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NS MAYPORT
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ENVIRONMENTAL BASELINE SURVEY PUBLIC/PRIVATE VENTURE HOUSING
PRIVATIZATION NAS MAYPORT FL
08/01/2004
NAVFAC SOUTHERN

**Environmental Baseline Survey
Public / Private Venture Housing Privatization
Naval Station Mayport
Mayport, Florida**



August 2004

Prepared for:

**Southern Division
Naval Facilities Engineering Command
North Charleston, South Carolina**

LIST OF ACRONYMS AND ABBREVIATIONS

ACM	asbestos-containing material
asl	above sea level
AST	aboveground storage tank
ASTM	American Society of Testing and Materials
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DoD	Department of Defense
DoN	Department of the Navy
EBS	Environmental Baseline Survey
EBSR	Environmental Baseline Survey Report
HARP	Historic and Archeological Resources Protection Plan
LBP	lead-based paint
msl	mean sea level
NS	Naval Station
PCB	polychlorinated biphenyl
PPV	Public / Private Venture
PRI	Project Resources Inc.
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
SOW	Statement of Work
SWMU	Solid Waste Management Unit

EXECUTIVE SUMMARY

Project Resources Inc. (PRI) conducted a site visit during the week of June 21, 2004, as part of an Environmental Baseline Survey (EBS) for the naval family housing located on and off of Naval Station (NS) Mayport in Mayport, Florida (Figure 1-1).

The Department of the Navy (DoN) is privatizing the naval family housing at NS Mayport. The DoN will issue the private entity an easement in order to gain access to the naval housing areas. The environmental condition of the naval family housing at Bennet Shores (on base), Ribault Bay Village (off base), and Marsh Cove (off base) were assessed during this EBS. An EBS is required by Department of Defense (DoD) policy before a property can be sold, leased, transferred, or acquired. PRI has prepared this EBS Report (EBSR) in accordance with the Statement of Work (SOW) [856] – Naval Family Housing Public / Private Venture Housing Privatization (PPV), Naval Station Mayport.

For the purpose of this EBS, the “subject property” refers to the Bennet Shores, Ribault Bay (Ribault Bay) Village, and Marsh Cove naval family housing at NS Mayport, and includes 1,281 housing units and associated outbuildings. Representative photographs were taken of the subject and adjacent properties, which are included in Appendix A.

Recognized environmental conditions (RECs), associated with the subject property or immediate vicinity, include the presence or likely presence of hazardous substances or petroleum products. The following RECs were observed during this EBS:

Historical and Cultural Resources

Based on a review of the 1996 Phase I Historic Resources Survey of the Main Cantonment Dune Line, there is an area, the dune line, on the subject property that is reportedly considered a significant cultural resource. The dune line is considered a high potential landform for archaeological studies because of its elevated nature. This site consists of a scatter of prehistoric Swift Creek ceramics.

Petroleum Products

According to the NS Mayport Environmental Division, three aboveground storage tanks (ASTs) are located at the subject property, within the Bennet Shores housing area. The ASTs are used to supply fuel to the emergency generators, associated with the sewage lift stations. In 2004, AST G1376R, associated with a sewage lift station in Bennet Shores, reportedly had release from a small hole in the piping. The petroleum hydrocarbon release was removed, but visible staining remains on concrete pad. The lift stations at the Ribault Bay and Marsh Cove housing units are maintained by the City of Atlantic Beach.

Asbestos-Containing Material

Based on PRI’s review of the environmental records at NS Mayport, asbestos surveys were reportedly performed at the subject property in September 1994. The reports indicate that asbestos-containing material (ACM) is present at the subject property. ACM was identified in

locations including, but not limited to, drywall joint compound, window caulking, mastic, and sink undercoating.

Lead-Based Paint

Based on PRI's review of the environmental records at NS Mayport, a lead survey was reportedly performed at the subject property in September 1994. The reports indicate that lead-based paint (LBP) is present at the subject property, on both the interior and exterior components of the housing units.

Other Environmental Concerns

The following environmental conditions were also reviewed regarding the subject property, and no RECs were identified:

- Natural Resources
- Federal/State Regulatory Agreements/Permits
- Hazardous Substances / Waste Management
- Solid/Bio-Hazardous Waste
- Pesticides and Herbicides
- Installation Restoration Program.

Property Classification

The subject property at NS Mayport is characterized as Category 1, areas where no release or disposal of hazardous substances or petroleum products has occurred (including migration of these substances from adjacent properties).

The findings presented in this EBSR are relative to the dates of PRI's survey in June 2004 and should not be relied upon to represent conditions at substantially later dates. See Section 8.0 of this EBSR for further limitations.

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FIGURES

- Figure 1-1 Regional Location Map
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APPENDICES

- Appendix A Photographs of Subject Property
- Appendix B Title Reports
- Appendix C Identified ACM and LBP Locations at the Subject Property

1.0 INTRODUCTION

1.1 Introduction and Background

NS Mayport is located near the town of Mayport within the city limits of Jacksonville, Florida, in northeastern Duval County. NS Mayport is located on the northern end of a peninsula, bounded by the Atlantic Ocean to the east and the Saint Johns River to the north and west (see Regional Location Map, Figure 1-1).

The Department of the Navy (DoN) is privatizing the naval family housing and related improvements at Bennet Shores, Ribault Bay Village (Ribault Bay), and Marsh Cove, hereafter referred to as the “subject property” (Figure 1-2). The DoN will issue the private entity an easement in order to gain access to the subject property. An Environmental Baseline Survey (EBS) is required by Department of Defense (DoD) policy to identify recognized environmental conditions (RECs), if any, before a property can be sold, leased, transferred, or acquired. RECs, associated with the subject property or immediate vicinity, include the presence or likely presence of hazardous substances or petroleum products. The environmental condition of the naval family housing sections was assessed during this EBS.

This Environmental Baseline Survey Report (EBSR) summarizes readily available relevant information into a single document to establish a baseline for use by the DoN in making decisions concerning real property transaction involving the subject property. It will also be used by the DoN in meeting its obligations under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S. Code Section 9620(h), as amended by the Community Environmental Response Facilitation Act (Public Law 102-426).

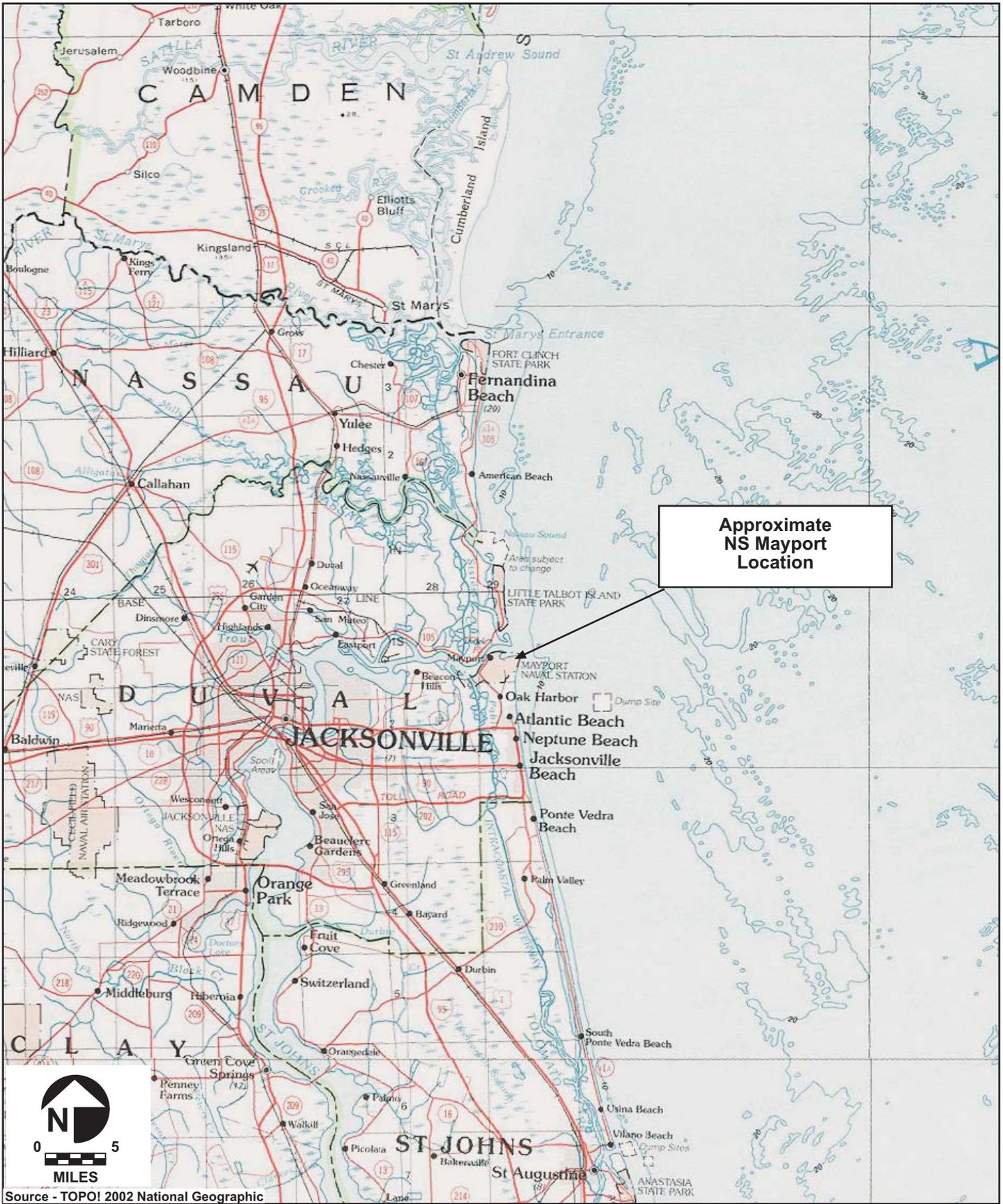
Project Resources Inc. (PRI) conducted visual assessment of the subject property as part of the Public / Private Venture (PPV) Housing Privatization EBS at NS Mayport. A representative number (approximately 10 percent) of the housing units were externally inspected. Readily available information also was obtained and reviewed during the EBS. Photographs taken of the subject property and surrounding vicinity are presented in Appendix A.

1.2 Organization of EBSR

The organization of this EBSR follows the format for a base-wide EBS prescribed by the Naval Facilities Engineering Command Environmental Baseline Survey Guidance, March 1995. PRI has performed this EBS, and prepared this EBSR, following the Statement of Work (SOW) [859] – Naval Family Housing Public / Private Venture Housing Privatization, Naval Station Mayport, Florida. Guidelines were followed from the American Society of Testing and Materials (ASTM D 6008-96).

1.3 Parcel Identification and Boundaries

A total of 1,281 naval housing units at Bennet Shores (on base), Ribault Bay (off base), and Marsh Cove (off base), and their associated buildings, comprise the subject property (Figures 1-3 and 1-4). The irregular-shaped parcels are defined in title reports provided in Appendix B.



Source - TOPO! 2002 National Geographic



**Regional Location Map
Naval Station Mayport
Mayport, Florida**

FIGURE

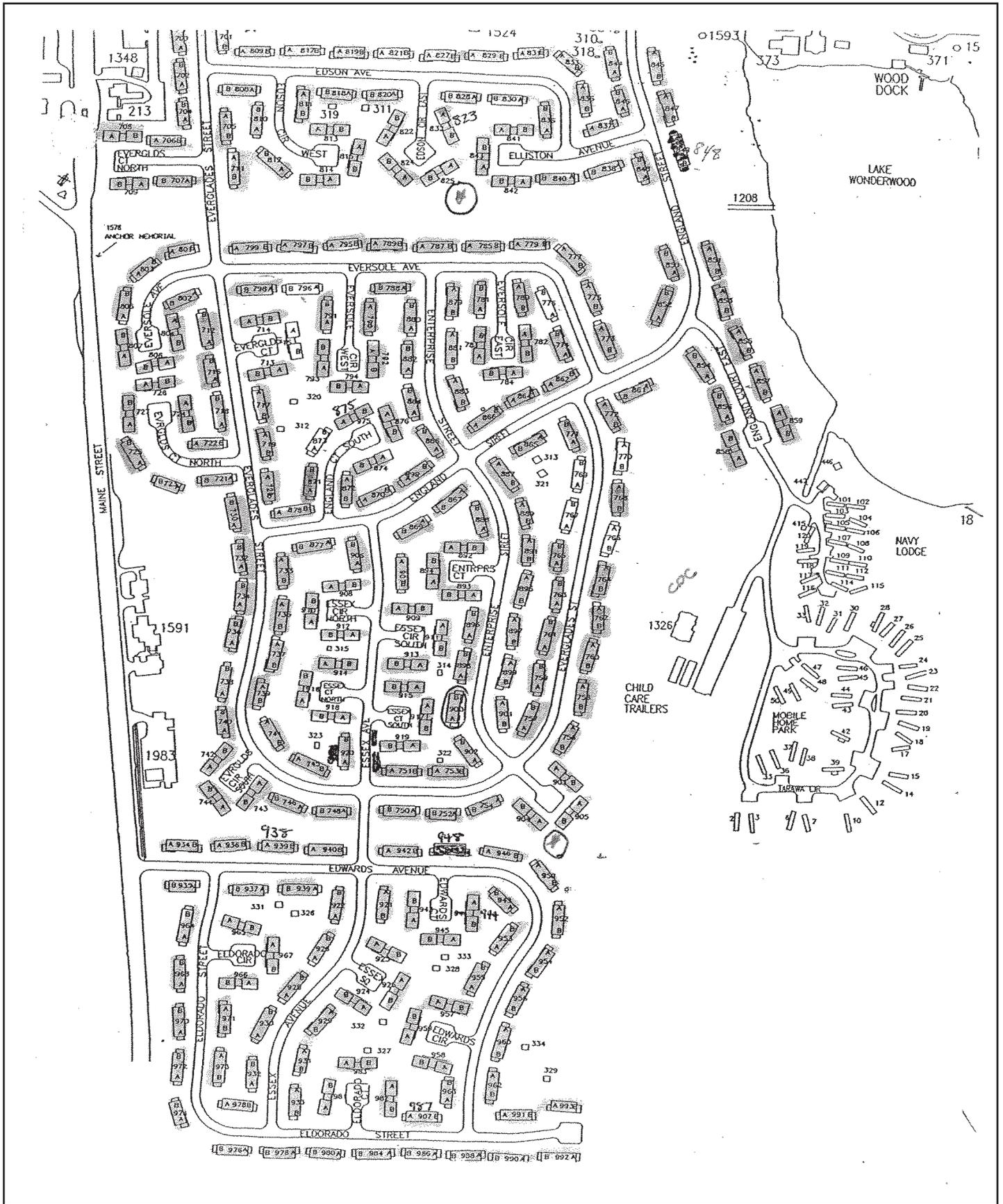
1-1



Housing Area Location Map
 Naval Station Mayport
 Mayport, Florida

FIGURE

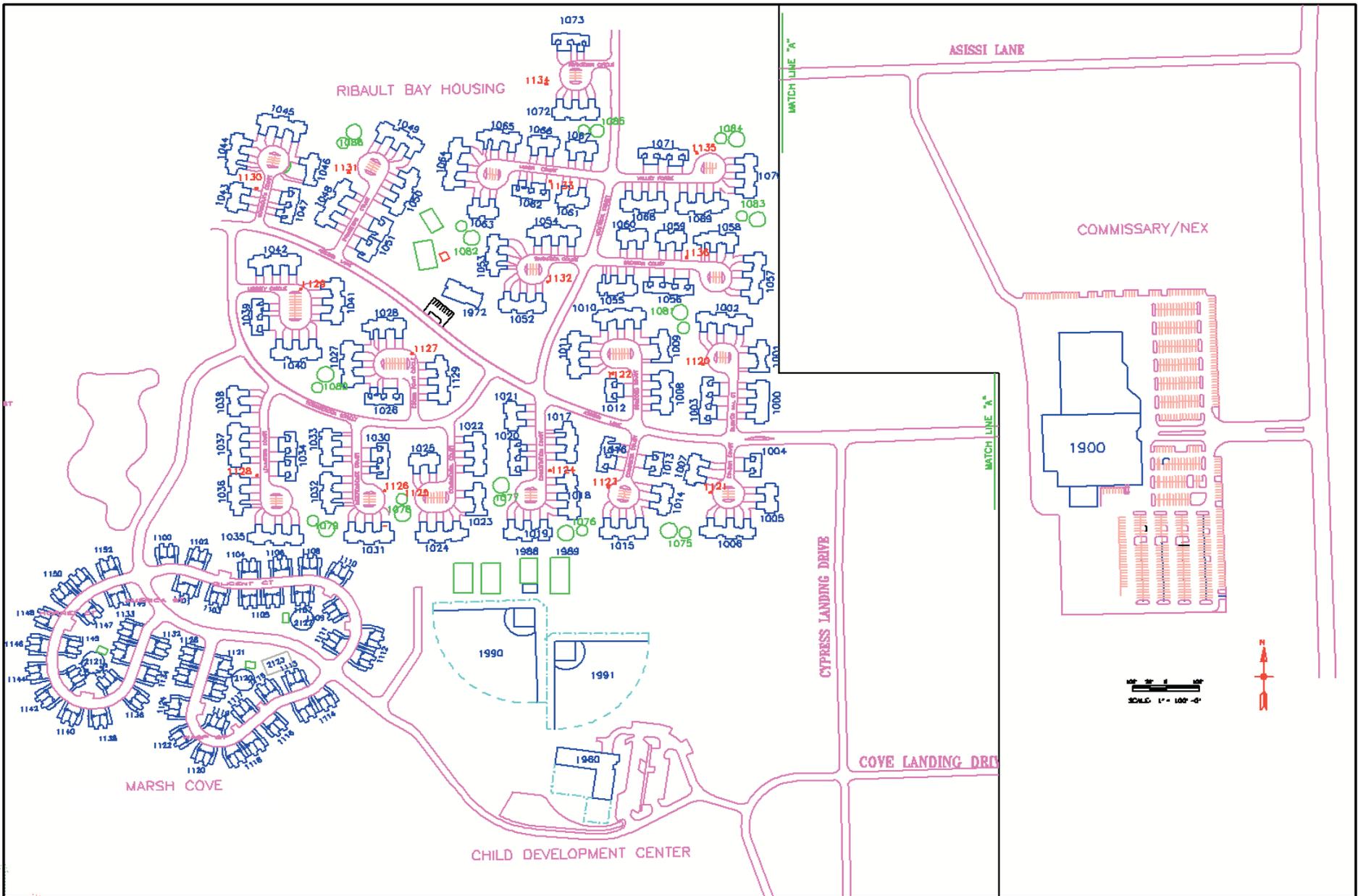
1-2



Site Location Map - Bennet Shores Housing Area
 Naval Station Mayport
 Mayport, Florida

FIGURE

1-3



FIGURE

Site Location Map - Ribault Bay and Marsh Cove
Housing Areas
Naval Station Mayport
Mayport, Florida



2.0 SURVEY METHODOLOGY

2.1 Approach and Rationale

This EBS employed a variety of methods to obtain the necessary information to assess the environmental condition of the subject property. This includes the following:

1. Search and review of available information and records in the possession of the Navy, and records made available by the regulatory agencies or other involved federal agencies.
2. Review of reasonably obtainable federal, state, and local government records of facilities where there has been a release or likely release of any hazardous substance or petroleum product or its derivatives, and which is likely to cause or contribute to a release or threatened release of any hazardous substance or petroleum product or its derivative on the subject property.
3. Interviews with current occupants of the property.
4. Visual assessment of the subject and immediately adjacent properties, noting sewer lines, runoff patterns, evidence of environmental impact (e.g., stained soil, stressed vegetation, or dead or ill wildlife), and other observations, which indicate actual or potential release of hazardous substances or petroleum products.
5. Review of ongoing response actions that have been taken at the subject or adjacent properties.

2.2 Property Classification

Upon review of the RECs associated with the subject property, it can be placed into one of the following categories under the DoD Environmental Condition of Property System:

- CATEGORY 1** **WHITE:** Areas where no release or disposal of hazardous substances or petroleum products occurred (including no migration of these substances from adjacent properties).
- CATEGORY 2** **BLUE:** Areas where only a release or disposal of petroleum products or their derivatives has occurred.
- CATEGORY 3** **LIGHT GREEN:** Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require removal or remedial action.
- CATEGORY 4** **DARK GREEN:** Areas where a release, disposal, and/or migration of hazardous substances has occurred, and all remedial actions necessary to protect human health and the environment have been taken.
- CATEGORY 5** **YELLOW:** Areas where release, disposal, and/or migration of hazardous substances has occurred, and removal and remedial actions are underway, but all required remedial actions have not taken place.

CATEGORY 6 **RED:** Areas where release, disposal, and/or migration of hazardous substances has occurred, but required actions have not been implemented.

CATEGORY 7 **GREY:** Areas that are not evaluated or require additional evaluation.

The subject property is characterized as Category 1, areas where no release or disposal of hazardous substances or petroleum products has occurred (including migration of these substances from adjacent properties).

2.3 Related Reports

The following is a listing of the documents that have been reviewed for this EBS:

- ABB Environmental Services. 1995. *Resource Conservation and Recovery Act Corrective Action Program General Information Report, U.S. Naval Station, Mayport, Florida, Volume I of II*. July 1995.
- A.T. Kearney, Inc. 1989. *RCRA Facility Assessment of the Naval Station Mayport*. September 1989.
- Brockington and Associates, Inc. 1996. *Phase I Historic Resources Survey of the Main Cantonment Dune Line*. February 1996.
- Department of the Navy. 2002. *Integrated Natural Resources Management Plan for Naval Station Mayport*. February 2002.
- EnSafe. 2002. *Spill Prevention, Control, and Countermeasure Plan*. March 2002.
- Hardy Heck Moore, Inc. 2001. *Integrated Cultural Resource Management Plan (ICRMP) and Cold War Update Naval Station Mayport*. October 2001.
- Naval Station Mayport. 1996. *Asbestos Survey Summary*. 1996
- Naval Station Mayport. 1996. *Asbestos Management Plan*. 1996
- Naval Station Mayport. 1996. *Lead Action Summary*. 1996
- Naval Station Mayport. 1996. *Lead Management Plan*. 1996
- Naval Station Mayport. 2002. *Naval Station Mayport Hazardous Waste Management Plan*. May 2002.
- PanAmerican Consultants, Inc. 2000. *Archaeological Resources Survey of Navy-owned Undeveloped Land Adjacent to Ribault Bay Family Housing*. May 2000.
- U.S. Army Corps of Engineers. 1994. *Historic and Archaeological Resource Protection Plan (HARP)*. 1994.

3.0 PAST AND CURRENT USE

3.1 Subject Property

The subject property includes 1,281 naval family housing units and their associated buildings at Bennet Shores, Ribault Bay, and Marsh Cove that were built in support for military personnel stationed at the nearby NS Mayport (Figure 1-2). Review of aerial photographs and interviews with on-site personnel revealed that prior to construction of the subject property, the land was mostly forested.

Bennet Shores occupies approximately 200 acres of land on NS Mayport. Bennet Shores was constructed in circa 1961 and 1963, and includes 681 housing units (Figure 1-3). The three-bedroom housing units are single story units, built on concrete blocks with carports.

Ribault Bay occupies approximately 58 acres, located approximately four miles south of NS Mayport. Ribault Bay Village was constructed in circa 1978, and includes 74 apartment style buildings, which contain 400 housing units (Figure 1-4). These two- and four-bedroom housing units have wood-frame construction with vinyl siding.

Marsh Cove occupies approximately 32 acres and is located adjacent to the southern portion of NS Mayport, and west of the Ribault Bay. Marsh Cove was constructed in circa 2003, and includes 200 housing units (Figure 1-4).

3.2 Adjacent Property

Bennet Shores is bounded on the north by a golf course; on the west by Mayport Road and a large wetland area; on the south by residences; and on the east by the Atlantic Ocean.

Ribault Bay is bounded on the north by residences; on the west by an undeveloped property and a wetland area; on the south by undeveloped property and a Navy childcare center; and on the east by Puckett Creek.

Marsh Cove is bounded on the north by the Ribault Bay housing area and residences; on the west by wetlands; on the south by wetlands and residences; and on the east by the Ribault Bay.

Based on PRI's observations, these adjacent properties do not appear to present an environmental concern to the subject property at this time.

4.0 ENVIRONMENTAL SETTING

4.1 Location

NS Mayport is located near the town of Mayport within the city limits of Jacksonville, Florida, in northeastern Duval County. NS Mayport is located on the northern end of a peninsula bounded by the Atlantic Ocean to the east and the Saint Johns River to the north and west.

4.2 Physiography

NS Mayport is located in the southeastern Coastal Plain physiographic province. The topography of this region is controlled by the remnants of two ancient marine terraces, the Pamlico and the Silver Bluff. Development, stream erosion, dredging, and filling activities have modified these terraces. Approximately 1,667 acres of salt marsh are located on the southern and western portions of NS Mayport. Mayport Turning Basin is to the north and Lake Wonderwood to the south of NS Mayport. Lake Wonderwood is a 20-acre fresh water lake that was excavated to provide fill for construction. The elevation at the subject property ranges from 0 to 30 feet above sea level (asl) (A. T. Kearney Inc., 1989).

4.3 Geology

Three separate geologic units have been identified at NS Mayport. The uppermost unit is comprised of a surficial deposit of material, dredged from the Mayport Turning Basin and the Saint Johns River, to depths of approximately 8 to 16 feet below ground surface (bgs). Beneath this is a uniform, poorly-graded, well-sorted, sand, identified as undifferentiated post-Hawthorn deposits. This unit grades at depth into the third unit, the Coosawhatchi Formation of the upper Hawthorn Group. The natural soils at NS Mayport consist of three major groups: sand ridges, tidal marsh, and flatwoods (ABB Environmental Services, 1994).

4.4 Hydrogeology

The groundwater at the subject property flows generally north, towards the Mayport Turning Basin entrance channel and the Saint Johns River. Tidal influence is not anticipated to impact the direction of groundwater flow. The groundwater elevation ranges from approximately 3 feet to 6 feet above mean sea level (msl). The depth to groundwater ranges from approximately 4 feet to 11 feet bgs (Tetra Tech NUS Inc., 2003). Surface water drainage, in the Ribault Bay housing area and the Marsh Cove housing area, is toward the west and south, toward Pablo Creek. Surface water drainage in the Bennett Shores housing area is into Lake Wonderwood.

4.5 Topography

NS Mayport is located within the Jacksonville, Florida, 7.5-Minute Topographic Quadrangle Map (Figure 4-1). The topography of NS Mayport is generally flat with elevations at ranging from approximately 0 to 30 feet above (msl).

4.6 Natural Resources

While rare, threatened, and endangered species are present at NS Mayport, based on the available information, the subject property does not appear to present a significant threat to the



NS Mayport Boundary

FIGURE

4-1

environmental integrity of endangered or threatened species, or critical habitats, at NS Mayport. In addition, no wetlands have been identified within the subject property.

4.7 Cultural and Archeological Resources

Based on a review of the 1996 Phase I Historic Resources Survey of the Main Cantonment Dune Line, there is an area, the dune line, on the subject property that is considered a significant cultural resource. The dune line is considered a high potential landform for archaeological studies because of its elevated nature. The site consists of a scatter of prehistoric Swift Creek ceramics.

5.0 ENVIRONMENTAL CONDITIONS

5.1 Federal/State Regulatory Agreements

The remedial activities at NS Mayport are driven by the Hazardous and Solid Waste Amendment (HSWA) section of the Resource Conservation and Recovery Act (RCRA), which addresses procedures to be followed during the investigation and cleanup of environmental problems. NS Mayport has been issued a HSWA permit by Florida Department of Environmental Protection.

5.2 Hazardous Substances / Waste Management

The hazardous material accumulation areas at NS Mayport are not within or adjacent to the subject property. Based on visual observations and environmental records reviewed to date, these areas do not appear to have had an adverse impact on the environmental integrity of the subject property. There is no indication of hazardous waste disposal at the subject property.

5.3 Petroleum Products

According to the NS Mayport Environmental Division, three aboveground storage tanks (ASTs) are located at the subject property, within the Bennet Shores housing area. The ASTs are used to supply fuel to the emergency generators, associated with the sewage lift stations. During PRI's site visit, the ASTs appeared to be in good condition. In 2004, AST# G1376R, associated with a sewage lift station in Bennet Shores, reportedly had release from a small hole in the piping. The petroleum hydrocarbon release was removed, but visible staining remains on concrete pad. The lift stations at Ribault Bay and Marsh Cove housing units are maintained by the City of Atlantic Beach.

5.4 Environmental Restoration

There have been no Solid Waste Management Unit (SWMU) sites identified within the subject property. However, a total of 56 SWMU sites have been identified at NS Mayport. Due to their status and distance, none of these sites are considered a threat to the environmental integrity of the subject property.

5.5 Solid Waste

Solid waste accumulation at the subject property is limited to paper and plastic generated in the offices, and household items generated in the subject property. The solid waste is picked up and removed from the subject property by an outside contractor. No evidence of illegal dumping of hazardous materials was observed at the subject property during PRI's site visit.

5.6 Polychlorinated Biphenyls Compliance

Polychlorinated biphenyls (PCBs) are potentially toxic substances that are commonly found in electrical transformers. The commercial use of PCBs has been banned since 1979. Interviews with on-site personnel indicated that a base-wide program to identify PCB-containing transformers and oil switches was completed in the early 1990s. This program included testing existing transformers and oil switches for the presence of PCBs; wipe testing visible stains adjacent to the transformers; and retro-filling transformers identified as having PCB-containing insulating fluid with non-PCB-containing insulating fluid.

Due to the efforts of the base-wide 1990s PCB identification program, it appears that the historical presence of PCB-containing transformers is not anticipated to have an adverse impact on the environmental integrity of the subject property. Additionally, the current transformers appear in good condition, with no evidence of leaks or spills.

5.7 Asbestos-Containing Material

Based on PRI's review of the environmental records at NS Mayport, asbestos surveys were reportedly performed at the subject property in September 1994. The reports indicate that asbestos-containing material (ACM) is present at the subject property. ACM was identified in locations including, but not limited to, drywall joint compound, window caulking, mastic, and sink undercoating. Identified ACM locations are presented in Appendix C.

5.8 Lead-Based Paint

Based on PRI's review of the environmental records at NS Mayport, a lead survey was reportedly performed at the subject property in September 1994. The reports indicate that lead-based paint (LBP) is present at the subject property, on both interior and exterior components of the housing units. Identified LBP locations are presented in Appendix C.

5.9 Pesticides and Herbicides

Based on interviews with NS Mayport housing personnel, vegetated areas appear to be sprayed with commercially available pesticides and herbicides, as needed. There is a low probability of impact from pesticides and herbicides to the subject property.

6.0 ADJACENT PROPERTY

The subject property is surrounded by portions of NS Mayport, as well as residential, commercial, and woodland areas. Based on PRI's observations, these adjacent properties do not appear to present an environmental concern to the subject property at this time.

7.0 PROPERTY CLASSIFICATION AND ASSESSMENT

The following RECs were observed during this EBS:

Petroleum Products

According to the NS Mayport Environmental Division, three ASTs are located at the subject property, within the Bennet Shores housing area. The ASTs are used to supply fuel to the emergency generators, associated with the sewage lift stations. During PRI's site visit, the ASTs appeared to be in good condition. In 2004, AST# G1376R, associated with a sewage lift station in Bennet Shores, reportedly had release from a small hole in the piping in 2004. The petroleum was removed, but visible staining remains on concrete pad. The lift stations at Ribault Bay and Marsh Cove housing units are maintained by the City of Atlantic Beach.

Asbestos-Containing Material

Based on PRI's review of the environmental records at NS Mayport, asbestos surveys were reportedly performed at the subject property in September 1994. The reports indicate that ACM is present at the subject property. ACM was identified in locations including, but not limited to, the drywall joint compound, window caulking, mastic, and sink undercoating.

Lead-Based Paint

Based on PRI's review of the environmental records at NS Mayport, a lead survey was reportedly performed at the subject property in September 1994. The reports indicate that LBP is present at the subject property, on both interior and exterior components of the housing units.

Property Classification

The subject property at NS Mayport is characterized as Category 1, areas where no release or disposal of hazardous substances or petroleum products has occurred (including migration of these substances from adjacent properties).

8.0 CERTIFICATION

This report describes the pertinent information obtained during the EBS assessment. The findings presented in this EBSR are relative to the dates of PRI's survey in 2004, and should not be relied upon to represent conditions at substantially later dates. PRI's observations reflect site conditions as of the latest visit to particular areas of the subject property, and should not be construed as representing previous or future site conditions. Any opinions included herein are based on the information obtained during this study and PRI's experience with similar assessments. Although this assessment has attempted to identify the potential for environmental impacts to the subject property resulting from possible contamination, sources may have escaped detection due to: 1) the limited scope of this assessment; 2) the inaccuracy of public records; 3) the presence of undetected or unreported environmental incidents; or 4) other site and area specific factors. It has not been the purpose of this study to determine the actual presence, degree or extent of contamination, if any, at the site.

I certify that the property conditions stated in this report are based on a review of available records, visual inspections, and interviews as noted, and are true and correct, with the above qualifications, to the best of my knowledge and belief.

Date

Jeremiah D. Jackson, PhD, PE
Program Manager
Project Resources Inc.

ENVIRONMENTAL BASELINE SURVEY
PUBLIC / PRIVATE VENTURE HOUSING PRIVATIZATION
NAVAL STATIN MAYPORT

Appendix A

Photographs of Subject Property

Naval Station Mayport
Public / Private Venture Housing Privatization
Environmental Baseline Survey



Exterior view of 701 Everglades, Bennett Shores housing area



Exterior view of 1004 Colony Circle, Ribault Village housing area

Naval Station Mayport
Public / Private Venture Housing Privatization
Environmental Baseline Survey



Exterior view of 1100 Diligent Court, Marsh Cove housing area



Main Cantonment Dune Line, portion of subject property at Bennett Shores housing area

ENVIRONMENTAL BASELINE SURVEY
PUBLIC / PRIVATE VENTURE HOUSING PRIVATIZATION
NAVAL STATIN MAYPORT

Appendix B

Chain of Title Reports

**TITLE AND JURISDICTION RERORT
BENNETT SHORES FAMILY HOUSING
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA**

NAVY TRACT II - Title to 111.32 acres, more or less, was vested in the United States of America by Declaration of Taking in suit styled “United States of America, Petitioner, V. 111.32 acres of land, more or less, in the County of Duval and State of Florida, et al., Defendants, Civil Action No. 201-J” filed on 17 June 1940 in the United States District Court for the Southern District of Florida at Jacksonville.

The United States of America has **exclusive jurisdiction** over the 111.32 acres of Navy Tract II.

NAVY TRACT III - Title to 17.58 acres, more or less, was vested in the United States of America by Declaration of Taking in suit styled “United States of America, Petitioner, V. 17.58 acres of land, more or less, in the County of Duval and State of Florida, et al., Defendants, Civil Action No. 202-J” filed on 17 June 1940 in the United States District Court, for the Southern District of Florida at Jacksonville.

The United States of America has **exclusive jurisdiction** over the 17.58 acres of Navy Tract VI.

NAVY TRACT XLVII – Title to 0.41 acre, more or less, was conveyed to the United States of America by Stanley H. Burke and Artolia R. Burke, his wife, by Warranty Deed dated 20 February 1959 and recorded in Volume 696, Page 155 of the Deed Records of Duval County, Florida.

The United States of America has **proprietary jurisdiction** over the 0.41 acre of Navy Tract XLVII.

NAVY TRACT XLVIII – Title to 0.55 acre, more or less, was conveyed to the United States of America by Francis W. Hall and John V. Hall, her husband by Warranty Deed dated 20 February 1959 and recorded in Volume 696, Page 103 of the Deed Records of Duval County, Florida.

The United States of America has **proprietary jurisdiction** over the 0.55 acre of Navy Tract XLVIII.

