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. 0027

INTERIOR/EXTERIOR REPAIRS, BLDG. M101

MARINE CORPS BASE – CAMP JOHNSON

JACKSONVILLE, NORTH CAROLINA

Prepared By:

ALLIED CONSULTING & ENVIRONMENTAL SERVICES, LLC

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ISSUE DATE: JUNE 5, 2019

ACES PROJECT: 2019-04-024

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ACES Project No.: 2019-04-024

June 5, 2019

Prepared by:

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

Reviewed by:

Robert L. Smith, AIA, LEED AP
Managing Partner

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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-101 at the Marine Corps Base – Camp Johnson in Jacksonville, North Carolina on April 17, 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-101.

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-101 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 seventeen (17) 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-eight (28) samples were analyzed by the laboratory. Samples included the following materials: roofing materials, drywall, spackling, lay-in ceiling tile, leveling compound, 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-101 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 twenty-seven (27) locations for Building M-101. 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-eight (28) of the twenty-eight (28) 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 twenty-eight (28) samples analyzed by EMSL. In addition, an asbestos report prepared by others indicated that friable and 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 DESRIPTION	REPORTED LOCATION	APPROX. QUANTITY
Pipe Insulation	Attic North Wing, East & West Connections to Exterior Overhead Steam Lines	10 lin. ft.
Transite Panel	Attic Firewalls & Debris; Center & North Wing	100 sq. ft.
Gray Roofing Sealant	Roofing System Vents & Pipe Penetrations	2 sq. ft.
Gasket Material	South Wing East Museum Boiler Unit	1 sq. ft.
Concrete Expansion Joint Material	Exterior Perimeter of South Wing at Concrete Slab	120 lin. ft.

4.3 Lead-based Paint

The results of the testing (Appendix 3) revealed that lead-based paint was present at three (3) locations associated with Building M-101 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-101	109	Interior	Water Table	Concrete	White	> 1.0
M-101	110	Exterior	Roof Joist	Wood	White	> 5.0
M-101	113	Exterior	Soffit	Wood	White	> 5.0

NOTE: 1) units in milligrams per square centimeter (mg/cm^2)

4.4 Recommendations - ACM & Presumed ACM

Asbestos containing materials (ACM) and Presumed Asbestos Containing Materials (PACM) were identified in the building as shown in Table 1. In their current condition, the materials are considered Friable and 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/cm^2), was identified at three (3) 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-101 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.

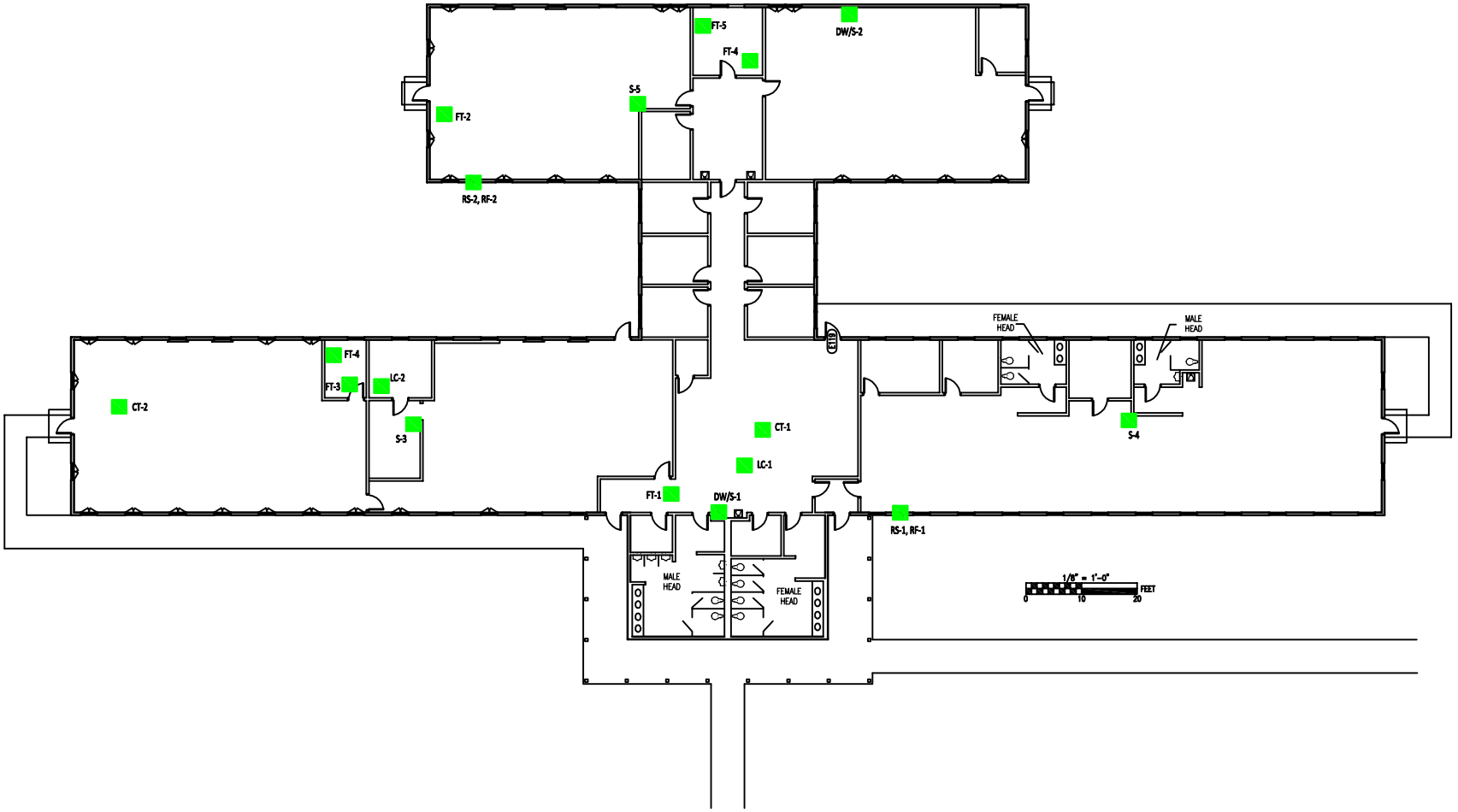
During the site visit, accessible areas were visually surveyed for the presence of suspect asbestos containing materials (ACM) and lead-based paints (LBP). Inaccessible areas, such as above ceilings or behind walls may have not been surveyed; therefore, all ACM and/or LBP may not have been identified. 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



