



SURVEY REPORT FOR ASBESTOS AND LEAD-BASED PAINT

Prepared For:

**TALLEY & SMITH ARCHITECTURE, INC.
409 EAST MARION STREET
SHELBY, NORTH CAROLINA 28150**

Regarding:

**DELIVERY ORDER No. 0024
INTERIOR/EXTERIOR REPAIRS, BLDG. M116 (CHAPEL)
MARINE CORPS BASE – CAMP JOHNSON
JACKSONVILLE, NORTH CAROLINA**

Prepared By:

**ALLIED CONSULTING & ENVIRONMENTAL SERVICES, LLC
POST OFFICE BOX 2426
SHELBY, NORTH CAROLINA 28151
PHONE (704) 600-6255
FAX (704) 482-5596**

ISSUE DATE: MAY 15, 2019

ACES PROJECT: 2019-03-017



SURVEY REPORT FOR ASBESTOS AND LEAD-BASED PAINT

Prepared for:

**TALLEY & SMITH ARCHITECTURE, INC.
409 EAST MARION STREET
SHELBY, NORTH CAROLINA 28150**

Regarding:

**DELIVERY ORDER No. 0024
INTERIOR/EXTERIOR REPAIRS, BLDG M116 (CHAPEL)
MARINE CORPS BASE – CAMP JOHNSON
JACKSONVILLE, NORTH CAROLINA**

ACES Project No.: 2019-03-017

May 15, 2019

Prepared by:

A handwritten signature in blue ink, appearing to read "DeWitt Whitten".

DeWitt Whitten, CHMM, REM, CES, REPA
General Manager
NC Licensed Asbestos Inspector #10706
NC Licensed LBP Risk Assessor #120118

Reviewed by:

A handwritten signature in black ink, appearing to read "Robert L. Smith".

Robert L. Smith, AIA, LEED AP
Managing Partner



TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY.....	1
2.0	INTRODUCTION.....	1
2.1	ASBESTOS.....	1
2.2	LEAD-BASED PAINT.....	3
2.3	PROJECT SCOPE.....	4
3.0	METHODOLOGY.....	4
3.1	ASBESTOS.....	4
3.2	LEAD-BASED PAINT.....	4
4.0	FINDINGS AND RECOMMENDATIONS.....	5
4.1	NON-ASBESTOS CONTAINING MATERIALS.....	5
4.2	ASBESTOS CONTAINING MATERIALS & PRESUMED ASBESTOS CONTAINING MATERIALS.....	5
4.3	LEAD-BASED PAINT.....	5
4.4	RECOMMENDATIONS - ACM & PACM.....	5
4.5	RECOMMENDATIONS - LEAD-BASED PAINT.....	6
5.0	LIMITATIONS.....	6

Appendix 1

Figures

Appendix 2

Asbestos Analytical Results

Chain of Custody

Appendix 3

Asbestos Report by Others

Appendix 4

XRF Field Data Sheets



**SURVEY REPORT
FOR ASBESTOS AND LEAD-BASED PAINT
INTERIOR/EXTERIOR REPAIRS, BLDG. M116 (CHAPEL)
MARINE CORPS BASE – CAMP JOHNSON
JACKSONVILLE, NORTH CAROLINA**

1.0 INTRODUCTION

As authorized by Talley & Smith Architecture, Inc. on April 12, 2019, personnel of Allied Consulting and Environmental Services, LLC (ACES) performed a non-invasive survey for suspect asbestos containing materials (ACM) and a limited lead-based paint (LBP) survey for building M-116 at the Marine Corps Base – Camp Johnson in Jacksonville, North Carolina on March 27, 2019. The surveys were conducted for the purpose of identifying asbestos containing materials and lead-based painted materials that may be impacted by the proposed renovation of the Building M-116.

2.0 GENERAL BACKGROUND INFORMATION

2.1 Asbestos

The term “asbestos” refers to a group of naturally-occurring, fibrous minerals that are commercially mined throughout the world, primarily in Canada, Russia, and South Africa. Asbestos has been used in hundreds of products. Collectively, these products are referred to as asbestos-containing materials (ACMs). Asbestos gained wide use because it is plentiful, readily available, low in cost, and because of its unique properties – fire resistance, high tensile strength, resistance, and insulating characteristics.

As an insulator, asbestos received wide spread use for thermal insulation and condensation control. Asbestos is added to a variety of building materials to enhance strength. It is found in concrete and concrete-like products. Asbestos cement products are used as siding and roofing shingles, wallboard, as corrugated or flat sheets for roofing and partition walls, and as piping. Asbestos has also been added to asphalt, vinyl, and other materials to make products like roofing cements, felts and shingles, exterior siding materials, floor tiles, joint compounds, and mastics/adhesives. Asbestos also proved valuable as a component of acoustical plaster. This material was troweled-on or sprayed-on to ceilings or walls. As a decorative product, asbestos was frequently used to texture ceilings, walls, and other painted surfaces. Asbestos is still mined commercially and used in many common products, including brake shoes, roofing materials, and flooring products. It is important to realize that commercially available products containing asbestos can still be purchased. It is a common misconception that asbestos is no longer used.

The three most commonly encountered types of asbestos are sometimes referred to by their predominant color. Chrysotile (white) is by far the most frequently used asbestos mineral, constituting approximately 95% of all commercial and industrial applications. Chrysotile fibers



are long and flexible and can be spun or woven into cloth. Amosite (brown) and crocidolite (blue) are used in approximately 4-5% of asbestos-containing products.

The U.S. Environmental Protection Agency promulgated the National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR Part 61], which addresses the application, removal, and disposal of asbestos-containing materials (ACM). Under NESHAP, the following categories are defined for asbestos-containing materials:

Friable - When dry, can be crumbled, pulverized, or reduced to powder by hand pressure.

Nonfriable - When dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Category I Nonfriable ACM - Packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than 1% asbestos.

Category II Nonfriable ACM – Any material excluding Category I Nonfriable ACM containing more than 1% asbestos.

Regulated Asbestos Containing Material (RACM) – RACM include one of the following:

- 1) Friable ACM
- 2) Category I Nonfriable ACM that has become friable.
- 3) Category I Nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading.
- 4) Category II Nonfriable ACM that has a high probability of becoming, or has become, friable by the forces expected to act on the material in the course of demolition or renovation operations.

Under NESHAP, the following actions are required:

- 1) Prior to the commencement of demolition or renovation activities, the building owner must inspect the affected facility or part of the facility where the demolition or renovation activities will occur for the presence of asbestos.
- 2) Remove all RACM from the facility before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access for subsequent removal.
- 3) RACM need not be removed if:
 - a) It is Category I nonfriable ACM that is not in poor condition.
 - b) It is on a facility component that is encased in concrete or other similar material and is adequately wet whenever exposed.
 - c) It was not accessible for testing and was therefore not discovered until after demolition began and because of the demolition the material cannot be safely removed.



- d) It is Category II non-friable ACM and the probability is low that the material will become crumbled, pulverized, or reduced to powder during demolition.

The Occupational Safety and Health Administration (OSHA) has established three sets of regulatory standards pertaining to asbestos exposure:

29 CFR 1910.1001	General Industry
29 CFR 1926.1101	Construction Industry
29 CFR 1910.134	Respiratory Protection

The construction industry standard covers activities involving asbestos demolition, removal, alteration, repair, maintenance, installation, cleanup, transportation, disposal, and storage. The general industry standard covers other activities where asbestos exposure is possible. Addressed under the OSHA standards are building owner / employer responsibilities regarding the identification of identified or presumed asbestos containing materials (PACM), notification to tenants / employees of the presence of asbestos, employee training, and work procedures.

2.2 Lead-based Paint

Lead-based paint is paint containing lead, a heavy metal, which is used as pigment. Lead chromate ($PbCrO_4$ - "chrome yellow") and lead carbonate ($PbCO_3$ - "white lead") are the most common lead compounds used as pigments. Lead is also added to paint to speed drying, increase durability, retain a fresh appearance, and resist moisture that causes corrosion. Paint with significant lead content is still used in industry and by the military. For example, leaded paint is sometimes used to paint roadway markings and parking lot lines.

