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SAMPLING AND ANALYSIS REPORT FOR FACILITY 65 AND AREA OF INTEREST 23 BASE
REALIGNMENT AND CLOSURE ZONE H AVIATION ORDNANCE AREA NAS CECIL FIELD
FL
11/1/1998
HARDING LAWSON ASSOCIATES

**SAMPLING AND ANALYSIS REPORT
FACILITY 65 AND AREA OF INTEREST 23**

**BASE REALIGNMENT AND CLOSURE
ZONE H, AVIATION ORDNANCE AREA**

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

Unit Identification Code N60200

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GLOSSARY

ABB-ES ABB Environmental Services, Inc.
AOI Area of Interest
EBS environmental baseline survey
HLA Harding Lawson Associates
JP jet propellant

1.0 INTRODUCTION

Harding Lawson Associates (HLA), under contract to Southern Division, Naval Facilities Engineering Command, has completed the Phase II Sampling and Analysis program for Facility 65, at Naval Air Station Cecil Field. This report summarizes the field operations, results, conclusions, and recommendations of the Phase II investigation pertaining to Facility 65.

Facility 65 is referred to as the Ready Ammunition Belting Plant in the Environmental Baseline Survey (EBS) Report (ABB Environmental Services, Inc. [ABB-ES], 1994a). Facility 65 is located adjacent to the south of a drainage canal that leads to Sal Taylor Creek.

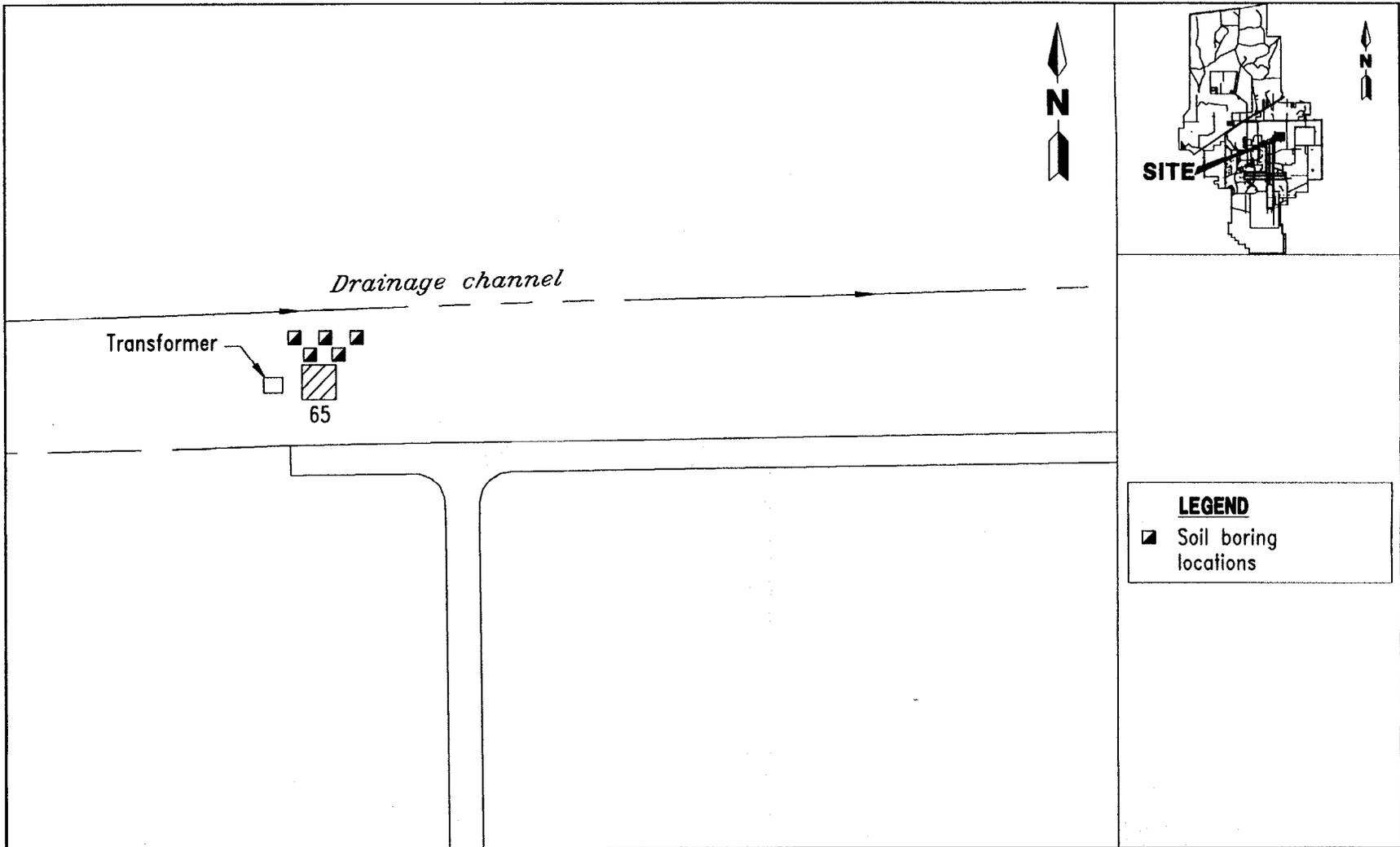
A jet propellant (JP)-5 fuel spill impacted Sal Taylor Creek and many of its tributaries in 1991. Soil borings were advanced in the area north of Facility 65 during an investigation of the JP-5 fuel spill. A red paint-like substance is reported to have been encountered in soil borings north of Building 65 and a white paint-like substance is reported to have been observed to be seeping from the bank of the canal. The EBS report suggests that bullets may have been coated with special paints at Facility 65 and that the red and white substances observed during the investigation of the JP-5 spill may be associated with buried paint waste. The area between Facility 65 and the drainage canal was designated as Area of Interest (AOI) 23 in the EBS report and was assigned a color classification of 7/Grey.