LEGEND

Sample ID # — CT-2 — Approximate Sample Location - Asbestos Not Detected

Sample ID # — FT-2 — Approximate Sample Location - Asbestos Detected

BLDG M-101

PROJ. NUM.: 2019 - 03 - 01_

DATE: March __, 2019

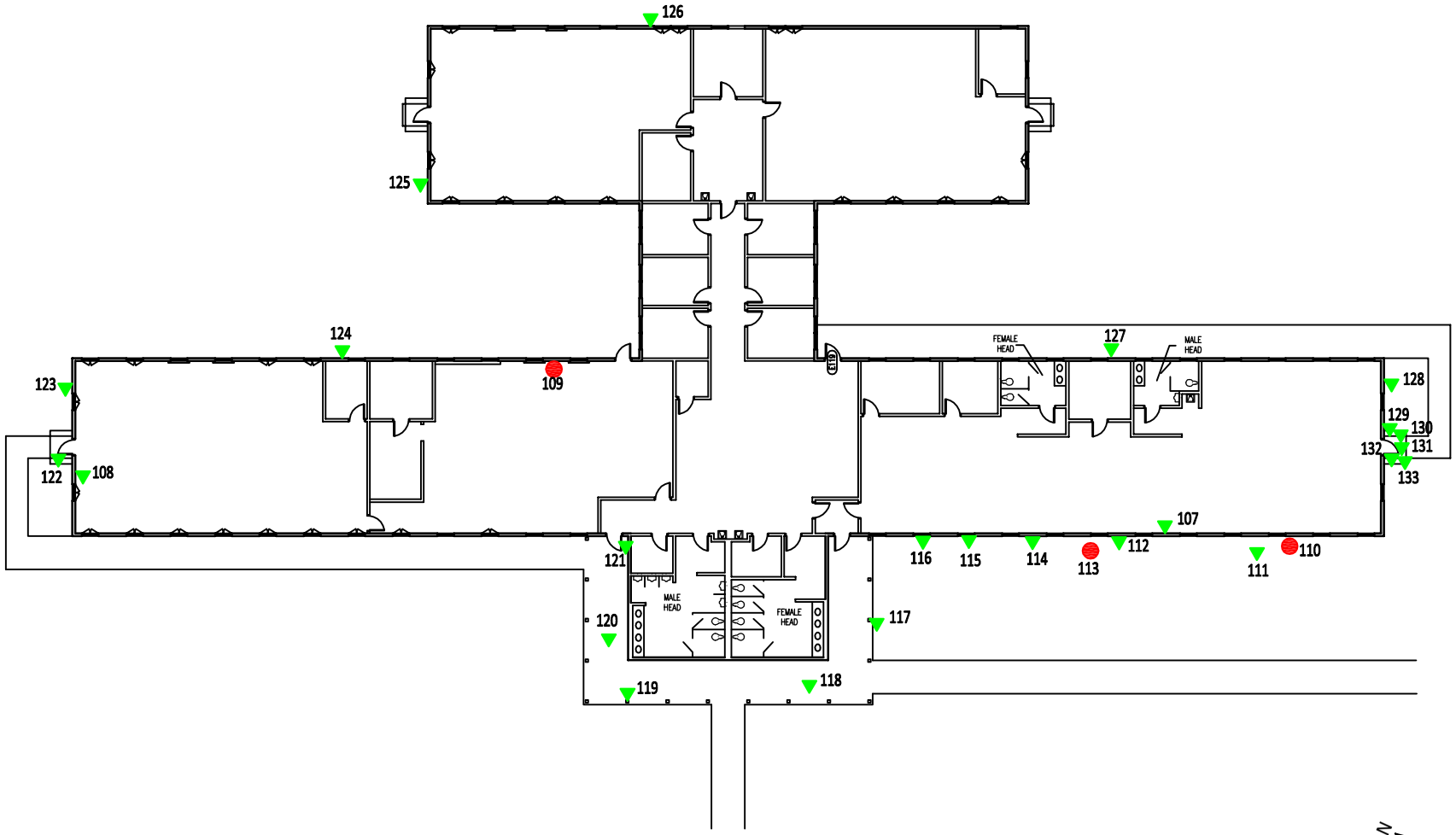
SAMPLE LOCATION PLAN

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 0027
INTERIOR/EXTERIOR REPAIRS, BLDG. M 101
MARINE CORPS BASE - CAMP JOHNSON
JACKSONVILLE, NORTH CAROLINA