Although lead improves paint performance, it is a dangerous substance. It is especially damaging to children under age six whose bodies are still developing. Lead causes nervous system damage, hearing loss, stunted growth, and delayed development. It can cause kidney damage and affects every organ system of the body. It also is dangerous to adults, and can cause reproductive problems for both men and women. One myth related to lead-based paint is that the most common cause of poisoning was eating leaded paint chips. In fact, the most common pathway of childhood lead exposure is through ingestion of lead dust through normal hand-to-mouth contact during which children swallow lead dust dislodged from deteriorated paint or lead dust generated during remodeling or painting. Lead dust from remodeling or deteriorated paint lands on the floor near where children play and can ingest it.

Paint containing more than 0.06% (600 ppm) lead was banned for residential use in the United States in 1978 by the U.S. Consumer Product Safety Commission (16 Code of Federal Regulations CFR 1303). The U.S. Government defines "lead-based paint" as any "paint, surface coating that contains lead equal to or exceeding one milligram per square centimeter (1.0 mg/cm^2) or 0.5% by weight." These definitions are used to enforce regulations that apply to certain activities conducted in housing constructed prior to 1978, such as abatement, or the permanent elimination of a "lead-based paint hazard." Construction activities that involve LBP are addressed OSHA in 29 CFR 1926.62 (Lead in Construction).



2.3 Project Scope

The scope of this survey included the interior and exterior of Building M-116 as designated on drawings furnished by Talley & Smith Architecture, Inc., the proposed scope of work provided to ACES, and as discussed in our conversation on April 12, 2019. It is our understanding that the building will be repaired/renovated in the near future.

3.0 METHODOLOGY

3.1 Asbestos

For this project, a visual, non-invasive survey and sampling for suspect asbestos containing materials (ACM) was conducted at the above referenced building. ACES personnel submitted a total of fourteen (14) bulk samples of suspect ACM that may be impacted by the planned renovation project. Samples were collected by a NC Licensed Asbestos Inspector (DeWitt Whitten - #10706) and submitted to a NVLAP Accredited Asbestos Laboratory (EMSL in Charlotte, NC). Samples were analyzed using Polarized Light Microscopy (PLM) by EPA Method 600/R-93/116. Due to some materials consisting of more than one layer, a total of twenty-four (24) samples were analyzed by the laboratory. Samples included the following materials: roofing materials, felt paper underlayment, residual mastic, wall materials, and floor tile and associated mastic. Please refer to the Sample Location Plan (Figure No. 1) and the Chain of Custody sheet in Appendices 1 and 2, respectively, for the approximate sample locations and the specific materials sampled.

During the survey, ACES personnel also reviewed a previously prepared report for Building M-116 provided by personnel of the Camp Lejeune Marine Corps' Environmental Protection office. The report was dated March 29, 2019 (print date). For the purpose of this report, the materials listed in the report are considered presumed asbestos containing materials. These materials are discussed further in Section 4.3 of this report. A copy of the provided report prepared by others is presented in Appendix 3.

3.2 Lead-based Paint

A North Carolina Lead-based Paint Risk Assessor (Mr. DeWitt Whitten, Risk Assessor #120118) performed a limited lead-based paint (LBP) survey of the interior and exterior painted surfaces at eighteen (18) locations for Building M-116. Please refer to the Sample Location Plans (Figure No. 2) and the XRF Field Data Sheets in Appendices 1 and 4, respectively, for the approximate test locations and the specific materials sampled. The testing was conducted using a INNOV-X Portable X-ray Fluorescence (XRF) Analyzer to screen surface coatings that may contain lead. The sampling for lead-based paint was not a comprehensive surface by surface testing of the paint (*e.g.* a HUD level survey), but consisted of testing representative painted surfaces for the presence of LBP. Surfaces tested included exterior and interior walls, exterior and interior doors and door frames, stair railings and components, columns, and interior roof support components.



4.0 FINDINGS AND RECOMMENDATIONS

4.1 Non-asbestos Containing Materials

Twenty-one (21) of the twenty-four (24) samples analyzed by EMSL did not contain asbestos (i.e. greater than one percent asbestos).

4.2 Asbestos Containing Materials & Presumed Asbestos Containing Materials (PACM)

Asbestos was detected in the three (3) of the twenty-four (24) samples analyzed by EMSL. In addition, an asbestos report prepared by others indicated that non-friable ACM is present in the building. Materials identified that are known or presumed to contain asbestos are summarized in Table 1.

TABLE 1 – SUMMARY OF KNOWN or PRESUMED ACM		
ACM/PACM DESCRIPTION	REPORTED LOCATION	APPROX. QUANTITY
Residual Mastic	RM-1	160 sq. ft.
Bottom Mastic	FT-3	150 sq. ft.
Bottom Mastic	FT-4	---
Black Roofing Sealant	Roofing, Northwest Chimney Stack Flashing	12 sq. ft.

4.3 Lead-based Paint

The results of the testing (Appendix 3) revealed that lead-based paint was present at seven (7) locations associated with Building M-116 as shown in Table 2.

TABLE 2 – SUMMARY OF LEAD-BASED PAINT FINDINGS						
FACILITY ID.	XRF TEST NO.	INT./EXT.	FEATURE	SUBSTRATE	COLOR	XRF RDG. ¹
M-116	7	Interior	Column	Wood	White	1.45
M-116	8	Interior	Brace	Metal	White	> 5.0
M-116	13	Interior	Truss Upper Chord	Wood	Tan	1.44
M-116	16	Interior	Truss Lower Chord	Wood	White	1.41
M-116	18	Interior	Truss Member (Horiz.)	Wood	White	1.50
M-116	32	Exterior	Door Frame	Wood	White	> 5.0
M-116	39	Exterior	Siding (original)	Wood	White	4.43

NOTE: 1) units in milligrams per square centimeter (mg/cm²)

4.4 Recommendations - ACM & Presumed ACM

Asbestos containing materials (ACM) and Presumed Asbestos Containing Materials (PACM) were identified in the building. In their current condition, the materials are considered Category I Non-friable ACM or PACM. For the purposes of repair/renovation, the identified ACM and PACM should be considered Regulated Asbestos Containing Materials (RACM). These materials and any other suspect ACM where present should be removed prior to the renovation of the facilities by accredited personnel in accordance with applicable local, state, and federal



regulations and guidelines. Disposal of the removed RACM should be disposed of in accordance with applicable local, state, and federal regulations/guidelines.

All ACM waste materials resulting from the renovation activities should be collected and disposed of in accordance with applicable state and federal regulations, the project specifications, and the “Marine Corps Base (MCB) Camp Lejeune Contractor Environmental Guidelines”.

4.5 Recommendations - Lead-based Paint

Lead-based paint (LBP), i.e. paint that contains lead equal to or exceeding one milligram per square centimeter (1.0 mg/cm²), was identified at seven (7) locations on the painted surfaces tested at the building as shown in Table 2. ACES recommends that the lead paint on the various surfaces not be disturbed as a part of the repair/renovation activities unless necessary as a result of the repair and/or renovation. If the painted surfaces must be disturbed, removal of the LBP should be performed in accordance with local, state, and federal regulations.

In addition, lead was identified on other painted surfaces but the concentration did not meet the definition of LBP. For painted surfaces where LBP was not present but lead was present and would be impacted by the renovation activities, the necessary protection for the potential exposure to lead that may be present should be addressed as outlined in applicable Occupational Safety and Health Administration (OSHA) regulatory standards.

All waste materials from the renovations should be collected and disposed of in accordance with applicable state and federal regulations, the project specifications, and the “Marine Corps Base (MCB) Camp Lejeune Contractor Environmental Guidelines”.

5.0 LIMITATIONS

This report has been prepared for the exclusive use of Talley & Smith Architecture, Inc. and their agents with regard to Building M-116 located at Camp Johnson in Jacksonville, North Carolina. This report has been prepared in accordance with generally accepted environmental practices. No other warranty, expressed or implied, is made. Our observations are based upon conditions readily visible at the time of our site visit. We have not verified the completeness or accuracy of the information provided by others.