NAVY TRACT XLIX – Title to 9.74 acre, more or less, was conveyed to the United States of America by Marie H. Sallas, as executrix under the Last Will and Testament of

Joseph E. Sallas, deceased, by Special Warranty Deed and recorded in Volume 696, Page 44, also by F. A. Sallas and Imogene Sallas, his wife by Warranty Deed dated 20 February 1959 and recorded in Volume 696, Page 47, and by Marie H. Sallas, widow of Joseph E. Sallas, deceased, F.A. Sallas and Imogene Sallas, his wife, and Marie H. Sallas, as Executrix under Last Will and Testament of Joseph E. Sallas, deceased, also known as J.E. Sallas by Correction and Consolidation Deed dated 17 June 1959 and recorded in Volume 785, Page 242 of the Deed Records of Duval County, Florida.

The United States of America has **proprietary jurisdiction** over the 9.74 acre of Navy Tract XLIX.

NAVY TRACT LII – Title to 299.36 acres, more or less, was vested in the United States of America by Declaration of Taking in suit styled “United States of America, Petitioner, V. 301.65 acres of land, more or less, in the County of Duval and State of Florida, Jack N. Dulberg, as trustee, et al., Defendants, Civil Action No. 4260-J” filed on 24 March 1959 in the United States District Court, for the Southern District of Florida at Jacksonville.

The United States of America has **proprietary jurisdiction** over the 299.36 acre of Navy Tract LII.

NAVY TRACT LIII – Title to 138.82 acres, more or less, was vested in the United States of America by Declaration of Taking in suit styled “United States of America, Plaintiff, V. 138.824 acres of land, more or less, in the County of Duval, State of Florida, Carol Bradford, et al., Defendants, Civil Action No. 4706-J” filed on 5 June 1961 in the United States District Court, for the Southern District of Florida at Jacksonville.

The United States of America has **proprietary jurisdiction** over the 138.82 acres of Navy Tract LIII.

NAVY TRACT LV – Title to 43.50 acres, more or less, was vested in the United States of America by Declaration of Taking in suit styled “United States of America, Plaintiff, V. 43.5 acres of land, more or less, in the County of Duval, State of Florida; R.C.B.S. Corporation, (a Florida corporation), et al., Defendants, Civil Action No. 4931-J” filed on 19 June 1962 in the United States District Court, for the Southern District of Florida at Jacksonville.

The United States of America has **proprietary jurisdiction** over the 43.50 acres of Navy Tract LV.

NAVY TRACT LVIII – Title to 1.13 acres, more or less, was a portion of the 1.45 acres, more or less, which was conveyed to the United States of America (Treasury

Department - U.S. Coast Guard) by R.C.B.S. Corporation, a Florida corporation, by Warranty Deed dated 5 November 1953 and recorded in Volume 1668, Page 88 of the Deed Records of Duval County, Florida. The 1.13 acres, more or less, was transferred to the Navy by DD-1354 dated 8 December 1969.

The United States of America has **proprietary jurisdiction** over the 1.13 acres of Navy Tract LVIII.

Title Report prepared by
William J. Holling
Realty Specialist
Real Estate Division
SOUTHNAVFACENGCOM
20 January 1999

**TITLE AND JURISDICTION RERORT
RIBAUT BAY FAMILY HOUSING
NAVAL STATION MAYPORT
JACKSONVILLE, FLORIDA**

NAVY TRACT LIX - Title to 77.92 acres, more or less, was vested in the United States of America by Declaration of Taking in suit styled "United States of America, Plaintiff, V. 77.92 acres of land, more or less, in Duval County, State of Florida, and Almand, Inc., a Florida corporation, et al., Defendants, Civil Action No. 75-202-CIV-J-T" filed on 3 April 1975 in the United States District Court for the Middle District of Florida at Jacksonville.

The United States of America has **proprietary jurisdiction** over the 77.92 acres of Navy Tract LIX.

NAVY TRACT LXXII – Title to 86.53 acres, more or less, was conveyed to the United States of America by Atlantic National Bank of Florida by Warranty Deed dated 9 December 1982 and recorded in Volume 5594, Page 454 of the Deed Records of Duval County, Florida. **LESS AND EXCEPT** 39.50 acres, more or less, conveyed to The New Met Company by Quitclaim Deed dated 20 June 1986, for a total of 47.03 acres, more or less, after said exception.

The United States of America has **proprietary jurisdiction** over the 47.03 acres of Navy Tract LXXII.

NAVY TRACT LXXIV – Title to 29.00 acres, more or less, was conveyed to the United States of America by The New Met Company, a Florida corporation, by Warranty Deed dated 20 June 1986 and recorded in Volume 6149, Page 356 of the Deed Records of Duval County, Florida.

The United States of America has **proprietary jurisdiction** over the 29.00 acres of Navy Tract LXXIV.

NAVY TRACT LXXV – Title to 0.01 acre (570 square feet), more or less, was conveyed to the United States of America by John J. Snyder, Bishop of the Diocese of St. Augustine, by Warranty Deed dated 8 May 1989 and recorded in Volume 6707, Page 1233 of the Deed Records of Duval County, Florida.

The United States of America has **proprietary jurisdiction** over the 0.01 acre (570 square feet) of Navy Tract LXXV.

Title Report prepared by
William J. Holling
Realty Specialist
Real Estate Division
SOUTHNAVFACENCOM
26 January 1999

ENVIRONMENTAL BASELINE SURVEY
PUBLIC / PRIVATE VENTURE HOUSING PRIVATIZATION
NAVAL STATIN MAYPORT

Appendix C

Location of ACM and LBP at Subject Property

PROGRAM INFORMATION AND PROTOCOL

PROGRAM HISTORY

Naval Facilities Engineering Command (NAVFACENGCOM) has retained Public Works Center (PWC) - Norfolk, Virginia to develop and manage the environmental assessment. The assessment provides strategies to ensure the safety of residents and workers.

The Navy Family Housing Lead Based Paint/Asbestos Inventory Program is outlined in a 9 November 1992 letter from Commander, Naval Facilities Engineering Command.

The National Emission Standards for Hazardous Air Pollutants (NESHAPS [40 CFR 61 PART M]) and the Asbestos Hazard Emergency Response Act (AHERA [40 CFR 763]) specify the legislative and statutory requirements for this assessment.

United States Environmental Protection Agency (USEPA) Certified Inspectors performed comprehensive inspections to locate and assess the condition of asbestos containing materials (ACM). The inspection follows USEPA and Naval Facilities Engineering Service Center (NFESC) methodology and procedures. These guidelines predicate testing of the entire community as a homogenous area to allow for statistical sampling.

BACKGROUND

Asbestos is a natural silicate mineral that occurs in a fibrous form. It is mined from the earth in rock form then crushed and milled to extract the asbestos fibers.

The most common asbestos types are chrysotile, amosite, and crocidolite. Asbestos fibers possess a high tensile strength, light weight, excellent resistance to heat and chemicals, and are low in conductivity. Due to these properties, asbestos was a common additive in insulation and building materials.

The presence of asbestos containing material does not automatically constitute a health hazard. A hazard only exists if the material is friable (able to be pulverized by hand pressure) and damaged or deteriorated to the point of releasing asbestos fibers.

Inhalation and ingestion are the two routes for asbestos fibers to enter the body. Asbestos fibers are extremely small, as small as thousandths of a micron (1 micron is approximately 1/25,000 of an inch), and become airborne quite easily. By way of inhalation, airborne asbestos fibers are the largest threat of exposure. The body is not capable of destroying the asbestos fibers, which pose the risk of contributing to the development of asbestos, cancer, and other disease. It is important to note that no known safe exposure limit to asbestos exists, as studies indicate wide variations in the correlation between exposure and development of disease.

TESTING PROCEDURES

Sampling Objectives

The inspection process focuses on identifying suspect asbestos containing materials by homogeneous area, and assessing the physical condition of the material. A homogeneous area is an area containing material that is uniform in color and texture, installed around the same time, and appears to be identical in every respect. Inspectors identify homogeneous areas and generate floor plans depicting the location and size of each. Refer to Appendix I of the individual Asbestos Management Plan for the floor plans of that community.

The inspection includes materials that are open and/or accessible, and generally does not include materials within sealed areas, such as electrical components or piping inside walls. The following are some of the common materials inspected. Refer to Appendix II for a more complete listing of suspect materials.

- Ceilings; spray-on acoustic, tiles
- Flooring; asphalt/vinyl tiles, mastic/sealer
- Insulation; HVAC, surfacing, piping/plumbing
- Roofing; felt, flashing, mastic/waterproofing
- Walls; plaster, sheeting, cement board, sealant

Bulk samples of each suspect asbestos containing material are collected. USEPA guidelines specify the number of samples required to properly represent a homogenous area. The following table indicates the number of samples required to maximize the chance of detecting and identifying ACM based on amount of material present. The recommended numbers of asbestos samples for each homogeneous area within each community were routinely collected during the survey. An accredited laboratory analyzes the bulk samples to determine if the homogeneous area is an ACM.

NUMBER OF ASBESTOS SAMPLES TO BE TAKEN	
SAMPLING SPECIFICS	MINIMUM SAMPLE NO.
Surfacing ACM	
Less than 1,000 square feet	3
1,000 to 5,000 square feet	5
Greater than 5,000 square feet	7
TSI ACM	
per homogeneous area	3
per patch (<6 ft or <6 ft ²)	1
valve or fitting (i.e., tees elbows, etc.) mud, and cement	1
Miscellaneous ACM	
per homogeneous area	3

Data Analysis

The method utilized for laboratory analysis of suspect asbestos containing material samples is Polarized Light Microscopy (PLM), as recommended by EPA. A sample tested and shown to have greater than or equal to one percent (1%) asbestos is ACM. Consequently, the confirmed material's entire homogeneous area is ACM.

A ranking system developed by Naval Facilities Engineering Service Center (NFESC/NEESA) determines the appropriate action response for the ACM. In the ranking system algorithm, the material condition and location of each ACM homogeneous area aids in deriving the hazard potential of the ACM.

REFERENCE DOCUMENTS

Appendix III contains a list of reference material regarding the policy of the Navy Family Housing Lead Based Paint/Asbestos Inventory Program and regulations for asbestos control. Also listed are various documents concerning the inspection, control, and abatement of asbestos. Provided to each activity is a document package that contains applicable federal/state regulations and guidance documents that support all survey information and recommendations.

All aspects of this management plan utilize the respective governing regulatory documents as a basis for action. Although these documents sometime contradict one another, this Action Summary combined with the accompanying Asbestos Management Plans provide guidance for a safe and cost effective means to resolve environmental issues related to asbestos hazards.

ACTIVITY DESCRIPTION

A summary of Naval Station Mayport inspection is in Table 1. Provided in each individual community management plan for this activity are vicinity and community maps along with a listing of the housing units inspected.

- Activity UIC Number: N60201 ¹
- Inspection Dates: September - December 1994

Table 1 - Inspection Parameters			
Housing Type	Total # of Units	# of Units Inspected for Asbestos	Year(s) of Construction
Field Grade Officer (3013)			
3 Bedroom	1	1	19??
Ribault Village (3014)			
2 Bedroom	100	4	1978-79
3 Bedroom	90	4	1978-79
4 Bedroom	170	8	1978-79
5 Bedroom	40	2	1978-79
Junior Officer (3015)			
3 Bedroom	10	10	1963
4 Bedroom	2	2	1963
Capehart Field Grade Officer (3016)			
3 Bedroom	39	26	1964
4 Bedroom	5	5	1964
Milcon Enlisted (3017)			
2 Bedroom	12	2	1964
3 Bedroom	98	39	1964
4 Bedroom	16	6	1964
Capehart Enlisted (3018)			
2 Bedroom	40	4	1963
3 Bedroom	298	38	1963
4 Bedroom	64	13	1963
Senior Officer (3019)			
4 Bedroom	2	2	1964

Table 1 - Inspection Parameters

Housing Type	Total # of Units	# of Units Inspected for Asbestos	Year(s) of Construction
Capehart Junior Officer (3020)			
2 Bedroom	8	4	1962
3 Bedroom	66	30	1962
4 Bedroom	14	8	1962
Capehart Senior Officer (3021)			
4 Bedroom	6	6	1962
Johnson Housing (3023)			
2 Bedroom	200	10	1987
Totals	1281	224	
¹ See Definitions - Appendix I. ² See Floor Plans provided as Appendix I in each community's individual Asbestos Management Plan.			

ASBESTOS SURVEY SUMMARY

FINDINGS AND ANALYSIS

3013 - *Field Grade Officer (212)* - Four homogeneous areas are ACM.

- A1 - Built Up Roof, Exterior over Den and Living Room Areas
Hazard Priority Level 5, O&M until abatement.
- A6 - Sink Undercoating, Kitchen
Hazard Priority Level 5, O&M until abatement.
- A10 - Linoleum, Under vinyl in kitchen
Hazard Priority Level 5, O&M until abatement.
- A11 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.

3014 - *Ribault Village* - Three homogeneous areas are ACM.

- A6 - Sink Undercoating, Kitchen
Hazard Priority Level 5, O&M until abatement.
- A12 - Built Up Roof, Carports of 2 Bedroom units
Hazard Priority Level 5, O&M until abatement.
- A13 - Linoleum, Under floor tile in kitchen
Hazard Priority Level 5, O&M until abatement.

3015 - *Junior Officer* - Two homogeneous areas are ACM.

- A10 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.
- A11 - Built Up Roof, Carport of only unit 657
Hazard Priority Level 5, O&M until abatement.

3016 - *Capehart Field Grade Officer* - Three homogeneous areas are ACM.

- A5 - Built Up Roof, Exterior
Hazard Priority Level 5, O&M until abatement.
- A8 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.
- A10 - Floor Tile and Mastic, Interior Storage Area
Hazard Priority Level 5, O&M until abatement.

3017 - *Milcon Enlisted* - Three homogeneous areas are ACM.

- A3 - Window Caulk, Exterior
Hazard Priority Level 5, O&M until abatement.
- A10 - Built Up Roof, Exterior
Hazard Priority Level 5, O&M until abatement.
- A14 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.

3018 - *Capehart Enlisted* - Four homogeneous areas are ACM.

- A3 - Window Caulk, Exterior
Hazard Priority Level 5, O&M until abatement.
- A7 - Floor Tile and Mastic, Interior Storage Area
Hazard Priority Level 5, O&M until abatement.
- A13 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.
- A14 - Built Up Roof, Exterior
Hazard Priority Level 5, O&M until abatement.

3019 - *Senior Officer* - Two homogeneous areas are ACM.

- A5 - Floor Tile and Mastic, Interior Storage Area
Hazard Priority Level 5, O&M until abatement.
- A7 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.

3020 - *Capehart Junior Officer*, Four homogeneous areas are ACM.

- A3 - Window Caulk, Exterior
Hazard Priority Level 5, O&M until abatement.
- A7 - Floor Tile and Mastic, Interior Storage Area
Hazard Priority Level 5, O&M until abatement.
- A10 - Built Up Roof, Exterior
Hazard Priority Level 5, O&M until abatement.
- A11 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.

3021 - *Capehart Senior Officer* - Four homogeneous areas are ACM.

- A1 - Built Up Roof, Exterior
Hazard Priority Level 5, O&M until abatement.
- A8 - Window Caulk, Exterior
Hazard Priority Level 5, O&M until abatement.
- A11 - Floor Tile and Mastic, Interior Storage Area
Hazard Priority Level 5, O&M until abatement.
- A11 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.

3023 - *Johnson Housing* - ACM was not identified in this community.

RECOMMENDATIONS

Response actions are sorted by four time frames: short-term, interim control, renovation, and demolition. Refer to Appendix II for further clarification of these time frames.

Short-Term (6 - 12 months)

No short term response actions are required.

Interim Control

In place management of ACM to safeguard the health of residents and maintenance workers can be achieved by use of interim control measures. An operations and maintenance (O&M) program is a plan that includes training, cleaning, work practices, and surveillance to maintain ACM in good condition. The following elements recommended by the National Institute of Building Sciences (NIBS) publication, Asbestos Operations and Maintenance Work Practices are essential for the development of an O&M program.

- *Asbestos Program Manager appointment and training*
- *Copies of applicable regulations and guidance documents*
- *Occupant notification/communication program*
- *O&M worker, supervisor, and competent person assignments and training program*
- *Work control/inspection/permit system*
- *Periodic surveillance program*
- *Recordkeeping program*
- *Hazard communication program*
- *Worker protection program (personal protective equipment)*
- *Respiratory protection program*
- *Medical surveillance program*
- *Asbestos fiber release episode response program*
- *Air monitoring program*
- *Waste disposal program*
- *Confined space program*
- *Safety program for other hazards*

O&M work practices, including removal techniques, vary according to the type of ACM and the conditions of the specific task. The following steps outline general O&M practices to manage ACM in place and reduce potential hazards:

1. Visually inspect confirmed ACM at convenient times such as occupant turn-over for signs of damage or deterioration.
2. Repair/replace damaged or deteriorated ACM, utilizing appropriate O&M work practices and procedures. Reduce or contain materials, dust, or fiber release resulting from work performed on or near asbestos containing materials.
3. Inform and educate occupants and maintenance workers regarding the presence of ACM. When occupants observe damaged or deteriorated ACM, they should notify the Housing Manager or an appointed Asbestos Program Manager.
4. Maintenance workers need to adhere to appropriate work practices and procedures when performing maintenance activities around ACM. Organize work practices to minimize the extent and impact of any releases which do occur.

Renovation and Demolition

National Emission Standards for Hazardous Air Pollutants (NESHAPS [40 CFR 61]) emphasize procedures for minimizing emissions of asbestos fibers into the environment. With respect to demolition and renovation activities, the important NESHAP areas for consideration are applicability, notification requirements, asbestos emission control procedures, and ACM waste disposal practices and records. In some areas the administration of NESHAP has been delegated to the state level, in which case the regulation may be more stringent or the interpretation and enforcement may vary from the federal authorities. In any case, the NESHAP administrator is a federal or state authority with primary responsibility for regulation of asbestos abatement associated with building demolition or renovation.

**Asbestos-Containing Material Survey
Ribault Bay Housing Phase II
Mayport Naval Station
Mayport, Florida**

Prepared for:

Department of the Navy
Southern Division
Naval Facilities Engineering Command
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November 1999

ASBESTOS SURVEY REPORT

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1.0 Executive Summary

BAT Associates, Inc. contracted Cape Environmental Management Inc (CAPE), to perform an asbestos-containing material (ACM) survey for the Southern Division, Naval Facilities Engineering Command (SouthDiv NAVFACENGCOM) at Ribault Bay Housing Phase II located in the Mayport Naval Station, Florida. The field investigation was conducted by CAPE staff industrial hygienists Mr. Mike Spradling (EPA/AHERA Building Inspector #5875), Mr. Kevin Bailey (EPA/AHERA Building Inspector #5984), and Mr. David Bratley (EPA/AHERA Building Inspector #2519) between the dates of August 23, 1999 and October 1, 1999.

The purpose of this ACM survey is to provide a detailed inventory of suspect ACM, an assessment of the condition of each identified ACM, the quantities of the identified ACM, and an assessment of the friability of each identified ACM.

The Ribault Bay Housing Phase II at Mayport Naval Station consists of two, three, four, and five bedroom housing units. The scope of work required that ACM surveys be conducted on 200 of the housing units targeted for Phase II renovation. CAPE performed building material surveys of these units to determine the materials (interior and exterior) that were suspected of containing asbestos.

For the purposes of this survey, typical housing units were separated into the following four groups: two bedroom units, three bedroom units, four bedroom units, and five bedroom units. Based on the sampling criteria outlined in 40 CFR Part 763, Asbestos Hazard Emergency Response Act (AHERA), and modified by the scope of work, one typical housing unit of each group was sampled in detail. Additional suspect- ACMs were sampled in the remaining housing units as they were discovered during the survey of each individual unit.

The following ACMs were identified:

2 Bedroom Units

Friable ACM:

- Light fixture insulation

The friable light fixture insulation was significantly damaged.

Non-Friable ACM:

- Resilient sheet flooring, white with orange and brown pattern
- Resilient sheet flooring, cream, white, and gray mosaic pattern
- Resilient sheet flooring, brown brick pattern
- Resilient sheet flooring, cream with gold and mustard designs

- Sink mastic, black
- 12" x 12" floor tile cream with tan streaks, and mastic

All non-friable materials were observed to be in good condition on the days of the field investigation.

3 Bedroom Units

Friable ACM:

- Light fixture insulation

The friable light fixture insulation was significantly damaged.

Non-Friable ACM:

- Resilient sheet flooring, white with orange and brown pattern
- Resilient sheet flooring, cream, white, and gray mosaic pattern
- Resilient sheet flooring, brown brick pattern
- Resilient sheet flooring, cream with gold and mustard designs
- Sink mastic, black
- 12" x 12" floor tile cream with tan streaks, and mastic

All non-friable materials were observed to be in good condition on the days of the field investigation

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4 Bedroom Units

Friable ACM:

- Light fixture insulation

The friable light fixture insulation was significantly damaged.

Non-Friable ACM:

- Resilient sheet flooring, white with orange and brown pattern
- Sink mastic, black

- 12" x 12" floor tile cream with tan streaks, and mastic
- Mastic associated with 12" x 12" floor tile white with brown smudges
- Mastic associated with white resilient sheet flooring,

All non-friable materials were observed to be in good condition on the days of the field investigation.

5 Bedroom Units

Friable ACM:

- Light fixture insulation

The friable light fixture insulation was significantly damaged.

Non-Friable ACM:

- Resilient sheet flooring, white with orange and brown pattern
- Sink mastic, black
- 12" x 12" floor tile cream with tan streaks, and mastic

All non-friable materials were observed to be in good condition on the days of the field investigation.

The following floor tiles were identified as patches in various locations of two bedroom, three bedroom, four bedroom, and five bedroom units. These tiles were reported to be non-asbestos containing by PLM analysis, however, **the mastic associated with these tiles is asbestos-containing.**

- 12" x 12" gray with white and dark gray smudges floor tile
- 12" x 12" gray with brown and yellow streaks floor tile
- 12" x 12" beige with brown and gray spots floor tile
- 12" x 12" tan with white and brown streaks floor tile
- 12" x 12" white with brown and gray streaks floor tile
- 12" x 12" beige with brown and white streaks floor tile

The following units were included in the scope of work for this project.

2 Bedroom Units		
1004A	1039C	1071A
1004B	1039D	1071B*
1004C	1039E	1071C
1004D*	1039F	1071D*
1016A*	1047A	1071E
1016B	1047B*	1071F*
1016E*	1047C	1071G
1016F*	1047D*	1071H
1020A	1047E	1073A
1020B	1047F	1073B*
1020C	1062A	1073C
1020D	1062B	1073D
1020E	1062C	1073E
1020F	1062D	1073F
1039A*	1062E	
1039B*	1062F	

3 Bedroom Units		
1000A	1059B	1068C
1000B	1059C	1068D
1000C	1059D	1068E
1000D	1060A	1068F
1000E	1060B*	1070A
1000F	1060C	1070B
1013A	1060D	1070C
1013B	1066A	1070D
1013C	1066B	1070E
1013D	1066C	1070F*
1037A	1066D	1072A
1037B	1067A	1072B
1037C	1067B*	1072C
1037D	1067C*	1072D
1037E	1067D	1072E
1037F	1068A	1072F
1059A*	1068B	

4 Bedroom Units		
1011A	1038C	1053B
1011B	1038D	1053C
1011C	1040A	1053D
1011D	1040B*	1053E*
1011E	1040C	1057A
1011F	1040D	1057B
1027A	1040E	1057C
1027B	1040F	1057D
1027C	1044B	1058B
1027D	1044C	1058C
1027E	1044D	1058D
1027F	1044E	1058E
1028B	1045A	1061A
1028C	1045B	1061B
1028D	1045C	1061C
1028E	1045D	1061D
1029B	1045E	1063A
1029C	1045F	1063B
1029D	1049A	1063C
1029E	1049B	1063D
1029F	1049C	1065B*
1031A	1049D	1065C
1031B	1049E	1069B
1031C	1049F	1069C
1031D	1050B	1069D
1031E*	1050C	1069E
1031F	1050D	1069F*
1038A	1050E	
1038B	1050F	

5 Bedroom Units
1001B
1001C
1002F
1028A
1029A
1032A*
1036A
1044A
1046A*
1046B
1046C
1050A
1053A
1057E
1057F
1058A
1064E
1064F
1065A
1069A*

Notes: Unit numbers that are **bold** indicate the units that could not be accessed.

* Bulk samples were collect ed from these units.

2.0 Asbestos Survey Methodology

2.1 Field Investigation

The scope of work established for this project consisted of the following:

1. Conducting a visual survey of interior and exterior areas of each building to identify accessible, suspect-ACM and determine:
 - Material type
 - Location
 - Quantity
 - Friability
 - Physical condition
2. Developing a suspect-ACM bulk sampling strategy based on the sampling collection criteria outlined in the AHERA regulation and the scope of work. The scope of work required one typical unit in each group of buildings to be sampled in detail.
3. Providing an asbestos inventory and survey report.

The field investigation required identification and classification of suspect-ACM as (1) *thermal system insulation*, (2) *surfacing materials*, or (3) *miscellaneous materials*. Once these materials were identified, homogeneous sampling areas (areas that are uniform in color, texture, construction/application date, and general appearance) were delineated. Homogeneous areas (HAs) were then assigned unique HA numbers and the appropriate number of bulk samples were collected from each HA. (Note: HA number assignments for this project are not intended to be representative of the sequence in which the HAs were identified within the units or the order in which HAs were sampled).

The sampling criteria for this project required detailed sampling of the suspect- ACMs in one housing unit from each group of similar dwellings. These units were:

2 bedroom unit 1016A

3 bedroom unit 1059A

4 bedroom unit 1031E

5 bedroom unit 1032A

Based on written documentation and visual evidence, all units included in the scope of work at Ribault Bay Housing were determined to be of typical design and common construction history. The housing complex contains four different types of design: two bedroom, three bedroom, four

bedroom, and five bedroom units. Therefore, in accordance with the scope of work, one individual housing unit representative of the whole group was sampled. In addition, CAPE conducted a walk through of all accessible units to identify HAs that were present throughout the group type. Similar HAs that were identified in the units were considered to have the same asbestos content of the HAs identified in the housing unit that was sampled. All non-similar suspect-ACMs identified during the walk through were sampled as they were discovered in each remaining unit (please see page 4 for a complete list of housing units sampled).

CAPE personnel collected samples as required by AHERA regulations. These regulations stipulate, at a minimum, that three bulk samples be collected from materials identified as *thermal system insulation* (e.g., pipe and pipe fitting insulation, boiler insulation, duct insulation, etc.). For materials identified as *miscellaneous material* (e.g., cement board, ceiling tile, gypsum wallboard, etc.) AHERA requires that these materials be sampled “in a manner sufficient to determine whether a material is ACM or not ACM.” CAPE personnel collected a minimum of two bulk samples from each friable miscellaneous material. Finally, for materials identified as *surfacing materials* (e.g., fire proofing, plaster, spray applied acoustical ceiling material, etc.) AHERA requires three bulk samples be collected if the total quantity of the material is less than 1,000 square feet, five bulk samples be collected if the total quantity of the material is between 1,000 square feet but less than or equal to 5,000 square feet, and seven bulk samples be collected if the total material quantity is greater than 5,000 square feet. In situations when suspect materials cannot be sampled (because sampling would damage the integrity or functionality of the material), they are assumed to contain asbestos.

The suspect-ACM bulk sample identification numbering scheme for this survey was based on the following pattern:

MRBH-1016A-1-01

MRBH	=	Project identifier (e.g., Mayport – Ribault Bay Housing)
1016A	=	Unit number
1	=	Suspect-ACM homogeneous area number
01	=	Sequential sample ID number

CAPE’s field personnel included Industrial Hygienists accredited as Building Inspectors in accordance with EPA’s revised Asbestos Model Accreditation Plan (MAP) mandated by the Asbestos School Hazard Abatement Reauthorization Act (ASHARA).

During the inspection, CAPE’s inspectors physically assessed the friability of each suspect-ACM and placed them into the appropriate friability category: (1) *regulated friable suspect-ACM*, or (2) *Category I or Category II, non-friable suspect-ACM*. Friable suspect-ACM is defined by AHERA as a material that when dry, can be crushed, pulverized, or reduced to powder by normal hand pressure; non-friable suspect-ACM is defined by AHERA as a material that when dry cannot be crushed, pulverized, or reduced to powder by normal hand pressure.

Suspect-ACMs were then placed into one of three condition categories as part of the physical assessment: (1) *good*, (2) *damaged*, or (3) *significantly damaged*.

Although an ACM HA cannot be absolutely determined to have no degree of damage, materials with no visible damage or deterioration, as well as those materials showing only very limited damage or deterioration, were categorized as being in good condition for the purpose of this survey.

2.2 Bulk Sample Analysis

Collected samples were analyzed by Polarized Light Microscopy (PLM) in accordance with EPA Method 600/R-93/116 of July 1993. Analytical Environmental Services, Inc. (AES) in Atlanta, Georgia (NVLAP Lab Code 102033), served as the primary laboratory for asbestos analysis. CAPE's laboratory in Atlanta, Georgia (NVLAP Lab Code 102111), performed the quality control of bulk sample analysis. In accordance with EPA's 1994 clarification for analysis of multi-layered systems, suspect materials were treated as asbestos containing if one or more layers of the material was determined to contain greater than 1% asbestos.

In accordance with Federal and state regulations, suspect-ACM that was determined by initial PLM analysis to have an asbestos content of greater than 1% (or assumed to have an asbestos content greater than 1%), was considered to be ACM. Suspect-ACM that was determined by initial PLM analysis to contain no detectable asbestos was considered non-ACM.

Point counting of materials found to have an asbestos content of less than 1% was not included in the scope of work for this project. Any material determined to have an asbestos content between "Trace" and 1% was assumed to be an asbestos-containing material.

Limitations of Asbestos Analysis:

Transmission electron microscopy (TEM) analysis to confirm negative PLM analysis results of floor tile and/or other resinously bound materials was not included in the analytical criteria established for this project.

3.0 Asbestos Survey Findings

This section includes a summary of the findings from the asbestos-containing materials survey of the 200 housing units at Ribault Bay Housing targeted for Phase II renovation.

A summary of the identified ACM is given in Tables 1 through 4. The tables list the typical location, appropriate NESHAP category in accordance with EPA regulations, and the appropriate OSHA category in accordance with the OSHA Classes of Work. (See Section 4.0, *Overview of Asbestos Regulatory Requirements* for definitions of NESHAP Categories and OSHA Classes of Work).

For NESHAP compliance purposes, each Category I, Non-friable ACM and each Category II, Non-friable ACM should be evaluated prior to building demolition/renovation to determine if forces acting on the material during the demolition/renovation process will render the material friable, and therefore require that it be re-categorized as Regulated ACM.

Refer to Appendices of this report for the following additional building survey data:

- Summary of Suspect Asbestos-Containing Materials (By Unit-Type)
- Summary of Suspect Asbestos-Containing Materials (Individual Unit Material Summary)
- Extent of Asbestos-Containing Material and Bulk Sample Locations (Typical Housing Unit Floor Plan)
- Laboratory Analysis Reports: of Suspect ACM Bulk Samples

Housing Units surveyed consist of multi-family buildings with four to eight units per building. Buildings are two-story wood-framed structures on concrete slabs. Exterior walls have vinyl siding and roofing has asphalt shingles. Interior flooring consists of floor tile, resilient sheet flooring, and carpet. Interior walls are gypsum drywall. Ceilings finishes are gypsum drywall with a smooth finish or a textured finish.

Refer to Appendix A for a complete inventory of suspect materials identified in each unit.

Table 1

Summary of ACM Identified in 2-Bedroom Units

HA No.	Material Description	Typical Location	Physical Assessment	NESHAP Category	OSHA
1	12" x 12" floor tile cream with tan streaks, and mastic	<i>1st floor units</i> - Master bedroom, bedroom 2, utility, entry, family room, living/dining room	Good	Category I Non-Friable	Class II
3	Mastic associated with 12" x 12" gray with white and dark gray smudges floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
7	Sink mastic, black	Kitchen	Good	Category I Non-Friable	Class II
11	Resilient sheet flooring, white with orange and brown pattern	Kitchen	Good	Category I Non-Friable	Class II
12	Light fixture insulation	Fixtures in entry and utility	Significantly damaged	Regulated ACM	Class I
14	Resilient sheet flooring, cream, white, and gray mosaic pattern	<i>2nd floor units</i> - Bathroom	Good	Category I Non-Friable	Class II
15	Resilient sheet flooring, brown brick pattern	<i>2nd floor units</i> - Utility	Good	Category I Non-Friable	Class II
18	Mastic associated with 12" x 12" gray with brown and yellow streaks floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
23	Mastic associated with 12" x 12" beige with brown and gray spots floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
24	Resilient sheet flooring, cream with gold and mustard designs	<i>2nd floor units</i> - Bathroom	Good	Category I Non-Friable	Class II

Table 2**Summary of ACM Identified in 3-Bedroom Units**

HA No.	Material Description	Typical Location	Physical Assessment	NESHAP Category	OSHA
2	12" x 12" floor tile cream with tan streaks, and mastic	Living/dining room, utility, family room, entry, master bedroom, bedroom 2, bedroom 3, hall, storage	Good	Category I Non-Friable	Class II
7	Sink mastic, black	Kitchen	Good	Category I Non-Friable	Class II
8	Mastic associated with 12" x12" tan with brown and white streaks floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
10	Mastic associated with 12" x12" gray with white and dark gray smudges floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
12	Mastic associated with 12" x12" white with brown and gray streaks floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
13	Mastic associated with 12" x12" gray with brown and yellow streaks floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
15	Resilient sheet flooring, white with orange and brown pattern	Kitchen	Good	Category I Non-Friable	Class II
16	Mastic associated with 12" x12" beige with brown and white streaks floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
17	Light fixture insulation	Fixtures in entry, utility, and hall	Significantly damaged	Regulated ACM	Class I
18	Mastic associated with 12" x12" beige with brown and gray spots floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II

Table 3**Summary of ACM Identified in 4-Bedroom Units**

HA No.	Material Description	Typical Location	Physical Assessment	NESHAP Category	OSHA
6	12" x 12" floor tile cream with tan streaks, and mastic	Living/dining room, utility, family room, entry, master bedroom, bedroom 2, bedroom 3, bedroom 4, hall, storage	Good	Category I Non-Friable	Class II
7	Mastic associated with 12" x12" gray with white and dark gray smudges floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
8	Mastic associated with 12" x12" tan with brown and white streaks floor tile,	Various locations (patches)	Good	Category I Non-Friable	Class II
11	Resilient sheet flooring, white with orange and brown pattern	Kitchen	Good	Category I Non-Friable	Class II
12	Light fixture insulation	Fixtures in entry, utility, master bedroom, and hall	Significantly damaged	Regulated ACM	Class I
17	Sink mastic, black	Kitchen	Good	Category I Non-Friable	Class II
18	Mastic associated with 12" x12" white with brown smudges floor tile	Various throughout (unit 1045B)	Good	Category I Non-Friable	Class II
19	Mastic associated with white resilient sheet flooring,	Kitchen (unit 1045B)	Good	Category I Non-Friable	Class II

Table 4**Summary of ACM Identified in 5-Bedroom Units**

HA No.	Material Description	Typical Location	Physical Assessment	NESHAP Category	OSHA
1	12" x 12" floor tile cream with tan streaks, and mastic,	Living/dining room, utility, family room, entry, master bedroom, bedroom 2, bedroom 3, bedroom 4, bedroom 5, hall, storage	Good	Category I Non-Friable	Class II
3	Mastic associated with 12" x12" white with brown and gray streaks floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
9	Mastic associated with 12" x12" gray with white and dark gray smudges floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
11	Resilient sheet flooring, white with orange and brown pattern	Kitchen	Good	Category I Non-Friable	Class II
12	Light fixture insulation	Fixtures in entry, utility, and hall	Significantly damaged	Regulated ACM	Class I
14	Mastic associated with 12" x12" beige with brown and white streaks floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
15	Sink mastic, black	Kitchen	Good	Category I Non-Friable	Class II

Appendix A

Suspect Asbestos-Containing Materials

(By Unit Type)

**Table A-1
Suspect ACM Identified in 2-Bedroom Units**

HA #	Supect ACM	Description*	Location(s)	Unit sampled	ACM (Yes or No)
1	12" x 12" floor tile and mastic	Cream with tan streaks	Various throughout	1016A	Tile (+), Mastic (+)
2	12" x 12" floor tile and mastic	Gray with white and dark gray spots	Kitchens	1016A	Tile (-), Mastic (-)
3	12" x 12" floor tile and mastic	Gray with white and dark gray smudges	Various (patches)	1016A	Tile (-), Mastic (+)
4	Gypsum wallboard and associated joint compound	Walls	Throughout	1016A	No
5	Gypsum ceiling and associated joint compound	Ceilings	Restroom, Kitchen, Utility	1016A	No
6	Spray-applied decorative ceiling	Ceilings	Various throughout	1016A	No
7	Sink mastic	Black	Kitchen	1016A	Yes
8	Basecove and mastic	Black	Kitchen	1016A	Basecove (-), Mastic (-)
9	Asphalt shingle roof	Gray	Roof	1016A	No
10	Flat membrane roof	Rubber with caulk	Roof (carport)	1016A	No
11	Resilient sheet flooring	White with orange and brown pattern	Kitchen	1016A	Yes
12	Light fixture insulation	White	Hall and Utility fixtures	1039A	Yes
13	12" x 12" floor tile and mastic	Beige with tan, white, and gray spots	Kitchen	1004D	Tile (-), Mastic (-)
14	Resilient sheet flooring	Cream, white, and gray mosaic pattern	Restroom (2 nd floor units)	1004D	Yes
15	Resilient sheet flooring	Brown brick pattern	Utility (2 nd floor units)	1004D	Yes
16	Resilient sheet flooring	Blue with peach, white, and gray spots	Lanai (2 nd floor units)	1004D	No
17	Vapor barrier, tar paper	Black	Interior of exterior walls	1004D	No
18	12" x 12" floor tile and mastic	Gray with brown and yellow streaks	Various (patches)	1016E	Tile (-), Mastic (assumed)
19	Basecove and mastic	White	Restroom (2 nd floor units)	1016F	No
20	Carpet mastic	Black	Under Carpet (2 nd floor units)	1016F	No
21	12" x 12" floor tile and mastic	Beige with brown and white streaks	Bathroom (2 nd floor units)	1039B	Tile (-), Mastic (-)
22	Resilient sheet flooring	Cream and brown faux pattern	Utility (2 nd floor units)	1039B	No
23	12" x 12" floor tile and mastic	Beige with brown and gray spots	Various (patches)	1047B	Tile (-), Mastic (Assumed)
24	Resilient sheet flooring	Cream with gold and mustard designs	Bathroom (2 nd floor units)	1047B	Yes
25	12" x 12" floor tile and mastic	Gray with tan and white spots	Kitchen	1071B	Tile (-), Mastic (-)

*Description refers to the suspect ACM exposed to view not the mastic underneath. When the material exposed to view is not a suspect ACM (such as carpet) the description refers to the mastic underneath.