FIGURE

1



LEGEND

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

Sample ID # — 12 — ● Approximate Sample Location - Lead-based Paint Identified

BLDG M-101

PROJ. NUM.: 2019 - 04 - 024

DATE: June 3, 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 0027
INTERIOR/EXTERIOR REPAIRS, BLDG. M 101
MARINE CORPS BASE - CAMP JOHNSON
JACKSONVILLE, NORTH CAROLINA

FIGURE
2

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:	411903672
Customer ID:	ALLC25
Customer PO:	
Project ID:	

Attention:	Dewitt Whitten	**Phone:**	(704) 232-0152
	Allied Consulting & Environmental Svs	**Fax:**	
	P.O. Box 2426	**Received Date:**	04/23/2019 11:40 AM
	Shelby, NC 28151	**Analysis Date:**	04/27/2019 - 04/29/2019
		Collected Date:	04/17/2019
Project:	M-101/ 2019-04-024		

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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
RS-1 *411903672-0001*	Roof Shingle	Black Fibrous Homogeneous	8% Glass	5% Quartz 15% Ca Carbonate 72% Non-fibrous (Other)	None Detected
RS-2 *411903672-0002*	Roof Shingle	Gray/Black Fibrous Homogeneous	5% Glass	5% Quartz 20% Ca Carbonate 70% Non-fibrous (Other)	None Detected
RF-1 *411903672-0003*	Roof Felt	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
RF-2 *411903672-0004*	Roof Felt	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
CT-1 *411903672-0005*	Lay-In Ceiling Tile	Gray/White Fibrous Homogeneous	60% Cellulose 15% Min. Wool	15% Perlite 10% Non-fibrous (Other)	None Detected
CT-2 *411903672-0006*	Lay-In Ceiling Tile	Gray/White Fibrous Homogeneous	60% Cellulose 5% Min. Wool	30% Perlite 5% Non-fibrous (Other)	None Detected
LC-1-Mastic *411903672-0007*	Leveling Compound	Tan Non-Fibrous Homogeneous	<1% Cellulose	5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
LC-1-Leveler *411903672-0007A*	Leveling Compound	Gray Non-Fibrous Homogeneous		8% Quartz 92% Non-fibrous (Other)	None Detected
LC-2 *411903672-0008*	Leveling Compound	Gray/Tan Non-Fibrous Homogeneous	2% Cellulose	5% Ca Carbonate 93% Non-fibrous (Other)	None Detected
DW/S-1-Drywall *411903672-0009*	Drywall-Spackling	Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
DW/S-1-Joint Compound *411903672-0009A*	Drywall-Spackling	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
DW/S-2-Drywall *411903672-0010*	Drywall-Spackling	Brown/Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
DW/S-2-Joint Compound *411903672-0010A*	Drywall-Spackling	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
S-3 *411903672-0011*	Drywall-Spackling	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
FT-1-Floor Tile *411903672-0012*	12x12 Floor Tile A	Beige Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected

Initial report from: 04/29/2019 12:41:15

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: 411903672
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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
FT-1-Mastic *411903672-0012A*	12x12 Floor Tile A	Tan Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
FT-2-Floor Tile *411903672-0013*	12x12 Floor Tile A	White/Various Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
FT-2-Mastic *411903672-0013A*	12x12 Floor Tile A	Tan Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
FT-3-Floor Tile *411903672-0014*	12x12 Floor Tile B	Beige Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
FT-3-Mastic *411903672-0014A*	12x12 Floor Tile B	Tan Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
FT-4-Floor Tile *411903672-0015*	12x12 Floor Tile B	Beige Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
FT-4-Mastic *411903672-0015A*	12x12 Floor Tile B	Yellow Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
FT-5-Floor Tile *411903672-0016*	12x12 Floor Tile C	Beige Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
FT-5-Mastic *411903672-0016A*	12x12 Floor Tile C	Tan Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
FT-6-Floor Tile *411903672-0017*	12x12 Floor Tile C	Gray/Tan/White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
FT-6-Mastic *411903672-0017A*	12x12 Floor Tile C	Tan Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
S-4 *411903672-0018*	Spackling	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
S-5 *411903672-0019*	Spackling	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected

Analyst(s)
Katherine Sluder (13)
Lacy Searcy (15)

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: 04/29/2019 12:41:15

OrderID: 411903672

EMSL ANALYTICAL, INC.
LABORATORY · PRODUCTS · TRAINING

Asbestos Chain of Custody

EMSL Order Number (*Lab Use Only*)

411903672

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
Fax #: 704-487-5596
Report To (Name): DeWitt Whitten
Please Provide Results: ☐ Fax ☑ Email
Email Address: dewitt@aces-env.com
Purchase Order:
Project Name/Number: M-101 / 2019-04-024
EMSL Project ID (*Internal Use Only*):
U.S. State Samples Taken:
CT Samples: ☐ Commercial/Taxable ☐ Residential/Tax Exempt

EMSL-Bill to: ☑ Same ☐ Different - If Bill to is Different note instructions in Comments**
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.