Materials identified as presumed ACM should be considered to contain asbestos or additional sampling and analysis should be performed to confirm or deny the presence of asbestos.

During the site visit, accessible areas were visually surveyed for the presence of suspect asbestos containing materials (ACM) and lead-based paints (LBP). Inaccessible areas, such as above ceilings or behind walls may have not been surveyed; therefore, all ACM and/or LBP may not have been identified. Areas inspected were those designated by the scope of services. As with any similar survey of this nature, actual conditions exist only at the precise locations from which bulk samples were collected and/or LBP samples measured. Certain inferences are based on the results of this sampling and related testing to form a professional opinion of conditions



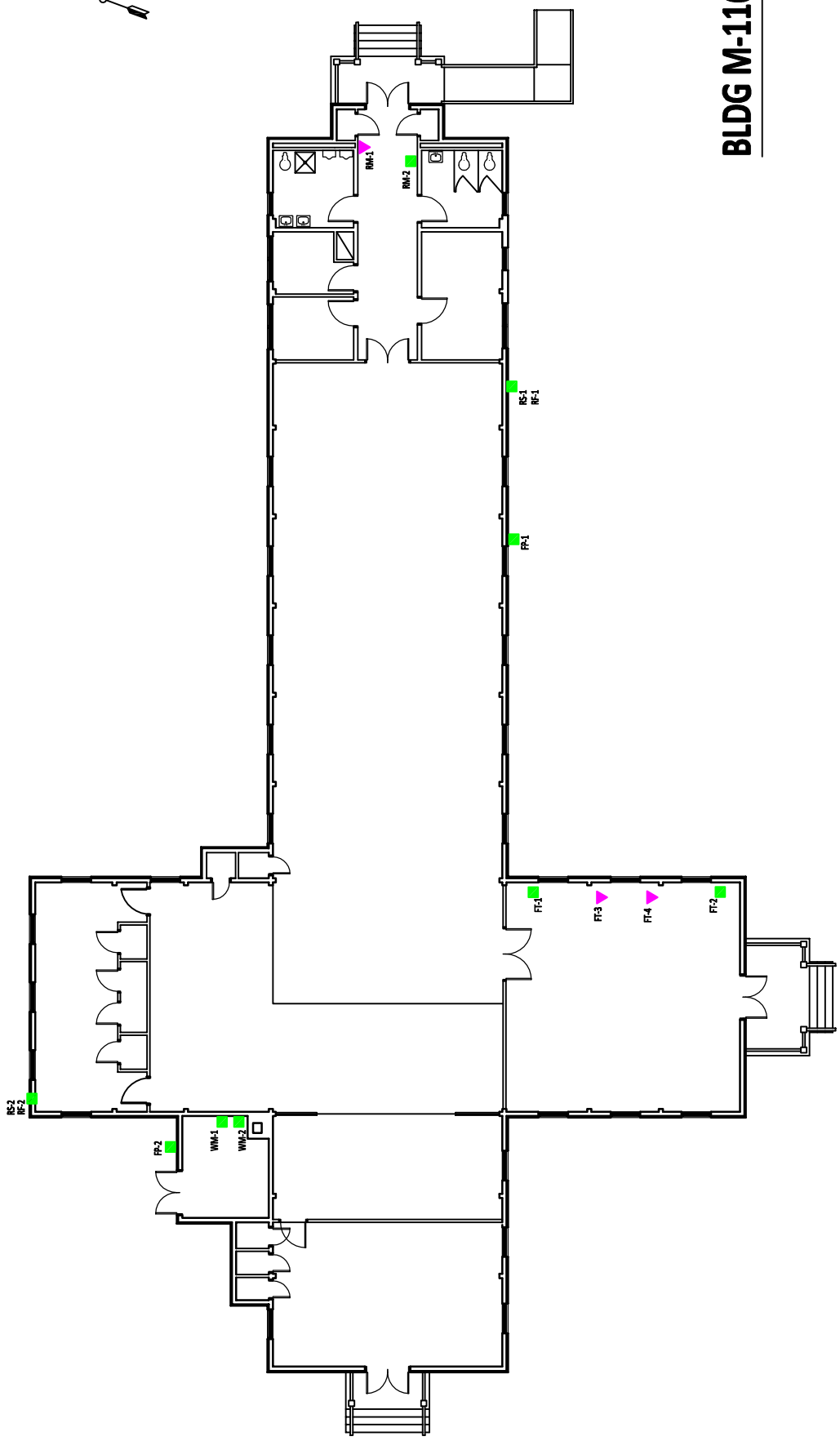
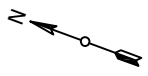
in areas beyond those from which the samples were collected. No other warranty, expressed or implied, is made.

Under this scope of services, ACES assumes no responsibility regarding response actions (e.g. O&M Plan, encapsulation, abatement, removal, worker notification, etc.) initiated as a result of these findings. It is important to note that the Building Owner has a number of responsibilities and obligations as found under 40 CFR 745 (also known as Title X) including notification and/or disclosure of all information concerning LBP to workers and buyers. ACES assumes no liability for the duties and responsibilities of the Building Owner with respect to compliance with these regulations. Compliance with regulations and response actions are the sole responsibility of the Building Owner and should be conducted in accordance with local, state and/or federal requirements, and should be performed by appropriately qualified and licensed personnel, as warranted.

ACES, by virtue of providing the services described in this report, does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies any conditions at the site that may present a potential danger to public health, safety, or the environment. It is the client's responsibility to notify the appropriate local, state, or federal public agencies as required by law, or otherwise to disclose, in a timely manner, any information that may be necessary to prevent any danger to public health, safety, or the environment. The contents of this report should not be construed in any way as a recommendation to purchase, sell, or further develop the project site.



APPENDIX 1
FIGURES



BLDG M-116

LEGEND

- CT-2  Approximate Sample Location - Asbestos Not Detected
- FT-2  Approximate Sample Location - Asbestos Detected

PROJ. NUM.: 2019 - 03 - 017

DATE: May 13, 2019

SAMPLE LOCATION PLAN

ALLIED CONSULTING & ENVIRONMENTAL SERVICES
 SHELBY, NORTH CAROLINA
 P.O. BOX 2426 (28151-2426) 704-600-6255
 409 E. MARION ST. (28150) FAX 704-482-5596



