septic systems. Proposed sample locations are shown on Figure 2.

4.0 SELECTED REFERENCES

ABB-ES, 1992, Site Screening Study NAS Cecil Field; Letter Report: prepared for Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOM), August.

ABB Environmental Services, Inc. (ABB-ES), 1994a, Base Realignment and Closure Environmental Baseline Survey Report, Naval Air Station, Cecil Field, Jacksonville, Florida: prepared for SOUTHNAVFACENGCOM, November.

ABB-ES, 1994b, Project Operations Plan for Cecil Field and Health and Safety Plan: prepared for SOUTHNAVFACENGCOM, December.