PCM - Air ☐ Check if samples are from NY
☐ NIOSH 7400
☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
☒ PLM EPA 600/R-93/116 (<1%)
☐ PLM EPA NOB (<1%)
Point Count
☐ 400 (<0.25%) ☐ 1000 (<0.1%)
Point Count w/Gravimetric
☐ 400 (<0.25%) ☐ 1000 (<0.1%)
☐ NYS 198.1 (friable in NY)
☐ NYS 198.6 NOB (non-friable-NY)
☐ NYS 198.8 SOF-V
☐ NIOSH 9002 (<1%)

TEM – Air ☐ 4-4.5hr TAT (AHERA only)
☐ AHERA 40 CFR, Part 763
☐ NIOSH 7402
☐ EPA Level II
☐ ISO 10312

TEM - Bulk
☐ TEM EPA NOB
☐ NYS NOB 198.4 (non-friable-NY)
☐ Chatfield SOP
☐ TEM Mass Analysis-EPA 600 sec. 2.5

TEM – Water: EPA 100.2
Fibers >10µm ☐ Waste ☐ Drinking
All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Dust
☐ Microvac - ASTM D 5755
☐ Wipe - ASTM D6480
☐ Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite
☐ PLM EPA 600/R-93/116 with milling prep (<1%)
☐ PLM EPA 600/R-93/116 with milling prep (<0.25%)
☐ TEM EPA 600/R-93/116 with milling prep (<0.1%)
☐ TEM Qualitative via Filtration Prep
☐ TEM Qualitative via Drop Mount Prep
☐ Cincinnati Method EPA 600/R-04/004 – PLM/TEM (BC only)

Other:
☐

☐ Check For Positive Stop – Clearly Identify Homogenous Group

Filter Pore Size (Air Samples): ☐ 0.8µm ☐ 0.45µm

Samplers Name: DeWitt Whitten
Samplers Signature:

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
RS-1, 2	Roof Shingle		17 April 19 PM
RF-1, 2	Roof Felt		"
CT-1, 2	Lay-in Ceiling Tile		"
LC-1, 2	Leveling Compound		"
DW/S-1, 2 S-3	Dry wall - Spackling		"

Client Sample # (s): See above & next page
Total # of Samples: 17
Relinquished (Client): DeWitt Whitten **Date:** 23 April 2019 **Time:** 1132
Received (Lab): Kyle Nh **Date:** 4/23/19 **Time:** 11:40 AM W/D
Comments/Special Instructions:

M-10
2019-04-024

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

411903672

PHONE:
FAX:

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
FT-1, 2	12 x 12 Floor Tile A		
FT-3, 4	12 x 12 Floor Tile B		
FT-5, 6	12 x 12 Floor Tile C		

*Comments/Special Instructions:

APPENDIX 3

ASBESTOS REPORT BY OTHERS

ASBESTOS INSPECTION REPORT of:

Building # M101

MCB CAMP LEJEUNE

Print Date

Friday, March 29, 2019

INSPECTION SUMMARY

BLDG #: **M101** ***YEAR BUILT:*** **1942**

OCCUPANT: **SOI CLASSROOMS, OFFICE, MUSEUM** ***ASBESTOS MANAGER: Billy Parkin 451-5837***

BUILDING COMMENTS:

HAZ RANK 1C/RED [AH AUG2016]
FIBROUS ACM DEBRIS IN ATTIC, EXTERIOR OVERHEAD.

AUG2016
PVS. ACM REMAINS

APR2014
PVS. ACM AND DEBRIS REMAINS; ROOF REPLACED, SOME ACM REMOVED

JAN2010
ACCESSIBLE BOILER DEBRIS ABATED (MAY2010). PVS. ACM REMAINS, ADDL SAMPLING, ADDL ACM INCLUDES:
FIBROUS DEBRIS
GASKET/ PACKING MATERIAL
CONCRETE EXPANSION JOINT

INSPECT JUL07
ACM IDENTIFIED INCLUDES:
TRANSITE PANEL MATERIAL and DEBRIS
ROOFING SEALANT, GRAY
EXTERIOR CAULKING, WHITE

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

DESCRIPTION	*LOCATION*	*Date*	*Quantity*
PIPE INSULATION	ATTIC NORTH WING, EAST AND WEST CONNECTIONS TO EXTERIOR OVERHEAD STEAM LINES	1/26/2010	10 LF
PIPE INSULATION	ATTIC NORTH WING, EAST AND WEST CONNECTIONS TO EXTERIOR OVERHEAD STEAM LINES	8/23/2016	4 LF
PIPE INSULATION	ATTIC NORTH WING, EAST AND WEST CONNECTIONS TO EXTERIOR OVERHEAD STEAM LINES	4/21/2014	10 LF