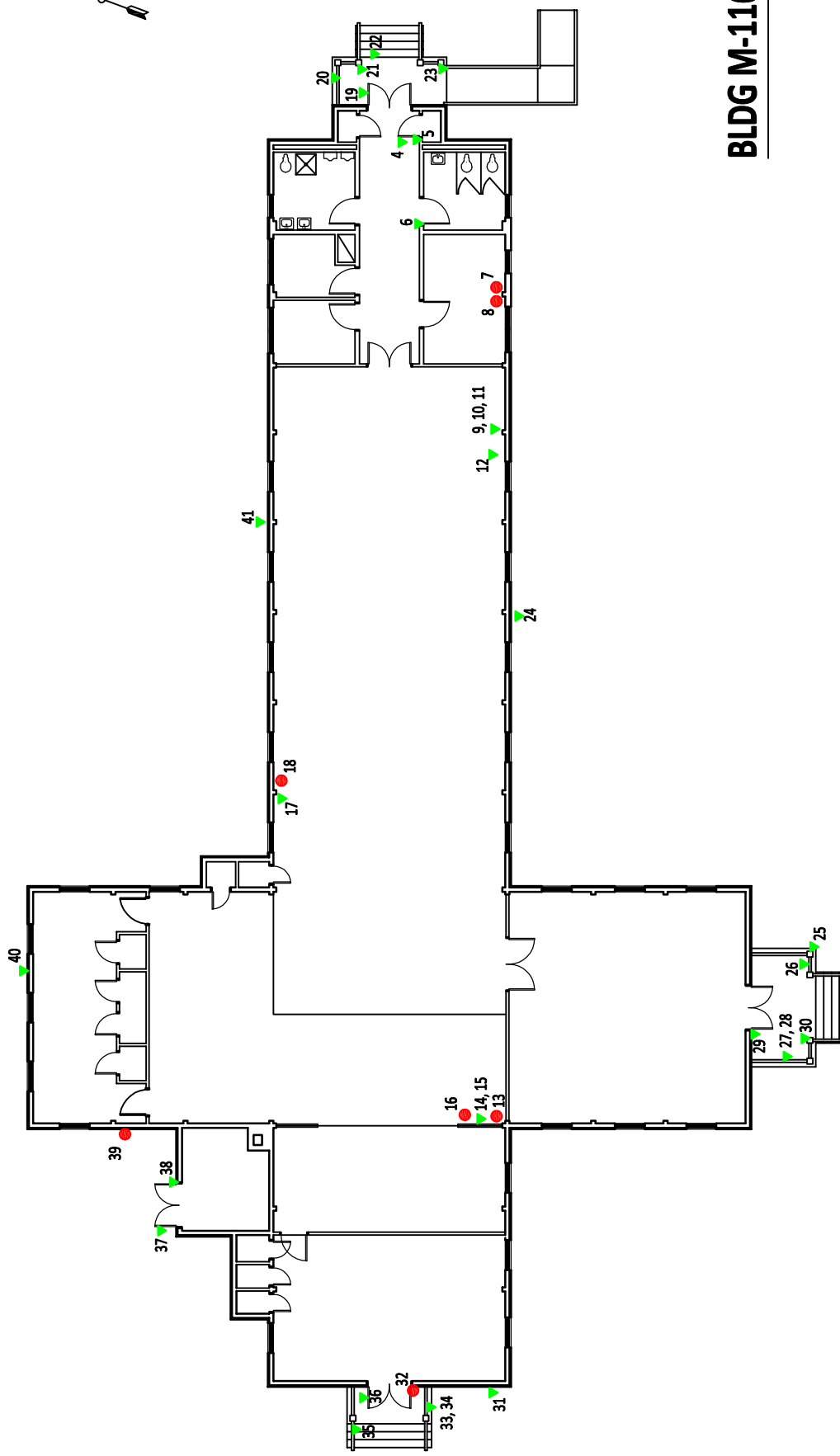
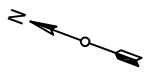
DELIVERY ORDER 0024

BLDG. M 116

MARINE CORPS BASE - CAMP JOHNSON JACKSONVILLE, NORTH CAROLINA

FIGURE

1



BLDG M-116

LEGEND

- Sample ID # 4 Approximate Sample Location - No Lead-based Paint Identified
- Sample ID # 12 Approximate Sample Location - Lead-based Paint Identified

FIGURE **2**

DELIVERY ORDER 0024
BLDG. M 116
MARINE CORPS BASE - CAMP JOHNSON
JACKSONVILLE, NORTH CAROLINA



ALLIED CONSULTING & ENVIRONMENTAL SERVICES
 SHELBY, NORTH CAROLINA
 P.O. BOX 2426 (28151-2426) 704-600-6255
 409 E. MARION ST. (28150) FAX 704-482-5596

PROJ. NUM.: 2019 - 03 - 017
 DATE: May 13, 2019
SAMPLE LOCATION PLAN



APPENDIX 2
ASBESTOS ANALYTICAL RESULTS
CHAIN OF CUSTODY



EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / charlottelab@emsl.com

EMSL Order: 411902948

Customer ID: ALLC25

Customer PO:

Project ID:

Attention: Dewitt Whitten
Allied Consulting & Environmental Svcs
P.O. Box 2426
Shelby, NC 28151

Phone: (704) 232-0152

Fax:

Received Date: 03/29/2019 10:50 AM

Analysis Date: 04/03/2019 - 04/04/2019

Collected Date: 03/27/2019

Project: Bldg. M116/ 2019-03-017

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
RS-1 <small>411902948-0001</small>	Roof Shingle	Gray/Black Fibrous Homogeneous	8% Glass	10% Quartz 10% Ca Carbonate 72% Non-fibrous (Other)	None Detected
RS-2 <small>411902948-0002</small>	Roof Shingle	Gray/Black Fibrous Homogeneous	5% Glass	5% Quartz 10% Ca Carbonate 80% Non-fibrous (Other)	None Detected
RF-1 <small>411902948-0003</small>	Roof Felt	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
RF-2 <small>411902948-0004</small>	Roof Felt	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
FP-1 <small>411902948-0005</small>	Felt Paper Underlayment	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
FP-2 <small>411902948-0006</small>	Felt Paper Underlayment	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
WM-1 <small>411902948-0007</small>	Boiler Room - Wall Material	Gray Fibrous Homogeneous	2% Cellulose 5% Glass	93% Non-fibrous (Other)	None Detected
WM-2 <small>411902948-0008</small>	Boiler Room - Wall Material	Gray Fibrous Homogeneous	3% Cellulose 2% Glass	95% Non-fibrous (Other)	None Detected
RM-1-Mastic <small>411902948-0009</small>	Residual Mastic	Black Non-Fibrous Homogeneous		5% Ca Carbonate 93% Non-fibrous (Other)	2% Chrysotile
RM-1-Leveler <small>411902948-0009A</small>	Residual Mastic	Gray Non-Fibrous Homogeneous	15% Cellulose	20% Ca Carbonate 65% Non-fibrous (Other)	None Detected
RM-2-Mastic <small>411902948-0010</small>	Residual Mastic	Black Non-Fibrous Homogeneous	1% Cellulose	5% Ca Carbonate 94% Non-fibrous (Other)	None Detected
RM-2-Leveler <small>411902948-0010A</small>	Residual Mastic	Gray Non-Fibrous Homogeneous	15% Cellulose	10% Ca Carbonate 75% Non-fibrous (Other)	None Detected
FT-1-Floor Tile <small>411902948-0011</small>	12x12 Floor Tile (Blue)	Blue Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
FT-1-Mastic <small>411902948-0011A</small>	12x12 Floor Tile (Blue)	Tan Non-Fibrous Homogeneous	1% Cellulose	5% Ca Carbonate 94% Non-fibrous (Other)	None Detected
FT-2-Floor Tile <small>411902948-0012</small>	12x12 Floor Tile (Blue)	Blue Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
FT-2-Mastic <small>411902948-0012A</small>	12x12 Floor Tile (Blue)	Tan Non-Fibrous Homogeneous	2% Cellulose	5% Ca Carbonate 93% Non-fibrous (Other)	None Detected

Initial report from: 04/04/2019 10:21:03



EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / charlottelab@emsl.com

EMSL Order: 411902948
Customer ID: ALLC25
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
FT-3-Top Floor Tile <small>411902948-0013</small>	12x12 Floor Tile (Gray)	Gray Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
FT-3-Mastic <small>411902948-0013A</small>	12x12 Floor Tile (Gray)	Yellow Non-Fibrous Homogeneous	1% Cellulose	5% Ca Carbonate 94% Non-fibrous (Other)	None Detected
FT-3-Bottom Floor Tile <small>411902948-0013B</small>	12x12 Floor Tile (Gray)	Blue Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
FT-3-Mastic <small>411902948-0013C</small>	12x12 Floor Tile (Gray)	Black Non-Fibrous Homogeneous		5% Ca Carbonate 93% Non-fibrous (Other)	2% Chrysotile
FT-4-Top Floor Tile <small>411902948-0014</small>	12x12 Floor Tile (Gray)	Gray Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
FT-4-Mastic <small>411902948-0014A</small>	12x12 Floor Tile (Gray)	Yellow Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
FT-4-Bottom Floor Tile <small>411902948-0014B</small>	12x12 Floor Tile (Gray)	Blue Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
FT-4-Mastic <small>411902948-0014C</small>	12x12 Floor Tile (Gray)	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile

Analyst(s) _____

Lacy Searcy (12)
Sarah Breneman (12)

Lee Plumley, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from: 04/04/2019 10:21:03



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody EMSL Order Number (Lab Use Only)