Suspect ACM Identified in 2-Bedroom Units(continued)

HA #	Supect ACM	Description*	Location(s)	Unit sampled	ACM (Yes or No)
26	Resilient sheet flooring	Cream and gold square pattern	Bathroom (2 nd floor units)	1071F	No
27	Resilient sheet flooring	Cream square pattern	Bathroom (2 nd floor units)	1073B	No
28	Resilient sheet flooring	Cream with brown spots	Kitchen, Bathroom, Utility (2 nd floor units)	1047D	No
29	Basecove and mastic	Brown	Bathroom (2 nd floor units)	1071D	Basecove (-), Mastic (-)

*Description refers to the suspect ACM exposed to view not the mastic underneath. When the material exposed to view is not a suspect ACM (such as carpet) the description refers to the mastic underneath.

**Table A-2
Suspect ACM Identified in 3-Bedroom Units**

HA #	Supect ACM	Description*	Location(s)	Unit sampled	ACM (Yes or No)
1	12" x 12" floor tile and mastic	Gray with white and dark gray spots	Kitchens	1059A	Tile (-), Mastic (-)
2	12" x 12" floor tile and mastic	Cream with tan streaks	Various throughout	1059A	Tile (+), Mastic (+)
3	Gypsum wallboard and associated joint compound	Walls	Throughout	1059A	No
4	Gypsum ceiling and associated joint compound	Ceilings	Restrooms, Kitchen, Utility	1059A	No
5	Spray-applied decorative ceiling	Ceilings	Various throughout	1059A	No
6	Basecove and mastic	Black	Kitchen	1059A	Basecove (-), Mastic (-)
7	Sink mastic	Black	Kitchen	1059A	Yes
8	12" x 12" floor tile and mastic	Tan with brown and white streaks	Various (patches)	1059A	Tile (-), Mastic (+)
9	Stair tread and mastic	Dark brown	Stairs	1059A	Stair tread (-), Mastic (-)
10	12" x 12" floor tile and mastic	Gray with white and dark gray smudges	Various (patches)	1059A	Tile (-), Mastic (+)
11	Asphalt shingle roof	Gray	Roof	1059A	No
12	12" x 12" floor tile and mastic	White with brown and gray streaks	Various (patches)	1060B	Tile (-), Mastic (+)
13	12" x 12" floor tile and mastic	Gray with yellow and brown streaks	Various (patches)	1060B	Tile (-), Mastic (+)
14	12" x 12" floor tile and mastic	Beige with tan, white, and gray spots	Kitchen	1067B	Tile (-), Mastic (-)
15	Resilient sheet flooring	White with orange and brown pattern	Kitchen	1067B	Yes
16	12" x 12" floor tile and mastic	Beige with brown and white streaks	Various (patches)	1067C	Tile (-), Mastic (+)
17	Light fixture insulation	White	Hall and Utility fixtures	1070F	Yes
18	12" x 12" floor tile and mastic	Beige with brown and white spots	Various (patches)	1070F	Tile (-), Mastic (+)

*Description refers to the suspect ACM exposed to view not the mastic underneath. When the material exposed to view is not a suspect ACM (such as carpet) the description refers to the mastic underneath.

**Table A-3
Suspect ACM Identified in 4-Bedroom Units**

HA #	Supect ACM	Description*	Location(s)	Unit sampled	ACM (Yes or No)
1	Gypsum wallboard and associated joint compound	Walls	Throughout	1031E	No
2	Gypsum ceiling and associated joint compound	Ceilings	Restrooms, Kitchen, Utility	1031E	No
3	Spray-applied decorative ceiling	Ceilings	Various throughout	1031E	No
4	Basecove and mastic	Black	Kitchen	1031E	Basecove (-), Mastic (-)
5	Stair tread and mastic	Dark brown	Stairs	1031E	Stair tread (-), Mastic (-)
6	12" x 12" floor tile and mastic	Cream with tan streaks	Various throughout	1031E	Tile (+), Mastic (+)
7	12" x 12" floor tile and mastic	Gray with white and dark gray smudges	Various (patches)	1031E	Tile (-), Mastic (+)
8	12" x 12" floor tile and mastic	Tan with brown and white streaks	Various (patches)	1031E	Tile (+), Mastic (+)
9	12" x 12" floor tile and mastic	Gray with white and dark gray spots	Kitchens	1031E	Tile (-), Mastic (-)
10	12" x 12" floor tile and mastic	Beige with brown and white streaks	Various (patches)	1031E	Tile (-), Mastic (-)
11	Resilient sheet flooring	White with orange and brown pattern	Kitchen	1031E	Yes
12	Light fixture insulation	White	Hall and Utility fixtures	1031E	Yes
13	Asphalt shingle roof	Gray	Roof	1031E	No
14	Vapor barrier, tar paper	Black	Interior of exterior walls	1040B	No
15	12" x 12" floor tile and mastic	Wood parquet pattern	Kitchen	1040B	Tile (-), Mastic (-)
16	12" x 12" floor tile and mastic	Beige with tan, white, and gray spots	Kitchen	1053E	No
17	Sink mastic	Black	Kitchen	1053E	Yes
18	12" x 12" floor tile and mastic	White with brown smudges	Various throughout (unit 1045B)	1045B	Tile (-), Mastic (+)
19	Resilient sheet flooring	White	Kitchen (unit 1045B)	1045B	Flooring (-), Mastic (+)
20	Sink mastic	White	Kitchen (unit 1045B)	1045B	Tile (-), Mastic (-)
21	Resilient sheet flooring	Gray with brown swirl	Kitchen	1069F	No

*Description refers to the suspect ACM exposed to view not the mastic underneath. When the material exposed to view is not a suspect ACM (such as carpet) the description refers to the mastic underneath.

**Table A-4
Suspect ACM Identified in 5-Bedroom Units**

HA #	Supect ACM	Description*	Location(s)	Unit sampled	ACM (Yes or No)
1	12" x 12" floor tile and mastic	Cream with tan streaks	Various throughout	1032A	Tile (+), Mastic (+)
2	12" x 12" floor tile and mastic	Beige with tan, white, and gray spots	Kitchens	1032A	Tile (-), Mastic (-)
3	12" x 12" floor tile and mastic	White with brown streaks	Various (patches)	1032A	Tile (-), Mastic (Assumed)
4	Gypsum wallboard and associated joint compound	Walls	Throughout	1032A	No
5	Gypsum ceiling and associated joint compound	Ceilings	Restrooms, Kitchen, Utility	1032A	No
6	Spray-applied decorative ceiling	Ceilings	Various throughout	1032A	No
7	Basecove and mastic	Black	Kitchen	1032A	Basecove (-), Mastic (-)
8	Stair tread and mastic	Dark brown	Stairs	1032A	Stair tread (-), Mastic (-)
9	12" x 12" floor tile and mastic	Gray with white and dark gray smudges	Various (patches)	1032A	Tile (-), Mastic (+)
10	Asphalt shingle roof	Gray	Roof	1032A	No
11	Resilient sheet flooring	White with orange and brown pattern	Kitchen	1032A	Yes
12	Light fixture insulation	White	Hall and Utility fixtures	1032A	Yes
13	12" x 12" floor tile and mastic	Gray with white and dark gray spots	Kitchens	1069A	Tile (-), Mastic (-)
14	12" x 12" floor tile and mastic	Beige with brown and white streaks	Various (patches)	1069A	Tile (-), Mastic (+)
15	Sink mastic	Black	Kitchen	1069A	Yes
16	Vapor barrier, tar paper	Black	Interior of exterior walls	1069A	No
17	Mastic on fiberglass insulated duct	White	Utility	1046A	No

*Description refers to the suspect ACM exposed to view not the mastic underneath. When the material exposed to view is not a suspect ACM (such as carpet) the description refers to the mastic underneath.

Appendix B

Suspect Asbestos-Containing Materials

(Individual Unit Material Summary)

RIBAUT BAY HOUSING PHASE II - MAYPORT NAVAL STATION

Unit Surveyed: 1065B - (Four Bedroom Unit)

Inspector: Mike Spradling

Date of Survey: August 23 - October 1, 1995

H.A. Material	Description	Location	Quantity	Condition	Comments	
<u>IDENTIFIED ASBESTOS-CONTAINING MATERIALS</u>						
6	12" x 12" floor tile and mastic	Cream with tan streaks	Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4	720 S.F.	Potential Damage	Various patches of floor tile are included with this quantity
7	12" x 12" floor tile and mastic	Gray with white and dark gray smudges	Hall, Master Bedroom, Bedroom 4	N/A	Potential Damage	This floor tile was used as a patch in various areas
8	12" x 12" floor tile and mastic	Tan with brown and white streaks	Bedroom 2, Bedroom 4	N/A	Potential Damage	This floor tile was used as a patch in various areas
10	12" x 12" floor tile and mastic	Beige with brown and white streaks	Master Bedroom	N/A	Potential Damage	This floor tile was used as a patch in various areas
11	Resilient sheet flooring	White with orange and brown pattern	Kitchen	40 S.F.	Potential Damage	Underneath cabinets
12	Light fixture insulation	White	Hall, Master Bedroom	2 Each	Potential Damage	
17	Sink mastic	Black	Kitchen	1 Each	Potential Damage	

IDENTIFIED NON-ASBESTOS-CONTAINING MATERIALS

1	Gypsum wallboard and associated joint compound	Walls	Kitchen, Family room, Utility, Garage, Living/Dining room, Entry, Bathroom 1, Bathroom 2, Bathroom 3, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4	N/A	N/A	
2	Gypsum ceiling and associated joint compound	Ceilings	Kitchen, Utility, Garage, Bathroom 1, Bathroom 2, Bathroom 3	N/A	N/A	
3	Spray-applied decorative ceiling	Ceilings	Family room, Living/Dining room, Entry, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4	N/A	N/A	
4	Basecove and mastic	Black	Kitchen	N/A	N/A	
5	Stair tread and mastic	Dark brown	Entry	N/A	N/A	
9	12" x 12" floor tile and mastic	Gray with white and dark gray spots	Family room, Utility, Living/Dining room, Entry	N/A	N/A	

S.F = Square foot

N/A = Not Applicable

H.A. = Homogeneous Area

RIBAUT BAY HOUSING PHASE II - MAYPORT NAVAL STATION

Unit Surveyed: 1065B - (Four Bedroom Unit)

Inspector: Mike Spradling

Date of Survey: August 23 - October 1, 1995

H.A.	Material	Description	Location	Quantity	Condition	Comments
13	Asphalt shingle roof	Gray	Roof	N/A	N/A	
14	Vapor barrier, tar paper	Black	Interior of exterior walls	N/A	N/A	
15	12" x 12" floor tile and mastic	Wood parquet pattern	Kitchen	N/A	N/A	

S.F = Square foot

N/A = Not Applicable

H.A. = Homogeneous Area

RIBAUT BAY HOUSING PHASE II - MAYPORT NAVAL STATION

Unit Surveyed: 1065C - (Four Bedroom Unit)

Inspector: David Bratley

Date of Survey: August 23 - October 1, 1995

H.A.	Material	Description	Location	Quantity	Condition	Comments
<u>IDENTIFIED ASBESTOS-CONTAINING MATERIALS</u>						
6	12" x 12" floor tile and mastic	Cream with tan streaks	Family room, Utility, Living/Dining room, Entry, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4	135 S.F.	Potential Damage	Various patches of floor tile are included with this quantity
7	12" x 12" floor tile and mastic	Gray with white and dark gray smudges	Family room, Utility, Living/Dining room, Hall, Bedroom 2, Bedroom 3, Bedroom 4	N/A	Potential Damage	This floor tile was used as a patch in various areas
8	12" x 12" floor tile and mastic	Tan with brown and white streaks	Utility	N/A	Potential Damage	This floor tile was used as a patch in various areas
10	12" x 12" floor tile and mastic	Beige with brown and white streaks	Family room, Living/Dining room, Hall, Master Bedroom	N/A	Potential Damage	This floor tile was used as a patch in various areas
11	Resilient sheet flooring	White with orange and brown pattern	Kitchen	40 S.F.	Potential Damage	Underneath cabinets
12	Light fixture insulation	White	Utility, Entry, Hall, Master Bedroom	5 Each	Significant Damage	
17	Sink mastic	Black	Kitchen	0 Each	Potential Damage	

IDENTIFIED NON-ASBESTOS-CONTAINING MATERIALS

1	Gypsum wallboard and associated joint compound	Walls	Kitchen, Family room, Utility, Garage, Living/Dining room, Entry, Bathroom 1, Bathroom 2, Bathroom 3, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4	N/A	N/A	
2	Gypsum ceiling and associated joint compound	Ceilings	Kitchen, Utility, Garage, Bathroom 1, Bathroom 2, Bathroom 3	N/A	N/A	
3	Spray-applied decorative ceiling	Ceilings	Family room, Utility, Living/Dining room, Entry, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4	N/A	N/A	
4	Basecove and mastic	Black	Kitchen	N/A	N/A	
5	Stair tread and mastic	Dark brown	Entry	N/A	N/A	
13	Asphalt shingle roof	Gray	Roof	N/A	N/A	

S.F = Square foot

N/A = Not Applicable

H.A. = Homogeneous Area

RIBAUT BAY HOUSING PHASE II - MAYPORT NAVAL STATION

Unit Surveyed: 1065C - (Four Bedroom Unit)

Inspector: David Bratley

Date of Survey: August 23 - October 1, 1995

H.A.	Material	Description	Location	Quantity	Condition	Comments
14	Vapor barrier, tar paper	Black	Interior of exterior walls	N/A	N/A	
16	12" x 12" floor tile and mastic	Beige with tan, white, and gray spots	Kitchen	N/A	N/A	

S.F = Square foot

N/A = Not Applicable

H.A. = Homogeneous Area

RIBAUT BAY HOUSING PHASE II - MAYPORT NAVAL STATION

Unit Surveyed: 1032A - (Five Bedroom Unit)

Inspector: Mike Spradling

Date of Survey: August 23 - October 1, 1995

H.A. Material	Description	Location	Quantity	Condition	Comments	
<u>IDENTIFIED ASBESTOS-CONTAINING MATERIALS</u>						
1	12" x 12" floor tile and mastic	Cream with tan streaks	Family room, Utility, Living/Dining room, Entry, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, Bedroom 5	155 S.F.	Potential Damage	Various patches of floor tile are included with this quantity
3	12" x 12" floor tile and mastic	White with brown and gray streaks	Utility, Entry, Hall, Bedroom 4	N/A	Potential Damage	This floor tile was used as a patch in various areas
9	12" x 12" floor tile and mastic	Gray with white and dark gray smudges	Utility, Entry, Bedroom 5	N/A	Potential Damage	This floor tile was used as a patch in various areas
11	Resilient sheet flooring	White with orange and brown pattern	Kitchen	40 S.F.	Potential Damage	Underneath cabinets
12	Light fixture insulation	White	Entry, Hall	3 Each	Potential Damage	
<u>IDENTIFIED NON-ASBESTOS-CONTAINING MATERIALS</u>						
2	12" x 12" floor tile and mastic	Beige with tan, white, and gray spots	Kitchen	N/A	N/A	
4	Gypsum wallboard and associated joint compound	Walls	Kitchen, Family room, Utility, Garage, Living/Dining room, Entry, Bathroom 1, Bathroom 2, Bathroom 3, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, Bedroom 5	N/A	N/A	
5	Gypsum ceiling and associated joint compound	Ceilings	Kitchen, Utility, Bathroom 1, Bathroom 2, Bathroom 3	N/A	N/A	
6	Spray-applied decorative ceiling	Ceilings	Family room, Living/Dining room, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, Bedroom 5	N/A	N/A	
7	Basecove and mastic	Black	Kitchen	N/A	N/A	
8	Stair tread and mastic	Dark brown	Entry	N/A	N/A	
10	Asphalt shingle roof	Gray	Roof	N/A	N/A	
16	Vapor barrier, tar paper	Black	Interior of exterior walls	N/A	N/A	

S.F = Square foot

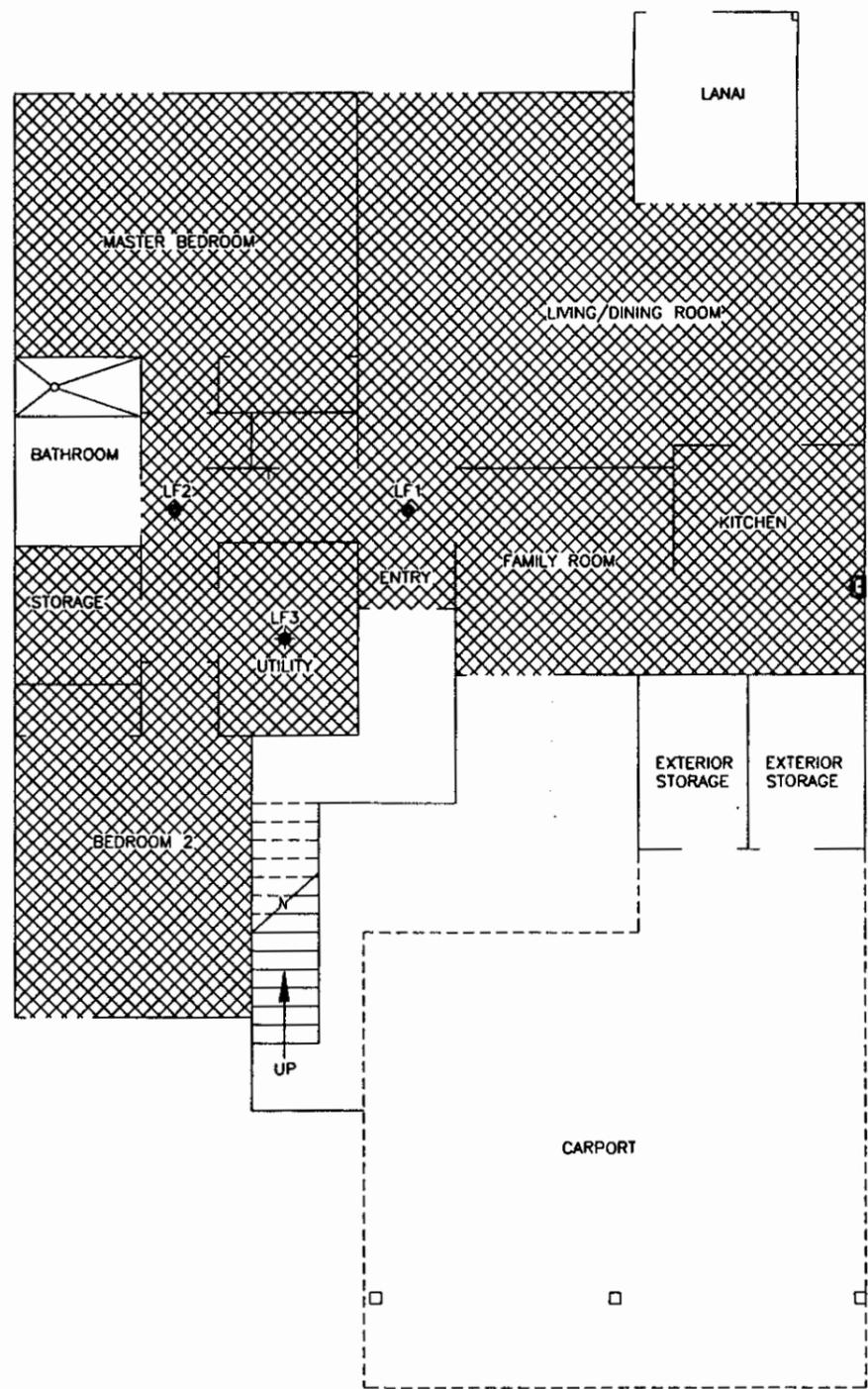
N/A = Not Applicable

H.A. = Homogeneous Area

Appendix C

Extent of Asbestos-Containing Material and Bulk Sample Locations

(Typical Housing Unit Floor Plans)



LEGEND

ASBESTOS-CONTAINING MATERIALS (ACM) IDENTIFIED - FLOORS AND WALLS

FLOOR COVERING AND MASTIC (+)

ASBESTOS-CONTAINING MATERIALS (ACM) IDENTIFIED - CEILING AND MISCELLANEOUS

B BLACK MASTIC UNDER SINK

LIGHT FIXTURE INSULATION

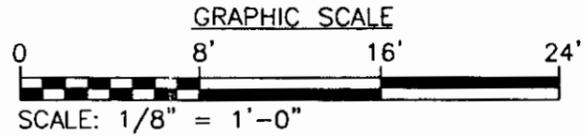
NOTE
NO ASBESTOS-CONTAINING WALL MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

NOTE
NO ASBESTOS-CONTAINING CEILING MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

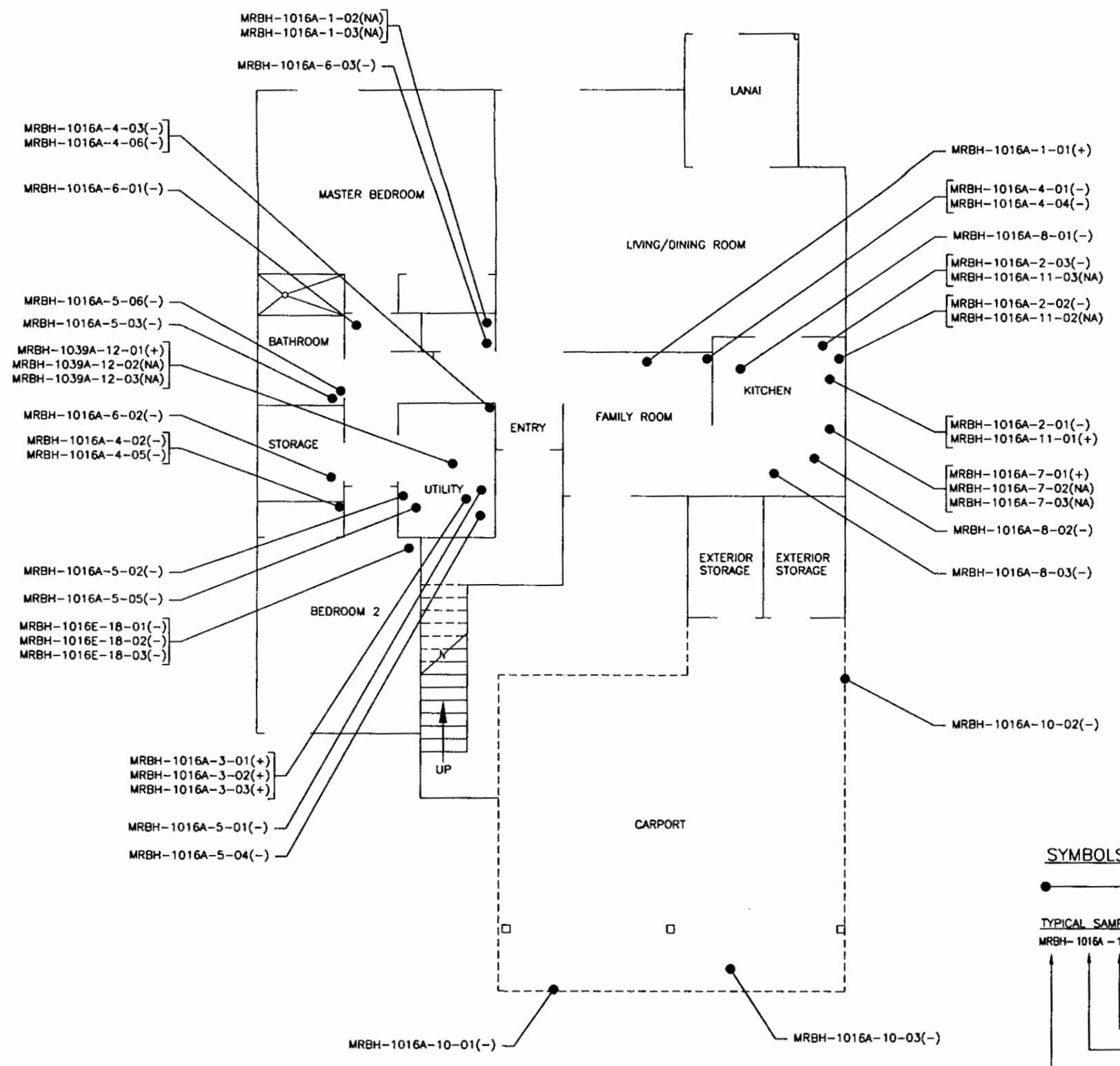
NOTE
NO ASBESTOS-CONTAINING THERMAL SYSTEM INSULATION MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

THIS DRAWING ILLUSTRATES ALL LOCATIONS OF ACM IDENTIFIED IN THIS UNIT TYPE. FOR SPECIFIC UNIT INFORMATION REFER TO APPENDIX B SUSPECT ASBESTOS-CONTAINING MATERIALS (INDIVIDUAL UNIT MATERIAL SUMMARY).

2 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING
FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"



DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	ATLANTA	CAPE ENVIRONMENTAL MANAGEMENT INC.
SOUTHERN DIVISION	CHARLESTON, S.C.	ISSN	GEORGIA
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY	AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	DR	CHK
2 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING - FIRST FLOOR PLAN	(ASBESTOS-CONTAINING MATERIALS)	SUPV./HROS	CH ENGR
APPROVED	EDD FOR COMMANDER, NAVFAC	SUBMITTED BY (FORM MEMBER-TITLE)	DATE
SEAL AREA		EC	BR NO
CODE NO.	SIZE	DATE APPROVD	OFFICER IN CHARGE
FED DRAWING NO.			PFE
STA. PROJ. NO.			
CAPE PROJ. No. 80032.001.000			
SPEC. NO. N/A			
CONSTRN. CNTR. NO. N/A			
NAVFAC DRAWING NO. N/A			
SHEET 1 OF 6			
29RASB-1			



2 BEDROOM UNIT TYPE - RIBALTBAY HOUSING
FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"

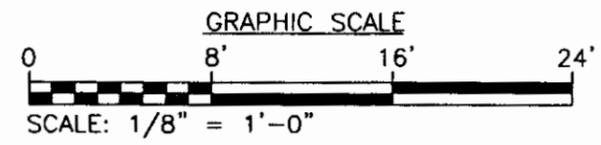


SYMBOLS

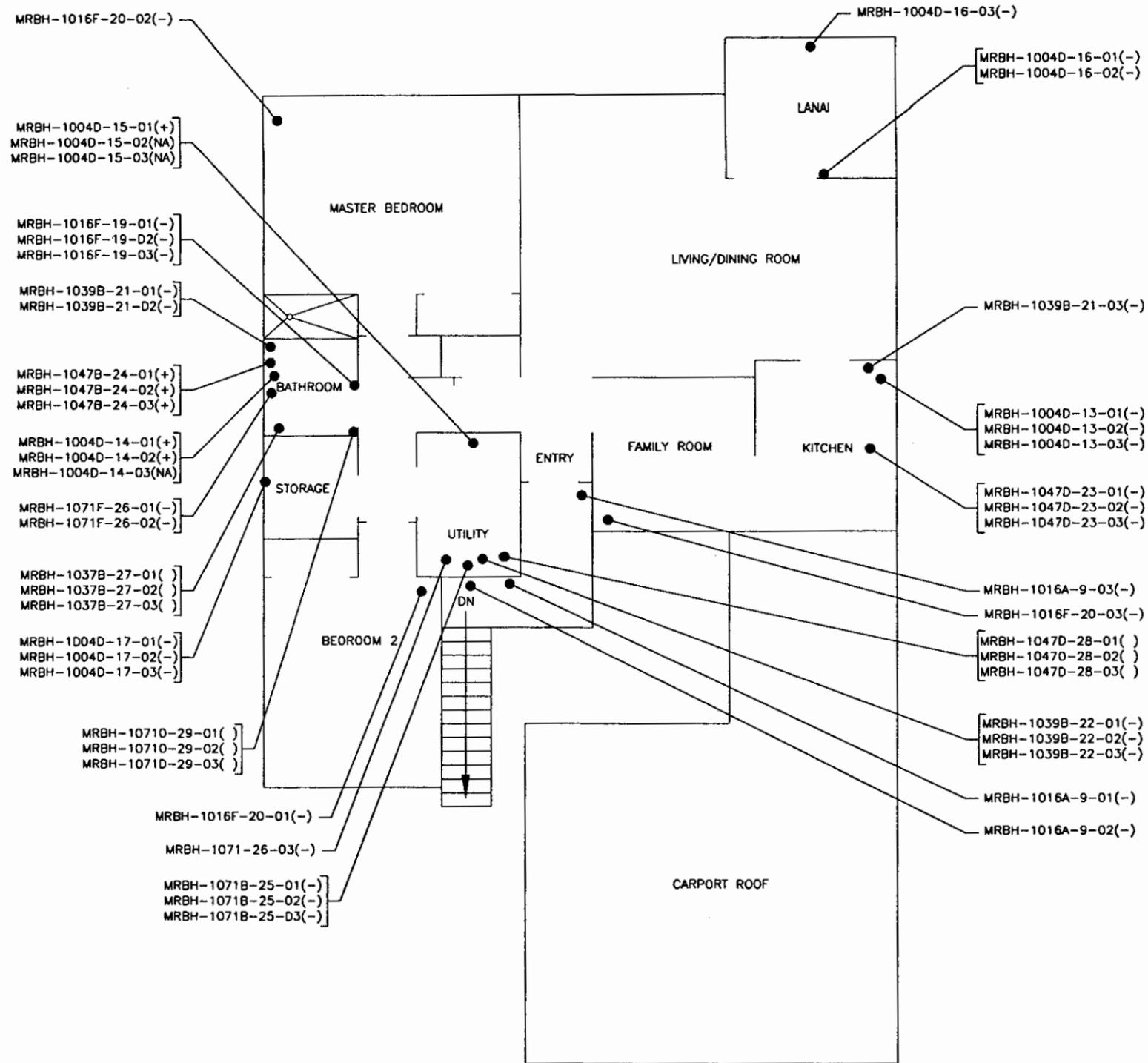
● LOCATION OF SAMPLES COLLECTED

TYPICAL SAMPLE I.D. No.

MRBH-1016A-1-01(+)
 ↑ POSITIVE (+) OR NEGATIVE (-) FOR THE PRESENCE OF ASBESTOS OR (NA) FOR NOT ANALYZED
 ↑ SAMPLE I.D. No.
 ↑ HOMOGENEOUS AREA No.
 ↑ UNIT NUMBER
 ↑ MAYPORT-RIBALTBAY HOUSING



DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	ATLANTA	CAPE ENVIRONMENTAL MANAGEMENT INC.
SOUTHERN DIVISION	CHARLESTON, S.C.	GEORGIA	
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY		DR C. BROS	DR
AT MAYPORT NAVAL STATION, JACKSONVILLE, FL		SUPPLIERS	CH ENGR
2 BEDROOM UNIT TYPE - RIBALTBAY HOUSING - FIRST FLOOR PLAN		SUBMITTED BY (PRM MEMBER-TITLE) DATE	
(BULK SAMPLES)		EC	DR TO
APPROVED	DATE	OFFICER IN CHARGE	FPE
SEAL AREA			
CODE ID.No.	SIZE		
FED DRAWING NO.			
STA. PROJ. NO.			
CAPE PRJ. No. 90032.001.000			
SPEC. NO. N/A			
CONSTR. CNTR. NO. N/A			
NAVAC DRAWING NO. N/A			
SHEET #	OF #		
2BRASB-2			



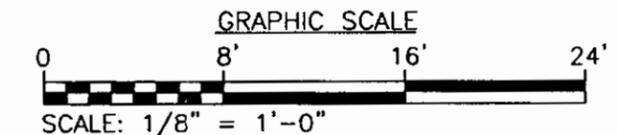
2 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"

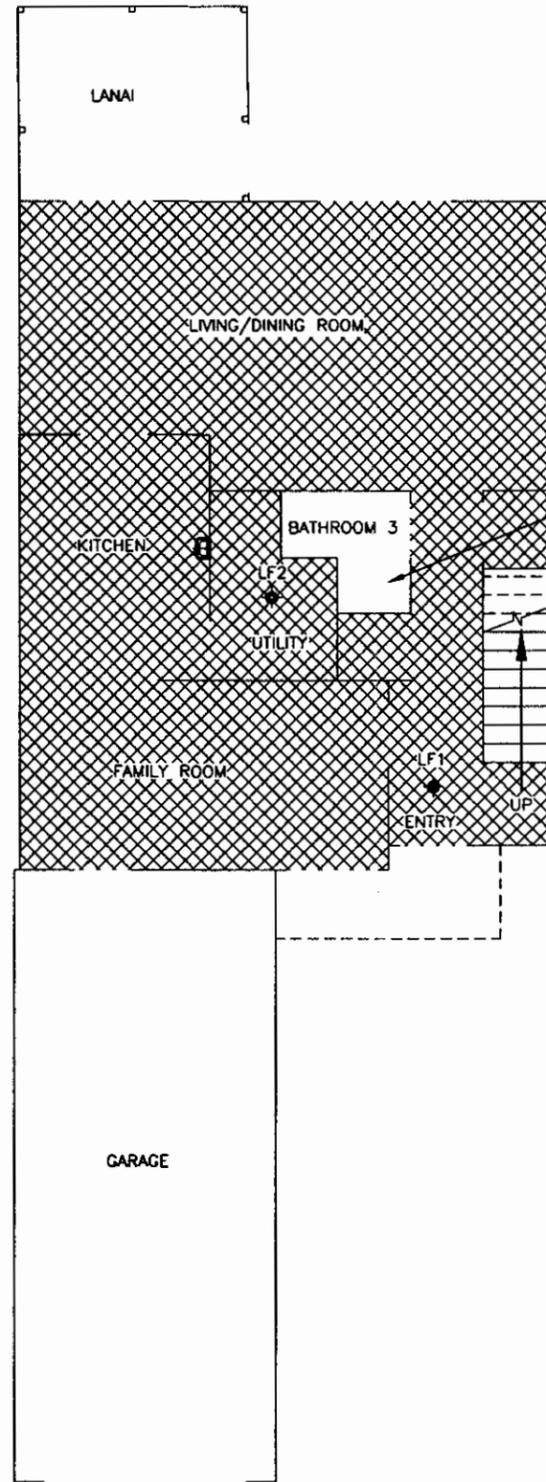


SYMBOLS

- LOCATION OF SAMPLES COLLECTED
- TYPICAL SAMPLE I.D. No.
 MRBH-1016A-1-01(+)
 ↑ SAMPLE I.D. No.
 ↑ HOMOGENEOUS AREA No.
 ↑ UNIT NUMBER
 ↑ MAYPORT-RIBAUTL BAY HOUSING
- ↑ POSITIVE (+) OR NEGATIVE (-) FOR THE PRESENCE OF ASBESTOS OR (NA) FOR NOT ANALYZED



CAPE ENVIRONMENTAL MANAGEMENT INC.		GEORGIA	
ATLANTA	DR	DR	S. BRYANT
USDA	DR	DR	C. ROOS
SUPV	H. ROOS	CH ENGR	
SUBMITTED BY (FIRM MEMBER-TITLE)		DATE	
EC	BR HO	EC	BR HO
PFE	DR	PFE	DR
DATE APPROVD	DATE	PREP BY	DATE
REV. DESCRIPTION	OFFICER IN CHARGE	DATE	APPROVED
SOUTHERN DIVISION		NAVAL FACILITIES ENGINEERING COMMAND	
CHARLESTON, S.C.		ED FOR COMMANDER, NAVFAC	
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY		AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	
2 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - SECOND FLOOR PLAN		(BULK SAMPLES)	
SCALE AREA	CODE ID No.	SIZE	B
	FED DRAWING NO.		
	STA. PROJ. NO.		
	CAPE PROJ. No. 80032.001.000		
	SPEC. NO. N/A		
	CONSTRN. CNTR. NO. N/A		
	NAVFAC DRAWING NO. N/A		
	SHEET 8 OF 8		
	2BRASB-4		



LEAD WAS IDENTIFIED IN THE CERAMIC TILE BASECOVE IN UNIT 1002F (BATHROOM 3).