Non-friable ACM(s) identified

DESCRIPTION	*LOCATION*	*Date*	*Quantity*
TRANSITE PANEL MATERIAL	ATTIC FIREWALLS AND DEBRIS; CENTER AND NORTH WING	7/10/2007	220 SF
ROOFING SEALANT, GRAY	ROOFING SYSTEM VENTS AND PIPE PENETRATIONS	7/10/2007	12 SF

CONCRETE EXPANSION JOINT MATERIAL	EXTERIOR PERIMETER OF SOUTH WING AT CONCRETE SLAB	1/26/2010	120	LF
GASKET MATERIAL	SOUTH WING EAST MUSEUM BOILER UNIT	1/26/2010	1	SF
TRANSITE PANEL MATERIAL	ATTIC FIREWALLS AND DEBRIS; CENTER AND NORTH WING	8/23/2016	220	SF
ROOFING SEALANT, GRAY	ROOFING SYSTEM VENTS AND PIPE PENETRATIONS	8/23/2016	2	SF
CONCRETE EXPANSION JOINT MATERIAL	EXTERIOR PERIMETER OF SOUTH WING AT CONCRETE SLAB	8/23/2016	120	LF
GASKET MATERIAL	SOUTH WING EAST MUSEUM BOILER UNIT	8/23/2016	1	SF
ROOFING SEALANT, GRAY	ROOFING SYSTEM VENTS AND PIPE PENETRATIONS	1/26/2010	12	SF
TRANSITE PANEL MATERIAL	ATTIC FIREWALLS w/DEBRIS IN CENTER AND NORTH WING; NORTHWEST EXTERIOR GROUND DEBRIS	1/26/2010	200	SF
TRANSITE PANEL MATERIAL	ATTIC FIREWALLS AND DEBRIS; CENTER AND NORTH WING	4/21/2014	100	SF
ROOFING SEALANT, GRAY	ROOFING SYSTEM VENTS AND PIPE PENETRATIONS	4/21/2014	2	SF
CONCRETE EXPANSION JOINT MATERIAL	EXTERIOR PERIMETER OF SOUTH WING AT CONCRETE SLAB	4/21/2014	120	LF
GASKET MATERIAL	SOUTH WING EAST MUSEUM BOILER UNIT	4/21/2014	1	SF

Tested Non ACM or REMOVED Materials

DESCRIPTION	*LOCATION*	*Date*
DUCT SEALANT, GRAY	ATTIC HVAC DUCT SYSTEMS	7/10/2007
ROOFING FELT DEBRIS	ATTIC, OLD ROOFING SYSTEM DEBRIS	7/10/2007
FELT PAPER	ROOFING SYSTEM UNDERLAYMENT	7/10/2007
DRYWALL	WALLS THROUGHOUT (SEE ALSO HM01)	7/10/2007
SHINGLE ROOFING	[NEW] ROOFING SYSTEM DEBRIS IN ATTIC	7/10/2007
SHINGLE ROOFING	[OLD] ROOFING SYSTEM DEBRIS IN ATTIC	7/10/2007
FIBERGLASS INSULATION SEALANT	MECHANICAL ROOM PIPING (MULTIPLE MECH ROOMS)	7/10/2007
BLACK VINYL BASE AND ADHESIVE, 4"	SOUTH WING WEST AND CENTER ROOMS; CENTER CORRIDOR OFFICES; NORTH WING ROOMS THROUGHOUT	7/10/2007
DRYWALL AND JOINT MATERIAL	WALLS THROUGHOUT (SEE ALSO HM01/ 02)	7/10/2007

MISCELLANEOUS SEALANT	ATTIC AND OVERHEAD DUCT SYSTEM INSULATION THROUGHOUT	7/10/2007
EXTERIOR CAULKING,	DOORS	7/10/2007
EXTERIOR CAULKING,	ROOFING SYSTEM, CENTRAL MAIN VENT FAN UNIT	7/10/2007
FIBROUS DEBRIS	ABANDONED PIPE HANGARS OVERHEAD; SOUTH WING EAST MUSEUM BOILER UNIT (SEE ALSO HM30)	1/26/2010
12" RAINBOW FLOOR TILE AND ADHESIVE	SOUTH WING WEST AND CENTER ROOMS; CENTER CORRIDOR OFFICES; NORTH WING ROOMS THROUGHOUT	7/10/2007
JOINT MATERIAL	WALLS THROUGHOUT (SEE ALSO HM02)	7/10/2007
MISCELLANEOUS SEALANT	MECHANICAL ROOM WALL PATCHING AT PIPE PENETRATIONS (POSSIBLE JOINT COMPOUND HM01)	7/10/2007
INTERIOR CAULKING,	WOOD WINDOWS; METAL AND WOOD DOORS	1/26/2010
LAGGING PAPER ON FIBERGLASS	MECHANICAL ROOM PIPING SYSTEMS	1/26/2010
MUDDED FITTING(S)	RESIDUAL MATERIAL, NORTH WING, NORTHEAST STEAM PIT	1/26/2010
TEXTURED CEILING MATERIAL	NORTH WING CLASSROOM CEILINGS	1/26/2010
FIBERGLASS INSULATION SEALANT	ATTIC AND OVERHEAD DUCT SYSTEM INSULATION THROUGHOUT	1/26/2010
PIPE INSULATION, AIRCELL	SOUTH WING EAST MUSEUM BOILER UNIT (RESIDUE)	1/26/2010
MISCELLANEOUS SEALANT	ATTIC FIREWALLS COATING	1/26/2010
EXTERIOR CAULKING,	ROOFING SYSTEM, CENTRAL MAIN VENT FAN UNIT	1/26/2010
FIBROUS DEBRIS	ABANDONED PIPE HANGARS OVERHEAD; SOUTH WING EAST MUSEUM BOILER UNIT (SEE ALSO HM30)	8/23/2016
12" RAINBOW FLOOR TILE AND ADHESIVE	SOUTH WING WEST AND CENTER ROOMS; CENTER CORRIDOR OFFICES; NORTH WING ROOMS THROUGHOUT	1/26/2010
DRYWALL AND JOINT MATERIAL	WALLS THROUGHOUT (SEE ALSO HM01)	1/26/2010
EXTERIOR CAULKING,	WOODEN DOORS AND WINDOWS	1/26/2010
FIBROUS DEBRIS	ABANDONED PIPE HANGARS OVERHEAD (SEE ALSO HM30)	4/21/2014