A sampling and analysis outline for the assessment of subsurface soil north of Facility 65 was prepared by HLA (then ABB-ES) and approved by the Base Realignment and Closure cleanup team (ABB-ES, 1996a). The area of environmental concern identified for Facility 65 is the same as the area identified for AOI 23 (ABB-ES, 1996b).

2.0 PHASE II INVESTIGATION

Five soil borings were hand-augered to a depth of approximately 8 feet below land surface during the Phase II investigation to determine whether any paint wastes have been buried in the area. Soil borings were terminated at the groundwater table interface. No paintlike materials or other visible evidence of waste disposal in the area was observed during the advancement of the five soil borings. Therefore, no samples were collected for laboratory analysis. Field activities were undertaken in general conformance with the Project Operations Plan (ABB-ES, 1994b).

A general site plan indicating the locations of soil samples is presented on Figure 1. Soil boring logs are included in Appendix A.



0 50 100
SCALE: 1 INCH = 100 FEET

FIGURE 1
FACILITY 65 AND AREA OF INTEREST 23
READY AMMUNITION BELTING PLANT



SAMPLING AND ANALYSIS REPORT

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

3.0 CONCLUSIONS AND RECOMMENDATIONS

No evidence of paint waste disposal was observed at Facility 65 and AOI 23, and no other environmental concerns were noted for these facilities in the EBS report. However, Facility 65 and AOI 23 are located directly adjacent to a drainage canal that has been impacted by the 1991 JP-5 spill. Therefore, Facility 65 and AOI 23 should be reclassified to 2/Blue.

REFERENCES

- ABB Environmental Services, Inc. (ABB-ES). 1994a. *Base Realignment and Closure Environmental Baseline Survey Report, Naval Air Station, Cecil Field, Jacksonville, Florida*. Prepared for Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOC), North Charleston, South Carolina (November).
- ABB-ES. 1994b. *Project Operations Plan for Cecil Field and Health and Safety Plan*. Prepared for SOUTHNAVFACENGCOC, North Charleston, South Carolina (December).
- ABB-ES. 1996a. *Sampling and Analysis Outline, Facility 65, Base Realignment and Closure, Zone H, Aviation Ordnance Area, Group VII, Naval Air Station, Cecil Field, Jacksonville, Florida*. Prepared for SOUTHNAVFACENGCOC, North Charleston, South Carolina (March).
- ABB-ES. 1996b. *Sampling and Analysis Outline, Area of Interest 23, Base Realignment and Closure, Zone H, Aviation Ordnance Area, Group VIII, Naval Air Station, Cecil Field, Jacksonville, Florida*. Prepared for SOUTHNAVFACENGCOC, North Charleston, South Carolina (June).