LEGEND

ASBESTOS-CONTAINING MATERIALS (ACM) IDENTIFIED - FLOORS AND WALLS

 FLOOR COVERING AND MASTIC (+)

ASBESTOS-CONTAINING MATERIALS (ACM) IDENTIFIED - CEILING AND MISCELLANEOUS

 BLACK MASTIC UNDER SINK

 LIGHT FIXTURE INSULATION

NOTE

NO ASBESTOS-CONTAINING WALL MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

NOTE

NO ASBESTOS-CONTAINING CEILING MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

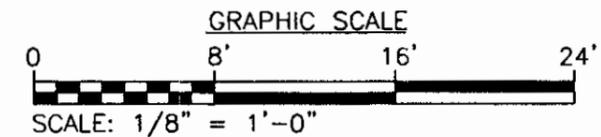
NOTE

NO ASBESTOS-CONTAINING THERMAL SYSTEM INSULATION MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

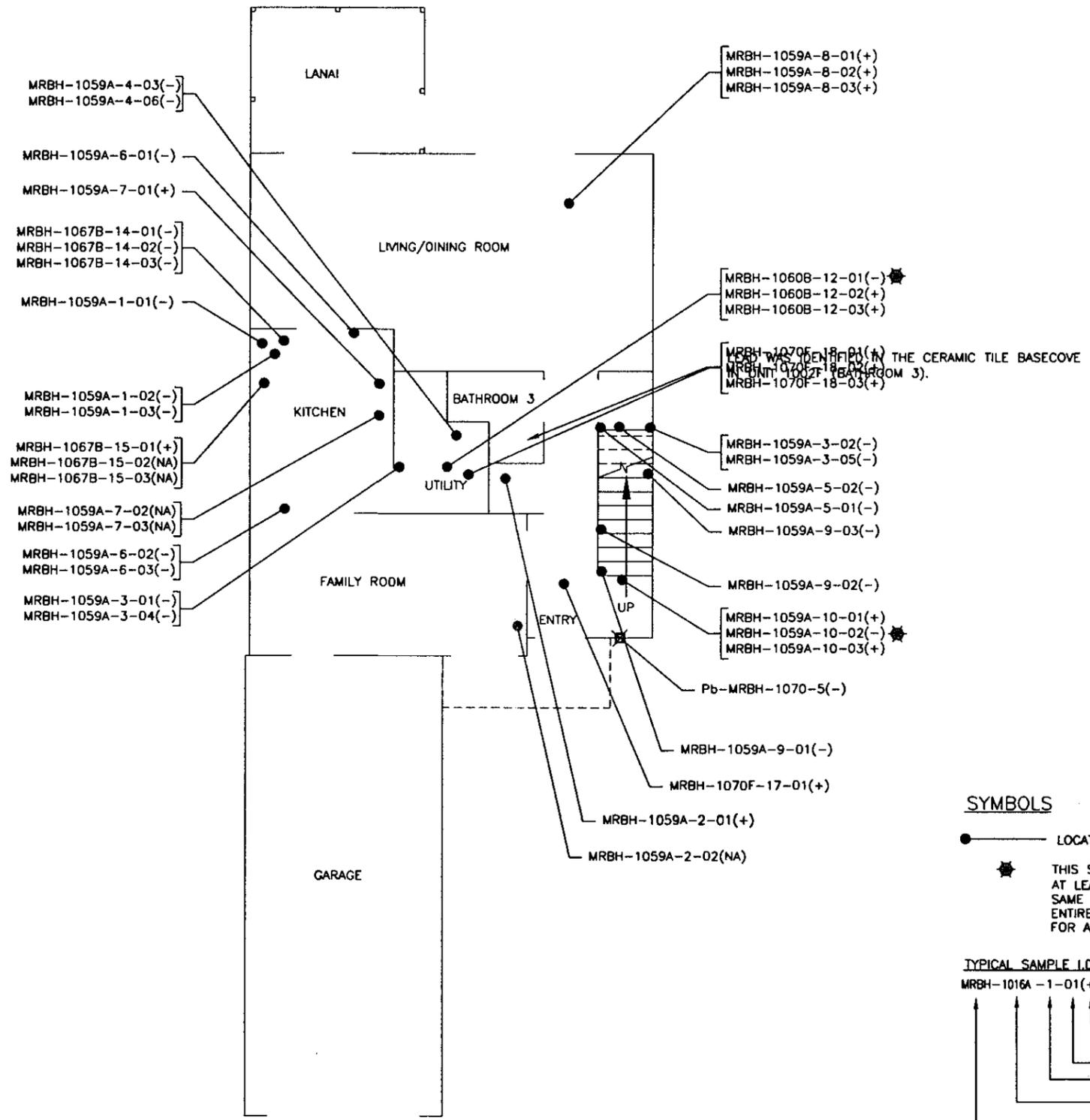
THIS DRAWING ILLUSTRATES ALL LOCATIONS OF ACM IDENTIFIED IN THIS UNIT TYPE. FOR SPECIFIC UNIT INFORMATION REFER TO APPENDIX B SUSPECT ASBESTOS-CONTAINING MATERIALS (INDIVIDUAL UNIT MATERIAL SUMMARY).

3 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"



DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	CAPE ENVIRONMENTAL MANAGEMENT INC.	ATLANTA	ATLANTA	GEORGIA
SOUTHERN DIVISION	CHARLESTON, S.C.	DESIGN	DATE	DATE	DATE
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY	AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	CH ENGR	DATE	DATE	DATE
3 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - FIRST FLOOR PLAN	(ASBESTOS-CONTAINING MATERIALS)	CH ENGR	DATE	DATE	DATE
APPROVED	ETD FOR COMMANDER, NAVFAC	DATE	DATE	DATE	DATE
SEAL AREA		DATE	DATE	DATE	DATE
CODE ID.No.	SIZE	DATE	DATE	DATE	DATE
FED DRAWING NO.		DATE	DATE	DATE	DATE
STA. PROJ. NO.		DATE	DATE	DATE	DATE
CAPE PROJ. No. 80032.001.000		DATE	DATE	DATE	DATE
SPEC. NO. N/A		DATE	DATE	DATE	DATE
CONSTR. CONTR. NO. N/A		DATE	DATE	DATE	DATE
NAVFAC DRAWING NO. N/A		DATE	DATE	DATE	DATE
SHEET 1 OF 6		DATE	DATE	DATE	DATE
JBRASB-1		DATE	DATE	DATE	DATE



MRBH-1059A-4-03(-)
MRBH-1059A-4-06(-)

MRBH-1059A-6-01(-)

MRBH-1059A-7-01(+)

MRBH-1067B-14-01(-)
MRBH-1067B-14-02(-)
MRBH-1067B-14-03(-)

MRBH-1059A-1-01(-)

MRBH-1059A-1-02(-)
MRBH-1059A-1-03(-)

MRBH-1067B-15-01(+)
MRBH-1067B-15-02(NA)
MRBH-1067B-15-03(NA)

MRBH-1059A-7-02(NA)
MRBH-1059A-7-03(NA)

MRBH-1059A-6-02(-)
MRBH-1059A-6-03(-)

MRBH-1059A-3-01(-)
MRBH-1059A-3-04(-)

MRBH-1059A-8-01(+)
MRBH-1059A-8-02(+)
MRBH-1059A-8-03(+)

MRBH-1060B-12-01(-)★
MRBH-1060B-12-02(+)
MRBH-1060B-12-03(+)

MRBH-1070F-18-03(+) THE CERAMIC TILE BASECOVE IN BATHROOM 3.

MRBH-1059A-3-02(-)
MRBH-1059A-3-05(-)

MRBH-1059A-5-02(-)
MRBH-1059A-5-01(-)
MRBH-1059A-9-03(-)

MRBH-1059A-9-02(-)

MRBH-1059A-10-01(+)
MRBH-1059A-10-02(-)★
MRBH-1059A-10-03(+)

Pb-MRBH-1070-5(-)

MRBH-1059A-9-01(-)

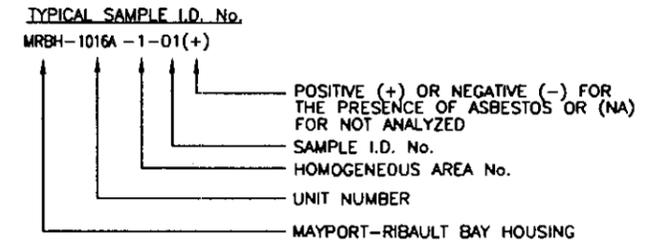
MRBH-1070F-17-01(+)

MRBH-1059A-2-01(+)

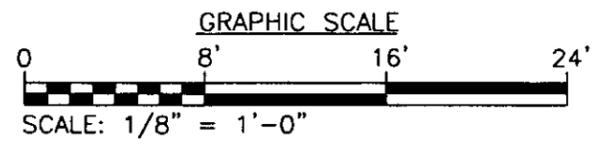
MRBH-1059A-2-02(NA)

SYMBOLS

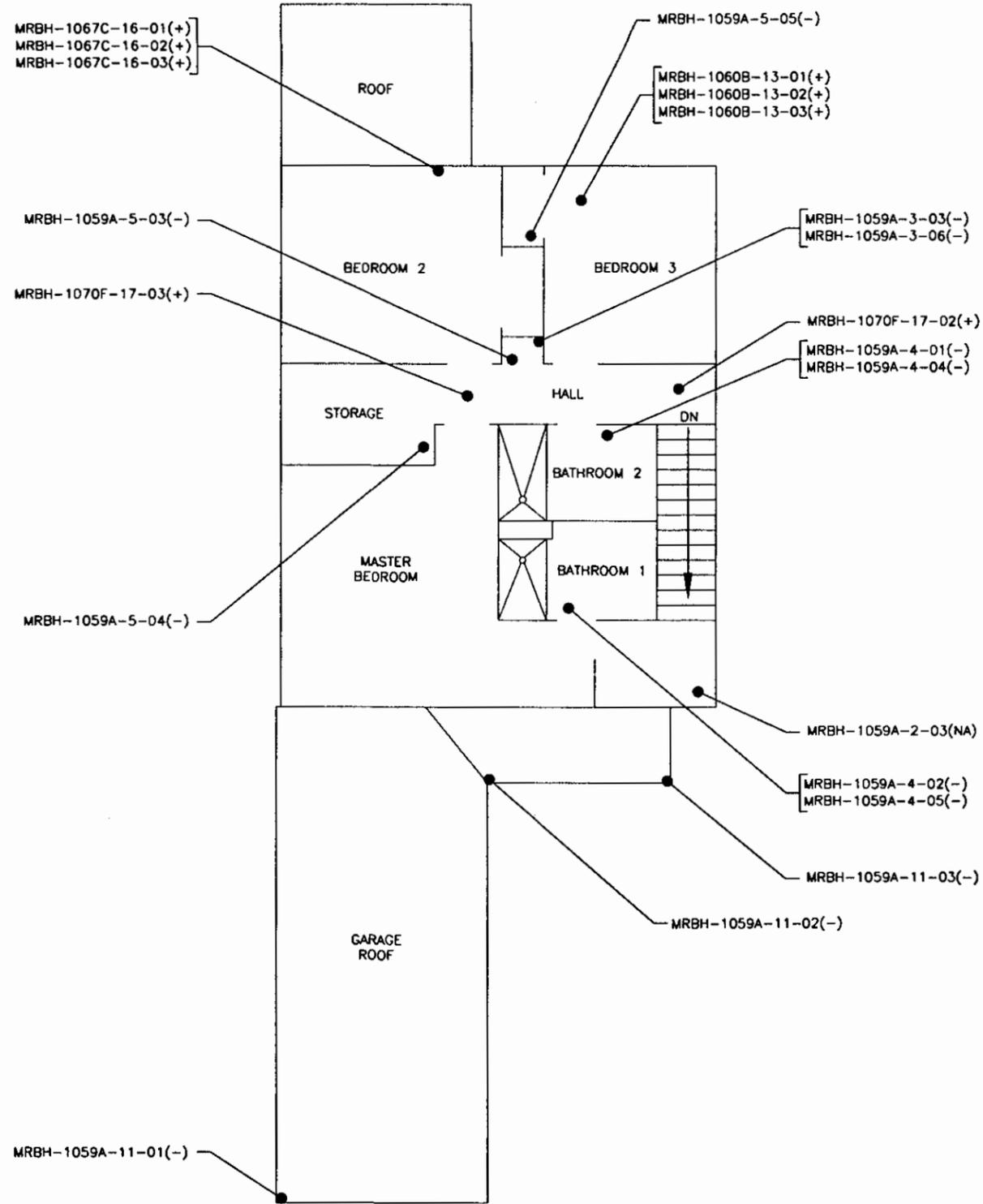
- LOCATION OF SAMPLES COLLECTED
- ★ THIS SAMPLE'S ANALYSIS RESULT IS NEGATIVE; HOWEVER, AT LEAST ONE OTHER SAMPLE'S ANALYSIS RESULT OF SAME HOMOGENEOUS MATERIAL IS POSITIVE. THEREFORE ENTIRE HOMOGENEOUS MATERIAL IS CONSIDERED POSITIVE FOR ASBESTOS CONTENT.



3 BEDROOM UNIT TYPE -- RIBAULT BAY HOUSING
FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"



DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	CAPE ENVIRONMENTAL MANAGEMENT INC.	GEORGIA
SOUTHERN DIVISION	CHARLESTON, S.C.	ATLANTA	ATLANTA
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY	AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	DR C. CROSS	DR C. CROSS
3 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING - FIRST FLOOR PLAN	(BULK SAMPLES)	SUPPLIERS CH ENGR	SUBRYANT
APPROVED	DATE	DATE	DATE
APPROVED	DATE	OFFICER IN CHARGE	DR
SCALE AREA			
CODE ID.No.	SIZE B		
FED DRAWING NO.			
STA. PROJ. NO.			
CAPE PROJ. No. 90032.001.000			
SPEC. NO. N/A			
CONSTRN. CNTR. NO. N/A			
NAVFAC DRAWING NO. N/A			
SHEET 2 OF 8			
JBRASB-2			

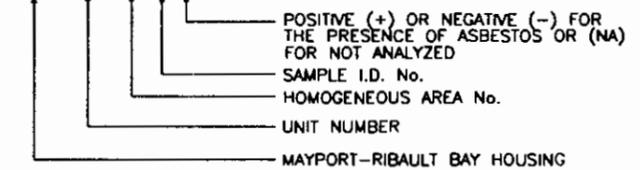


SYMBOLS

● LOCATION OF SAMPLES COLLECTED

TYPICAL SAMPLE I.D. No.

MRBH-1016A-1-01(+)

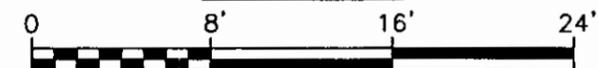


**3 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING
SECOND FLOOR PLAN**

SCALE: 1/8" = 1'-0"

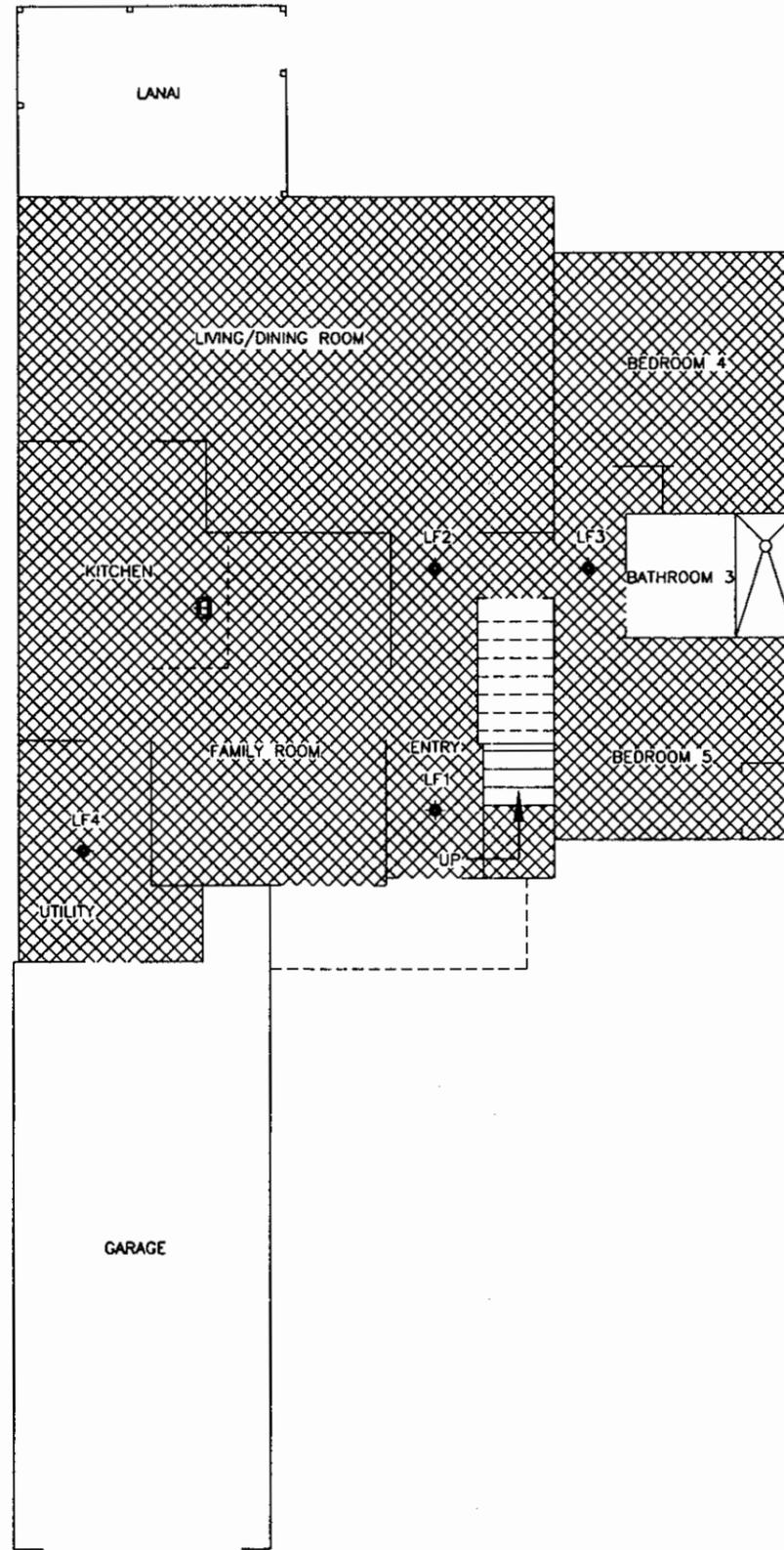


GRAPHIC SCALE



SCALE: 1/8" = 1'-0"

DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	CAPE ENVIRONMENTAL MANAGEMENT INC.	GEORGIA
SOUTHERN DIVISION	CHARLESTON, S.C.	ATLANTA	ATLANTA
REV. DESCRIPTION	PREP BY	DATE APPROV	DATE
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY AT MAYPORT NAVAL STATION, JACKSONVILLE, FL 3 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING - SECOND FLOOR PLAN (BULK SAMPLES)			
SEAL AREA	CODE No.	SIZE	B
	FED. DRAWING NO.		
	STA. PROJ. NO.		
	CAPE PROJ. No. 90032.001.000		
	SPEC. NO. N/A		
	CONSTR. CONTR. NO. N/A		
	NAVFAC DRAWING NO. N/A		
	SHEET 3	OF 4	
	JBRASB-4		



THIS DRAWING ILLUSTRATES ALL LOCATIONS OF ACM IDENTIFIED IN THIS UNIT TYPE. FOR SPECIFIC UNIT INFORMATION REFER TO APPENDIX B SUSPECT ASBESTOS-CONTAINING MATERIALS (INDIVIDUAL UNIT MATERIAL SUMMARY).

5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"



LEGEND

ASBESTOS-CONTAINING MATERIALS (ACM) IDENTIFIED - FLOORS AND WALLS

FLOOR COVERING AND MASTIC (+)

ASBESTOS-CONTAINING MATERIALS (ACM) IDENTIFIED - CEILING AND MISCELLANEOUS

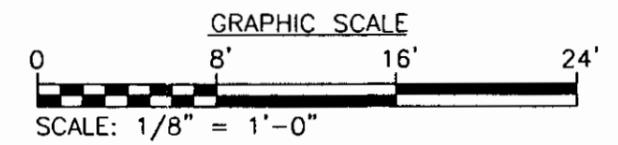
BLACK MASTIC UNDER SINK

LIGHT FIXTURE INSULATION

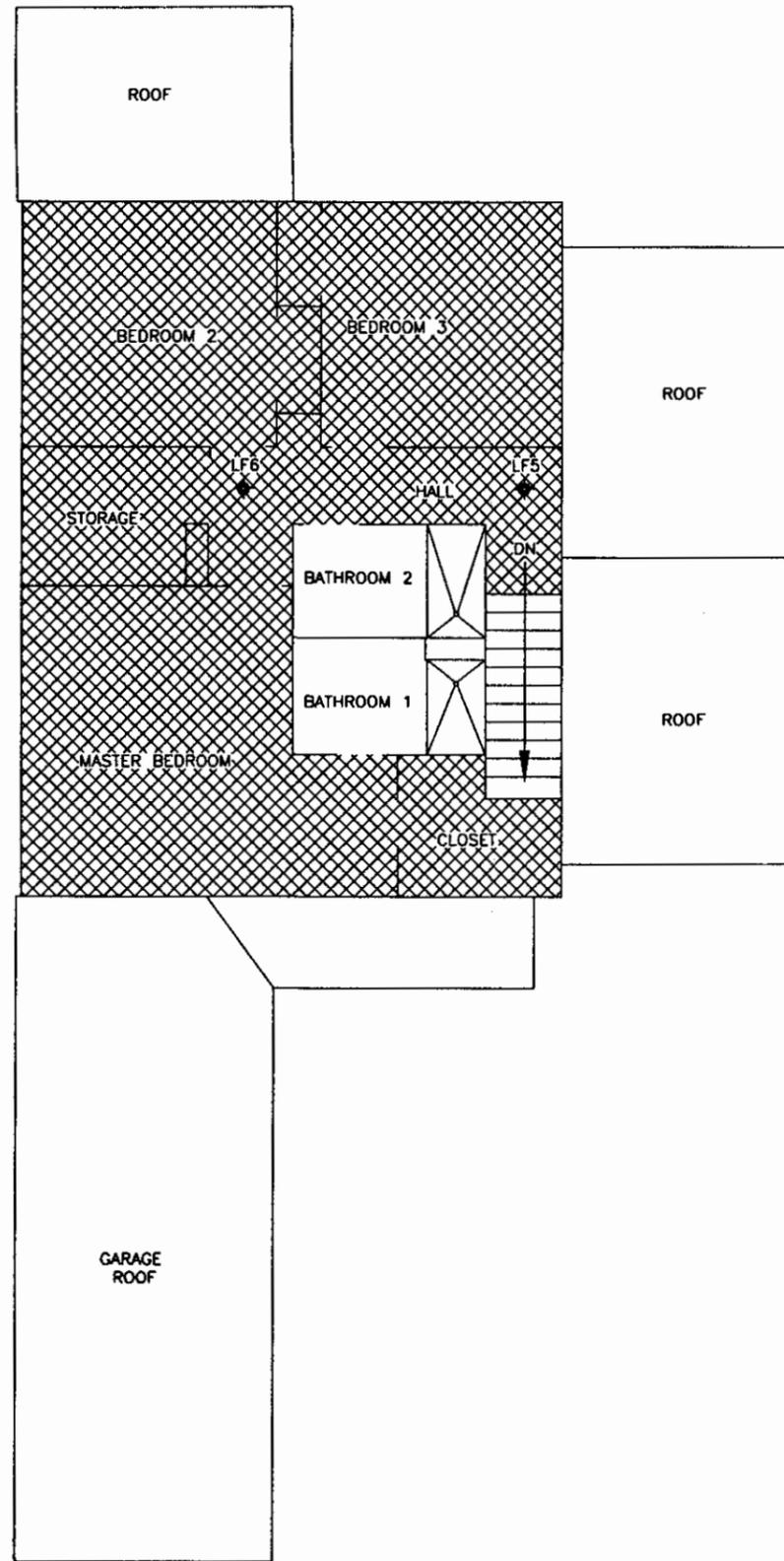
NOTE
 NO ASBESTOS-CONTAINING WALL MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

NOTE
 NO ASBESTOS-CONTAINING CEILING MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

NOTE
 NO ASBESTOS-CONTAINING THERMAL SYSTEM INSULATION MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.



DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	ATLANTA	DATE APPROV'D
SOUTHERN DIVISION	CHARLESTON, S.C.	USNR	PREP BY
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - FIRST FLOOR PLAN (ASBESTOS-CONTAINING MATERIALS)	DR C. BOOS	DATE
		CH ENGR	OFFICER IN CHARGE
		SUBMITTED BY (FORM MEMBER-TITLE)	DATE
		EC	BR NO
		DR	DR
		APPROVED	
SCALE AREA			
CODE ID No.	SIZE		
FED DRAWING NO.			
STA. PROJ. NO.			
CAPE PROJ. No. 90032.001.000			
SPEC. NO. N/A			
CONSTR. CONTR. NO. N/A			
NAVFAC DRAWING NO. N/A			
SHEET 1 OF 8			
SBRASB-1			



LEGEND
 ASBESTOS-CONTAINING MATERIALS (ACM)
 IDENTIFIED - FLOORS AND WALLS

 FLOOR COVERING AND MASTIC (+)

LEGEND
 ASBESTOS-CONTAINING MATERIALS (ACM)
 IDENTIFIED - CEILING AND MISCELLANEOUS

 LIGHT FIXTURE INSULATION

NOTE
 NO ASBESTOS-CONTAINING WALL MATERIALS WERE IDENTIFIED
 IN THIS UNIT TYPE.

NOTE
 NO ASBESTOS-CONTAINING CEILING MATERIALS WERE IDENTIFIED
 IN THIS UNIT TYPE.

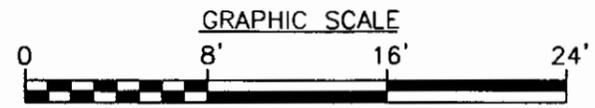
NOTE
 NO ASBESTOS-CONTAINING THERMAL SYSTEM INSULATION MATERIALS
 WERE IDENTIFIED IN THIS UNIT TYPE.

NOTE
 NO ASBESTOS-CONTAINING ROOFING MATERIALS
 WERE IDENTIFIED IN THIS UNIT TYPE.

THIS DRAWING ILLUSTRATES ALL LOCATIONS OF ACM IDENTIFIED
 IN THIS UNIT TYPE. FOR SPECIFIC UNIT INFORMATION REFER TO
 APPENDIX B SUSPECT ASBESTOS-CONTAINING MATERIALS
 (INDIVIDUAL UNIT MATERIAL SUMMARY).

5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"



DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	REV. DESCRIPTION	PREP BY	DATE APPROV	CAPE ENVIRONMENTAL MANAGEMENT INC.
SOUTHERN DIVISION	ATLANTA				ATLANTA
CHARLESTON, S.C.	TSOR				GEORGIA
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY	DK				CRK
AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	C. RYOS				S. BRYANT
5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - SECOND FLOOR PLAN	SUPV. RYOS				CH ENGR
(ASBESTOS-CONTAINING MATERIALS)	DATE				SUBMITTED BY (FIRM MEMBER-TITLE)
APPROVED	DATE				EC
EDD FOR COMMANDER, NAVFAC	OFFICER IN CHARGE				BR NO
	APPROVED				DIR
SEAL AREA					
CODE ID No.	SIZE				
FED DRAWING NO.					
STA. PROJ. NO.					
CAPE PROJ. No. 90032.001.000					
SPEC. NO. N/A					
CONSTRN. CNTR. NO. N/A					
NAVFAC DRAWING NO. N/A					
SHEET 4 OF 8					
SBRASB-3					

Appendix D

Laboratory Analysis Reports of Suspect ACM Bulk Samples

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME : MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1065B-15-01 AES LAB NO : 135643 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - DARK GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, GLUE & LATEX
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	40
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	10
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	46
ANTIGORITE			

COMMENTS : LATEX INCLUDED AS RESILIENT.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MR ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME : MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1065B-15-02 AES LAB NO : 135644 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - DARK GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, GLUE & LATEX
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	40
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	10
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	46
ANTIGORITE			

COMMENTS : LATEX INCLUDED AS RESILIENT.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CY NT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1065B-15-03 AES LAB NO : 135645 AES JOB NO : B9080

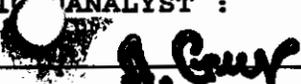
SAMPLE LOCATION :

SAMPLE - DARK GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, GLUE & LATEX
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	40
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	10
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	46
ANTIGORITE			

COMMENTS : LATEX INCLUDED AS RESILIENT.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MIC ANALYST :

 ARKADIY BENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-1-01 AES LAB NO : 135646 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - BEIGE HARD COMPACT PARTLY GRANULAR WITH FIBERS & BLACK MASTIC.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE	5	VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	40
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	1
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	
ANIMAL HAIR		BINDERS	52
ANTIGORITE			

COMMENTS : FLOOR TILE CONTAINS 5% CHRYBOTILE.
 BITUMEN CONTAINS 3% CHRYBOTILE.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST : *A. Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY : *S. Arkhipov*
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-2-01 AES LAB NO : 135649 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - BEIGE HARD COMPACT PARTLY GRANULAR WITH FIBERS & GLUE.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	51
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
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 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-2-02 AES LAB NO : 135650 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - BEIGE HARD COMPACT PARTLY GRANULAR WITH FIBERS & GLUE.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	51
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MICROANALYST


ARKADIY GENDLIN

QUALITY CONTROL BY :


SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-2-03 AES LAB NO : 135651 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - BEIGE HARD COMPACT PARTLY GRANULAR WITH FIBERS & GLUE.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	51
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CITY NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-3-01 AES LAB NO : 135652 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, BLACK MASTIC &
 DESCRIPTION GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	< 1
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	51
ANTIGORITE			

COMMENTS : BITUMEN IS NOT ENOUGH TO BE ANALYZED.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CITY NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-3-02 AES LAB NO : 135653 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, BLACK MASTIC &
 DESCRIPTION GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	< 1
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	51
ANTIGORITE			

COMMENTS : BITUMEN IS NOT ENOUGH TO BE ANALYZED.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST : *A. Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY : *Svetlana Arkhipov*
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-3-03 AES LAB NO : 135654 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, BLACK MASTIC &
 DESCRIPTION GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	< 1
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	51
ANTIGORITE			

COMMENTS : BITUMEN IS NOT ENOUGH TO BE ANALYZED.

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ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CITY NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-4-01 AES LAB NO : 135655 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
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 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99
 PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000
 SAMPLE ID : MRBH-1032A-4-02 AES LAB NO : 135656 AES JOB NO : B9080
 SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST:


 ARKADIY GENDLIN

QUALITY CONTROL BY :


 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99
 PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000
 SAMPLE ID : MRBH-1032A-4-03 AES LAB NO : 135657 AES JOB NO : B9080
 SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-4-04 AES LAB NO : 135658 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT BROWN SOFT FIBROUS WITH PAINT;
 DESCRIPTION 2) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	75
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99
 PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000
 SAMPLE ID : MRBH-1032A-4-05 AES LAB NO : 135659 AES JOB NO : B9080
 SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	2
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	73
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CITY NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-4-06 AES LAB NO : 135660 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	2
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	73
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST : A. Gendlin
 ARKADIY GENDLIN

QUALITY CONTROL BY : S. Arkhipov
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CITY NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99
 PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000
 SAMPLE ID : MRBH-1032A-5-01 AES LAB NO : 135661 AES JOB NO : B9080
 SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	15	GLUE	
ANIMAL HAIR		BINDERS	82
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST

Arkadiy Gendlin

ARKADIY GENDLIN

QUALITY CONTROL BY :

Svetlana Arkhipov

SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME : MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-5-02 AES LAB NO : 135662 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-5-03 AES LAB NO : 135663 AES JOB NO : B9080

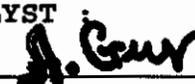
SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

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TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. **DATE :** 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-5-04 **AES LAB NO :** 135664 **AES JOB NO :** B9080

SAMPLE LOCATION :

SAMPLE DESCRIPTION - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ME ANALYST :
A. Gendlin
 ARKADIY GENDLIN

QUALITY CONTROL BY :
S. Arkhipov
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-5-05 AES LAB NO : 135665 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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MI ANALYST : *A. Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY : *S. Arkhipov*
 SVETLANA ARKHIPOV

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 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CY NT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-5-06 AES LAB NO : 135666 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
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 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME : MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-6-01 AES LAB NO : 135667 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS & MICA.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	10
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS	5	RESILIENT MATERIAL	
CELLULOSE	20	GLUE	
ANIMAL HAIR		BINDERS	65
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ME ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CITY NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-6-02 AES LAB NO : 135668 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
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 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME : MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-6-03 AES LAB NO : 135669 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST: 

 ARKADIY GENDLIN

QUALITY CONTROL BY : 

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
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 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-6-04 AES LAB NO : 135670 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA,
 DESCRIPTION STYROFOAM & PAINT; 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	5
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	20	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST : 
 ARKADIY GENDLIN

QUALITY CONTROL BY : 
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME : MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-6-05 AES LAB NO : 135671 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA,
 DESCRIPTION STYROFOAM & PAINT; 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	5
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	20	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST : 
 ARKADIY GENDLIN

QUALITY CONTROL BY : 
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-7-01 AES LAB NO : 135672 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - BLACK SEMI-HARD RESILIENT WITH FIBERS & GLUE.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	95
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	1
ANTIGORITE			

COMMENTS :

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ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME : MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-7-02 AES LAB NO : 135673 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - BLACK SEMI-HARD RESILIENT WITH FIBERS & GLUE.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	95
CELLULOSE	1	GLUE	1
ANIMAL HAIR		BINDERS	2
ANTIGORITE			

COMMENTS :

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ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
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 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-7-03 AES LAB NO : 135674 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - BLACK SEMI-HARD RESILIENT WITH FIBERS & GLUE.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	95
CELLULOSE	1	GLUE	1
ANIMAL HAIR		BINDERS	2
ANTIGORITE			

COMMENTS :

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ANALYST:


ARKADIY GENDLIN

QUALITY CONTROL BY:


SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
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 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-8-01 AES LAB NO : 135675 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - DARK BROWN SEMI-HARD RESILIENT WITH FIBERS & GLUE.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	95
CELLULOSE	1	GLUE	< 1
ANIMAL HAIR		BINDERS	3
ANTIGORITE			

COMMENTS :

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ANALYST : *A. Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY : *S. Arkhipov*
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CUSTOMER NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-8-02 AES LAB NO : 135676 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - DARK BROWN SEMI-HARD RESILIENT WITH FIBERS & GLUE.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	95
CELLULOSE	1	GLUE	< 1
ANIMAL HAIR		BINDERS	3
ANTIGORITE			

COMMENTS :

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ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

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 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-8-03 AES LAB NO : 135677 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - DARK BROWN SEMI-HARD RESILIENT WITH FIBERS & GLUE.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	95
CELLULOSE	1	GLUE	1
ANIMAL HAIR		BINDERS	2
ANTIGORITE			

COMMENTS :

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ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME : MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-9-01 AES LAB NO : 135678 AES JOB NO : B9080

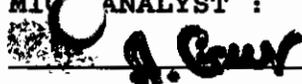
SAMPLE LOCATION :

SAMPLE - GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, BLACK MASTIC &
 DESCRIPTION GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE	< 1	VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	1
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	3
ANIMAL HAIR		BINDERS	49
ANTIGORITE			

COMMENTS : BITUMEN CONTAINS 3% CHRYSTILE.
 FLOOR TILE & GLUE DO NOT CONTAIN ASBESTOS.