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

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

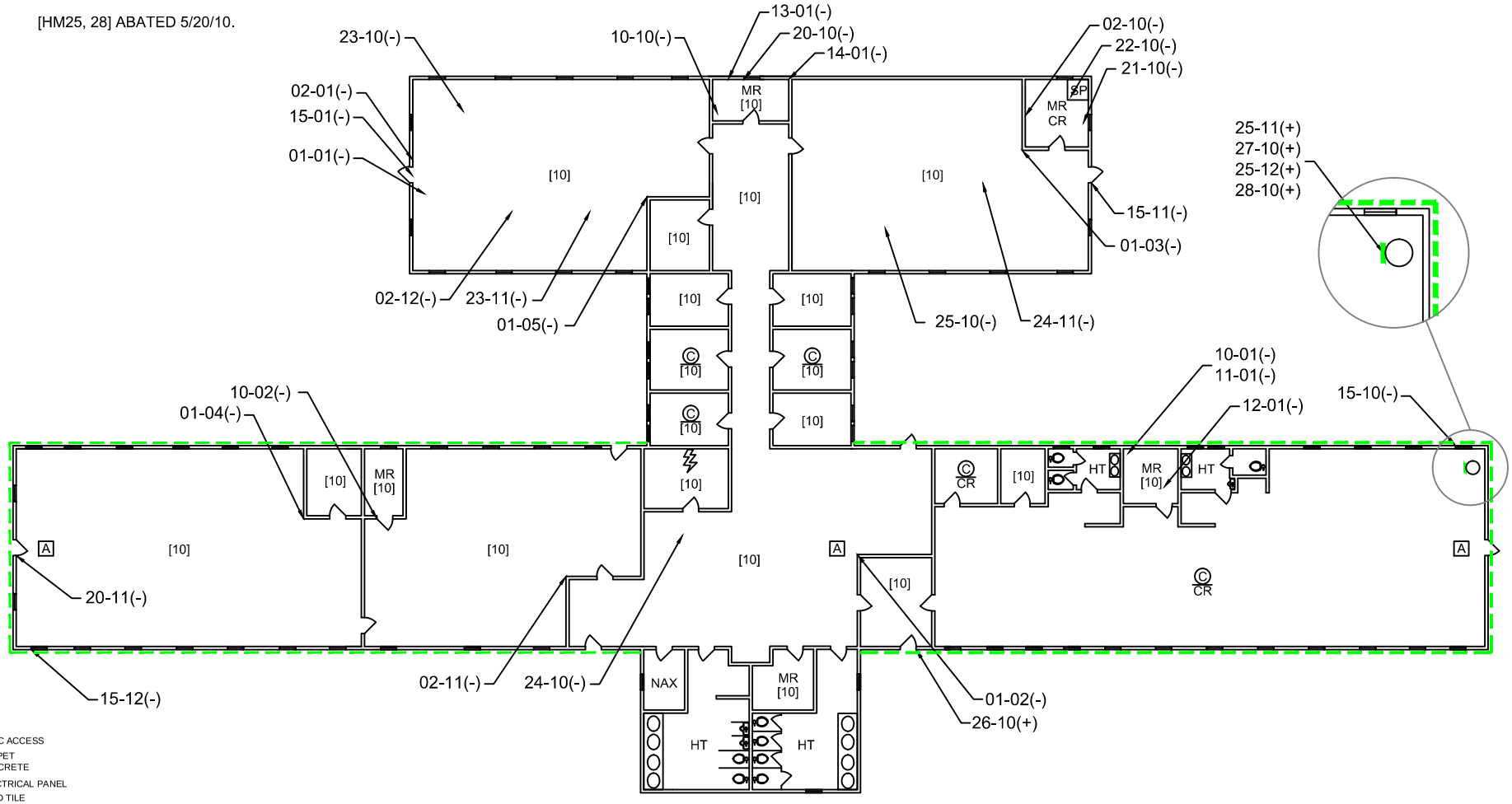
Sample	HA	Description		Sample Date	Sample Location	Chr (%)	Amo (%)	Oth (%)
M101-01-01	01	JOINT MATERIAL		7/10/2007	NORTH WING, WEST WALL	0	0	0
M101-01-02	01	JOINT MATERIAL		7/10/2007	SOUTH WING, CNTR WALL	0	0	0
M101-01-03	01	JOINT MATERIAL		7/10/2007	NORTH WING, NE WALL AT MECH RM	0	0	0
M101-01-04	01	JOINT MATERIAL		7/10/2007	SOUTH WING, WEST CNTR WALL	0	0	0
M101-01-05	01	JOINT MATERIAL		7/10/2007	NORTH WING, CNTR WALL	0	0	0
M101-02-01	02	DRYWALL		7/10/2007	NORTH WING, WEST END WALL	0	0	0
M101-02-02	02	DRYWALL		7/10/2007	NORTH WING ATTIC, CNTR DEBRIS	0	0	0
M101-02-10	02	DRYWALL		1/26/2010	NORTH WING, NE MECH RM	0	0	0
M101-02-11	02	DRYWALL		1/26/2010	SOUTH WING, CNTR WEST WALL	0	0	0
M101-02-12	02	DRYWALL		1/26/2010	NORTH WING WEST, OLD CEILING	0	0	0
M101-02-13	02	DRYWALL		1/26/2010	ATTIC, SOUTH WING, WEST FIREWALL	0	0	0
M101-03-01	03	FELT PAPER	BLACK	7/10/2007	FROM ATTIC, NORTH WING WEST VENT	0	0	0
M101-04-00ri09	04	TRANSITE PANEL MATERIAL	DEBRIS	1/26/2010	N/A	9	9	9
M101-04-00ri13	04	TRANSITE PANEL MATERIAL	DEBRIS	4/21/2014	N/A	9	9	9
M101-04-00ri16	04	TRANSITE PANEL MATERIAL	DEBRIS	8/23/2016	N/A	9	9	9
M101-04-01	04	TRANSITE PANEL MATERIAL	DEBRIS	7/10/2007	ATTIC, NORTH WING, WEST	15	0	0
M101-05-01	05	DUCT SEALANT, GRAY		7/10/2007	ATTIC, NORTH WING CNTR	0	0	0
M101-06-01	06	SHINGLE ROOFING	DEBRIS	7/10/2007	ATTIC, NORTH WING CNTR	0	0	0
M101-07-01	07	SHINGLE ROOFING	DEBRIS	7/10/2007	ATTIC, NORTH WING CNTR	0	0	0
M101-08-01	08	ROOFING FELT DEBRIS		7/10/2007	ATTIC, CNTR	0	0	0