411902948

PHONE
FAX

Company Name : Allied Consulting & Environmental Services		EMSL Customer ID:	
Street: Post Office Box 2426		City: Shelby	State/Province: NC
Zip/Postal Code: 28151		Country: USA	Telephone #: 704-600-6255
Report To (Name): DeWitt Whitten		Fax #: 704-487-5596	
Email Address: dewitt@aces-env.com		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
Project Name/Number: <i>Bldg Mill/2019-03-017</i>		Purchase Order:	
U.S. State Samples Taken:		EMSL Project ID (Internal Use Only):	
EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different - If Bill to is Different note instructions in Comments**		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

Third Party Billing requires written authorization from third party

Turnaround Time (TAT) Options* - Please Check

3 Hour
 6 Hour
 24 Hour
 48 Hour
 72 Hour
 96 Hour
 1 Week
 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

<p>PCM - Air <input type="checkbox"/> Check if samples are from NY</p> <p><input type="checkbox"/> NIOSH 7400</p> <p><input type="checkbox"/> w/ OSHA 8hr. TWA</p> <p>PLM - Bulk (reporting limit)</p> <p><input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)</p> <p><input type="checkbox"/> PLM EPA NOB (<1%)</p> <p>Point Count</p> <p><input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)</p> <p>Point Count w/Gravimetric</p> <p><input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)</p> <p><input type="checkbox"/> NYS 198.1 (friable in NY)</p> <p><input type="checkbox"/> NYS 198.6 NOB (non-friable-NY)</p> <p><input type="checkbox"/> NYS 198.8 SOF-V</p> <p><input type="checkbox"/> NIOSH 9002 (<1%)</p>	<p>TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only)</p> <p><input type="checkbox"/> AHERA 40 CFR, Part 763</p> <p><input type="checkbox"/> NIOSH 7402</p> <p><input type="checkbox"/> EPA Level II</p> <p><input type="checkbox"/> ISO 10312</p> <p>TEM - Bulk</p> <p><input type="checkbox"/> TEM EPA NOB</p> <p><input type="checkbox"/> NYS NOB 198.4 (non-friable-NY)</p> <p><input type="checkbox"/> Chatfield SOP</p> <p><input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5</p> <p>TEM - Water: EPA 100.2</p> <p>Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking</p> <p>All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking</p>	<p>TEM - Dust</p> <p><input type="checkbox"/> Microvac - ASTM D 5755</p> <p><input type="checkbox"/> Wipe - ASTM D6480</p> <p><input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)</p> <p>Soil/Rock/Vermiculite</p> <p><input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<1%)</p> <p><input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.25%)</p> <p><input type="checkbox"/> TEM EPA 600/R-93/116 with milling prep (<0.1%)</p> <p><input type="checkbox"/> TEM Qualitative via Filtration Prep</p> <p><input type="checkbox"/> TEM Qualitative via Drop Mount Prep</p> <p><input type="checkbox"/> Cincinnati Method EPA 600/R-04/004 - PLM/TEM (BC only)</p> <p>Other:</p> <p><input type="checkbox"/></p>
---	--	---

Check For Positive Stop - Clearly Identify Homogenous Group Filter Pore Size (Air Samples): 0.8µm 0.45µm

Samplers Name: *DeWitt Whitten* Samplers Signature: *[Signature]*

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
<i>RS-1, 2</i>	<i>Roof Shingle</i>		<i>27 March 2019</i>
<i>RF-1, 2</i>	<i>Roof Felt</i>		<i>"</i>
<i>FP-1, 2</i>	<i>Felt Paper Underlayment</i>		<i>"</i>
<i>WM-1, 2</i>	<i>Wall Material - Boiler Room</i>		<i>"</i>
<i>RM-1, 2</i>	<i>Residual Mastic</i>		<i>"</i>

Client Sample # (s): <i>see above & next page</i>	Total # of Samples: <i>14</i>
Relinquished (Client): <i>[Signature]</i> Date: <i>29 March 2019</i> Time: <i>1047</i>	
Received (Lab): <i>[Signature]</i> Date: <i>3/29/19</i> Time: <i>10:50AM Wh</i>	
Comments/Special Instructions:	

Controlled Document - Asbestos COC - R10 - 05/09/2016



APPENDIX 3
ASBESTOS REPORT BY OTHERS

ASBESTOS INSPECTION REPORT of:
Building # M116
MCB CAMP LEJEUNE



Print Date

Friday, March 29, 2019

INSPECTION SUMMARY

BLDG #: M116

YEAR BUILT: 1942

OCCUPANT: CAMP JOHNSON AREA CHAPEL

ASBESTOS MANAGER: Billy Parkin 451-5837

BUILDING COMMENTS:

HAZ RANK 3/GREEN [AH AUG2016]
ACM SEALANT AT CHIMNEY

AUG2016
PVS. ACM REMAINS

APR2014
ACM FLOORING REMOVED, ACM SEALANT AT CHIMNEY REMAINS, LOW HAZARD

JAN2010
PVS. ACM REMAINS, ADDL TEM TILE SAMPLES, NO CHANGES

NOV07
PVS. ACM REMAINS, ADDL SAMPLES, ACM INCLUDES:
ROOFING SEALANT, BLACK

OCT03
PVS. ACM REMAINS, NO CHANGES

INSPECT OCT00
ACM INCLUDES:
9" BLACK FLOOR TILE AND MASTIC
BLUE FLOOR TILE w/MASTIC

NOTIFICATION OF ACM IN BUILDING

NOTICE: The following asbestos-containing materials have been identified in this structure. Refer to survey findings for additional information or contact the Asbestos Program Manager. Please note ACM that is intact and undisturbed is not considered a significant health hazard to building occupants.

Friable ACM(s) identified

<i>DESCRIPTION</i>	<i>LOCATION</i>	<i>Date</i>	<i>Quantity</i>
No friable ACM records found in database			

Non-friable ACM(s) identified

<i>DESCRIPTION</i>	<i>LOCATION</i>	<i>Date</i>	<i>Quantity</i>
ROOFING SEALANT, BLACK	ROOFING, NORTHWEST CHIMNEY STACK FLASHING	11/27/2007	12 SF
ROOFING SEALANT, BLACK	ROOFING, NORTHWEST CHIMNEY STACK FLASHING	8/22/2016	12 SF
ROOFING SEALANT, BLACK	ROOFING, NORTHWEST CHIMNEY STACK FLASHING	1/8/2010	12 SF
ROOFING SEALANT, BLACK	ROOFING, NORTHWEST CHIMNEY STACK FLASHING	4/30/2014	12 SF