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MIC ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY:

 SVETLANA ARKHIPOV

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-9-02 AES LAB NO : 135679 AES JOB NO : B9080

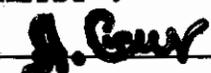
SAMPLE LOCATION :

SAMPLE - GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, BLACK MASTIC &
 DESCRIPTION GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE	< 1	VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	1
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	3
ANIMAL HAIR		BINDERS	49
ANTIGORITE			

COMMENTS : BITUMEN CONTAINS 3% CHRYSTILE.
 FLOOR TILE & GLUE DO NOT CONTAIN ASBESTOS.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MIQ ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CUSTOMER NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99
 PROJECT NAME : MAYPORT NS - R.B. HOUSING / 90032.001.000
 SAMPLE ID : MRBH-1032A-9-03 AES LAB NO : 135680 AES JOB NO : B9080
 SAMPLE LOCATION :

SAMPLE - LAYERED: 1) GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS,
 DESCRIPTION BLACK MASTIC & GLUE;
 2) GRAY SEMI-HARD PARTLY GRANULAR WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTOTILE	< 1	VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	1
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	5
ANIMAL HAIR		BINDERS	47
ANTIGORITE			

COMMENTS : LAYERS #1: BITUMEN CONTAINS 3% CHYSOTILE. FLOOR TILE & GLUE DO NOT CONTAI ASBESTOS. LAYER #2 DOES NOT CONTAIN ASBESTOS.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99
 PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000
 SAMPLE ID : MRBH-1032A-10-01 AES LAB NO : 135681 AES JOB NO : B9080
 SAMPLE LOCATION :

SAMPLE - LAYERED: 1) GRAY SEMI-HARD PARTLY GRANULAR TO BITUMENOUS;
 DESCRIPTION 2) BLACK SEMI-HARD BITUMENOUS TO FIBROUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	15
INOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	55
FIBERGLASS	25	RESILIENT MATERIAL	
CELLULOSE		GLUE	
ANIMAL HAIR		BINDERS	5
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MICROANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CITY NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-10-02 AES LAB NO : 135682 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) GRAY SEMI-HARD PARTLY GRANULAR TO BITUMENOUS;
 DESCRIPTION 2) BLACK SEMI-HARD BITUMENOUS TO FIBROUS;
 3) BLACK SEMI-HARD FIBROUS TO BITUMENOUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	15
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	50
FIBERGLASS	25	RESILIENT MATERIAL	
CELLULOSE	5	GLUE	
ANIMAL HAIR		BINDERS	5
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST : *Arkadiy Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY : *Svetlana Arkhipov*
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. **DATE :** 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-10-03 **AES LAB NO :** 135683 **AES JOB NO :** B9080

SAMPLE LOCATION :

SAMPLE - DESCRIPTION LAYERED: 1) GRAY SEMI-HARD PARTLY GRANULAR TO BITUMENOUS;
 2) BLACK SEMI-HARD BITUMENOUS TO FIBROUS;
 3) BLACK SEMI-HARD FIBROUS TO BITUMENOUS.

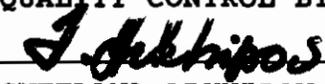
RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	10
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	50
FIBERGLASS	20	RESILIENT MATERIAL	
CELLULOSE	15	GLUE	
ANIMAL HAIR		BINDERS	5
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-11-01 AES LAB NO : 135684 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) BEIGE SEMI-HARD RESILIENT;
 DESCRIPTION 2) GRAY SOFT FIBROUS TO SILTY WITH GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE	25	VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	50
CELLULOSE		GLUE	5
ANIMAL HAIR		BINDERS	20
ANTIGORITE			

COMMENTS : LAYER #2 CONTAINS 50% CHRYSTILE.
 GLUE & LAYER #1 DO NOT CONTAIN ASBESTOS.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

CAPE ENVIRONMENTAL MANAGEMENT INC

2302 Parklake Drive, Suite 200, Atlanta, GA 30345

770/908-7200 Fax 770/908-7219

CHAIN OF CUSTODY

LABORATORY NAME: Analytical Environmental Services, Inc. (AES)			
CLIENT NAME	Southern Division NAVY	PROJECT MANAGER:	Scott Bryant
PROJECT NAME:	Mayport NS - R.B. Housin	PROJECT NUMBER:	90032.001.000
ANALYSIS REQUESTED:	PLM <input checked="" type="checkbox"/>	OTHER:	
TURNAROUND TIME REQUESTED:	SAME DAY <input type="checkbox"/>	NEXT DAY <input type="checkbox"/>	3 DAYS <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/>
INSTRUCTIONS:	ANALYZE ALL <input type="checkbox"/>	STOP POSITIVE <input checked="" type="checkbox"/>	

SAMPLE ID		SAMPLE ID	
1	MRBH-1032A-1-01	16	MRBH-1032A-5-01
2	MRBH-1032A-1-02	17	MRBH-1032A-5-02
3	MRBH-1032A-1-03	18	MRBH-1032A-5-03
4	MRBH-1032A-2-01	19	MRBH-1032A-5-04
5	MRBH-1032A-2-02	20	MRBH-1032A-5-05
6	MRBH-1032A-2-03	21	MRBH-1032A-5-06
7	MRBH-1032A-3-01	22	MRBH-1032A-6-01
	MRBH-1032A-3-02	23	MRBH-1032A-6-02
9	MRBH-1032A-3-03	24	MRBH-1032A-6-03
10	MRBH-1032A-4-01	25	MRBH-1032A-6-04
11	MRBH-1032A-4-02	26	MRBH-1032A-6-05
12	MRBH-1032A-4-03	27	MRBH-1032A-7-01
13	MRBH-1032A-4-04	28	MRBH-1032A-7-02
14	MRBH-1032A-4-05	29	MRBH-1032A-7-03
15	MRBH-1032A-4-06	30	MRBH-1032A-8-01

SPECIAL INSTRUCTIONS:

RELINQUISHED BY: <i>[Signature]</i>	RECEIVED BY:
DATE: 30-Aug-99 TIME: 1900	DATE: TIME:
RELINQUISHED BY:	RECEIVED BY:
DATE: TIME:	DATE: TIME:
RELINQUISHED BY:	RECEIVED BY: <i>[Signature]</i>
DATE: TIME:	DATE: 8/31/99 TIME: 9:00am

CAPE ENVIRONMENTAL MANAGEMENT INC

2302 Parklake Drive, Suite 200, Atlanta, GA 30345

770/908-7200 Fax 770/908-7219

CHAIN OF CUSTODY

LABORATORY NAME: **Analytical Environmental Services, Inc. (AES)**

CLIENT NAME	Southern Division NAVY	PROJECT MANAGER:	Scott Bryant
PROJECT NAME:	Mayport NS - R.B. Housin	PROJECT NUMBER:	90032.001.000
ANALYSIS REQUESTED:	PLM <input checked="" type="checkbox"/>	OTHER:	
TURNAROUND TIME REQUESTED:	SAME DAY <input type="checkbox"/>	NEXT DAY <input type="checkbox"/>	3 DAYS <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/>
INSTRUCTIONS:	ANALYZE ALL <input type="checkbox"/>	STOP POSITIVE <input checked="" type="checkbox"/>	

SAMPLE ID		SAMPLE ID	
1	MRBH-1032A-8-02	16	MRBH-1069A-13-02
2	MRBH-1032A-8-03	17	MRBH-1069A-13-03
3	MRBH-1032A-9-01	18	MRBH-1069A-14-01
4	MRBH-1032A-9-02	19	MRBH-1069A-14-02
5	MRBH-1032A-9-03	20	MRBH-1069A-14-03
6	MRBH-1032A-10-01	21	MRBH-1069A-15-01
7	MRBH-1032A-10-02	22	MRBH-1069A-15-02
	MRBH-1032A-10-03	23	MRBH-1069A-15-03
9	MRBH-1032A-11-01	24	MRBH-1069A-16-01
10	MRBH-1032A-11-02	25	MRBH-1069A-16-02
11	MRBH-1032A-11-03	26	MRBH-1069A-16-03
12	MRBH-1032A-12-01	27	
13	MRBH-1032A-12-02	28	
14	MRBH-1032A-12-03	29	
15	MRBH-1069A-13-01	30	

SPECIAL INSTRUCTIONS:

RELINQUISHED BY: <i>[Signature]</i>	RECEIVED BY:
DATE: 30-Aug-99 TIME: 1900	DATE: TIME:
RELINQUISHED BY:	RECEIVED BY:
DATE: TIME:	DATE: TIME:
RELINQUISHED BY:	RECEIVED BY: <i>[Signature]</i>
DATE: TIME:	DATE: 8/31/99 TIME: 9:00am

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B9232
PROJECT NAME: MAYPORT NS - R.B. HOUSING DATE RECEIVED: 9/1/99
PROJECT NO: 90032.001.000 REPORT ISSUED: 9/7/99
SAMPLE FIELD ID: QC-MRBH-1032A-2-01 LAB ID: 916403
SAMPLE INFO: - DATE ANALYZED: 9/3/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY HARD RESILIENT TO GRANULAR WITH GLUE

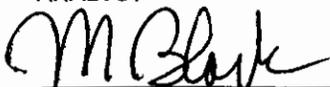
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLITE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	35
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	1
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	64

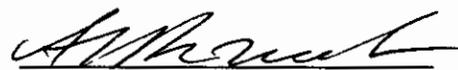
COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 9/3/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST


MICHAEL BLACK

QUALITY CONTROL


ALEKSEY REZNIK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B9232
PROJECT NAME: MAYPORT NS - R.B. HOUSING DATE RECEIVED: 9/1/99
PROJECT NO: 90032.001.000 REPORT ISSUED: 9/7/99
SAMPLE FIELD ID: QC-MRBH-1032A-5-01 LAB ID: 916404
SAMPLE INFO: - DATE ANALYZED: 9/3/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 1+2+3 NO. OF LAYERS: 3
APPEARANCE: 1. WHITE HARD SILTY WITH MICA (J/C) AND PAINT; 2.GRAY SOFT FIBROUS; 3. LIGHT GRAY HARD SILTY WITH FIBERS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLITE		CELLULOSE	15	VERMICULITE/MICA	2	BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	83

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 9/3/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST

M Black

MICHAEL BLACK

QUALITY CONTROL

Aleksey Reznik

ALEKSEY REZNIK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B9232
PROJECT NAME: MAYPORT NS - R.B. HOUSING DATE RECEIVED: 9/1/99
PROJECT NO: 90032.001.000 REPORT ISSUED: 9/7/99
SAMPLE FIELD ID: QC-MRBH-1032A-6-01 LAB ID: 916405
SAMPLE INFO: - DATE ANALYZED: 9/3/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 1+2+3 NO. OF LAYERS: 3
APPEARANCE: 1. WHITE HARD SILTY WITH MICA (J/C); 2. GRAY SOFT FIBROUS; 3. LIGHT GRAY HARD SILTY WITH FIBERS

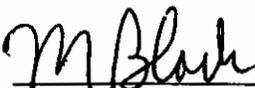
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLITE		CELLULOSE	15	VERMICULITE/MICA	3	BITUMEN/TAR	
AMOSITE		GLASS FIBERS	1	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	81

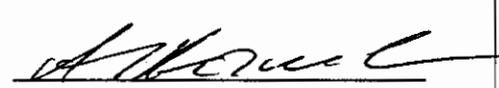
COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 9/3/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


MICHAEL BLACK

QUALITY CONTROL


ALEKSEY REZNIK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B9232
PROJECT NAME: MAYPORT NS - R.B. HOUSING DATE RECEIVED: 9/1/99
PROJECT NO: 90032.001.000 REPORT ISSUED: 9/7/99
SAMPLE FIELD ID: QC-MRBH-1032A-9-01 LAB ID: 916406-1
SAMPLE INFO: - DATE ANALYZED: 9/3/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 1 NO. OF LAYERS: 2
APPEARANCE: WHITE HARD RESILIENT TO GRANULAR

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSOITILE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	70

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 9/3/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST

M. Black
MICHAEL BLACK

QUALITY CONTROL

Aleksey Reznik
ALEKSEY REZNIK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B9232
PROJECT NAME: MAYPORT NS - R.B. HOUSING DATE RECEIVED: 9/1/99
PROJECT NO: 90032.001.000 REPORT ISSUED: 9/7/99
SAMPLE FIELD ID: QC-MRBH-1032A-9-01 LAB ID: 916406-2
SAMPLE INFO: - DATE ANALYZED: 9/3/99

SAMPLE DESCRIPTION

LAYERED: YES	LAYER NO: 2	NO. OF LAYERS: 2
APPEARANCE: MIX OF BLACK MASTIC AND GLUE		

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	<1	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	10
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	80
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	10

COMMENTS: **2% CHRYSTOLE IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 9/3/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST



MICHAEL BLACK

QUALITY CONTROL



ALEKSEY REZNIK

CAPE ENVIRONMENTAL MANAGEMENT INC

2302 Parklake Drive, Suite 200, Atlanta, GA 30345

770/908-7200

Fax 770/908-7219

CHAIN OF CUSTODY

LABORATORY NAME: Cape Environmental Management, Inc.			
CLIENT NAME: Southern Division NAVY		PROJECT MANAGER: Scott Bryant	
PROJECT NAME: Mayport NS - R.B. Housing		PROJECT NUMBER: 90032.001.000	
ANALYSIS REQUESTED: PLM <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	
TURNAROUND TIME: SAME DAY <input type="checkbox"/>		NEXT DAY <input type="checkbox"/>	
3 DAYS <input type="checkbox"/>		5 DAYS <input checked="" type="checkbox"/>	
REQUESTED: <input type="checkbox"/>		<input type="checkbox"/>	
INSTRUCTIONS: ANALYZE ALL <input type="checkbox"/>		STOP POSITIVE <input type="checkbox"/>	
SAMPLE ID		SAMPLE ID	
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2	QC-MRBH-1016A-5-01	17	QC-MRBH-1040B-14-01
3	QC-MRBH-1016A-7-01	18	QC-MRBH-1032A-2-01
4	QC-MRBH-1004D-14-01	19	QC-MRBH-1032A-5-01
5	QC-MRBH-1004D-17-01	20	QC-MRBH-1032A-6-01
6	QC-MRBH-1016F-20-01	21	QC-MRBH-1032A-9-01
7	QC-MRBH-1059A-1-01	22	QC-MRBH-1069A-13-01
8	QC-MRBH-1059A-4-01	23	QC-MRBH-1069A-16-01
9	QC-MRBH-1059A-7-01	24	
10	QC-MRBH-1059A-9-01	25	
11	QC-MRBH-1059A-10-01	26	
12	QC-MRBH-1067B-15-01	27	
13	QC-MRBH-1031E-1-01	28	
14	QC-MRBH-1031E-3-01	29	
15	QC-MRBH-1031E-6-01	30	
SPECIAL INSTRUCTIONS:			
RELINQUISHED BY: <i>MQ [Signature]</i>		RECEIVED BY: <i>[Signature]</i>	
DATE: 1-Sep-99	TIME: 800	DATE: 9-1-99	TIME: 0900
RELINQUISHED BY:		RECEIVED BY:	
DATE:	TIME:	DATE:	TIME:
RELINQUISHED BY:		RECEIVED BY:	
DATE:	TIME:	DATE:	TIME:

Appendix E

Certifications and Accreditations

The Environmental Institute

Mike Spradling

Social Security Number - 259-98-7159

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA/AHERA (TSCA Title II) Approved Reaccreditation
and NESHAPs Regulations Training*

*Asbestos in Buildings: Inspector & Management
Planner Refresher*

September 1, 1998

Course Date

5875

Certificate Number

September 1, 1998

Examination Date

August 31, 1999

Expiration Date

William H. Spain

William H. Spain - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

The Environmental Institute

Michael Spradling

Social Security Number - 259-98-7159

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA/AHERA/ASHARA (TSCA Title II) Approved Reaccreditation
and NESHAP Regulations Training*

*Asbestos in Buildings: Inspector & Management
Planner Refresher*

August 31, 1999

Course Date

6308

Certificate Number

August 31, 1999

Examination Date

August 30, 2000

Expiration Date

Thomas G. Laubenthal

Thomas G. Laubenthal - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

The Environmental Institute

W. David Bratley

Social Security Number - 594-44-4358

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA/AHERA (TSCA Title II) Approved Accreditation
and NESHAPs Regulations Training*

Asbestos in Buildings: Inspection and Assessment

December 7-9, 1998

Course Date

2519

Certificate Number

December 9, 1998

Examination Date

December 8, 1999

Expiration Date

R. A. Short

Ronald A. Short - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

The Environmental Institute

Kevin Bailey

Social Security Number - 406-11-6964

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA/AHERA (TSCA Title II) Approved Reaccreditation
and NESHAPs Regulations Training*

*Asbestos in Buildings: Inspector & Management
Planner Refresher*

December 15, 1998

Course Date

5984

Certificate Number

December 15, 1998

Examination Date

December 14, 1999

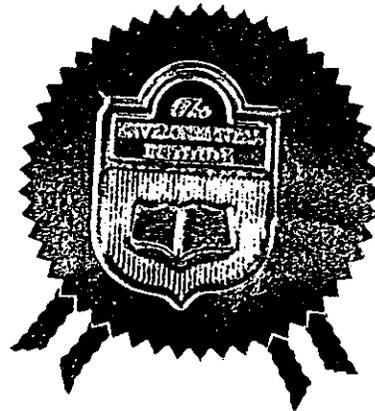
Expiration Date

R. A. Short

Ronald A. Short - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

The Environmental Institute

Mike Spradling

Social Security Number - 259-98-7159

Has completed a three-day course and satisfactorily passed an examination that meets the criteria listed for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities as regulated by Georgia DNR/EPD Chapter 371-3-24 and U.S. EPA TSCA 40 CFR Part 745 for the course titled

Lead Inspector: EPA

(Target Housing & Child-Occupied Facilities)

April 13-15, 1998

Course Date

1166

Certificate Number

April 15, 1998

Examination Date

Jeffrey B. Maurras

Jeffrey Maurras - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator



The Environmental Institute

Mike Spradling

Social Security Number - 259-98-7159

Has completed coursework and satisfactorily passed an examination that meets all criteria in accordance with requirements for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities as regulated by Georgia DNR/EPD Chapter 371-3-24 and U.S. EPA TSCA 40 CFR Part 745 for the course titled

Lead Risk Assessor: EPA
(Target Housing & Child-Occupied Facilities)

April 16-17, 1998

Course Date

1141

Certificate Number

April 17, 1998

Examination Date

Bonnie Maurras

Bonnie Maurras - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator



Certificate of Achievement

This is to certify that

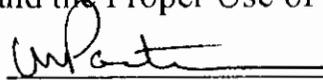
Michael J. Spradling

Cape Environmental Management, Inc.

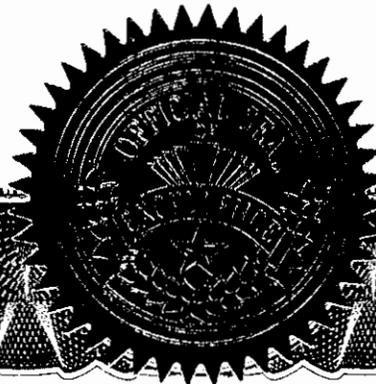
on the 26th day of February 1998 successfully completed the factory training for

RMD's LPA-1 Lead Paint Inspection System

including, but not limited to, the topics of Radiation Safety
and the Proper Use of the Instrument.



Jacob H. Paster, Vice President, RMD, Inc.
44 Hunt St., Watertown, Massachusetts



United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]

Certificate of Accreditation

ISO/IEC GUIDE 25:1990
ISO 9002:1987



ANALYTICAL ENVIRONMENTAL SERVICES, INC.
ATLANTA, GA

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation for:

BULK ASBESTOS FIBER ANALYSIS

September 30, 2000

Effective through

A handwritten signature in black ink, appearing to read "James L. Galt".

For the National Institute of Standards and Technology

NVLAP Lab Code: 102033-0

United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation



CAPE ENVIRONMENTAL MANAGEMENT, INC.
ATLANTA, GA

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation for:

BULK ASBESTOS FIBER ANALYSIS

June 30, 2000

Effective through

A handwritten signature in black ink, appearing to read "James L. Galt".

For the National Institute of Standards and Technology

NVLAP Lab Code: 102111-0

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Scope of Accreditation



Page: 1 of 1

BULK ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 102111-0

CAPE ENVIRONMENTAL MANAGEMENT, INC.

2302 Parklake Drive, Suite 200

Atlanta, GA 30345-2907

Mr. Aleksey Reznik

Phone: 770-908-7200 Fax: 770-908-7219

NVLAP Code

18/A01

Designation

U.S. EPA's "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" as found in 40 CFR, Part 763, Subpart F, App. A, or the current U.S. EPA method for the analysis of asbestos in building material.

June 30, 2000

Effective through

A handwritten signature in black ink, appearing to read 'James L. Galt', is written over a horizontal line.

For the National Institute of Standards and Technology

ATTACHMENT #8

Lead Based Paint Survey

Lead-Based Paint Survey Ribault Bay Housing Phase II Mayport Naval Station Mayport, Florida

Prepared for:

Department of the Navy
Southern Division
Naval Facilities Engineering Command
P.O. Box 190010
2155 Eagle Drive
North Charleston, SC 29419-9010

Prepared by:

BAT Associates, Inc.
5151 Brook Hollow Parkway, Suite 250 and
Norcross, GA 30071

Cape Environmental Management Inc
2302 Parklake Drive
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Atlanta, GA 30345

Contact Person:
Scott Bryant, 770/908-7200

November 1999

LEAD-BASED PAINT SURVEY REPORT

Table of Contents

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- Appendix B --- Individual Unit LBP Inspection Reports
- Appendix C --- Laboratory Report for Paint Chip Sample Analysis
- Appendix D --- Floor Plans Illustrating Extent of LBP (Typical Housing Unit Floor Plans)
- Appendix E --- Multifamily Decision Flowchart
- Appendix F --- Accreditations and Certifications

1.0 Executive Summary

Cape Environmental Management Inc (CAPE) was contracted by BAT Associates, Inc. to perform a lead-based paint (LBP) inspection for the Southern Division, Naval Facilities Engineering Command (SouthDiv NAVFACENGC) at the Ribault Bay Housing Phase II located in the Mayport Naval Station, Florida. The survey was conducted in accordance with the Housing and Urban Development (HUD), Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (1997 revision). This survey was conducted by CAPE staff industrial hygienist Mr. Mike Spradling between August 23, 1999 and October 1, 1999.

The purpose of this LBP survey was to identify the types and locations of components determined to contain lead above the HUD defined threshold of 1.0 milligrams per square centimeter (mg/cm^2).

The Ribault Bay Housing Phase II at Mayport Naval Station consists of two, three, four, and five bedroom housing units. The scope of work required that LBP inspections be conducted on a representative number of housing units as specified by BAT Associates, Inc. CAPE performed comprehensive LBP inspections of 21 2-bedroom units, 10 3-bedroom units, 8 4-bedroom units, and 8 5-bedroom units. CAPE additionally visually inspected 11 2-bedroom units, 24 3-bedroom units, 64 4-bedroom units, and 11 5-bedroom units to ensure units were similar in construction, materials, and paint history (please see page 2 for a complete list of units tested).

CAPE performed the testing for LBP using an x-ray fluorescence (XRF) analyzer in accordance with the multi-family inspection criteria outlined in the HUD Guidelines. Paint chip samples were collected for laboratory analysis to confirm XRF results when overall results were inconclusive.

After completing the comprehensive LBP surveys and additional visual inspections, the following painted components were identified as having LBP.

- Glazing on ceramic tile basecove (blue) located in unit 1002F (5 bedroom unit-type). CAPE collected 85 XRF readings for LBP on ceramic tile basecoves in the 47 units that were tested. Only unit 1002F yielded a positive XRF result. CAPE recommends testing all ceramic tile basecoves in untested units before renovation or demolition.
- Metal handrails (black) located on the second floor of the 2 bedroom unit-types. Only the second floor of the 2-bedroom units had metal handrails, and all but 1 XRF reading from this metal handrails yielded positive XRF results. Therefore all the metal handrails on the second floor of the 2-bedroom units are considered LBP

A discussion of the Lead Survey Methodology is presented in Section 2.0. A discussion of the LBP Survey Findings is presented in Section 3.0.

The following units were included in the scope of work for this project:

2 Bedroom Units		
1004A	1039C*	1071A*
1004B	1039D*	1071B*
1004C	1039E	1071C*
1004D*	1039F	1071D
1016A*	1047A*	1071E
1016B	1047B*	1071F*
1016E*	1047C	1071G
1016F*	1047D	1071H
1020A	1047E	1073A*
1020B*	1047F	1073B*
1020C	1062A	1073C
1020D	1062B	1073D
1020E*	1062C	1073E
1020F	1062D*	1073F*
1039A*	1062E*	
1039B*	1062F	

3 Bedroom Units		
1000A	1059B	1068C
1000B	1059C*	1068D
1000C	1059D	1068E
1000D	1060A	1068F
1000E*	1060B*	1070A
1000F	1060C	1070B
1013A	1060D	1070C
1013B	1066A	1070D
1013C	1066B	1070E
1013D	1066C	1070F*
1037A*	1066D	1072A
1037B	1067A	1072B
1037C	1067B*	1072C
1037D	1067C*	1072D
1037E	1067D*	1072E
1037F	1068A	1072F*
1059A*	1068B	

4 Bedroom Units		
1011A	1038C	1053B
1011B	1038D	1053C
1011C	1040A	1053D
1011D	1040B*	1053E*
1011E	1040C	1057A
1011F	1040D	1057B
1027A	1040E	1057C
1027B	1040F	1057D
1027C	1044B	1058B
1027D	1044C	1058C
1027E	1044D	1058D
1027F	1044E	1058E
1028B	1045A	1061A
1028C	1045B	1061B
1028D	1045C	1061C*
1028E	1045D	1061D
1029B	1045E	1063A
1029C	1045F	1063B
1029D	1049A	1063C*
1029E	1049B	1063D
1029F	1049C	1065B*
1031A	1049D	1065C
1031B	1049E	1069B
1031C	1049F	1069C
1031D	1050B	1069D
1031E*	1050C	1069E
1031F	1050D	1069F
1038A	1050E*	
1038B*	1050F	

5 Bedroom Units
1001B
1001C
1002F*
1028A
1029A
1032A*
1036A
1044A
1046A*
1046B
1046C*
1050A
1053A*
1057E
1057F
1058A
1064E*
1064F
1065A*
1069A*

Note: Unit numbers that are **bold** indicate the units that could not be accessed.

* Comprehensive LBP survey performed in these units.

2.0 Field Investigation Methodology

Cape Environmental Management Inc (CAPE) was contracted by BAT Associates, Inc. to perform a lead-based paint (LBP) inspection for Southern Division, Naval Facilities Engineering Command (SouthDiv NAVFACENGCOM) at the Ribault Bay Housing Phase II located in the Mayport Naval Station, Florida. CAPE conducted the LBP inspections in accordance with the Department of Housing and Urban Development (HUD), Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (1997 revision). The HUD Guidelines currently set the standard for technical protocols, practices and procedures on testing, abatement, worker protection, cleaning, and disposal of LBP in residential structures.

The HUD Guidelines define *Lead-based paint* as “any paint, varnish, stain, or other applied coating that has 1.0 mg/cm² (or 0.5% by weight) or more of lead.” Furthermore the HUD Guidelines specify that the use of x-ray fluorescent (XRF) lead paint analyzer to identify LBP is acceptable. The XRF lead paint analyzer used on this project was a battery powered Radiation Monitoring Device (RMD), LPA-1 XRF Spectrum Analyzer, re-sourced and serviced after March 1, 1998. The XRF instrument performed spectrometric analysis of K-shell X-ray fluorescence and displayed a lead concentration reading in milligrams per square centimeter (mg/cm²).

2.1 Lead-Based Paint Survey

The lead-based-paint (LBP) survey strategy established for this project consisted of the following:

1. Reviewing written documentation for the purpose of grouping housing units for inspections based on similarity of construction, materials, and common painting histories.
2. Identifying all “testing combinations” in each unit type. HUD defines a testing combination as a unique surface characterized by the “room equivalent”, building component type, and substrate. A room equivalent is defined as rooms/areas that are similar in size and function within the same unit such as a bedroom, a house exterior side, or an exterior area. The substrate is the material underneath the paint.
3. Developing a suspect-LBP testing strategy based on HUD Guidelines for multi-family housing, including developing a strategy for the confirmation of LBP.
4. Utilizing an XRF lead-in-paint analyzer to measure the lead concentration of all identified testing combinations within the selected units that had paint, shellac, or varnish
5. Providing a LBP survey report describing the location and types of LBP components identified.

Based on written documentation and visual evidence, all of the housing units included in the scope of work at Ribault Bay Housing Phase II were determined to have common construction and painting history. The number of units tested was determined in the scope of work by BAT Associates, Inc. and provides results that were statistically representative of the Ribault Bay Housing Phase II.

2.1.1 XRF Testing

CAPE tested painted building components for the presence of LBP. Typical components include:

Baseboard/crown molding, beam, cabinet, ceiling, column, counter, door, door casing, shelf/shelf support, trim, wall, window casing/sill

In accordance with the HUD Guidelines and the XRF Performance Characteristic Sheet for the instrument used in this survey, the following decision criteria was used for the determination of XRF inspection results:

- Components with brick, concrete, drywall, plaster, or wood substrates and XRF values greater than or equal to 1.0 mg/cm^2 were considered LBP. Components with brick, concrete, drywall, plaster, or wood substrates and XRF values less than 1.0 mg/cm^2 indicated no lead was present at or above the regulatory level of 1.0 mg/cm^2 . For the purposes of this report, glazing used in the production of ceramic tile that contains lead in concentrations greater than or equal to 1.0 mg/cm^2 was considered lead-based paint.
- Components with a metal substrate and XRF values greater than or equal to 1.3 mg/cm^2 were considered LBP. Components with metal substrate and XRF values less than or equal to 0.9 mg/cm^2 indicated that no lead was present at or above the regulatory level of 1.0 mg/cm^2 . Components with a metal substrate and XRF values greater than 0.9 mg/cm^2 and less than 1.3 mg/cm^2 required confirmatory testing.

Pre/post inspection calibration readings of the XRF instrument were taken using nominal 30-second standard mode readings of an unpainted wood block (0.0 mg/cm^2) and the red National Institute of Standards and Technology (NIST) standard reference material (SRM # 2579) paint film (1.02 mg/cm^2). If the average of three calibration measurements were to fall outside the established acceptable range (based on the XRF Performance Characteristic Sheet), further inspection would be discontinued until proper corrective actions were taken and/or acceptable measurements obtained. During this project, no calibration measurements fell outside the established acceptable range.

2.1.2 Classification of XRF Results

A summary report that aggregates the XRF results for each “component type ” tested was prepared. A component type is a group of like components constructed of the same substrate. For each component type, the aggregate percentage of positive, negative and inconclusive classifications was recorded. The “Multifamily Decision Flowchart” (Figure 7.11 in the HUD Guidelines included in Appendix E) was used to interpret results. The flowchart was applied separately to each component type to determine either a positive result or a negative result.

The “Multifamily Decision Flowchart” leads to a positive result when 15 percent or more of the components of a particular component type are positive. The decision flowchart leads to a negative result when (a) 100 percent of the tested components are negative, or (b) less than 15% of XRF readings are initially positive and subsequent confirmatory paint chip analysis of all positive and inconclusive readings yields no positive results. If any confirmatory paint chip samples for a particular component type yields positive results, the component type is classified as positive.

Confirmatory testing was accomplished by collecting and submitting bulk paint film samples for laboratory analysis by Atomic Absorption Spectroscopy (AAS). Samples were sent to and analyzed by Hygeia Laboratories, Inc. in Marietta, Georgia. Hygeia Laboratories, Inc. is accredited by the American Industrial Hygiene Association (AIHA) and successfully participates in the Environmental Lead Proficiency Testing Program (ELPAT) administered by EPA’s National Lead Laboratory Accreditation Program (NLLAP). The transfer of bulk paint film samples for laboratory analysis was documented on Chain-of-Custody forms (copies of all Chain-of-Custody Forms are provided in **Appendix C** of this report).

Once all laboratory results were obtained, the aggregate summary was updated to include laboratory results and make final classification decisions for each component type. In accordance with HUD, paint was defined as LBP when it contained lead in concentrations equal to or greater than 5,000 mg per Kg (0.5% of lead by weight) or when XRF readings were equal to or greater than 1.0 mg of lead per cm^2 of surface area by laboratory analysis.

3.0 Discussion of Findings

Suspect-LBP components were classified as “positive” or “negative” based on the “Multifamily Decision Flowchart” outlined in the HUD Guidelines (refer to section 2.1.2 and Appendix E). The flowchart was applied separately to each component type to determine one of the following results:

Positive: Lead was present at or above the HUD standard of 1.0 mg/cm² on *one or more* of the components sampled.

Negative: Lead was not present at or above the HUD standard of 1.0 mg/cm² on any of the components sampled. (Note: Lead may still be present in concentrations below 1.0 mg/cm² and hazardous dust may be generated during disturbance of painted surfaces containing low levels of lead).

For this report, 47 of the 198 units were extensively tested for the presence of lead-based paint. An additional 109 units were visually observed and confirmed to be of similar construction and paint history as the 47 units that were tested. There were 42 units that were not accessible.

An inventory of components tested for lead-based paint is provided in Section 3.1. A summary of the component types determined to contain lead above the HUD defined threshold is provided in Section 3.2. A summary of confirmatory sample results is provided in Section 3.3.

The *Summary Report of XRF Inspection Results (Component Type Report)* utilized in classifying XRF results is presented as Appendix A. This report aggregates the results of XRF testing across the housing units by component type and makes final classifications based on the percentages of positive, negative and inconclusive XRF readings, and on the subsequent confirmatory tests as performed.

Individual LBP Inspection Reports for each unit inspected are provided in Appendix B. Appendix C contains bulk sample laboratory reports for paint chip analysis. Floor plans illustrating the extent of LBP in housing units (typical housing unit floor plans) including bulk paint film sample locations are provided in Appendix D.