Sample	HA	Description	Sample Date	Sample Location	Chr (%)	Amo (%)	Oth (%)
M101-09-01	09	MISCELLANEOUS SEALANT WHITE	7/10/2007	ATTIC, CNTR DUCTS	0	0	0
M101-10-01	10	12" RAINBOW FLOOR TILE AND ADHESIVE	7/10/2007	SOUTH WING, EAST CNTR	0	0	0
M101-10-02	10	12" RAINBOW FLOOR TILE AND ADHESIVE	7/10/2007	SOUTH WING, WEST CNTR	0	0	0
M101-10-10	10	12" RAINBOW FLOOR TILE AND ADHESIVE	1/26/2010	NORTH WING, CNTR MECH RM	0	0	0
M101-10-10tem	10	12" RAINBOW FLOOR TILE AND ADHESIVE	1/26/2010	NORTH WING, CNTR MECH RM	0	0	0
M101-11-01	11	BLACK VINYL BASE AND ADHESIVE, 4"	7/10/2007	SOUTH WING, EAST CNTR	0	0	0
M101-12-01	12	FIBERGLASS INSULATION SEALANT WHITE	7/10/2007	SOUTH WING, EAST CNTR MECH RM	0	0	0
M101-13-01	13	MISCELLANEOUS SEALANT WHITE	7/10/2007	NORTH WING, NORTH CNTR MECH RM	0	0	0
M101-14-01	14	DRYWALL AND JOINT MATERIAL	7/10/2007	NORTH WING, NORTH CNTR	0	0	0
M101-15-01	15	EXTERIOR CAULKING, WHITE	7/10/2007	NORTH WING, WEST DOOR	0	0	0
M101-15-10	15	EXTERIOR CAULKING, WHITE	1/26/2010	SOUTH WING, NE WINDOW	0	0	0
M101-15-11	15	EXTERIOR CAULKING, WHITE	1/26/2010	NORTH WING, EAST DOOR	0	0	0
M101-15-12	15	EXTERIOR CAULKING, WHITE	1/26/2010	SOUTH WING, SW WINDOW	0	0	0
M101-16-00ri09	16	ROOFING SEALANT, GRAY	1/26/2010	N/A	9	9	9
M101-16-00ri13	16	ROOFING SEALANT, GRAY	4/21/2014	N/A	9	9	9
M101-16-00ri16	16	ROOFING SEALANT, GRAY	8/23/2016	N/A	9	9	9
M101-16-01	16	ROOFING SEALANT, GRAY	7/10/2007	ROOF, SOUTH WING, EAST VENT	8	0	0
M101-16-02	16	ROOFING SEALANT, GRAY	7/10/2007	ROOF, NORTH WING, WEST VENT	8	0	0
M101-17-00ri09	17	EXTERIOR CAULKING, WHITE	1/26/2010	N/A	9	9	9
M101-17-01	17	EXTERIOR CAULKING, WHITE	7/10/2007	ROOF, MIDDLE MAIN VENT BASE	4	0	0