Tested Non ACM or REMOVED Materials

<i>DESCRIPTION</i>	<i>LOCATION</i>	<i>Date</i>
CONCRETE EXPANSION JOINT MATERIAL	CONCRETE FLOOR SLAB JOINTS, CENTERS AND PERIMETER	10/23/2000
FLOOR LEVELING COMPOUND	CHAPEL AND NORTH WING PATCHING	10/1/2003
INTERIOR CAULKING,	WOOD CASEMENT WINDOWS THROUGHOUT	11/27/2007
FLOOR TILE AND ADHESIVE, UNDER OTHER	EAST CORRIDOR; CENTER CHAPEL; WEST CHAPEL STAGE AREA; SOUTH WING; WEST OFFICE, NORTH WING. MOST UNDER CARPET OR OTHER TILE, OVER ACM TILE IN MANY LOCATIONS	10/23/2000
GASKET MATERIAL	NORTHWEST MECHANICAL ROOM (DEBRIS)	10/23/2000
DRYWALL AND JOINT MATERIAL	WALLS THROUGHOUT BUILDING	10/23/2000
12" BLUE FLOOR TILE AND ADHESIVE	OVER HM01, 06 IN SOUTH WING OFFICES/ MEETING AREAS; EAST CORRIDOR	10/23/2000
12" BLUE FLOOR TILE AND ADHESIVE	NEW REPLACEMENT TILE POST 2010, SOUTHSIDE WING EAST (SEE ALSO HM41)	4/30/2014
RESIDUAL MASTIC	LOCATIONS THROUGHOUT OF PREVIOUS HM01 TILES (REMOVED)	4/30/2014
2'x2' CEILING TILE,	SOUTH WING CEILING	10/23/2000
12" GREEN FLOOR TILE AND ADHESIVE	EAST END OF CHAPEL, OFFICE AREAS	10/23/2000
CARPET ADHESIVE	CENTER CHAPEL AND WEST WING OFFICE	10/23/2000
9" BLACK FLOOR TILE AND ADHESIVE	CENTER CHAPEL, WEST AND SOUTH WING OFFICES/ MEETING AREAS; EAST CORRIDOR (UNDER OTHER TILES)	10/23/2000
FLOOR LEVELING COMPOUND	CHAPEL AND NORTH WING PATCHING	11/27/2007
9" BLACK FLOOR TILE AND ADHESIVE	CENTER CHAPEL, WEST AND SOUTH WING OFFICES/ MEETING AREAS; EAST CORRIDOR (UNDER OTHER TILES)	10/1/2003
9" BLACK FLOOR TILE AND ADHESIVE	CENTER CHAPEL, WEST AND SOUTH WING OFFICES/ MEETING AREAS; EAST CORRIDOR (UNDER OTHER TILES)	11/27/2007
FLOOR TILE AND ADHESIVE, UNDER OTHER	EAST CORRIDOR; CENTER CHAPEL; WEST CHAPEL STAGE AREA; SOUTH WING; WEST OFFICE, NORTH WING. MOST UNDER CARPET OR OTHER TILE, OVER ACM TILE IN MANY LOCATIONS	11/27/2007
FLOOR TILE AND ADHESIVE, UNDER OTHER	EAST CORRIDOR; CENTER CHAPEL; WEST CHAPEL STAGE AREA; SOUTH WING; WEST OFFICE, NORTH WING. MOST UNDER CARPET OR OTHER TILE, OVER ACM TILE IN MANY LOCATIONS	10/1/2003

12" BLUE FLOOR TILE AND ADHESIVE	OVER HM01, 06 IN SOUTH WING OFFICES/ MEETING AREAS; EAST CORRIDOR	1/8/2010
FLOOR TILE AND ADHESIVE, UNDER OTHER	EAST CORRIDOR; CENTER CHAPEL; WEST CHAPEL STAGE AREA; SOUTH WING; WEST OFFICE, NORTH WING. MOST UNDER CARPET OR OTHER TILE, OVER ACM TILE IN MANY LOCATIONS	1/8/2010
9" BLACK FLOOR TILE AND ADHESIVE	CENTER CHAPEL, WEST AND SOUTH WING OFFICES/ MEETING AREAS; EAST CORRIDOR (UNDER OTHER TILES)	1/8/2010

- HEALTH ASPECTS:** ACM only presents a health hazard when asbestos fibers are airborne and inhaled. Avoid disturbance which will release fibers. The presence of asbestos does not constitute a health hazard.
- CONDITIONS TO AVOID:** Do not disturb or cause damage to ACM. Do not sand, grind or abrade materials or cause damage with any type of equipment.
- REPORTS OF DAMAGE:** Report any damage, dust or debris that may come from ACM or suspect ACM, or any change in the condition of materials, or accidental disturbance to the Asbestos Program Manager.
- RESPONSE ACTION:** Corrective action initiated to minimize fiber release and protect personnel.
- INSPECTION:** ACM will be inspected periodically to evaluate any changes in condition.
- RECORDKEEPING:** The Camp Lejeune Asbestos Program Manager maintains a copy of the survey for the building.

CAMP LEJEUNE Asbestos Program Manager

Phone: (910) 451-5837

SAMPLES COLLECTED

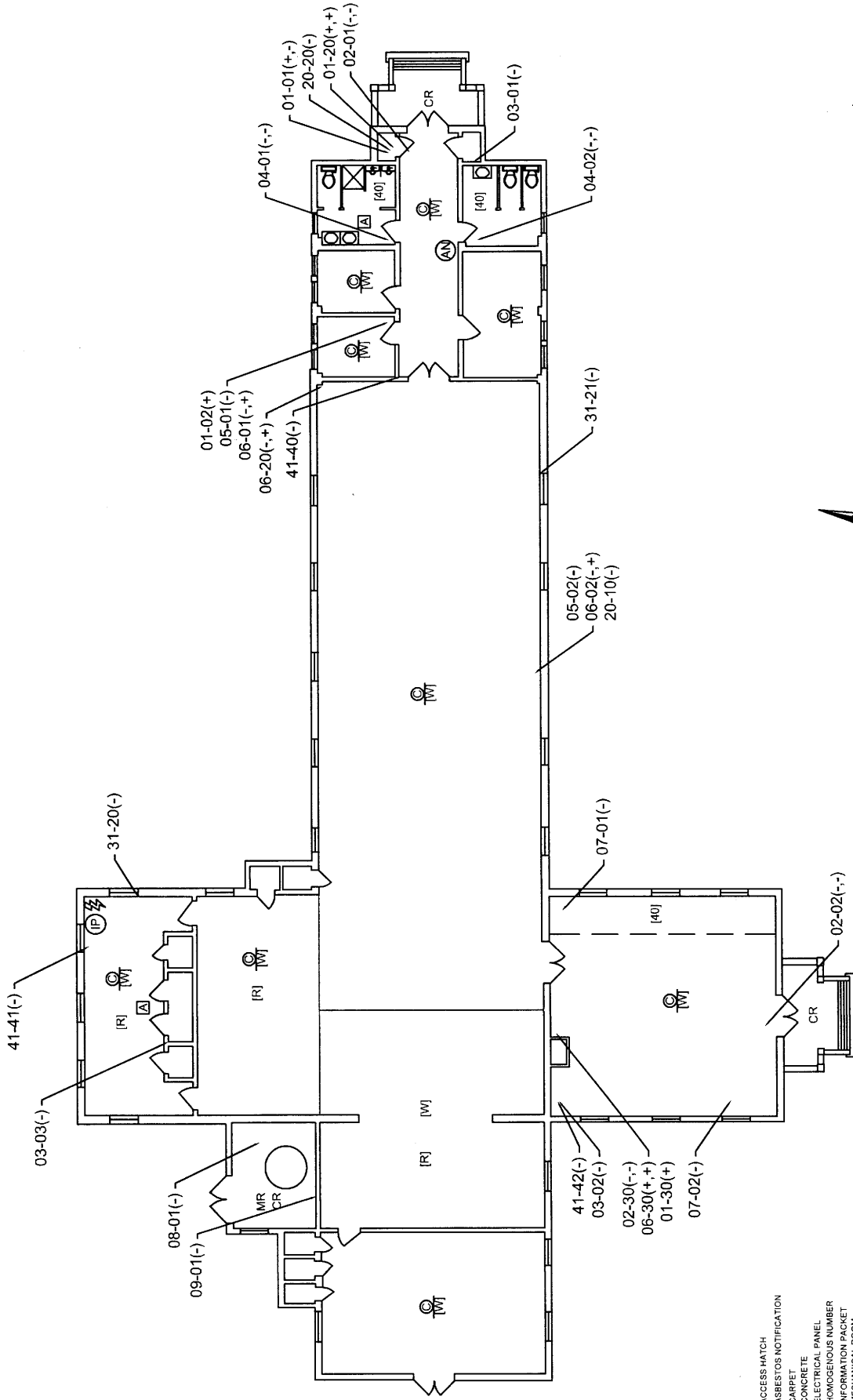
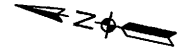
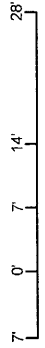
Sample	HA	Description	Sample Date	Sample Location	Chr (%)	Amo (%)	Oth (%)
M116-01-00ri03	01	9" BLACK FLOOR TILE AND ADHESIVE	10/1/2003	N/A	9	9	9
M116-01-01	01	9" BLACK FLOOR TILE AND ADHESIVE	10/23/2000	EAST END HALL	10	0	0
M116-01-02	01	9" BLACK FLOOR TILE AND ADHESIVE	10/23/2000	SOUTH WING MEETING AREA	10	0	0
M116-01-20	01	9" BLACK FLOOR TILE AND ADHESIVE	11/27/2007	EAST END, NORTH CLOSET	3	0	0
M116-01-30	01	9" BLACK FLOOR TILE AND ADHESIVE	1/8/2010	SOUTH WING, NORTH CNTR	5	0	0
M116-01-30tem	01	9" BLACK FLOOR TILE AND ADHESIVE	1/8/2010	SOUTH WING, NORTH CNTR	9.61	0	0
M116-02-01	02	12" BLUE FLOOR TILE AND ADHESIVE	10/23/2000	RIGHT CLOSET AT ENTRY	0	0	0
M116-02-02	02	12" BLUE FLOOR TILE AND ADHESIVE	10/23/2000	SANCTUARY SOUTH WING	0	0	0
M116-02-30	02	12" BLUE FLOOR TILE AND ADHESIVE	1/8/2010	SOUTH WING, NORTH CNTR	0	0	0
M116-02-30tem	02	12" BLUE FLOOR TILE AND ADHESIVE	1/8/2010	SOUTH WING, NORTH CNTR	0	0	0
M116-03-01	03	DRYWALL AND JOINT MATERIAL	10/23/2000	EAST ENTRY, SOUTH CLOSET	0	0	0
M116-03-02	03	DRYWALL AND JOINT MATERIAL	10/23/2000	SOUTH WING, NW	0	0	0
M116-03-03	03	DRYWALL AND JOINT MATERIAL	10/23/2000	NORTH WING, CNTR	0	0	0
M116-04-01	04	12" GREEN FLOOR TILE AND ADHESIVE	10/23/2000	EAST END, NE HEAD	0	0	0
M116-04-02	04	12" GREEN FLOOR TILE AND ADHESIVE	10/23/2000	EAST END, SE HEAD	0	0	0
M116-05-01	05	CARPET ADHESIVE YELLOW	10/23/2000	EAST END, NORTH OFFICE	0	0	0
M116-05-02	05	CARPET ADHESIVE YELLOW	10/23/2000	SOUTH CNTR CHAPEL	0	0	0
M116-06-00ri03	06	FLOOR TILE AND ADHESIVE, UNDER OTHER	10/1/2003	N/A	9	9	9