3.1 Inventory of Components Tested for Lead-Based Paint

The following tables list the components tested for LBP, including the location and the condition of the painted component:

Table 1
2 Bedroom Units

Component	Location	Paint Condition
A/C Box	Utility	Good
Attic Hatch	Entry/Storage (2 nd floor units only)	Good
Baseboard	Family Room, Kitchen, Living/Dining Room, Entry/Storage, Utility, Master Bedroom, and Bedroom 2	Good
Basecove	Bathroom (1 st floor units only)	Good
Cabinet	Kitchen and Bathroom	Good
Ceiling	Family Room, Kitchen, Living/Dining Room, Entry/Storage, Utility, Bathroom, Master Bedroom, and Bedroom 2	Good
Column	Exterior	Good
Door	Entry/Storage, Utility, Bathroom, Master Bedroom, Bedroom 2, Exterior Storage, and Exterior	Good
Door Casing	Entry/Storage, Lanai (1 st floor units only), Bathroom, Master Bedroom, Bedroom 2, Exterior Storage, and Exterior	Good
Downspout	Exterior	Good
Electric Box	Exterior	Good
Floor	Bathroom (1 st floor units only)	Good
Foundation	Exterior	Fair – Poor
Fuse Box	Exterior	Good
Overhang	Exterior	Good

2 Bedroom Units (continued)

Component	Location	Paint Condition
Railing	Exterior	Good
Shelf	Entry/Storage, Master Bedroom, and Bedroom 2	Good
Stair	Exterior	Good
Threshold	Lanai (1 st floor units only) and Exterior	Good - Fair
Wall	Family Room, Kitchen, Living/Dining Room, Lanai, Entry/Storage, Utility, Bathroom, Master Bedroom, and Bedroom 2	Good
Window Sill	Family Room (2 nd floor units only), Kitchen (2 nd floor units only), Living/Dining Room (2 nd floor units only), Utility, Master Bedroom, and Bedroom 2	Good

Table 2

3 Bedrooms Units

Component	Location	Paint Condition
A/C Box	Entry	Good
Attic Hatch	Hall/Storage	Good
Baseboard	Family Room, Kitchen, Utility, Living/Dining Room, Entry, Hall/Storage, Master Bedroom, Bedroom 2, and Bedroom 3	Good
Basecove	Bathroom 1, Bathroom 2, and Bathroom 3	Good
Cabinet	Kitchen, Bathroom 1, Bathroom 2, and Bathroom 3	Good

3 Bedroom Units (continued)

Component	Location	Paint Condition
Ceiling	Family Room, Kitchen, Utility, Living/Dining Room, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, and Bedroom 3	Good
Column	Exterior	Good
Door	Family Room, Garage, Entry/Storage, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, and Exterior	Good
Door Casing	Family Room, Garage, Lanai, Entry/Storage, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, and Exterior	Good
Downspout	Exterior	Good
Electric Box	Exterior	Good
Floor	Bathroom 1, Bathroom 2, and Bathroom 3	Good
Foundation	Exterior	Fair – Poor
Fuse Box	Exterior	Good
Garage Door	Garage and Exterior	Good
Post	Exterior	Good - Fair
Railing	Entry	Good
Shelf	Entry, Hall/Storage, Master Bedroom, Bedroom 2, and Bedroom 3	Good
Stair	Entry	Good
Stringer	Entry	Good
Threshold	Lanai and Exterior	Good – Fair

3 Bedroom Units (continued)

Component	Location	Paint Condition
Wall	Family Room, Garage, Kitchen, Utility, Living/Dining Room, Lanai, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, and Bedroom 3	Good
Window Sill	Entry, Hall/Storage, Master Bedroom, Bedroom 2, and Bedroom 3	Good

Table 3

4 Bedrooms Units

Component	Location	Paint Condition
A/C Box	Entry	Good
Attic Hatch	Hall/Storage	Good
Baseboard	Family Room, Kitchen, Utility, Living/Dining Room, Entry, Hall/Storage, Master Bedroom, Bedroom 2, Bedroom 3, and Bedroom 4	Good
Basecove	Bathroom 1, Bathroom 2, and Bathroom 3	Good
Cabinet	Kitchen, Bathroom 1, Bathroom 2, and Bathroom 3	Good
Ceiling	Family Room, Garage, Kitchen, Utility, Living/Dining Room, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, and Bedroom 4	Good
Column	Exterior	Good
Door	Family Room, Garage, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, and Exterior	Good

4 Bedroom Units (continued)

Component	Location	Paint Condition
Door Casing	Family Room, Garage, Lanai, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, and Exterior	Good
Downspout	Exterior	Good
Electric Box	Exterior	Good
Floor	Bathroom 1, Bathroom 2, and Bathroom 3	Good
Foundation	Exterior	Fair – Poor
Fuse Box	Exterior	Good
Garage Door	Garage and Exterior	Good
Post	Exterior	Good - Fair
Railing	Entry	Good
Shelf	Entry, Hall/Storage, Master Bedroom, Bedroom 2, Bedroom 3, and Bedroom 4	Good
Stair	Entry	Good
Stringer	Entry	Good
Threshold	Lanai and Exterior	Good – Fair
Wall	Family Room, Garage, Kitchen, Utility, Living/Dining Room, Lanai, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, and Bedroom 4	Good
Window Sill	Entry, Hall/Storage, Master Bedroom, Bedroom 2, Bedroom 3, and Bedroom 4	Good

Table 4
5 Bedrooms Units

Component	Location	Paint Condition
A/C Box	Utility	Good
Attic Hatch	Hall/Storage and Bedroom 4	Good
Baseboard	Family Room, Kitchen, Utility, Living/Dining Room, Entry, Hall/Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, and Bedroom 5	Good
Basecove	Bathroom 1, Bathroom 2, and Bathroom 3	Good
Cabinet	Kitchen, Bathroom 1, Bathroom 2, and Bathroom 3	Good
Ceiling	Family Room, Kitchen, Utility, Living/Dining Room, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, and Bedroom 5	Good
Column	Exterior	Good
Door	Utility, Garage, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, Bedroom 5, and Exterior	Good
Door Casing	Utility, Garage, Lanai, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, Bedroom 5, and Exterior	Good
Downspout	Exterior	Good
Electric Box	Exterior	Good
Floor	Bathroom 1, Bathroom 2, and Bathroom 3	Good

5 Bedroom Units (continued)

Component	Location	Paint Condition
Foundation	Exterior	Fair – Poor
Fuse Box	Exterior	Good
Garage Door	Garage and Exterior	Good
Post	Exterior	Good - Fair
Railing	Entry	Good
Shelf	Entry, Hall/Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, and Bedroom 5	Good
Stair	Entry	Good
Step	Entry	Good
Stringer	Entry	Good
Threshold	Lanai and Exterior	Good
Wall	Family Room, Garage, Kitchen, Utility, Living/Dining Room, Lanai, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, and Bedroom 5	Good
Window Sill	Hall/Storage, Master Bedroom, Bedroom 2, Bedroom	Good

3.2 Summary of Component Types Determined to Contain Lead-Based Paint

The following component types were determined to contain lead-based paint:

2 Bedroom unit	
Component Type:	Metal Handrail (black)
Typical Location:	Handrail associated with stairs leading to 2 nd floor two bedroom units
Percent above 1.0 mg/cm²:	87.5%
Condition:	Good

5 Bedroom unit	
Component Type:	Ceramic tile basecove
Typical Location:	1002F – Bathroom 3
Percent above 1.0 mg/cm²:	1%*
Condition:	Good

Notes:

* The percentage of positive ceramic tile basecove fell below 15% requiring confirmatory sampling. Since lead in ceramic tile is in the glazing, confirmatory samples could not be collected. Therefore, the lead containing ceramic tile basecove is considered localized within unit 1002F (Bathroom 3). **Ceramic tile basecove may also contain lead in units not tested.**

3.3 Summary of Confirmatory Sample Results

XRF Readings from the foundations of units 1053A and 1070F yielded positive results. Bulk paint film samples were collected from the foundations of the two units and analysis results were below the HUD level (0.5% lead by weight) for lead-based paint

XRF results of the metal stairs associated with the two bedroom units were inconclusive in four units. Confirmatory sampling determined this component type to be below the HUD regulatory limit for lead-based paint. The following table summarizes all confirmatory samples collected:

Sample ID Number	Component	Result (% by weight)	LBP (Yes/No)
Pb-MRBH-1016A-85	Metal stairs (black)	0.13%	No
Pb-MRBH-1047-1	Metal stairs (black)	0.023%	No
Pb-MRBH-1062-2	Metal stairs (black)	0.027%	No
Pb-MRBH-1071-3	Metal stairs (black)	0.023%	No
Pb-MRBH-1053-4	Concrete foundation (white)	Below reporting limit	No
Pb-MRBH-1070-5	Concrete foundation (white)	Below reporting limit	No

Conclusions

- The metal handrails (black) associated with the exterior stairs of the two bedroom units contained lead-based paint.
- Ceramic tile basecove (blue) located in Bathroom 3 of unit 1002F contained lead. **Ceramic tile basecove may also contain lead in units not tested.**
- Confirmatory sampling results confirmed that the concentrations of lead in the concrete foundation (white) and the metal stairs (black) were below the HUD regulatory limit for lead-based paint.

***Appendix A --- Summary Report of XRF Inspection Results
(Component Type Report)***

Component Type Report

Upon the completion of the XRF testing, results of each component type with positive readings were tabulated in a Multi-Family Housing Component Type Report. The following table illustrates the total number of each component tested and the percentage of positive and negative results.

Table A-1

Multi-Family Housing Component Type Report (Ceramic tile basecove)					
Unit	total #	# pos	% pos	# neg	% neg
1000E	3	0	0.00%	3	100.00%
1002F	2	1	50.00%	1	50.00%
1004D	0	0	0.00%	0	0.00%
1016A	1	0	0.00%	1	100.00%
1016E	1	0	0.00%	1	100.00%
1016F	0	0	0.00%	0	0.00%
1020B	0	0	0.00%	0	0.00%
1020E	1	0	0.00%	1	100.00%
1031E	3	0	0.00%	3	100.00%
1032A	3	0	0.00%	3	100.00%
1037A	3	0	0.00%	3	100.00%
1038B	3	0	0.00%	3	100.00%
1039A	1	0	0.00%	1	100.00%
1039B	0	0	0.00%	0	0.00%
1039C	1	0	0.00%	1	100.00%
1039D	0	0	0.00%	0	0.00%
1040B	3	0	0.00%	3	100.00%
1046A	3	0	0.00%	3	100.00%
1046C	3	0	0.00%	3	100.00%
1047A	1	0	0.00%	1	100.00%
1047B	0	0	0.00%	0	0.00%
1050E	1	0	0.00%	1	100.00%
1053A	3	0	0.00%	3	100.00%
1053E	3	0	0.00%	3	100.00%
1059A	3	0	0.00%	3	100.00%
1059C	3	0	0.00%	3	100.00%
1060B	3	0	0.00%	3	100.00%
1061C	3	0	0.00%	3	100.00%
1062D	0	0	0.00%	0	0.00%
1062E	1	0	0.00%	1	100.00%
1063C	3	0	0.00%	3	100.00%
1064E	3	0	0.00%	3	100.00%
1065A	3	0	0.00%	3	100.00%
1065B	3	0	0.00%	3	100.00%
1067B	3	0	0.00%	3	100.00%

Table A-1 (cont)					
Multi-Family Housing Component Type Report (continued)					
Ceramic tile basecove					
Unit	total #	# pos	% pos	# neg	% neg
1067C	3	0	0.00%	3	100.00%
1067D	3	0	0.00%	3	100.00%
1069A	3	0	0.00%	3	100.00%
1070F	3	0	0.00%	3	100.00%
1071A	1	0	0.00%	1	100.00%
1071B	0	0	0.00%	0	0.00%
1071C	1	0	0.00%	1	100.00%
1071F	0	0	0.00%	0	0.00%
1072F	3	0	0.00%	3	100.00%
1073A	1	0	0.00%	1	100.00%
1073B	0	0	0.00%	0	0.00%
1073F	0	0	0.00%	0	0.00%
Total	85	1	1.18%	84	98.82%

Appendix B --- Individual Unit LBP Inspection Reports

Lead-Based Paint Inspection Report
Mayport Naval Station - Ribault Bay Housing
Mayport, Florida
Unit: 1032A (5 bedroom)

Date: 08/24/99

Shot	Room Name	Substrate	Component	Color	Wall *	Condition	Result
1	Calibration			Red			1.1
2	Calibration			Red			1.2
3	Calibration			Red			1.1
4	Calibration			Wood			0.0
5	Calibration			Wood			0.0
6	Calibration			Wood			0.0
7	Family Room	Gypsum	Wall	White	A	Good	-0.2
8	Family Room	Gypsum	Wall	White	B	Good	-0.2
9	Family Room	Gypsum	Wall	White	C	Good	-0.1
10	Family Room	Gypsum	Wall	White	D	Good	0.0
11	Family Room	Gypsum	Ceiling	White	-	Good	0.2
12	Family Room	Wood	Baseboard	White	C	Good	0.1
13	Utility	Gypsum	Wall	White	A	Good	-0.1
14	Utility	Gypsum	Wall	White	B	Good	-0.1
15	Utility	Gypsum	Wall	White	C	Good	-0.1
16	Utility	Gypsum	Wall	White	D	Good	-0.3
17	Utility	Gypsum	Ceiling	White	-	Good	-0.1
18	Utility	Wood	Baseboard	White	B	Good	-0.1
19	Utility	Wood	Door	White	A	Good	-0.2
20	Utility	Wood	Door Casing	White	A	Good	-0.1
21	Utility	Wood	A/C Box	White	B	Good	-0.1
22	Garage	Metal	Garage Door	White	A	Good	0.0
23	Garage	Gypsum	Wall	White	C	Good	-0.1
24	Garage	Wood	Door	White	C	Good	-0.1
25	Garage	Wood	Door Casing	White	C	Good	-0.1
26	Kitchen	Gypsum	Wall	White	A	Good	-0.1
27	Kitchen	Gypsum	Wall	White	B	Good	-0.3
28	Kitchen	Gypsum	Wall	White	C	Good	-0.1
29	Kitchen	Gypsum	Wall	White	D	Good	-0.1
30	Kitchen	Gypsum	Ceiling	White	-	Good	-0.2
31	Kitchen	Wood	Baseboard	White	B	Good	0.1
32	Kitchen	Wood	Cabinet	Stain	B	Good	-0.1
33	Living/Dining	Gypsum	Wall	White	A	Good	-0.1
34	Living/Dining	Gypsum	Wall	White	B	Good	-0.1
35	Living/Dining	Gypsum	Wall	White	C	Good	-0.2
36	Living/Dining	Gypsum	Wall	White	D	Good	-0.1
37	Living/Dining	Gypsum	Ceiling	White	-	Good	0.0
38	Living/Dining	Wood	Baseboard	White	A	Good	0.3

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
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* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
					*		
39	Lanai	Wood	Wall	White	B	Good	0.0
40	Lanai	Wood	Wall	White	C	Good	0.0
41	Lanai	Wood	Wall	White	D	Good	0.0
42	Lanai	Wood	Door Casing	White	B	Good	0.0
43	Lanai	Wood	Threshold	Blue	A	Good	0.1
44	Entry	Gypsum	Wall	White	A	Good	-0.1
45	Entry	Gypsum	Wall	White	B	Good	0.0
46	Entry	Gypsum	Wall	White	C	Good	-0.1
47	Entry	Gypsum	Wall	White	D	Good	-0.1
48	Entry	Gypsum	Ceiling	White	-	Good	0.4
49	Entry	Wood	Baseboard	White	B	Good	-0.2
50	Entry	Wood	Door	White	A	Good	-0.1
51	Entry	Wood	Door Casing	White	A	Good	-0.1
52	Entry	Wood	Stair	White	B	Good	0.1
53	Entry	Wood	Railing	White	-	Good	-0.1
54	Entry	Wood	Stair Railing	Stain	-	Good	-0.2
55	Entry	Wood	Stair	Stain	-	Good	0.2
56	Entry	Wood	Stringer	Stain	-	Good	-0.1
57	Entry	Wood	Shelf	White	A	Good	0.0
58	Entry	Metal	Door	White	B	Good	0.0
59	Bedroom 5	Gypsum	Wall	White	A	Good	0.0
60	Bedroom 5	Gypsum	Wall	White	B	Good	0.0
61	Bedroom 5	Gypsum	Wall	White	C	Good	-0.2
62	Bedroom 5	Gypsum	Wall	White	D	Good	-0.2
63	Bedroom 5	Gypsum	Ceiling	White	-	Good	0.0
64	Bedroom 5	Wood	Baseboard	White	D	Good	0.0
65	Bedroom 5	Metal	Door	White	B	Good	0.2
66	Bedroom 5	Wood	Door	White	C	Good	-0.3
67	Bedroom 5	Wood	Door Casing	White	C	Good	0.0
68	Bedroom 5	Wood	Window Sill	White	A	Good	0.2
69	Bedroom 5	Wood	Shelf	White	B	Good	0.0
70	Bathroom 3	Gypsum	Wall	White	A	Good	0.0
71	Bathroom 3	Gypsum	Wall	White	B	Good	-0.1
72	Bathroom 3	Gypsum	Wall	White	C	Good	-0.1
73	Bathroom 3	Gypsum	Wall	White	D	Good	-0.1
74	Bathroom 3	Gypsum	Ceiling	White	-	Good	-0.2
75	Bathroom 3	Ceramic Tile	Floor	Blue	-	Good	0.0
76	Bathroom 3	Ceramic Tile	Basecove	Blue	A	Good	-0.3
77	Bathroom 3	Wood	Door	White	D	Good	-0.3
78	Bathroom 3	Wood	Door Casing	White	D	Good	-0.1
79	Bathroom 3	Wood	Cabinet	Stain	C	Good	0.0
80	Bedroom 4	Gypsum	Wall	White	A	Good	-0.2
81	Bedroom 4	Gypsum	Wall	White	B	Good	-0.2
82	Bedroom 4	Gypsum	Wall	White	C	Good	-0.2

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall *	Condition	Result
83	Bedroom 4	Gypsum	Wall	White	D	Good	-0.1
84	Bedroom 4	Gypsum	Ceiling	White	-	Good	0.1

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
85	Bedroom 4	Wood	Baseboard	White	A	Good	0.3
86	Bedroom 4	Wood	Door	White	A	Good	-0.2
87	Bedroom 4	Wood	Door Casing	White	A	Good	0.0
88	Bedroom 4	Metal	Door	White	A	Good	0.0
89	Bedroom 4	Wood	Window Sill	White	C	Good	-0.3
90	Bedroom 4	Wood	Shelf	White	A	Good	0.0
91	Bedroom 4	Wood	Attic Hatch	White	-	Good	-0.1
92	Hall/Storage	Gypsum	Wall	White	A	Good	0.0
93	Hall/Storage	Gypsum	Wall	White	B	Good	-0.1
94	Hall/Storage	Gypsum	Wall	White	C	Good	-0.1
95	Hall/Storage	Gypsum	Wall	White	D	Good	-0.1
96	Hall/Storage	Gypsum	Ceiling	White	-	Good	0.0
97	Hall/Storage	Wood	Baseboard	White	A	Good	0.1
98	Hall/Storage	Metal	Door	White	C	Good	-0.2
99	Hall/Storage	Wood	Door	White	A	Good	-0.2
100	Hall/Storage	Wood	Door Casing	White	A	Good	0.0
101	Hall/Storage	Wood	Window Sill	White	B	Good	-0.1
102	Hall/Storage	Wood	Shelf	White	A	Good	0.2
103	Hall/Storage	Wood	Attic Hatch	White	-	Good	-0.2
104	Bedroom 3	Gypsum	Wall	White	A	Good	-0.1
105	Bedroom 3	Gypsum	Wall	White	B	Good	-0.1
106	Bedroom 3	Gypsum	Wall	White	C	Good	0.0
107	Bedroom 3	Gypsum	Wall	White	D	Good	-0.2
108	Bedroom 3	Gypsum	Ceiling	White	-	Good	0.0
109	Bedroom 3	Wood	Baseboard	White	B	Good	-0.1
110	Bedroom 3	Metal	Door	White	D	Good	-0.1
111	Bedroom 3	Wood	Door	White	A	Good	-0.3
112	Bedroom 3	Wood	Door Casing	White	A	Good	0.0
113	Bedroom 3	Wood	Window Sill	White	C	Good	-0.1
114	Bedroom 3	Wood	Shelf	White	D	Good	0.0
115	Bedroom 2	Gypsum	Wall	White	A	Good	-0.1
116	Bedroom 2	Gypsum	Wall	White	B	Good	-0.1
117	Bedroom 2	Gypsum	Wall	White	C	Good	-0.1
118	Bedroom 2	Gypsum	Wall	White	D	Good	-0.1
119	Bedroom 2	Gypsum	Ceiling	White	-	Good	0.0
120	Bedroom 2	Wood	Baseboard	White	D	Good	0.1
121	Bedroom 2	Metal	Door	White	B	Good	0.1
122	Bedroom 2	Wood	Door	White	A	Good	-0.1
123	Bedroom 2	Wood	Door Casing	White	A	Good	0.0
124	Bedroom 2	Wood	Window Sill	White	C	Good	0.0
125	Bedroom 2	Wood	Shelf	White	B	Good	-0.1
126	Bathroom 2	Gypsum	Wall	White	A	Good	-0.1
127	Bathroom 2	Gypsum	Wall	White	B	Good	-0.1
128	Bathroom 2	Gypsum	Wall	White	C	Good	-0.1

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
129	Bathroom 2	Gypsum	Wall	White	D	Good	0.0
130	Bathroom 2	Gypsum	Ceiling	White	-	Good	-0.1

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
131	Bathroom 2	Ceramic Tile	Floor	White	-	Good	-0.1
132	Bathroom 2	Ceramic Tile	Basecove	White	C	Good	0.0
133	Bathroom 2	Wood	Door	White	C	Good	0.0
134	Bathroom 2	Wood	Door Casing	White	C	Good	-0.1
135	Bathroom 2	Wood	Cabinet	Stain	A	Good	0.0
136	Master Bedroom	Gypsum	Wall	White	A	Good	-0.2
137	Master Bedroom	Gypsum	Wall	White	B	Good	-0.1
138	Master Bedroom	Gypsum	Wall	White	C	Good	0.0
139	Master Bedroom	Gypsum	Wall	White	D	Good	-0.1
140	Master Bedroom	Gypsum	Ceiling	White	-	Good	0.2
141	Master Bedroom	Wood	Baseboard	White	B	Good	0.1
142	Master Bedroom	Metal	Door	White	B	Good	-0.2
143	Master Bedroom	Wood	Door	White	C	Good	-0.2
144	Master Bedroom	Wood	Door Casing	White	C	Good	0.2
145	Master Bedroom	Wood	Window Sill	White	A	Good	-0.2
146	Master Bedroom	Wood	Shelf	White	A	Good	0.0
147	Bathroom 1	Gypsum	Wall	White	A	Good	-0.1
148	Bathroom 1	Gypsum	Wall	White	B	Good	-0.1
149	Bathroom 1	Gypsum	Wall	White	C	Good	-0.1
150	Bathroom 1	Gypsum	Wall	White	D	Good	-0.1
151	Bathroom 1	Gypsum	Ceiling	White	-	Good	-0.1
152	Bathroom 1	Ceramic Tile	Floor	Yellow	-	Good	-0.4
153	Bathroom 1	Ceramic Tile	Basecove	Yellow	A	Good	0.0
154	Bathroom 1	Wood	Cabinet	Stain	C	Good	0.0
155	Bathroom 1	Wood	Door	White	A	Good	-0.2
156	Bathroom 1	Wood	Door Casing	White	A	Good	0.2
157	Exterior	Wood	Threshold	Blue	A	Good	0.2
158	Exterior	Metal	Column	Black	A	Good	-0.1
159	Exterior	Metal	Downspout	White	A	Good	0.2
160	Exterior	Metal	Garage Door	Blue	A	Good	-0.1
161	Exterior	Concrete	Foundation	White	A	Good	0.4
162	Exterior	Metal	Electric Box	White	A	Good	0.0
163	Exterior	Metal	Electric Box	White	B	Good	0.0
164	Exterior	Concrete	Foundation	White	B	Good	0.1
165	Exterior	Metal	Downspout	White	C	Good	0.3
166	Exterior	Wood	Threshold	Blue	C	Good	0.0
167	Exterior	Concrete	Foundation	White	C	Good	0.0
168	Exterior	Metal	Downspout	White	D	Good	-0.1
169	Exterior	Metal	Electric Box	White	D	Good	-0.1
170	Exterior	Concrete	Foundation	White	D	Good	0.6
171	Calibration			Red			1.0
172	Calibration			Red			0.9
173	Calibration			Red			0.9
174	Calibration			Wood			0.0

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
175	Calibration			Wood	*		0.0
176	Calibration			Wood			0.0

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
40	Bedroom 4	Gypsum	Ceiling	White	-	Good	0.2
41	Bedroom 4	Wood	Baseboard	White	A	Good	-0.1
42	Bedroom 4	Metal	Door	White	A	Good	-0.2
43	Bedroom 4	Wood	Door	White	A	Good	-0.2
44	Bedroom 4	Wood	Door Casing	White	A	Good	-0.1
45	Bedroom 4	Wood	Window Sill	White	C	Good	0.1
46	Bedroom 4	Wood	Shelf	White	A	Good	-0.1
47	Bedroom 4	Wood	Attic Hatch	White	-	Good	-0.1
48	Family Room	Gypsum	Wall	White	A	Good	0.0
49	Family Room	Gypsum	Wall	White	B	Good	-0.2
50	Family Room	Gypsum	Wall	White	C	Good	-0.1
51	Family Room	Gypsum	Wall	White	D	Good	-0.2
52	Family Room	Gypsum	Ceiling	White	-	Good	0.0
53	Family Room	Wood	Baseboard	White	D	Good	0.1
54	Kitchen	Gypsum	Wall	White	A	Good	0.0
55	Kitchen	Gypsum	Wall	White	B	Good	-0.1
56	Kitchen	Gypsum	Wall	White	C	Good	-0.2
57	Kitchen	Gypsum	Wall	White	D	Good	-0.1
58	Kitchen	Gypsum	Ceiling	White	-	Good	-0.1
59	Kitchen	Wood	Baseboard	White	A	Good	0.0
60	Kitchen	Wood	Cabinet	Stain	B	Good	0.0
61	Hall/Storage	Gypsum	Wall	White	A	Good	-0.1
62	Hall/Storage	Gypsum	Wall	White	B	Good	-0.2
63	Hall/Storage	Gypsum	Wall	White	C	Good	-0.3
64	Hall/Storage	Gypsum	Wall	White	D	Good	0.0
65	Hall/Storage	Gypsum	Ceiling	White	-	Good	0.0
66	Hall/Storage	Wood	Baseboard	White	C	Good	0.2
67	Hall/Storage	Metal	Door	White	C	Good	-0.1
68	Hall/Storage	Wood	Door	White	A	Good	-0.3
69	Hall/Storage	Wood	Door Casing	White	A	Good	0.0
70	Hall/Storage	Wood	Window Sill	White	B	Good	0.0
71	Hall/Storage	Wood	Shelf	White	C	Good	-0.4
72	Hall/Storage	Wood	Attic Hatch	White	-	Good	-0.1
73	Bedroom 3	Gypsum	Wall	White	A	Good	-0.2
74	Bedroom 3	Gypsum	Wall	White	B	Good	0.0
75	Bedroom 3	Gypsum	Wall	White	C	Good	-0.2
76	Bedroom 3	Gypsum	Wall	White	D	Good	0.0
77	Bedroom 3	Gypsum	Ceiling	White	-	Good	0.0
78	Bedroom 3	Wood	Baseboard	White	A	Good	0.0
79	Bedroom 3	Metal	Door	White	D	Good	-0.1
80	Bedroom 3	Wood	Door	White	A	Good	-0.1
81	Bedroom 3	Wood	Door Casing	White	A	Good	-0.1
82	Bedroom 3	Wood	Window Sill	White	C	Good	-0.1
83	Bedroom 3	Wood	Shelf	White	D	Good	-0.2

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
84	Bedroom 2	Gypsum	Wall	White	A	Good	-0.3
85	Bedroom 2	Gypsum	Wall	White	B	Good	-0.1
86	Bedroom 2	Gypsum	Wall	White	C	Good	-0.1
87	Bedroom 2	Gypsum	Wall	White	D	Good	-0.1
88	Bedroom 2	Gypsum	Ceiling	White	-	Good	0.0
89	Bedroom 2	Wood	Baseboard	White	C	Good	-0.2
90	Bedroom 2	Metal	Door	White	B	Good	-0.1
91	Bedroom 2	Wood	Door	White	A	Good	0.0
92	Bedroom 2	Wood	Door Casing	White	A	Good	0.0
93	Bedroom 2	Wood	Window Sill	White	C	Good	0.0
94	Bedroom 2	Wood	Shelf	White	B	Good	-0.1
95	Bathroom 2	Gypsum	Wall	White	A	Good	0.0
96	Bathroom 2	Gypsum	Wall	White	B	Good	-0.1
97	Bathroom 2	Gypsum	Wall	White	C	Good	0.0
98	Bathroom 2	Gypsum	Wall	White	D	Good	0.0
99	Bathroom 2	Gypsum	Ceiling	White	-	Good	0.0
100	Bathroom 2	Ceramic Tile	Floor	Green/gray	-	Good	-0.2
101	Bathroom 2	Ceramic Tile	Basecove	Green	C	Good	-0.1
102	Bathroom 2	Wood	Door	White	C	Good	-0.2
103	Bathroom 2	Wood	Door Casing	White	C	Good	-0.1
104	Bathroom 2	Wood	Cabinet	Stain	A	Good	-0.1
105	Master Bedroom	Gypsum	Wall	White	A	Good	0.0
106	Master Bedroom	Gypsum	Wall	White	B	Good	-0.4
107	Master Bedroom	Gypsum	Wall	White	C	Good	-0.1
108	Master Bedroom	Gypsum	Wall	White	D	Good	0.2
109	Master Bedroom	Gypsum	Ceiling	White	-	Good	0.2
110	Master Bedroom	Wood	Baseboard	White	B	Good	-0.1
111	Master Bedroom	Metal	Door	White	B	Good	-0.1
112	Master Bedroom	Wood	Door	White	C	Good	-0.1
113	Master Bedroom	Wood	Door Casing	White	C	Good	0.0
114	Master Bedroom	Wood	Window Sill	White	A	Good	0.0
115	Master Bedroom	Wood	Shelf	White	C	Good	0.0
116	Bathroom 1	Gypsum	Wall	White	A	Good	0.0
117	Bathroom 1	Gypsum	Wall	White	B	Good	-0.1
118	Bathroom 1	Gypsum	Wall	White	C	Good	0.0
119	Bathroom 1	Gypsum	Wall	White	D	Good	-0.2
120	Bathroom 1	Gypsum	Ceiling	White	-	Good	-0.2
121	Bathroom 1	Ceramic Tile	Floor	Yellow	-	Good	-0.4
122	Bathroom 1	Ceramic Tile	Basecove	Yellow	C	Good	-0.1
123	Bathroom 1	Wood	Door	White	A	Good	-0.2
124	Bathroom 1	Wood	Door Casing	White	A	Good	0.0
125	Bathroom 1	Wood	Cabinet	Stain	D	Good	-0.2
126	Utility	Gypsum	Wall	White	A	Good	-0.1

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
					*		
127	Utility	Gypsum	Wall	White	B	Good	-0.1
128	Utility	Gypsum	Wall	White	C	Good	-0.1
129	Utility	Gypsum	Wall	White	D	Good	-0.2
130	Utility	Gypsum	Ceiling	White	-	Good	-0.1
131	Utility	Wood	Baseboard	White	B	Good	0.0
132	Utility	Wood	Door	White	A	Good	-0.2
133	Utility	Wood	Door Casing	White	A	Good	0.0
134	Utility	Wood	A/C Box	White	B	Good	0.2
135	Garage	Metal	Garage Door	White	A	Good	0.2
136	Garage	Gypsum	Wall	White	C	Good	-0.2
137	Garage	Wood	Door	White	C	Good	0.2
138	Garage	Wood	Door Casing	White	C	Good	-0.1
139	Bedroom 5	Gypsum	Wall	White	A	Good	0.0
140	Bedroom 5	Gypsum	Wall	White	B	Good	0.0
141	Bedroom 5	Gypsum	Wall	White	C	Good	-0.1
142	Bedroom 5	Gypsum	Wall	White	D	Good	-0.1
143	Bedroom 5	Gypsum	Ceiling	White	-	Good	0.0
144	Bedroom 5	Wood	Baseboard	White	B	Good	0.2
145	Bedroom 5	Metal	Door	White	B	Good	-0.1
146	Bedroom 5	Wood	Door	White	C	Good	-0.1
147	Bedroom 5	Wood	Door Casing	White	C	Good	0.0
148	Bedroom 5	Wood	Window Sill	White	A	Good	-0.1
149	Bedroom 5	Wood	Shelf	White	B	Good	-0.3
150	Bathroom 3	Gypsum	Wall	White	A	Good	-0.1
151	Bathroom 3	Gypsum	Wall	White	B	Good	-0.3
152	Bathroom 3	Gypsum	Wall	White	C	Good	-0.1
153	Bathroom 3	Gypsum	Wall	White	D	Good	-0.2
154	Bathroom 3	Gypsum	Ceiling	White	-	Good	0.0
155	Bathroom 3	Ceramic Tile	Floor	Blue	-	Good	-0.2
156	Bathroom 3	Ceramic Tile	Basecove	Blue	D	Good	-0.2
157	Bathroom 3	Wood	Door	White	D	Good	0.0
158	Bathroom 3	Wood	Door Casing	White	D	Good	0.0
159	Bathroom 3	Wood	Cabinet	Stain	C	Good	-0.2
160	Exterior	Metal	Column	Black	A	Good	-0.1
161	Exterior	Wood	Door	Blue	A	Good	-0.1
162	Exterior	Wood	Threshold	Blue	A	Good	-0.1
163	Exterior	Wood	Door Casing	Blue	A	Good	-0.1
164	Exterior	Concrete	Foundation	White	A	Fair	0.0
165	Exterior	Metal	Downspout	White	A	Good	0.3
166	Exterior	Wood	Post	White	A	Fair	-0.2
167	Exterior	Metal	Electric Box	White	A	Good	0.0
168	Exterior	Metal	Electric Box	White	B	Good	0.1
169	Exterior	Concrete	Foundation	White	B	Fair	0.4
170	Exterior	Concrete	Foundation	White	C	Fair	-0.1

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
171	Exterior	Wood	Threshold	Blue	C	Good	0.0
172	Exterior	Metal	Downspout	White	C	Good	-0.1
173	Exterior	Metal	Electric Box	Green	C	Good	0.0
174	Exterior	Metal	Downspout	White	D	Good	0.1
175	Exterior	Metal	Electric Box	White	D	Good	-0.1
176	Exterior	Concrete	Foundation	White	D	Fair	0.1
177	Exterior	Metal	Garage Door	Blue	A	Good	-0.1
178	Calibration			Red			1.1
179	Calibration			Red			1.2
180	Calibration			Red			1.1
181	Calibration			Wood			-0.1
182	Calibration			Wood			0.0
183	Calibration			Wood			0.1

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Lead-Based Paint Inspection Report
Mayport Naval Station - Ribault Bay Housing
Mayport, Florida
Unit: 1065B (4 bedroom)