APPENDIX A

SOIL BORING LOGS

| | | | |
|-------------------------------------|----------------------------|------------------------|------------------------|
| TITLE: NAS Cecil Field | | LOG of WELL: N/A | BORING NO. 63B00101 |
| CLIENT: SOUTHNAVFACENCOM | | | PROJECT NO: 08520.85 |
| CONTRACTOR: N/A | | DATE STARTED: 12/05/95 | COMPLTD: |
| METHOD: N/A | CASE SIZE: N/A | SCREEN INT.: N/A | PROTECTION LEVEL: D |
| TOC ELEV.: FEET. | MONITOR INST.: PID | TOT DPTH: 8.0 FEET. | DPTH TO ∇ FEET. |
| LOGGED BY: M. Pijnenburg/B. Svenson | WELL DEVELOPMENT DATE: N/A | | SITE: Facility 65 |

| DEPTH FT. | LABORATORY SAMPLE ID. | SAMPLE | RECOVERY | HEADSPACE (ppm) | SOIL/ROCK DESCRIPTION AND COMMENTS | LITHOLOGIC SYMBOL | SOIL CLASS | BLOWS/6-IN | WELL DATA |
|--------------|--------------------------|--------|----------|--------------------|---|----------------------|------------|------------|-----------|
| 43.7 | | | | | SILTY SAND: (SM), 100%, brown, quartz, medium-grained, subrounded to subangular, moderately well sorted, occasionally silty | | SM | | |
| 4.4 | | | | | | | | | |
| 3.2 | | | | | | | | | |
| 4.8 | | | | | | | | | |
| | | | | | Boring hand-augered to 8.0' bls. | | | | |

| | | | |
|-------------------------------------|--------------------|----------------------------|------------------------|
| TITLE: NAS Cecil Field | | LOG of WELL: N/A | BORING NO. 63B00201 |
| CLIENT: SOUTHNAVFACENGCOM | | PROJECT NO: 08520.85 | |
| CONTRACTOR: N/A | | DATE STARTED: 12/05/95 | COMPLTD: |
| METHOD: N/A | CASE SIZE: N/A | SCREEN INT.: N/A | PROTECTION LEVEL: D |
| TOC ELEV.: FEET. | MONITOR INST.: PID | TOT DPTH: 8.0 FEET. | DPTH TO ∇ FEET. |
| LOGGED BY: M. Pijnenburg/B. Svenson | | WELL DEVELOPMENT DATE: N/A | SITE: Facility 65 |

| DEPTH FT. | LABORATORY SAMPLE ID. | SAMPLE | RECOVERY | HEADSPACE (ppm) | SOIL/ROCK DESCRIPTION AND COMMENTS | LITHOLOGIC SYMBOL | SOIL CLASS | BLOWS/6-IN | WELL DATA |
|--------------|--------------------------|--------|----------|--------------------|---|----------------------|------------|------------|-----------|
| 0 | | | | | SILTY SAND: (SM), 100%, light gray to very dark brown, quartz, medium-grained, subrounded to subangular, moderately well sorted, occasionally silty | | SM | | |
| 0 | | | | | | | | | |
| 5 | | | | | | | | | |
| 0 | | | | | | | | | |
| 0 | | | | | | | | | |
| | | | | | Boring hand-augered to 8.0' bls. | | | | |
| 10 | | | | | | | | | |

| | | | |
|-------------------------------------|--------------------|----------------------------|------------------------|
| TITLE: NAS Cecil Field | | LOG of WELL: N/A | BORING NO. 63B00301 |
| CLIENT: SOUTHNAVFACENGCOM | | PROJECT NO: 08520.85 | |
| CONTRACTOR: N/A | | DATE STARTED: 12/05/95 | COMPLTD: |
| METHOD: N/A | CASE SIZE: N/A | SCREEN INT.: N/A | PROTECTION LEVEL: D |
| TOC ELEV.: FEET. | MONITOR INST.: PID | TOT DPTH: 8.0 FEET. | DPTH TO ∇ FEET. |
| LOGGED BY: M. Pijnenburg/B. Svenson | | WELL DEVELOPMENT DATE: N/A | SITE: Facility 65 |