Sample	HA	Description	Sample Date	Sample Location	Chr (%)	Amo (%)	Oth (%)	
M116-06-01	06	FLOOR TILE AND ADHESIVE, UNDER OTHER	9" BLUE	10/23/2000	EAST END, NORTH OFFICE	5	0	0
M116-06-02	06	FLOOR TILE AND ADHESIVE, UNDER OTHER	9" BLUE	10/23/2000	SOUTH WING, NW	5	0	0
M116-06-20	06	FLOOR TILE AND ADHESIVE, UNDER OTHER	9" BLUE	11/27/2007	CHAPEL, NE CORNER	2	0	0
M116-06-30	06	FLOOR TILE AND ADHESIVE, UNDER OTHER	9" BLUE	1/8/2010	SOUTH WING, NORTH CNTR	5	0	0
M116-06-30tem	06	FLOOR TILE AND ADHESIVE, UNDER OTHER	9" BLUE	1/8/2010	SOUTH WING, NORTH CNTR	9.37	0	0
M116-07-01	07	2'x2' CEILING TILE,		10/23/2000	SOUTH WING, NE	0	0	0
M116-07-02	07	2'x2' CEILING TILE,		10/23/2000	SOUTH WING, SW	0	0	0
M116-08-01	08	GASKET MATERIAL		10/23/2000	NW MECH RM DEBRIS	0	0	0
M116-09-01	09	CONCRETE EXPANSION JOINT MATERIAL	BLACK	10/23/2000	NW MECH RM	0	0	0
M116-20-10	20	FLOOR LEVELING COMPOUND	WHITE	10/1/2003	SOUTH CNTR CHAPEL	0	0	0
M116-20-20	20	FLOOR LEVELING COMPOUND	WHITE	11/27/2007	EAST END CLOSET	0	0	0
M116-31-20	31	INTERIOR CAULKING,	WHITE	11/27/2007	NORTH WING, EAST WINDOW	0	0	0
M116-31-21	31	INTERIOR CAULKING,	WHITE	11/27/2007	CHAPEL, SE WINDOW	0	0	0
M116-32-00ri09	32	ROOFING SEALANT, BLACK		1/8/2010	N/A	9	9	9
M116-32-00ri13	32	ROOFING SEALANT, BLACK		4/30/2014	N/A	9	9	9
M116-32-00ri16	32	ROOFING SEALANT, BLACK		11/8/2016	N/A	9	9	9
M116-32-20	32	ROOFING SEALANT, BLACK		11/27/2007	ROOF, NW MECH RM	10	0	0
M116-41-40	41	RESIDUAL MASTIC	BLACK	4/30/2014	EAST END HALL	0	0	0
M116-41-41	41	RESIDUAL MASTIC	BLACK	4/30/2014	NORTH WING, NORTH	0	0	0

Sample	HA	Description		Sample Date	Sample Location	Chr (%)	Amo (%)	Oth (%)
M116-41-42	41	RESIDUAL MASTIC	BLACK	4/30/2014	SOUTH WING, NW	0	0	0



**BUILDING M116
FIRST FLOOR**



- [A] ACCESS HATCH
- [N] ASBESTOS NOTIFICATION
- [C] CARPET
- [CR] CONCRETE
- [E] ELECTRICAL PANEL
- [M] HOMOGENOUS MATERIAL
- [IP] INFORMATION PACKET
- [R] MECHANICAL ROOM
- [W] NOT ACCESSIBLE
- [R] RAISED FLOOR