Date: 08/26/99

Shot	Room Name	Substrate	Component	Color	Wall *	Condition	Result
1	Calibration			Red			1.2
2	Calibration			Red			1.0
3	Calibration			Red			1.0
4	Calibration			Wood			-0.1
5	Calibration			Wood			0.1
6	Calibration			Wood			0.1
7	Family Room	Gypsum	Wall	White	A	Good	-0.2
8	Family Room	Gypsum	Wall	White	B	Good	-0.1
9	Family Room	Gypsum	Wall	White	C	Good	-0.2
10	Family Room	Gypsum	Wall	White	D	Good	0.1
11	Family Room	Gypsum	Ceiling	White	-	Good	0.0
12	Family Room	Wood	Baseboard	White	C	Good	0.0
13	Family Room	Wood	Door	White	A	Good	0.0
14	Family Room	Wood	Door Casing	White	A	Good	-0.1
15	Garage	Metal	Garage Door	White	A	Good	0.0
16	Garage	Gypsum	Wall	White	C	Good	-0.2
17	Garage	Wood	Door	White	C	Good	0.0
18	Garage	Wood	Door Casing	White	C	Good	-0.1
19	Garage	Gypsum	Ceiling	White	-	Good	-0.1
20	Kitchen	Gypsum	Wall	White	A	Good	-0.3
21	Kitchen	Gypsum	Wall	White	B	Good	0.0
22	Kitchen	Gypsum	Wall	White	C	Good	0.0
23	Kitchen	Gypsum	Wall	White	D	Good	0.0
24	Kitchen	Gypsum	Ceiling	White	-	Good	-0.2
25	Kitchen	Wood	Baseboard	White	A	Good	0.0
26	Kitchen	Wood	Cabinet	Stain	B	Good	0.0
27	Utility	Gypsum	Wall	White	A	Good	-0.1
28	Utility	Gypsum	Wall	White	B	Good	0.0
29	Utility	Gypsum	Wall	White	C	Good	0.1
30	Utility	Gypsum	Wall	White	D	Good	-0.2
31	Utility	Gypsum	Ceiling	White	-	Good	-0.2
32	Utility	Wood	Baseboard	White	A	Good	0.1
33	Living/Dining	Gypsum	Wall	White	A	Good	-0.2
34	Living/Dining	Gypsum	Wall	White	B	Good	-0.2
35	Living/Dining	Gypsum	Wall	White	C	Good	-0.2
36	Living/Dining	Gypsum	Wall	White	D	Good	-0.3
37	Living/Dining	Gypsum	Ceiling	White	-	Good	0.0
38	Living/Dining	Wood	Baseboard	White	A	Good	0.2

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
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* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
39	Lanai	Wood	Wall	White	B	Good	0.0
40	Lanai	Wood	Wall	White	C	Good	0.0
41	Lanai	Wood	Wall	White	D	Good	-0.1
42	Lanai	Wood	Door Casing	White	B	Good	-0.1
43	Lanai	Wood	Threshold	Blue	A	Good	0.0
44	Entry	Gypsum	Wall	White	A	Good	-0.1
45	Entry	Gypsum	Wall	White	B	Good	0.0
46	Entry	Gypsum	Wall	White	C	Good	0.0
47	Entry	Gypsum	Wall	White	D	Good	-0.3
48	Entry	Gypsum	Ceiling	White	-	Good	0.0
49	Entry	Wood	Baseboard	White	B	Good	-0.4
50	Entry	Metal	Door	White	D	Good	-0.2
51	Entry	Wood	Door	White	A	Good	-0.1
52	Entry	Wood	Door Casing	White	A	Good	-0.1
53	Entry	Wood	Shelf	White	A	Good	-0.2
54	Entry	Wood	Stair	Stain	-	Good	0.0
55	Entry	Wood	Stringer	White	-	Good	0.0
56	Entry	Wood	Railing	White	-	Good	0.0
57	Entry	Wood	Railing	Stain	-	Good	0.0
58	Entry	Wood	A/C Box	White	D	Good	-0.1
59	Bathroom 3	Gypsum	Wall	White	A	Good	-0.2
60	Bathroom 3	Gypsum	Wall	White	B	Good	0.0
61	Bathroom 3	Gypsum	Wall	White	C	Good	-0.1
62	Bathroom 3	Gypsum	Wall	White	D	Good	-0.1
63	Bathroom 3	Gypsum	Ceiling	White	-	Good	-0.1
64	Bathroom 3	Ceramic Tile	Floor	Blue	-	Good	-0.2
65	Bathroom 3	Ceramic Tile	Basecove	White	B	Good	-0.3
66	Bathroom 3	Wood	Door	White	B	Good	-0.2
67	Bathroom 3	Wood	Door Casing	White	B	Good	-0.1
68	Bathroom 3	Wood	Cabinet	Stain	D	Good	-0.1
69	Hall/Storage	Gypsum	Wall	White	A	Good	-0.2
70	Hall/Storage	Gypsum	Wall	White	B	Good	-0.2
71	Hall/Storage	Gypsum	Wall	White	C	Good	0.0
72	Hall/Storage	Gypsum	Wall	White	D	Good	-0.1
73	Hall/Storage	Gypsum	Ceiling	White	-	Good	0.1
74	Hall/Storage	Wood	Baseboard	White	D	Good	-0.1
75	Hall/Storage	Metal	Door	White	B	Good	-0.1
76	Hall/Storage	Wood	Door	White	D	Good	-0.2
77	Hall/Storage	Wood	Door Casing	White	D	Good	0.0
78	Hall/Storage	Wood	Shelf	White	C	Good	-0.1
79	Hall/Storage	Wood	Attic Hatch	White	-	Good	-0.1
80	Bedroom 4	Gypsum	Wall	White	A	Good	0.0
81	Bedroom 4	Gypsum	Wall	White	B	Good	-0.1
82	Bedroom 4	Gypsum	Wall	White	C	Good	-0.2

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall *	Condition	Result
83	Bedroom 4	Gypsum	Wall	White	D	Good	-0.3
84	Bedroom 4	Gypsum	Ceiling	White	-	Good	0.2
85	Bedroom 4	Wood	Baseboard	White	A	Good	0.0
86	Bedroom 4	Metal	Door	White	C	Good	-0.1
87	Bedroom 4	Wood	Door	White	C	Good	-0.3
88	Bedroom 4	Wood	Door Casing	White	C	Good	0.2
89	Bedroom 4	Wood	Window Sill	White	A	Good	0.0
90	Bedroom 4	Wood	Shelf	White	C	Good	0.0
91	Master Bedroom	Gypsum	Wall	White	A	Good	-0.2
92	Master Bedroom	Gypsum	Wall	White	B	Good	-0.2
93	Master Bedroom	Gypsum	Wall	White	C	Good	-0.1
94	Master Bedroom	Gypsum	Wall	White	D	Good	-0.1
95	Master Bedroom	Gypsum	Ceiling	White	-	Good	-0.2
96	Master Bedroom	Wood	Baseboard	White	B	Good	0.0
97	Master Bedroom	Metal	Door	White	B	Good	-0.1
98	Master Bedroom	Wood	Door	White	B	Good	-0.1
99	Master Bedroom	Wood	Door Casing	White	B	Good	0.0
100	Master Bedroom	Wood	Window Sill	White	A	Good	-0.1
101	Master Bedroom	Wood	Shelf	White	C	Good	0.0
102	Bathroom 1	Gypsum	Wall	White	A	Good	-0.2
103	Bathroom 1	Gypsum	Wall	White	B	Good	-0.2
104	Bathroom 1	Gypsum	Wall	White	C	Good	-0.1
105	Bathroom 1	Gypsum	Wall	White	D	Good	-0.1
106	Bathroom 1	Gypsum	Ceiling	White	-	Good	-0.1
107	Bathroom 1	Ceramic Tile	Floor	Yellow	-	Good	-0.2
108	Bathroom 1	Ceramic Tile	Basecove	Yellow	A	Good	-0.1
109	Bathroom 1	Wood	Door	White	B	Good	-0.1
110	Bathroom 1	Wood	Door Casing	White	B	Good	-0.1
111	Bathroom 1	Wood	Cabinet	Stain	C	Good	-0.2
112	Bathroom 2	Gypsum	Wall	White	A	Good	-0.2
113	Bathroom 2	Gypsum	Wall	White	B	Good	-0.1
114	Bathroom 2	Gypsum	Wall	White	C	Good	-0.1
115	Bathroom 2	Gypsum	Wall	White	D	Good	-0.1
116	Bathroom 2	Gypsum	Ceiling	White	-	Good	-0.1
117	Bathroom 2	Ceramic Tile	Floor	Green	-	Good	0.0
118	Bathroom 2	Ceramic Tile	Basecove	Green	C	Good	-0.2
119	Bathroom 2	Wood	Door	White	B	Good	0.0
120	Bathroom 2	Wood	Door Casing	White	B	Good	0.0
121	Bathroom 2	Wood	Cabinet	Stain	A	Good	0.0
122	Bedroom 2	Gypsum	Wall	White	A	Good	-0.2
123	Bedroom 2	Gypsum	Wall	White	B	Good	-0.1
124	Bedroom 2	Gypsum	Wall	White	C	Good	-0.1
125	Bedroom 2	Gypsum	Wall	White	D	Good	-0.2
126	Bedroom 2	Gypsum	Ceiling	White	-	Good	0.1

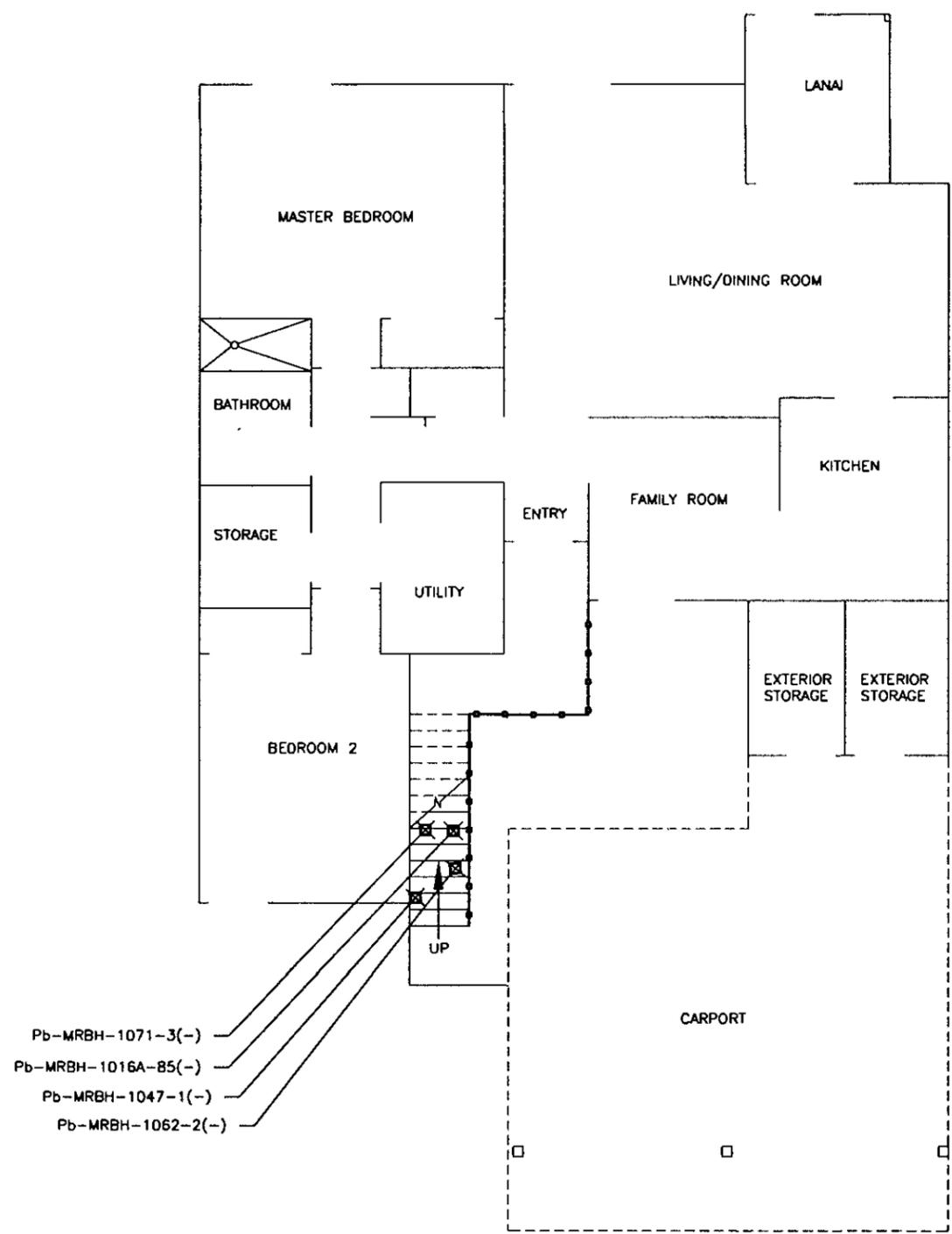
* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
127	Bedroom 2	Wood	Baseboard	White	C	Good	-0.1
128	Bedroom 2	Metal	Door	White	B	Good	0.0
129	Bedroom 2	Wood	Door	White	A	Good	-0.1
130	Bedroom 2	Wood	Door Casing	White	A	Good	0.0
131	Bedroom 2	Wood	Window Sill	White	C	Good	0.0
132	Bedroom 2	Wood	Shelf	White	B	Good	-0.1
133	Bedroom 3	Gypsum	Wall	White	A	Good	0.0
134	Bedroom 3	Gypsum	Wall	White	B	Good	-0.1
135	Bedroom 3	Gypsum	Wall	White	C	Good	-0.2
136	Bedroom 3	Gypsum	Wall	White	D	Good	-0.1
137	Bedroom 3	Gypsum	Ceiling	White	-	Good	0.1
138	Bedroom 3	Wood	Baseboard	White	A	Good	0.1
139	Bedroom 3	Metal	Door	White	D	Good	-0.1
140	Bedroom 3	Wood	Door	White	A	Good	-0.3
141	Bedroom 3	Wood	Door Casing	White	A	Good	0.0
142	Bedroom 3	Wood	Window Sill	White	C	Good	-0.3
143	Bedroom 3	Wood	Shelf	White	D	Good	0.0
144	Calibration			Red			1.1
145	Calibration			Red			1.2
146	Calibration			Red			1.0
147	Calibration			Wood			0.2
148	Calibration			Wood			0.1
149	Calibration			Wood			0.1

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

***Appendix C --- Laboratory Report for Paint Chip Sample
Analysis***

***Appendix D -- Floor Plans Illustrating Extent of LBP (Typical
Housing Unit Floor Plans)***



- Pb-MRBH-1071-3(-)
- Pb-MRBH-1016A-85(-)
- Pb-MRBH-1047-1(-)
- Pb-MRBH-1052-2(-)

LEGEND OF EXTENT OF LEAD-BASED PAINT

—●— RAILING

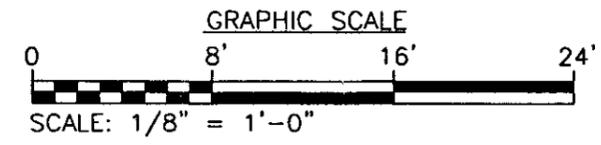
SYMBOLS

◆ LOCATION OF BULK FILM SAMPLES COLLECTED
 (-) >0.5% LEAD BY WEIGHT

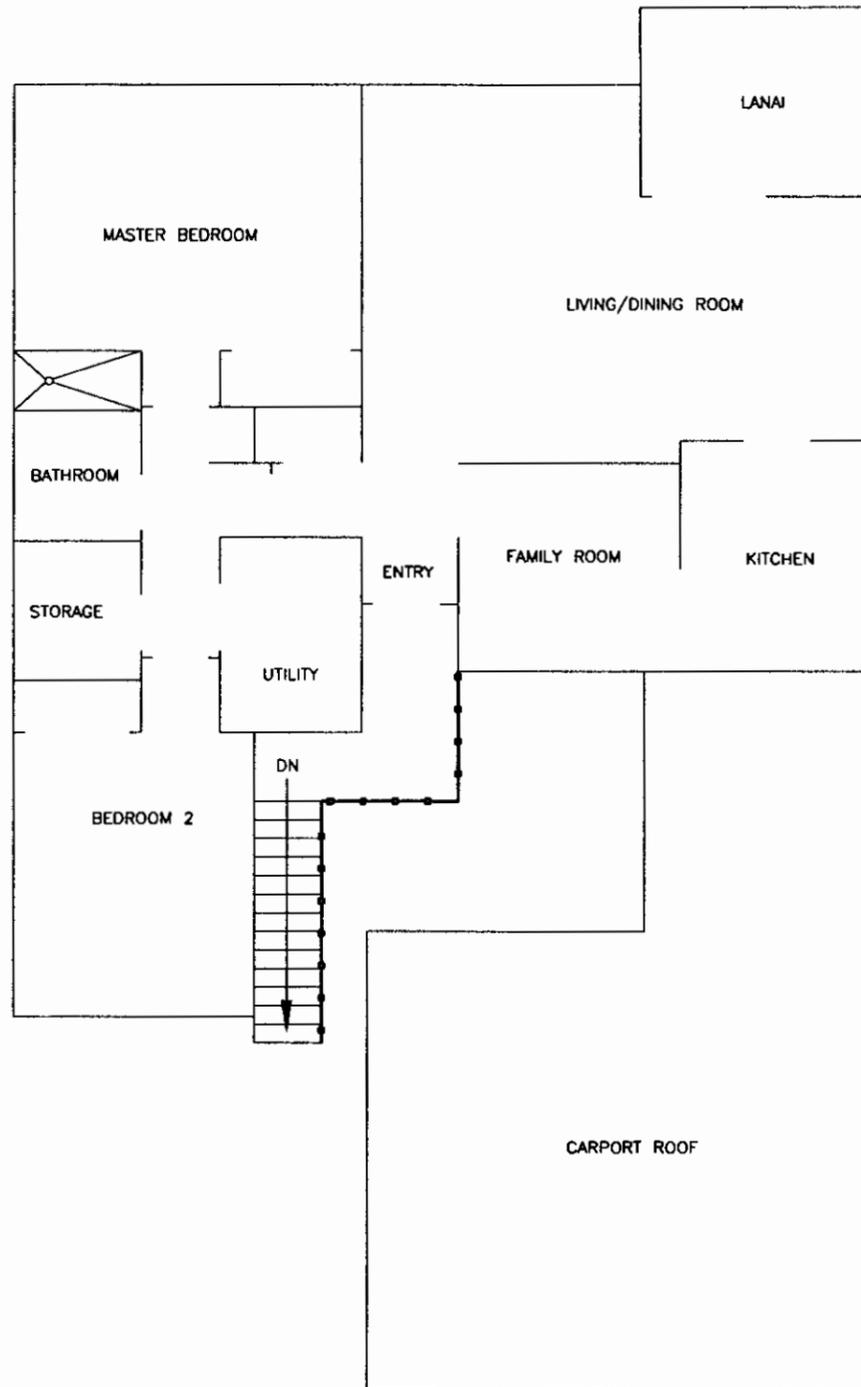
TYPICAL LEAD SAMPLE I.D. No.

Pb-MRBH-1016A-1(+)
 POSITIVE (+) OR NEGATIVE (-) FOR THE PRESENCE OF LEAD-BASED PAINT
 SAMPLE DESIGNATION
 UNIT NUMBER
 MAYPORT-RIBAULT BAY HOUSING
 LEAD

2 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING
FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"



DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	ATLANTA	DATE APPROV	PREP BY	REV. DESCRIPTION	CAPE ENVIRONMENTAL MANAGEMENT INC.
SOUTHERN DIVISION	CHARLESTON, S.C.	USDA		DR		GEORGIA
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY	AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	SUPV. RIOS		DR		DR
2 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING - FIRST FLOOR PLAN	(LEAD-BASED PAINT)	CH ENGR		DR		S. BRYANT
APPROVED	DATE	EDD FOR COMMANDER, NAVFAC	DATE	OFFICER IN CHARGE	APPROVED	DATE
SEAL AREA						
CODE ID. No.	SIZE					
FED. DRAWING NO.						
STA. PROJ. NO.						
CAPE PROJ. No. 90032.001.000						
SPEC. NO. N/A						
CONSTRN. CNTR. NO. N/A						
NAVFAC DRAWING NO. N/A						
SHEET 3 OF 6						
2BRLBP-1						



LEGEND OF EXTENT OF LEAD-BASED PAINT

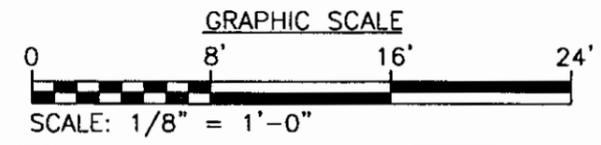
—●—●—●— RAILING

NOTE

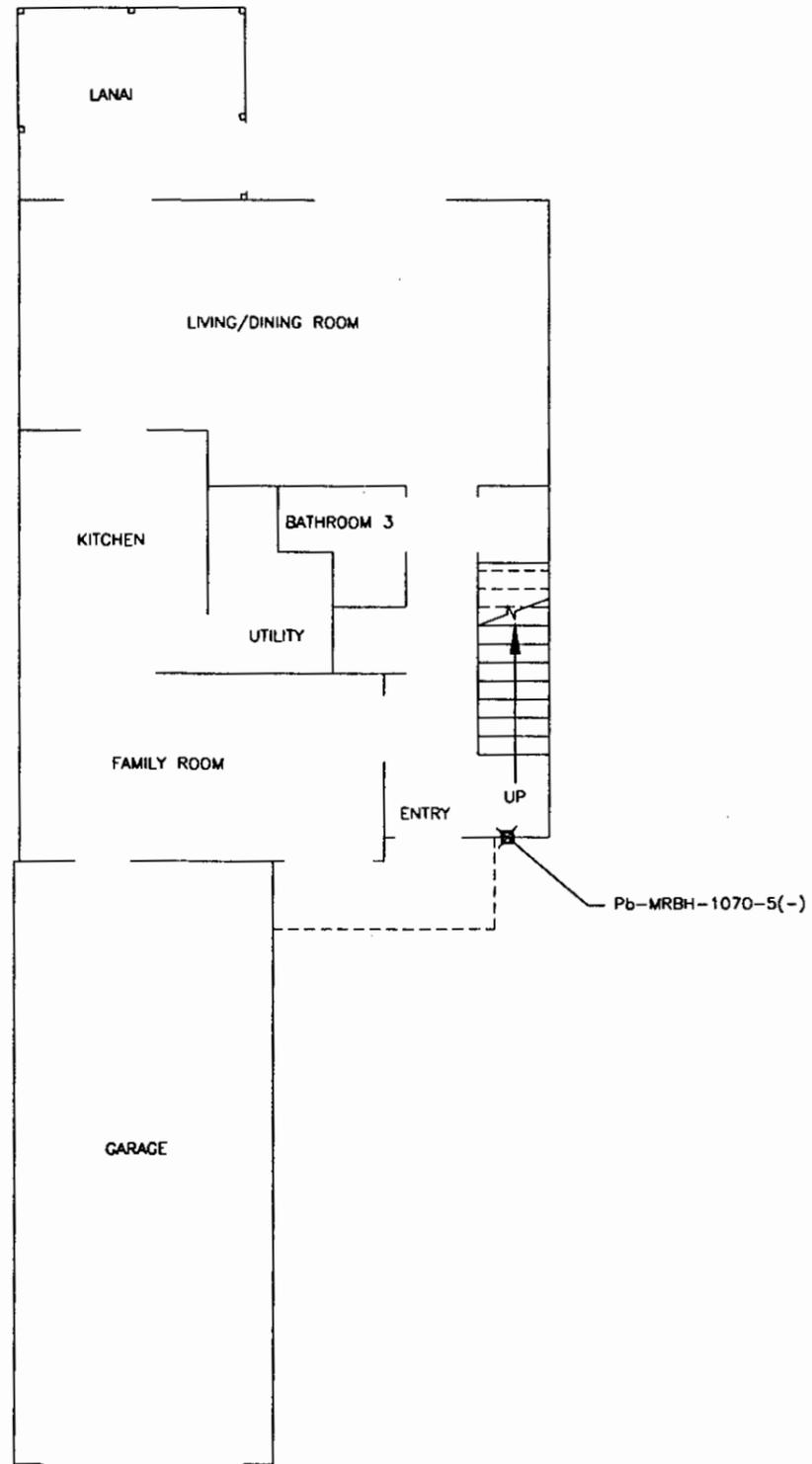
NO INCONCLUSIVE XRF READING IN THIS UNIT TYPE.
BULK PAINT FILM SAMPLES NOT REQUIRED.

2 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"



DEPARTMENT OF THE NAVY		NAVAL FACILITIES ENGINEERING COMMAND		CAPE ENVIRONMENTAL MANAGEMENT INC.	
SOUTHERN DIVISION		CHARLESTON, S.C.		ATLANTA	
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY		AT MAYPORT NAVAL STATION, JACKSONVILLE, FL		DIR C.ROSS	
2 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - SECOND FLOOR PLAN		(LEAD-BASED PAINT)		DIR CH. S. BRYANT	
DATE		DATE		DATE	
APPROVED		OFFICER IN CHARGE		DATE	
ETD FOR COMMANDER, NAVFAC		APPROVED		DATE	
SCALE AREA		REV. DESCRIPTION		PREP BY	
CODE NO.		DATE APPROV.		DIR	
SIZE B		ATLANTA		DIR	
FED DRAWING NO.		DIR		DIR	
STA. PROJ. NO.		DIR C.ROSS		DIR	
CAPE PROJ. No. 80032.001.000		DIR CH. S. BRYANT		DIR	
SPEC. NO. N/A		SUPERVISOR		DIR	
CONSTR. CNTR. NO. N/A		SUBMITTED BY (FIRM MEMBER-TITLE)		DIR	
NAVFAC DRAWING NO. N/A		EC		DIR	
SHEET # OF #		PFE		DIR	
2BR1BP-2					



NOTE
NO LEAD-BASED PAINT WAS IDENTIFIED IN THIS UNIT TYPE.

SYMBOLS

◆ LOCATION OF BULK FILM SAMPLES COLLECTED
(-) >0.5% LEAD BY WEIGHT

TYPICAL LEAD SAMPLE I.D. No.

Pb-MRBH-1070-1(+)
 — POSITIVE (+) OR NEGATIVE (-) FOR THE PRESENCE OF LEAD-BASED PAINT
 — SAMPLE DESIGNATION
 — UNIT NUMBER
 — MAYPORT-RIBAULT BAY HOUSING
 — LEAD

3 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING
FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

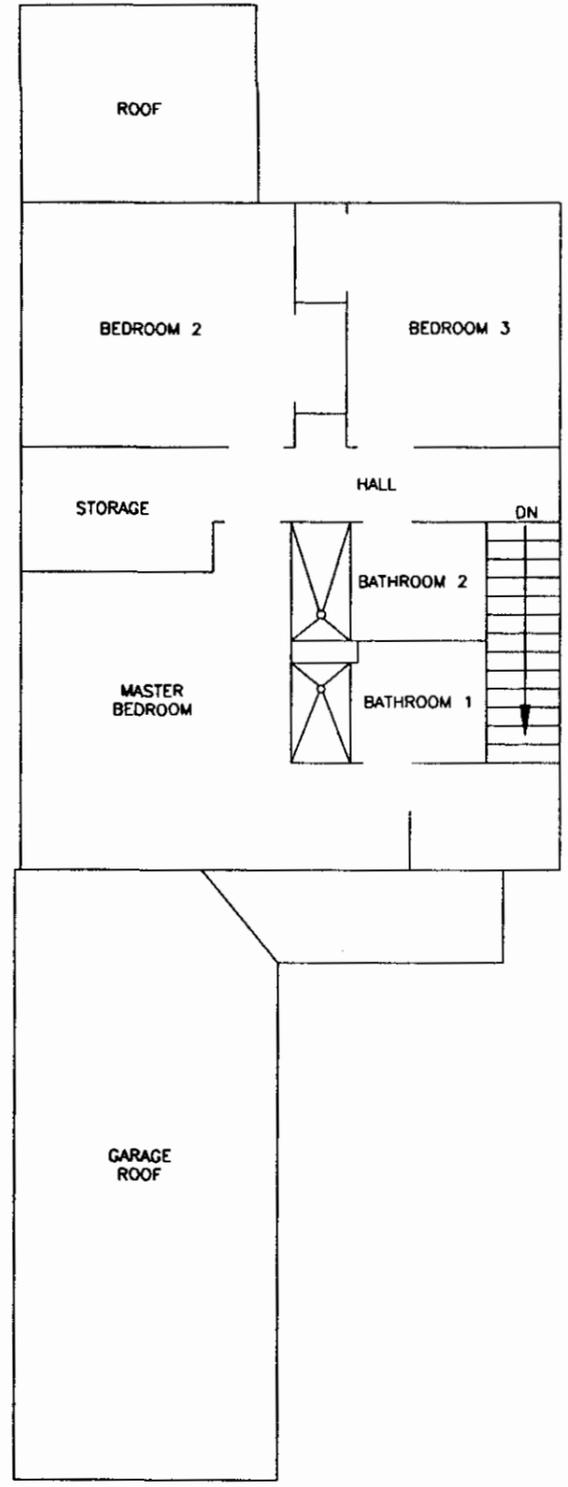


GRAPHIC SCALE



SCALE: 1/8" = 1'-0"

DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	CAPE ENVIRONMENTAL MANAGEMENT INC.	ATLANTA	ATLANTA	GEORGIA
SOUTHERN DIVISION	CHARLESTON, S.C.	DR	CLERKS	DR	CLERKS
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY	AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	SUPV	H, RIOS	CH ENGR	SUBSTANT
3 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING - FIRST FLOOR PLAN	(LEAD-BASED PAINT)	DATE	DATE	DATE	DATE
APPROVED	EDD FOR COMMANDER, NAVFAC	DATE	DATE	DATE	DATE
SCALE AREA		OFFICER IN CHARGE			
CODE ID No.	SIZE B				
STD DRAWING NO.					
STA. PROJ. NO.					
CAPE PROJ. No. 90032.001.000					
SPEC. NO.	N/A				
CONSTRN. CNTR. NO.	N/A				
NAVFAC DRAWING NO.	N/A				
SHEET 3	OF 6				
36RLBP-1					

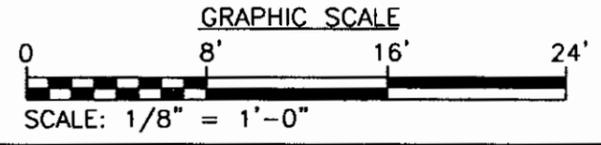


3 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
SECOND FLOOR PLAN
 SCALE: 1/8" = 1'-0"

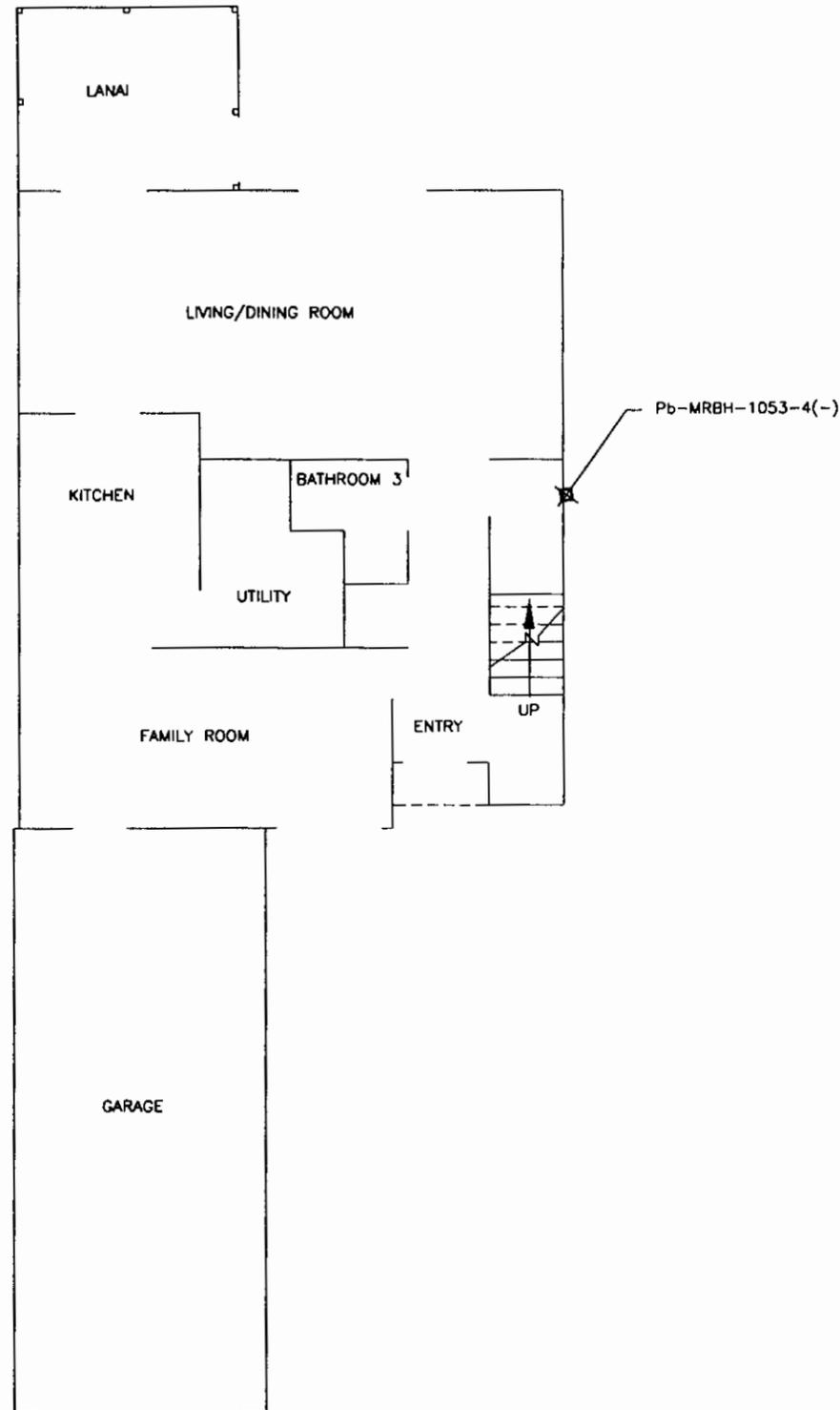


NOTE
 NO LEAD-BASED PAINT WAS IDENTIFIED IN THIS UNIT TYPE.

NOTE
 ND INCONCLUSIVE XRF READING IN THIS UNIT TYPE.
 BULK PAINT FILM SAMPLES NOT REQUIRED.



DEPARTMENT OF THE NAVY SOUTHERN DIVISION CHARLESTON, S.C.		NAVAL FACILITIES ENGINEERING COMMAND APPROVED		
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY AT MAYPORT NAVAL STATION, JACKSONVILLE, FL 3 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - SECOND FLOOR PLAN (LEAD-BASED PAINT)		ETD FOR COMMANDER, NAVFAC		
CODE ID No.	SIZE B	REV. DESCRIPTION	PREP BY	
FED DRAWING NO.	STA. PROJ. NO.	DATE APPROV	DATE	
CAPE PROJ. No. 90032-001-000	SPEC. NO. N/A	ATLANTA	OFFICER IN CHARGE	
CONSTR. CNTR. NO.	NAVFAC DRAWING NO.	CAPE ENVIRONMENTAL MANAGEMENT INC.	DATE	
SHEET # OF #	3BR1BP-2	ATLANTA	DATE	
<td> SUPP. RIDS </td> <td> DR. C. RIOS </td> <td> GEORGIA </td> <td> DATE </td>	SUPP. RIDS	DR. C. RIOS	GEORGIA	DATE
SUBMITTED BY (FROM MEMBER-TITLE)	CH ENGR	S. BRYANT	DATE	
EC	BR HQ	DR	DATE	
PFE	DR	DR	DATE	



4 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING

FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"



SYMBOLS

- ◆ LOCATION OF BULK FILM SAMPLES COLLECTED
- (-) >0.5% LEAD BY WEIGHT

NOTE

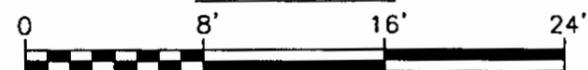
NO LEAD-BASED PAINT WAS IDENTIFIED IN THIS UNIT TYPE.

TYPICAL LEAD SAMPLE I.D. No.