| DEPTH FT. | LABORATORY SAMPLE ID. | RECOVERY HEADSPACE (ppm) | SOIL/ROCK DESCRIPTION AND COMMENTS | LITHOLOGIC SYMBOL | SOIL CLASS | BLOWS/6-IN | WELL DATA |
|--------------|--------------------------|--------------------------------|--|----------------------|------------|------------|-----------|
| 0 | | | SILTY SAND: (SM), 100%, gray to very dark brown, quartz, medium- grained, subrounded to subangular, moderately well sorted, occasionally silty | | SM | | |
| 5 | | | | | | | |
| 10 | | | Boring hand-augered to 8.0' bls. | | | | |

| | | | |
|-------------------------------------|----------------------------|------------------------|------------------------|
| TITLE: NAS Cecil Field | | LOG of WELL: N/A | BORING NO. 63B00401 |
| CLIENT: SOUTHNAVFACENGCOM | | | PROJECT NO: 08520.85 |
| CONTRACTOR: N/A | | DATE STARTED: 12/05/95 | COMPLTD: |
| METHOD: N/A | CASE SIZE: N/A | SCREEN INT.: N/A | PROTECTION LEVEL: D |
| TOC ELEV.: FEET. | MONITOR INST.: PID | TOT DPTH: 8.0 FEET. | DPTH TO ∇ FEET. |
| LOGGED BY: M. Pijnenburg/B. Svenson | WELL DEVELOPMENT DATE: N/A | | SITE: Facility 65 |

| DEPTH F.T. | LABORATORY SAMPLE ID. | RECOVERY | HEADSPACE (ppm) | SOIL/ROCK DESCRIPTION AND COMMENTS | LITHOLOGIC SYMBOL | SOIL CLASS | BLOWS/6-IN | WELL DATA |
|---------------|--------------------------|----------|--------------------|---|----------------------|------------|------------|-----------|
| 6.5 | | | | SILTY SAND: (SM), 100%, brown to very dark brown, quartz, medium- grained, subrounded to subangular, moderately well sorted, occasionally silty | | SM | | |
| 0 | | | | | | | | |
| 8.9 | | | | | | | | |
| 4.6 | | | | | | | | |
| | | | | Boring hand-augered to 8.0' bis. | | | | |
| 5 | | | | | | | | |
| 10 | | | | | | | | |

| | | | |
|-------------------------------------|--------------------|----------------------------|------------------------|
| TITLE: NAS Cecil Field | | LOG of WELL: N/A | BORING NO. 63B00501 |
| CLIENT: SOUTHNAVFACENCOM | | PROJECT NO: 08520.85 | |
| CONTRACTOR: N/A | | DATE STARTED: 12/05/95 | COMPLTD: |
| METHOD: N/A | CASE SIZE: N/A | SCREEN INT.: N/A | PROTECTION LEVEL: D |
| TOC ELEV.: FEET. | MONITOR INST.: PID | TOT DPTH: 8.0 FEET. | DPTH TO ∇ FEET. |
| LOGGED BY: M. Pijnenburg/B. Svenson | | WELL DEVELOPMENT DATE: N/A | SITE: Facility 65 |

| DEPTH FT. | LABORATORY SAMPLE ID. | SAMPLE | RECOVERY | HEADSPACE (ppm) | SOIL/ROCK DESCRIPTION AND COMMENTS | LITHOLOGIC SYMBOL | SOIL CLASS | BLOWS/6-IN | WELL DATA |
|--------------|--------------------------|--------|----------|--------------------|--|----------------------|------------|------------|-----------|
| | | | | 6.8 | SILTY SAND: (SM), 100%, very dark brown, quartz, fine- to medium- grained, subrounded, moderately well sorted, silty | | SM | | |
| | | | | 9.8 | | | | | |
| 5 | | | | 15.3 | | | | | |
| | | | | 25.7 | | | | | |
| | | | | | Boring hand-augered to 8.0' bls. | | | | |
| 10 | | | | | | | | | |