SAMPLE LEGEND

SAMPLE IDENTIFICATION

01-01(+,-)
 POSITIVE (+), NEGATIVE (-), OR TRACE
 (TR) FOR THE PRESENCE OF ASBESTOS

..... HOMOGENOUS MATERIAL

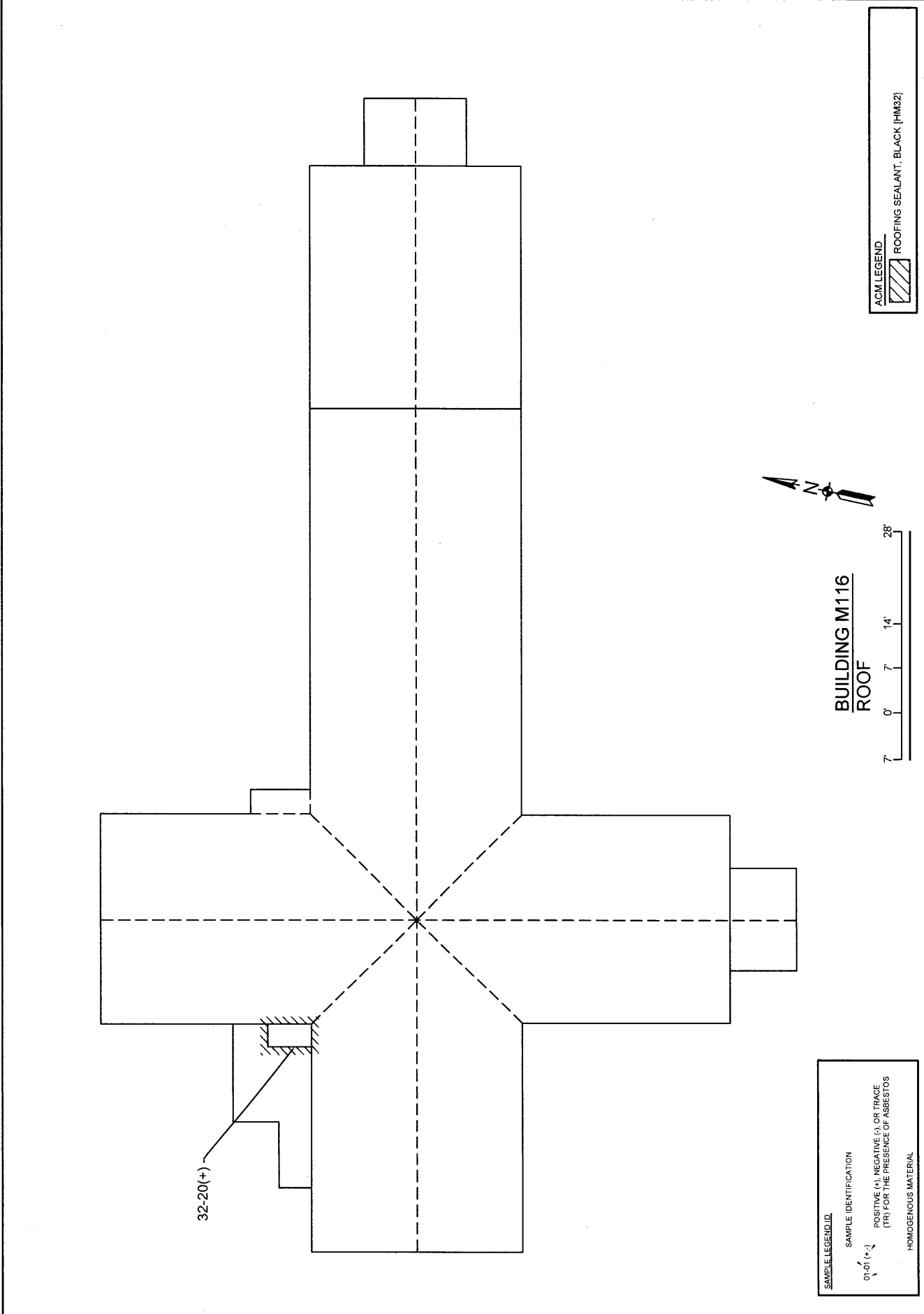
REVISIONS




MCB CAMP LEJEUNE, NC



CY2016 ASBESTOS INSPECTION
M116-R
MCB CAMP LEJEUNE, NC



ACM LEGEND
 ROOFING SEALANT, BLACK (HM32)

SAMPLE LEGEND ID.
 SAMPLE IDENTIFICATION
 (+) POSITIVE (+) NEGATIVE (-) OR TRACE
 (TR) FOR THE PRESENCE OF ASBESTOS
 HOMOGENEOUS MATERIAL



APPENDIX 4
XRF FIELD DATA SHEETS



XRF LBP TESTING DATA SHEET

PROJECT NAME/ADDRESS/UNIT NO.		Bldg M 116; MCB Camp Johnson; Jacksonville, NC		PROJECT NO.	2019 - 03 - 017		DATE	27 March 2019	
XRF MODEL/SERIAL NO.		INNOVX LBP 4000 #11916		INSPECTOR NAME/NO. DeWitt Whitten, NCRA 220118					
SAMPLE #	SUBSTRATE ¹	COMPONENT	COLOR ²	TEST LOCATION	LEVEL	SIGNATURE	XRF READING	UNITS ³	CLASSIFICATION ⁴
4	W	Door	W	See Figure 2	1 st		0.00	mg/cm ²	N
5	W	Door frame	W	See Figure 2	1 st		0.00	mg/cm ²	N
6	W	Door frame	W	See Figure 2	1 st		0.00	mg/cm ²	N
7	W	Column	W	See Figure 2	1 st		1.45	mg/cm ²	P
8	M	Brace	W	See Figure 2	1 st		> 5.0	mg/cm ²	P
9	W	Truss lower chord	W	See Figure 2	1 st		0.38	mg/cm ²	N
10	W	Truss member (horizontal)	W	See Figure 2	1 st		0.75	mg/cm ²	N
11	W	Truss upper chord	W	See Figure 2	1 st		0.53	mg/cm ²	N
12	Cardboard	Ceiling	W	See Figure 2	1 st		0.00	mg/cm ²	N
13	W	Truss upper chord	T	See Figure 2	1 st		1.44	mg/cm ²	P
14	W	Truss member (horizontal)	W	See Figure 2	1 st		0.78	mg/cm ²	N
15	W	Truss lower chord	W	See Figure 2	1 st		0.55	mg/cm ²	N
16	W	Truss lower chord	W	See Figure 2	1 st		1.41	mg/cm ²	P
17	Cardboard	Ceiling	W	See Figure 2	1 st		0.00	mg/cm ²	N
18	W	Truss member (horizontal)	W	See Figure 2	1 st		1.50	mg/cm ²	P
19	M	Door frame	W	See Figure 2	1 st		0.00	mg/cm ²	N
20	W	Railing	Gr	See Figure 2	1 st		0.00	mg/cm ²	N
21	M	Column	W	See Figure 2	1 st		0.00	mg/cm ²	N
22	W	Step	Gr	See Figure 2	1 st		0.00	mg/cm ²	N
23	M	Column	W	See Figure 2	1 st		0.00	mg/cm ²	N

- 1) M - metal
W - wood
DW - drywall
B - Brick
C - Concrete
CMU - Concrete Masonry Unit
P - Plaster
- 2) W- White
B - Blue
Y - Yellow
Bk - Black
Gr - Gray
O - Orange
Pr - Purple
- 3) mg/cm² - milligrams/square centimeter
- 4) N - Negative
P - Positive



XRF LBP TESTING DATA SHEET

PROJECT NAME/ADDRESS/UNIT NO.		Bldg M 116; MCB Camp Johnson; Jacksonville, NC		PROJECT NO.	2019 - 03 - 017		DATE	27 March 2019	
XRF MODEL/SERIAL NO.		INNOVX LBP 4000 #11916		INSPECTOR NAME/NO. DeWitt Whitten, NCRA 220118					
SAMPLE #	SUBSTRATE ¹	COMPONENT	COLOR ²	TEST LOCATION	LEVEL	XRF READING	UNITS ³	CLASSIFICATION ⁴	SIGNATURE
24	Vinyl	Wall	W	See Figure 2	1 st	0.00	mg/cm ²	N	
25	M	Column	W	See Figure 2	1 st	0.00	mg/cm ²	N	
26	W	Porch floor	Gr	See Figure 2	1 st	0.01	mg/cm ²	N	
27	W	Railing	Gr	See Figure 2	1 st	0.00	mg/cm ²	P	
28	W	Baluster	Gr	See Figure 2	1 st	0.00	mg/cm ²	P	
29	M	Door frame	W	See Figure 2	1 st	0.92	mg/cm ²	N	
30	M	Column	W	See Figure 2	1 st	0.00	mg/cm ²	N	
31	Vinyl	Wall	W	See Figure 2	1 st	0.00	mg/cm ²	N	
32	W	Door frame/casing	W	See Figure 2	1 st	> 5.0	mg/cm ²	N	
33	W	Railing	Gr	See Figure 2	1 st	0.00	mg/cm ²	P	
34	W	Baluster	Gr	See Figure 2	1 st	0.00	mg/cm ²	N	
35	M	Column	W	See Figure 2	1 st	0.00	mg/cm ²	N	
36	W	Porch floor	Gr	See Figure 2	1 st	0.00	mg/cm ²	P	
37	W	Door	W	See Figure 2	1 st	0.00	mg/cm ²	N	
38	M	Door frame/casing	W	See Figure 2	1 st	0.00	mg/cm ²	P	
39	W	Wall (original siding)	W	See Figure 2	1 st	4.43	mg/cm ²	N	
40	Vinyl	Wall	W	See Figure 2	1 st	0.01	mg/cm ²	N	
41	Vinyl	Wall	W	See Figure 2	1 st	0.00	mg/cm ²	N	

- 1) M - metal
W - wood
DW - drywall
B - Brick
C - Concrete
CMU - Concrete Masonry Unit
P - Plaster

- 2) W- White
B - Blue
Y - Yellow
Bk - Black
Gr - Gray
O - Orange
Pr - Purple

- R - Red
G - Green
T - Tan
Br - Brown
OW - Off-white
P - Pink
C - Clear

3) mg/cm² - milligrams/square centimeter

4) N - Negative
P - Positive