Pb-MRBH-1053-1(+)

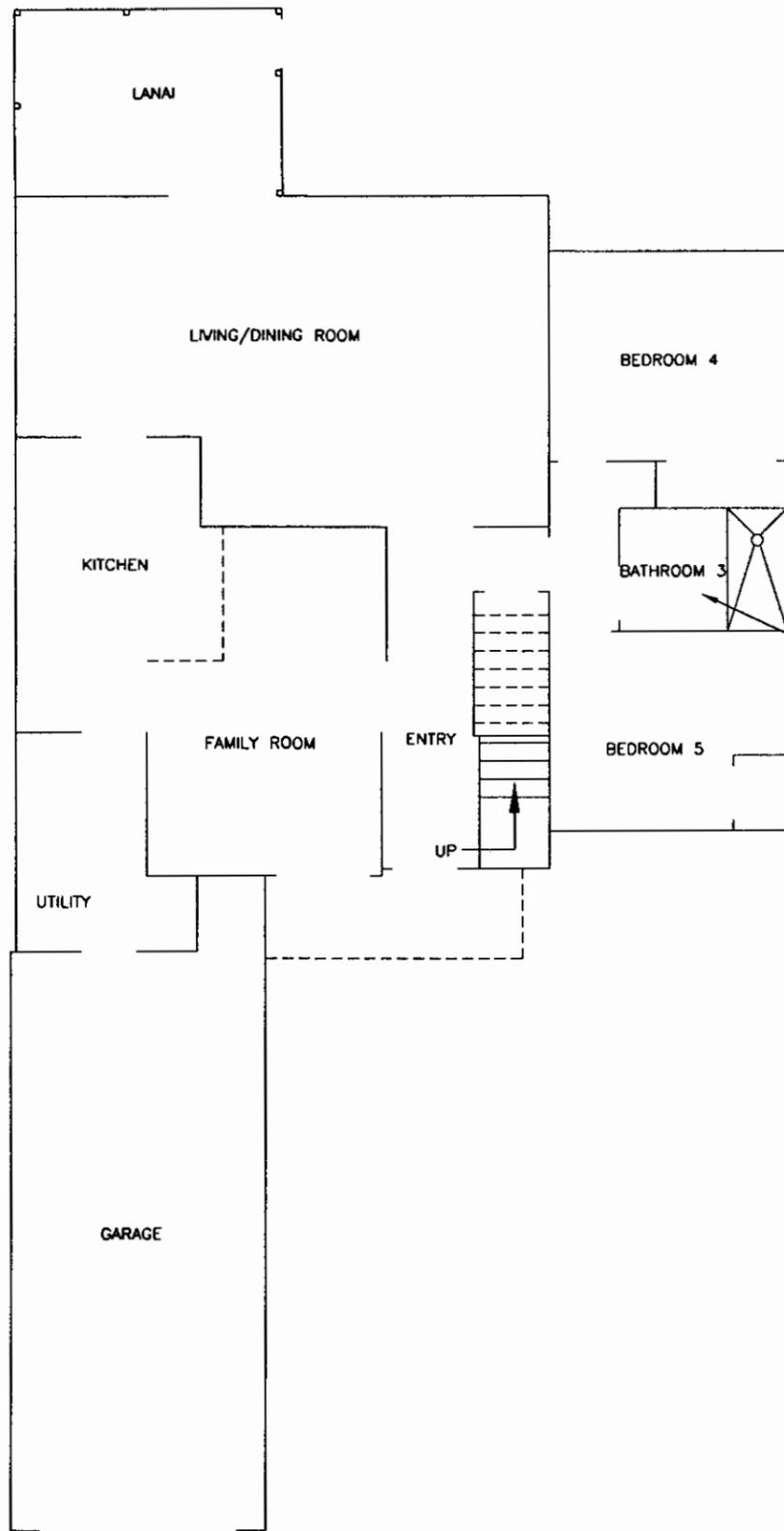
- ↑ POSITIVE (+) OR NEGATIVE (-) FOR THE PRESENCE OF LEAD-BASED PAINT
- ↑ SAMPLE DESIGNATION
- ↑ UNIT NUMBER
- ↑ MAYPORT-RIBAUTL BAY HOUSING
- ↑ LEAD

GRAPHIC SCALE



SCALE: 1/8" = 1'-0"

DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	REV. DESCRIPTION	PREP BY	DATE APPROV	CAPE ENVIRONMENTAL MANAGEMENT INC.
SOUTHERN DIVISION	CHARLESTON, S.C.				ATLANTA
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY					ATLANTA
AT MAYPORT NAVAL STATION, JACKSONVILLE, FL					DR
4 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - FIRST FLOOR PLAN					DR
(LEAD-BASED PAINT)					DR
DATE	ETD FOR COMMANDER, NAVFAC	APPROVED	DATE	OFFICER IN CHARGE	DR
APPROVED					DR
SCALE AREA					DR
CODE ID No.	SIZE				DR
FED DRAWING NO.					DR
STA. PROJ. NO.					DR
DAPE PRL No. 90032.001.000					DR
SPEC. NO. N/A					DR
CONSTRN. CNTR. NO. N/A					DR
NAVFAC DRAWING NO. N/A					DR
SHEET 3 OF 6					DR
48RLBP-1					DR

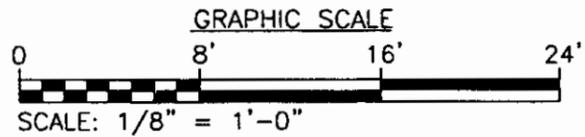


UNIT 1002F HAS CERAMIC TILE BASECOVE GLAZING THAT IS CONSIDERED LBP. CERAMIC TILE BASECOVE MAY CONTAIN LEAD IN UNITS NOT TESTED.

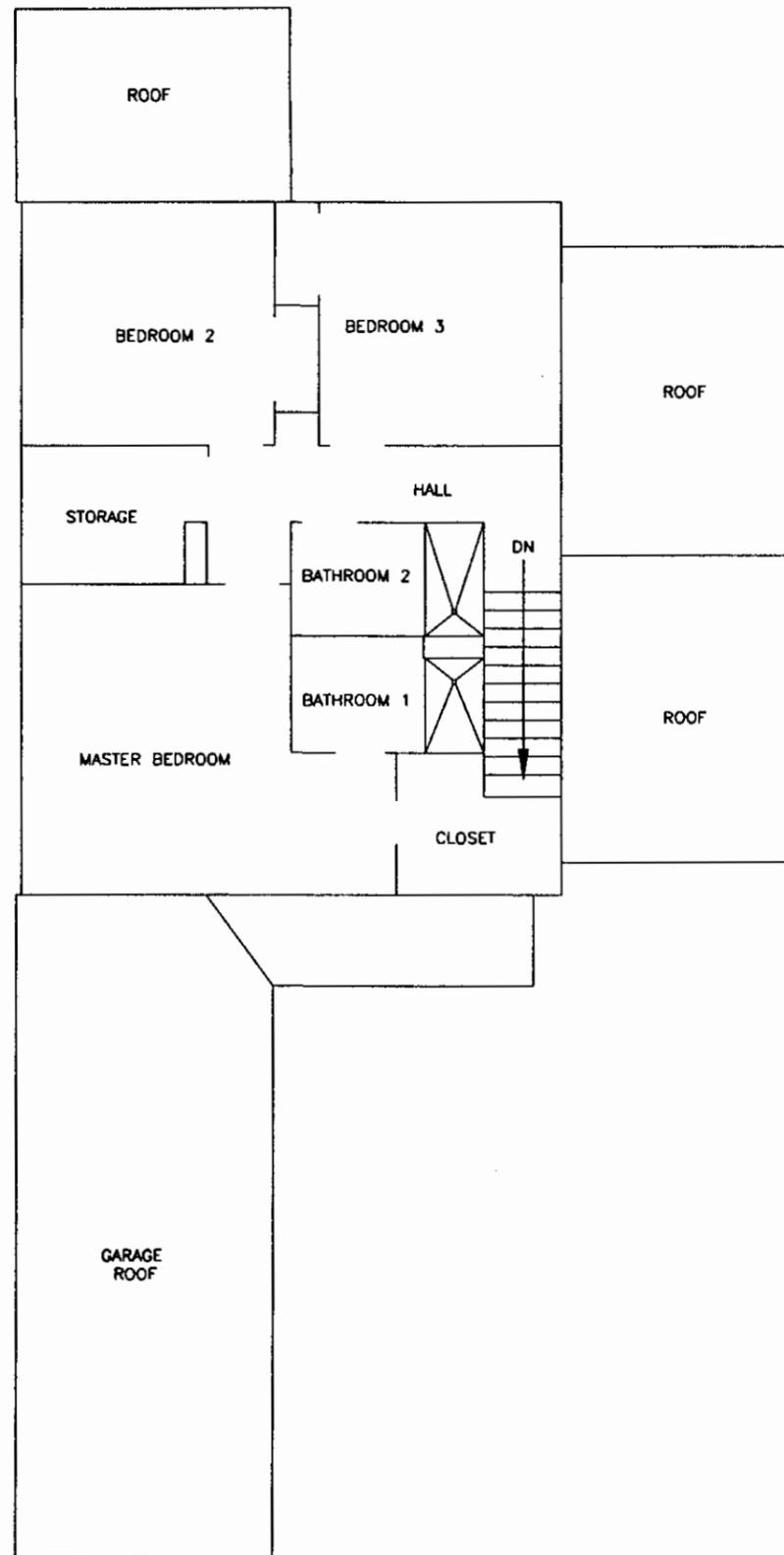
NOTE
NO LEAD-BASED PAINT WAS IDENTIFIED IN THIS UNIT TYPE.

NOTE
NO INCONCLUSIVE XRF READING IN THIS UNIT TYPE. BULK PAINT FILM SAMPLES NOT REQUIRED.

5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"



DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	REV. DESCRIPTION	PREP BY	DATE APPROV	CAPE ENVIRONMENTAL MANAGEMENT INC.
SOUTHERN DIVISION	CHARLESTON, S.C.				ATLANTA
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY					USOP
AT MAYPORT NAVAL STATION, JACKSONVILLE, FL					DR C.BROS
5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - FIRST FLOOR PLAN					CH ENGR
(LEAD-BASED PAINT)					SUBMITTED BY (PRM MEMBER-TITLE)
					DATE
					BR NO
					DR
					OFFICER IN CHARGE
					DATE
					APPROVED
					ETD FOR COMMANDER, NAVFAC
					APPROVED
SCALE AREA					
CODE ID No.	SIZE				
FED DRAWING NO.					
STA. PROJ. NO.					
CAPE PROJ. No. 80033.001.000					
SPEC. NO. N/A					
CONSTR. CONTR. NO. N/A					
NAVFAC DRAWING NO. N/A					
SHEET 3 OF 6					
5BR1BP-1					



5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"

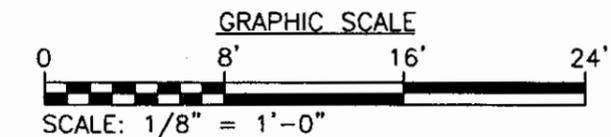


NOTE

NO LEAD-BASED PAINT WAS IDENTIFIED IN THIS UNIT TYPE.

NOTE

NO INCONCLUSIVE XRF READING IN THIS UNIT TYPE.
 BULK PAINT FILM SAMPLES NOT REQUIRED.

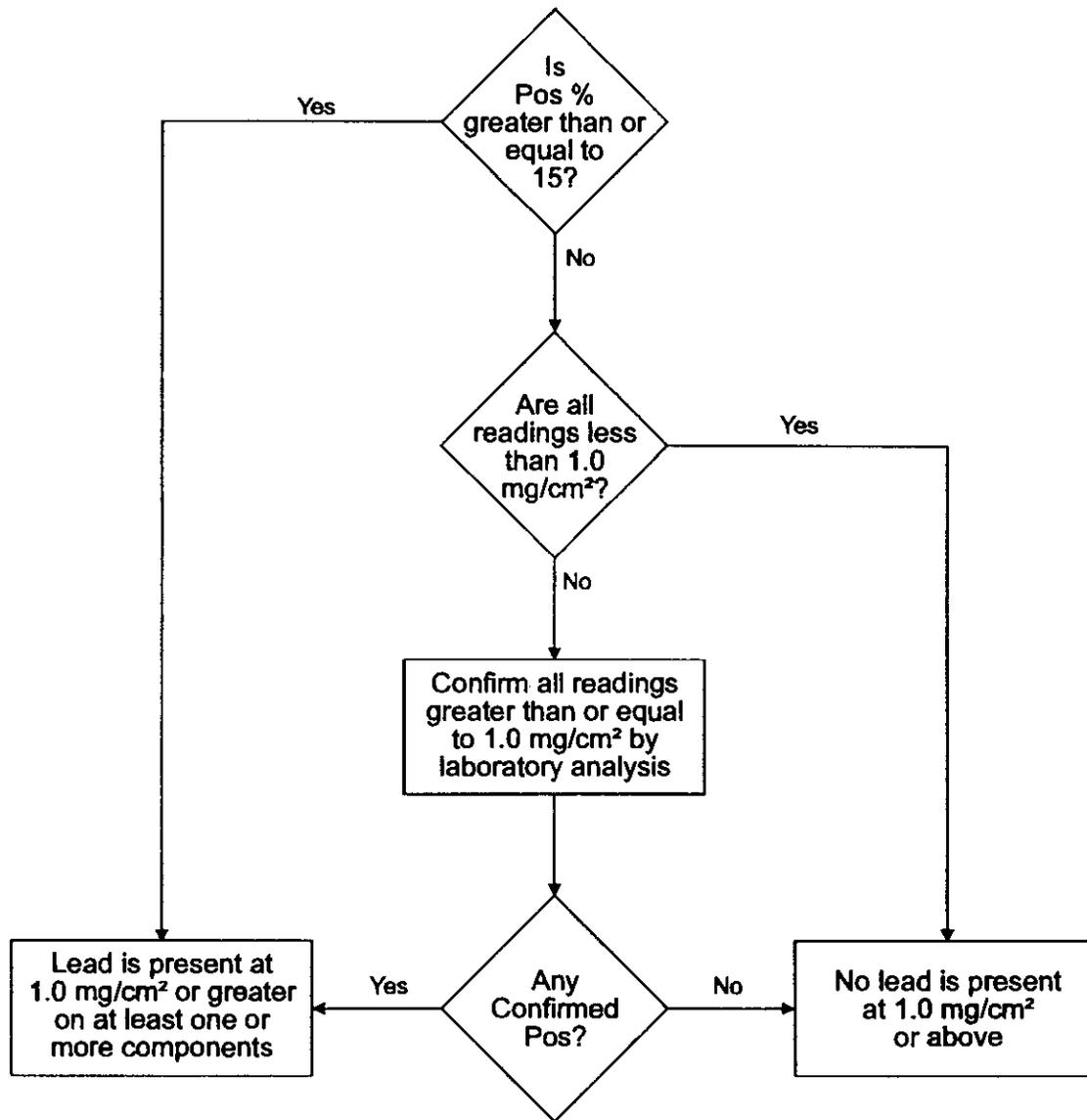


DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	CAPE ENVIRONMENTAL MANAGEMENT INC.	ATLANTA	ATLANTA	GEORGIA
SOUTHERN DIVISION	CHARLESTON, S.C.	DRG	DR	C.ROSS	DR
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY	AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	SUPH, RIOS	CH	ERRAR	S.BERTZANT
5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - SECOND FLOOR PLAN	(LEAD-BASED PAINT)	DATE	DATE	DATE	DATE
APPROVED	DATE	DATE	DATE	DATE	DATE
OFFICER IN CHARGE	OFFICER IN CHARGE	OFFICER IN CHARGE	OFFICER IN CHARGE	OFFICER IN CHARGE	OFFICER IN CHARGE
SCALE AREA					
CODE ID No.	SIZE				
FED DRAWING NO.					
STA. PROJ. NO.					
CAPE PROJ. No.	90032.001.000				
SPEC. NO.	N/A				
CONSTRN. CNTR. NO.	N/A				
NAVFAC DRAWING NO.	N/A				
SHEET #	OF #				
58RLBP-2					

Appendix E --- Multifamily Decision Flowchart

Multifamily Decision Flowchart

Purpose: to determine the presence of lead on a component type.



- Pos is the positive classification of a testing combination relative to the HUD standard as specified in the *XRF Performance Characteristics Sheet* for each XRF instrument.

Figure 7.11 Multifamily Decision Flowchart.

Appendix F --- Accreditations and Certifications

The Environmental Institute

Mike Spradling

Social Security Number - 259-98-7159

Has completed a three-day course and satisfactorily passed an examination that meets the criteria listed for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities as regulated by Georgia DNR/EPD Chapter 371-3-24 and U.S. EPA TSCA 40 CFR Part 745 for the course titled

Lead Inspector: EPA

(Target Housing & Child-Occupied Facilities)

April 13-15, 1998

Course Date

1166

Certificate Number

April 15, 1998

Examination Date

Jeffrey B. Maurras

Jeffrey Maurras - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator





Certificate of Achievement

This is to certify that

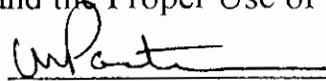
Michael J. Spradling

Cape Environmental Management, Inc.

on the 26th day of February 1998 successfully completed the factory training for

RMD's LPA-1 Lead Paint Inspection System

including, but not limited to, the topics of Radiation Safety
and the Proper Use of the Instrument.



Jacob H. Paster, Vice President, RMD, Inc.
44 Hunt St., Watertown, Massachusetts



The American Industrial Hygiene Association



is proud to acknowledge that

Hygeia Laboratories, Inc.
Marietta, GA
Laboratory ID# 9072

*has fulfilled the requirements for Environmental Lead
Laboratory Accreditation Program and has earned
distinguished recognition as an*

AIHA Accredited Laboratory

*Current certificate effective October 1, 1997 to October 1, 2000, subject to continued
compliance with AIHA accreditation criteria.*

The above named laboratory participates in the following:
ELLAP - ELPAT matrices: Paint, Soil, Dust

*The ELLAP program is recognized by the EPA as meeting the requirements of the National Lead Laboratory
Accreditation Program established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of
1992 and includes paint, soil and dust wipe analysis. Air analysis is not included as part of the ELLAP.*

James C. Rock

James C. Rock, Ph.D., PE, CIH
President, American Industrial Hygiene Association

Mark A. Puskar

Mark A. Puskar, Ph.D.
Chair, Analytical Accreditation Board

583
Certificate Number

PROGRAM INFORMATION AND PROTOCOL

PROGRAM HISTORY

Naval Facilities Engineering Command (NAVFACENGCOM) has retained Public Works Center (PWC) -- Norfolk, Virginia as a consultant to develop and manage the environmental assessment. The assessment will provide strategies to ensure safe living environments for residents and workers.

The Navy Family Housing Lead Based Paint/Asbestos Inventory Program is outlined in a 9 November 1992 letter from Commander, Naval Facilities Engineering Command. The Department of Housing and Urban Development (HUD) guidelines, the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X), and Requirements for Lead-Based Paint Activities: Proposed Rule (40 CFR Part 74) were generally adopted as assessment protocol.

Certified inspectors performed comprehensive inspections of the interior and exterior of residences, yards, common buildings, and grounds. The inspection determined the presence and location of **lead-based paint (LBP)**, **lead-contaminated dust** and **lead-contaminated soil**. In addition, the inspectors evaluated the physical condition of LBP substrates to assist in determining the **hazard potential** for each lead-based paint, lead-contaminated dust and/or lead-contaminated soil item. Basic protocol and procedures followed during the assessment are similar to those established by HUD for inspection of public and urban housing. HUD guidelines predicate random testing/sampling of the entire community as a **homogeneous area** to provide a statistical confidence level of 95%.

BACKGROUND

Lead-Based Paint

Lead-based paint can be a serious source of lead exposure to children and adults. Chipped or peeling lead-based paint creates a high risk to children via ingestion and to adults if improper cleaning or **abatement** techniques occur. When high levels of lead build up in a person's body, lead poisoning can occur. Children are very susceptible to lead poisoning due to their high growth-rate pattern. Banned from residential use in 1978, **lead containing paint** is evident in millions of homes due to its extensive use prior to that time. Following identification and confirmation of lead paint on a

component, only **mitigation** through **interim controls** or abatement will ensure the safety of both adults and children.

Lead in Dust

Current studies show the greatest hazard posed to children is dust generated from deteriorated lead-based paint and lead-contaminated soil. Small children's exposure to the lead hazard is primarily attributable to dust ingestion through normal hand to mouth behavior. Adults' exposure occurs through inhalation and ingestion of dust. Testing for lead in dust determines potential hazardous areas.

Lead in Soil

High levels of lead-contaminated soil can pose a human health hazard both directly and indirectly. Children expose themselves directly to lead in soil by hand to mouth behavior. Children or pets can also track this soil into residences and increase the dust lead levels. PWC Norfolk defines the areas around a particular unit as **subareas**. Those subareas sampled pose the greatest hazard to the occupants and possess at least one of the three following characteristics:

1. The area potentially has an elevated lead content.
2. The area is a source of dust.
3. The area has a particular use causing increased human exposure.

Refer to the document "Preventing Lead Poisoning in Young Children" by the Centers for Disease Control for a detailed history of high blood lead levels and its adverse health effects. Additionally, the document provides supplemental information on the sources and pathways of lead exposure.

TESTING PROCEDURES

Lead in Paint

Sampling Objectives

The objective of the inspection is to determine if potential **lead-based paint hazards** exist in the community and recommend methods to minimize confirmed hazards. The Department of Housing and Urban

Development (HUD) Interim Guidelines outline the general scheme applied for the units tested.

Sampling and results are provided per community group to coincide with NAVFAC Housing management practices. A homogeneous housing community consists of units with similar age and construction history. PWC Norfolk inspects a statistical representation, based on HUD guidelines, of the total number of units in each community. Although inspectors do not sample each unit, conclusions and recommendations apply to all housing within a community. This method provides the needed information for the best value. The HUD Interim Guidelines provide a suggested list of components or surfaces to sample in an inspection. Selection of sample locations is random, but all architectural components are tested.

Data Analysis

The lead-based paint analysis category of each component is either positive or negative based upon the percentage of positive XRF assay measurements taken for that component community-wide. If the community-wide percentage of a component is zero, the lead-based paint category for the component is negative. A community-wide percentage of ten or greater for a particular component categorizes that component as positive. A community-wide percentage of greater than zero and less than ten, requires further analysis to determine the lead-based paint category for that component. This analysis encompasses statistical comparison of that component with the same and similar components at different levels. The first level of analysis compares the component to similar components in the same functional area. The second level of analysis compares the component to the same component but within all other functional areas. The third and last level compare the component to similar components in all other functional areas.

Lead In Dust

Due to the correlation that exists between lead-contaminated soil and dust, the units randomly chosen for lead in dust inspection are also inspected for lead in soil.

Sampling Objectives

Inspectors collect dust samples from four rooms within each randomly chosen unit. HUD protocol dictates the minimum number of randomly selected units within a housing community and the number of dust

samples. The sampled rooms are the living room, kitchen, and two bedrooms. Children's bedrooms have sampling priority. Two component areas within these rooms are sampled (floor and window well/sill).

Data Analysis

HUD's Interim Guidelines for Hazard Identification and Abatement was the standard adopted for dust analysis. All dust samples require laboratory analysis. Atomic Absorption Spectrometry (AAS) and Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) methods produce data expressed as total mass of lead per surface area sampled. There are no Federal standards governing the **action level** of lead in dust at the present time. At present, HUD recommends the following guidelines for specific surfaces:

Floors:	100 micrograms per square foot
Window Sills:	500 micrograms per square foot
Window Wells:	800 micrograms per square foot

} From HUD Technical Guide for the Evaluation of Lead-Based Paint Hazards in P

Lead In Soil

Due to the correlation that exist between lead-contaminated soil and dust, the units randomly chosen for lead in dust inspection are also inspected for lead in soil.

Sampling Objectives

Inspectors collected soil samples from subareas around randomly selected units. HUD protocol dictates the minimum number of randomly selected units within a housing community. The following are examples of soil sample subareas:

- Base of a building foundation
- Downspout drop areas
- Garden areas
- Household pet play/sleeping areas
- Painted fence-rows
- Pathways created by pedestrian/vehicular traffic
- Along paved areas, alleys, parking lots, roadways, etc.
- Play/recreation areas

Data Analysis

Atomic Absorption Spectrometry (AAS) or Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) laboratory analysis methods determine the lead concentration in the soil samples. Following the Environmental Protection Agency's Guidance on Residential Lead-Based Paint, Lead-Contaminated Dust, and Lead-Contaminated Soil, the soil

lead concentration determines the action level. The lead in soil action levels begin at soil lead concentration of 400 parts per million (ppm); refer to Appendix I for further details.

ACTIVITY DESCRIPTION

A summary of Naval Station Mayport inspection is in Table 1 below. Provided in each community management plan are vicinity and community maps along with the list of the homes inspected.

- Activity UIC Number: N60201¹
- Inspection Dates: September - December 1994

Table 1 - Inspection Parameters

Housing Type	Total # of Units	# of Units Inspected			Year(s) of Construction
		Paint	Dust	Soil	
Field Grade Officer (3013)					
3 Bedroom	1	1	1	1	19??
Ribault Village (3014)					
2 Bedroom	100	4	4	4	1978-79
3 Bedroom	90	4	3	3	1978-79
4 Bedroom	170	8	9	9	1978-79
5 Bedroom	40	2	2	2	1978-79
Junior Officer (3015)					
3 Bedroom	10	10	5	5	1963
4 Bedroom	2	2	0	0	1963
Capehart Field Grade Officer (3016)					
3 Bedroom	39	26	7	7	1964
4 Bedroom	5	5	0	0	1964
Milcon Enlisted (3017)					
2 Bedroom	12	2	0	0	1964
3 Bedroom	98	39	6	6	1964
4 Bedroom	16	6	1	1	1964
Capehart Enlisted (3018)					
2 Bedroom	40	4	3	3	1963
3 Bedroom	298	38	11	10	1963
4 Bedroom	64	13	6	5	1963

Table 1 - Inspection Parameters

Housing Type	Total # of Units	# of Units Inspected			Year(s) of Constructi
		Paint	Dust	Soil	
Senior Officer (3019)					
4 Bedroom	2	2	2	2	1964
Capehart Junior Officer (3020)					
2 Bedroom	8	4	0	0	1962
3 Bedroom	66	30	5	5	1962
4 Bedroom	14	8	1	1	1962
Capehart Senior Officer (3021)					
4 Bedroom	6	6	6	6	1962
Johnson Housing (3023)					
2 Bedroom	200	0	10	10	1987
Playgrounds (3025)					
Playgrounds	37	0	N/A	37	Unknown
Totals	1318	214	82	117	

¹See Definitions - Appendix I.

REFERENCE DOCUMENTS

Appendix III contains a list of reference material regarding the policy of the Navy Family Housing Lead Based Paint/Asbestos Inventory Program and regulations for lead control. Also listed are the various documents concerning the inspection, control, and abatement of lead. The provided Document Package contains applicable federal regulations and guidance documents that apply to lead-based paint, lead in dust, and lead in soil inspections.

All aspects of the individual community management plans utilize the respective governing regulatory documents as a basis for action. Although these documents often contradict one another, this Action Summary combined with the accompanying management plans provides a safe and cost effective means to resolve environmental issues related to lead hazards.

LEAD SURVEY SUMMARY

FINDINGS AND ANALYSIS

Lead in Paint

Field Grade Officer; 212 (3013) - Lead based paint test results indicate that levels of lead above the action limit are evident on the wood trim throughout the interior of the unit. The paint and the wood are in good condition.

Ribault Village (3014) - The exterior soffits are painted with paint which contains lead above the HUD action level. The soffits are in poor condition and the paint has major damage.

Junior Officer (3015) - Various interior components are painted with lead based paint in this community. Nineteen of the one hundred and eight components tested in the community are positive for lead. The bathroom doors and trim, the baseboards throughout, and the hallway closet doors, shelves and trim have damaged painted surfaces and require short term action. The remaining positive components require monitoring in an Operations and Maintenance (O&M) Plan.

Capehart Field Grade Officer (3016) - Thirty two percent (40/124) of the components tested are positive for lead based paint. Several painted components are in a damaged condition. These require short term action. An O&M plan is needed to monitor the remaining components.

Milcon Enlisted (3017) - Of the one hundred and thirty three components tested, forty eight are painted with lead based paint. Some of the positive interior components are assessed as damaged. Damaged lead paint is a potential hazard to the occupants of the dwellings and must be corrected in a short term time frame.

Capehart Enlisted (3018) - Sixty two of the one hundred and thirty four components tested are painted with lead based paint. The paint on many of the components is damaged. These components require restoration. All positive components require O&M until abated.

Senior Officer (3019) - Twenty four percent (20/84) of the components tested in these two homes are painted with lead based paint. All of the interior components are intact and require O&M until abated. The

exterior carport beam has some damage and requires repair within six months.

Capehart Junior Officer (3020) - One hundred and twenty components in each of the homes were tested for the presence of lead based paint. Forty five components are painted with paint which contains lead above the action level of 1.0 mg/cm². Paint exists in a damaged condition on eleven of the forty five positive components. The short term response to these eleven components is restoration. Restore the painted surfaces on the damaged components and maintain all of the components under an Operations and Maintenance Program.

Capehart Senior Officer (3021) - One hundred and twenty six of the painted components in the homes of this community were tested for lead based paint. Thirty four of these components are painted with lead based paint. Paint that is damaged, i.e. chipped, cracked, flaking or chalking, requires restoration. Eight of the positive components in these homes have damaged painted surfaces and require restoration within six months.

Johnson Housing (3023) - This community was constructed after FY-83, there fore, the inspection was performed under a modified protocol as directed by Naval Facilities Engineering Command. This protocol dictates that asbestos, dust and soil will be inspected in accordance with the dust and soil table published by HUD. Paint inspections are not performed.

Playgrounds (3025) - Thirty seven playgrounds were assessed for lead in soil. (See Soil Section for findings.) The playground equipment consisted of unpainted materials and was not tested for lead based paint.

Lead in Dust

Field Grade Officer;212 (3013) - One of the four samples taken at this house contains lead above the HUD action limit.

Ribault Village (3014) - Dust samples were collected from nine homes within the community. Analyses of the results reveal that lead in dust poses no health hazard. All of the sample results are below the HUD action level.

Junior Officer (3015) - Dust samples were collected from five of the twelve homes in this community. The results are below the action level.

Capehart Field Grade Officer (3016) - Although the presence of lead-based paint creates the potential for lead in dust contamination none exists at this time. All of the sample results are below the corresponding action limit for floors, window sills, and window wells.

Milcon Enlisted (3017) - Seven randomly selected unites were inspected for lead in dust contamination. All of the sample results are well below the action limits set forth by HUD.

Capehart Enlisted (3018) - Dust samples were collected from twenty units in this community. The analysis results are well below the corresponding action levels of 100 $\mu\text{g}/\text{ft}^2$ for floors, 500 $\mu\text{g}/\text{ft}^2$ for window sills and 800 $\mu\text{g}/\text{ft}^2$ for window wells.

Senior Officer (3019) - Both of the units in this community were sampled for lead in dust. No hazard exists at this time. The presence of lead based paint creates the potential for lead in dust contamination.

Capehart Junior Officer (3020) - A lead in dust hazard is not present in this community. Advise residents to keep up periodic cleaning to minimize the potential for a lead in dust hazard.

Capehart Senior Officer (3021) - Dust samples taken throughout the six units in this community do not contain lead above the HUD action limit.

Johnson Housing (3023) - A hazard associated with lead in dust does not exist in this community. The apartments are 1987 construction; therefore were not tested for lead based paint according to guidelines established by NAVFAC.

Playgrounds (3025) - The playgrounds were only sampled for soil.

Lead in Soil

Field Grade Officer;212 (3013) - Lead above the HUD action limits of 400 ppm for exposed areas and 5000 ppm for areas covered with vegetation were not found in the soil around this home.

Ribault Village (3014) - Although the soffit is painted with LBP lead above the action limits is not present in the soil.

Junior Officer (3015) - Lead above the action limits is not present in the soil of this community.

Capehart Field Grade Officer (3016) - Lead in soil poses no hazard in this community. The soffit, door jambs, beam, facia, and some exterior walls are painted with lead based paint.

Milcon Enlisted (3017) - The carport ceilings, facia and soffit in this community are painted with LBP but hazardous levels of lead were not found in the soil.

Capehart Enlisted (3018) - Levels of lead in soil requiring action are not present in the soil surrounding the homes in this community. A few of the exterior components are painted with lead based paint.

Senior Officer (3019) - The soil in this community does not contain lead above the action levels specified by HUD.

Capehart Junior Officer (3020) - Analyses of soil samples taken from the areas around the homes in this community reveal that lead from soil does not pose a health hazard at this time.

Capehart Senior Officer (3021) - Lead above the action limits is not present in the soil of this community.

Johnson Housing (3023) - The soil in this community does not contain lead above the action levels.

Playgrounds (3025) - The playgrounds at NS Mayport do not contain levels lead in the soil that pose a health hazard to children.

RECOMMENDATIONS

Short-term

Prepare all surfaces for restoration by wet scraping and cleaning with a **tri-sodium phosphate (TSP)** solution. Repaint damaged surfaces with an approved elastomeric sealant within a **short-term response time-frame**. Clean surrounding areas and minimize the elevated risk/hazard. The Occupational Safety and Health Administration (OSHA) regulate the occupational exposure to inorganic lead. OSHA standards define the airborne lead exposure limits for workers.

All replacement material must meet the basic requirements of NAVFAC/EFD housing guidelines.

Develop and implement an **Operations and Maintenance (O&M)** Program to minimize and maintain existing hazard potentials under control.

Interim Control (Present to Abatement)

Implementation of an O&M Program will enable Naval Station Mayport housing to keep the potential lead hazards in a non-hazardous condition through awareness, cleaning, paint restoration, and dust/soil monitoring.

The following measures form the basis for a feasible and cost effective in-place management strategy for lead-based paint components.

1. Inform/educate the unit occupants, housing manager, and maintenance workers of the lead hazards within the community. The occupants and maintenance workers need to know where the lead-contaminated components are and what to do to protect themselves from its adverse effects. The education process begins with the town meeting (outbrief) concerning results from the inspections and continues until removal of all the lead paint hazards from the community.
2. As part of the education of the occupants, they should be encouraged to participate in DOD **blood lead level screening**.
3. Inspect components with a lead hazard annually and during unit turn-over for signs of any damaged or deteriorated surfaces.
4. Clean-up all lead-based paint components with **TSP** or a high phosphate detergent solution at the earliest possible time. All surfaces containing lead-based paint should be in good condition with no flaking, cracking, or peeling paint.
5. Maintain mulching/vegetation to cover lead contaminated soil areas.
6. Paint damaged or deteriorated surfaces.
7. Perform dust and soil sampling during change of occupancy, renovation/demolition actions, when findings of a visual inspection warrant it, or when elevated blood-lead levels in a child exist. Utilize the results to inform the housing occupants of any possible hazards, coupled with information that explains mitigation responses.

Lead in Paint: A Management Guide by Navy Public Works Center - Norfolk, Virginia, Environmental Engineering Branch, Code 414, provides guidance for in-place management work practices, procedures, and additional component testing protocol. This guide also provides detailed information on abatement of lead-based paint, clean-up and maintenance of lead in dust and lead in soil contamination, along with information to establish and run an Operations and Maintenance Program. The provided Document Package contains this guide and a generic O&M lead plan.

Renovation

During upcoming renovation projects, incorporate the recommended abatement action response for all lead-based paint components present in the proposed renovation area. Refer to the ranking scheme provided for the recommended abatement action response and priority for each lead based component. OSHA regulates the occupational exposure to inorganic lead. OSHA standards define the airborne lead exposure limits for workers.

Demolition

During a demolition phase, OSHA standards regulate the occupational lead exposure and define the airborne lead exposure limits for workers. The Resource Conservation and Recovery Act (RCRA), the basic Federal law governing waste disposal, distinguishes between solid waste and hazardous waste.

In determining whether a waste is hazardous or non-hazardous, RCRA allows generators of the waste to rely on the results of prior testing or experience, or knowledge of the waste or process generating the waste. Specific waste streams from lead abatement projects such as LBP chips and residue from chemical paint stripping processes are hazardous. RCRA has specific disposal requirements for these hazardous waste streams. If the RCRA "user knowledge" allowance can not be applied to the solid waste construction debris identified as containing lead, then testing prior to disposal is required to determine whether the debris is hazardous or non-hazardous. This pre-disposal test for waste is the Toxic Characteristic Leachate Procedure (TCLP).