Sample	HA	Description	Sample Date	Sample Location	Chr (%)	Amo (%)	Oth (%)
M101-20-10	20	INTERIOR CAULKING, WHITE	1/26/2010	NORTH CNTR WOOD WINDOW	0	0	0
M101-20-11	20	INTERIOR CAULKING, WHITE	1/26/2010	SOUTH WING, WEST METAL DOOR	0	0	0
M101-21-10	21	LAGGING PAPER ON FIBERGLASS	1/26/2010	NORTH WING, NE MECH RM	0	0	0
M101-22-10	22	MUDDED FITTING(S)	1/26/2010	NORTH WING, NE MECH RM	0	0	0
M101-23-10	23	TEXTURED CEILING MATERIAL WHITE	1/26/2010	NORTH WING, WEST CLASS NW	0	0	0
M101-23-11	23	TEXTURED CEILING MATERIAL WHITE	1/26/2010	NORTH WING, WEST CLASS SOUTH CNTR	0	0	0
M101-24-10	24	FIBERGLASS INSULATION SEALANT WHITE	1/26/2010	SOUTH WING, CNTR OVHD	0	0	0
M101-24-11	24	FIBERGLASS INSULATION SEALANT WHITE	1/26/2010	NORTH WING, EAST CNTR OVHD	0	0	0
M101-25-00ri13	25	FIBROUS DEBRIS WHITE	4/21/2014	N/A	9	9	9
M101-25-10	25	FIBROUS DEBRIS WHITE	1/26/2010	NORTH WING EAST OVHD HANGAR	0	0	0
M101-25-11	25	FIBROUS DEBRIS WHITE	1/26/2010	SOUTH WING EAST BOILER PIPE	20	40	0
M101-25-12	25	FIBROUS DEBRIS WHITE	1/26/2010	SOUTH WING, EAST BOILER	40	0	0
M101-25-13	25	FIBROUS DEBRIS WHITE	1/26/2010	ATTIC, CNTR HANGAR	0	0	0
M101-25-14	25	FIBROUS DEBRIS WHITE	1/26/2010	ATTIC, NORTH CNTR HANGAR	60	5	0
M101-26-00ri13	26	CONCRETE EXPANSION JOINT MATERIAL BLACK	4/21/2014	N/A	9	9	9
M101-26-00ri16	26	CONCRETE EXPANSION JOINT MATERIAL BLACK	8/23/2016	N/A	9	9	9
M101-26-10	26	CONCRETE EXPANSION JOINT MATERIAL BLACK	1/26/2010	SOUTH WING, WEST CNTR	3	0	0
M101-27-00ri13	27	GASKET MATERIAL GRAY	4/21/2014	N/A	9	9	9
M101-27-00ri16	27	GASKET MATERIAL GRAY	8/23/2016	N/A	9	9	9
M101-27-10	27	GASKET MATERIAL GRAY	1/26/2010	SOUTH WING, EAST BOILER	10	0	0
M101-27-11	27	GASKET MATERIAL GRAY	1/26/2010	SOUTH WING, EAST BOILER	5	0	0

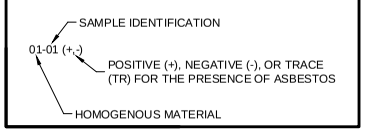
Sample	HA	Description		Sample Date	Sample Location	Chr (%)	Amo (%)	Oth (%)
M101-28-10	28	PIPE INSULATION, AIRCELL	DEBRIS	1/26/2010	SOUTH WING, EAST BOILER	40	0	0
M101-29-10	29	MISCELLANEOUS SEALANT	WHITE	1/26/2010	ATTIC, SOUTH WING, WEST FIREWALL	0	0	0
M101-30-00ri13	30	PIPE INSULATION		4/21/2014	N/A	19	19	19
M101-30-00ri16	30	PIPE INSULATION		8/23/2016	N/A	9	9	9
M101-30-10	30	PIPE INSULATION		1/26/2010	ATTIC, NORTH WING, WEST END	65	5	0
M101-30-11	30	PIPE INSULATION		1/26/2010	ATTIC, NORTH WING, EAST END	60	10	0

[HM25, 28] ABATED 5/20/10.



A ATTIC ACCESS
C CARPET
CR CONCRETE
ELECTRICAL PANEL
HT HARD TILE
[HM] HOMOGENOUS MATERIAL NUMBER
MR MECHANICAL ROOM
NAX NOT ACCESSIBLE
SP STEAM PIT
T TRANSITE PANEL MATERIAL REMOVED BY INSPECTOR

SAMPLE LEGEND ID



BUILDING M101
FIRST FLOOR

6' 0' 6' 12' 24'

ACM LEGEND

CONCRETE EXPANSION JOINT MATERIAL, PERIMETER, EXTERIOR [HM26]

GASKET MATERIAL [HM27]

REVISIONS

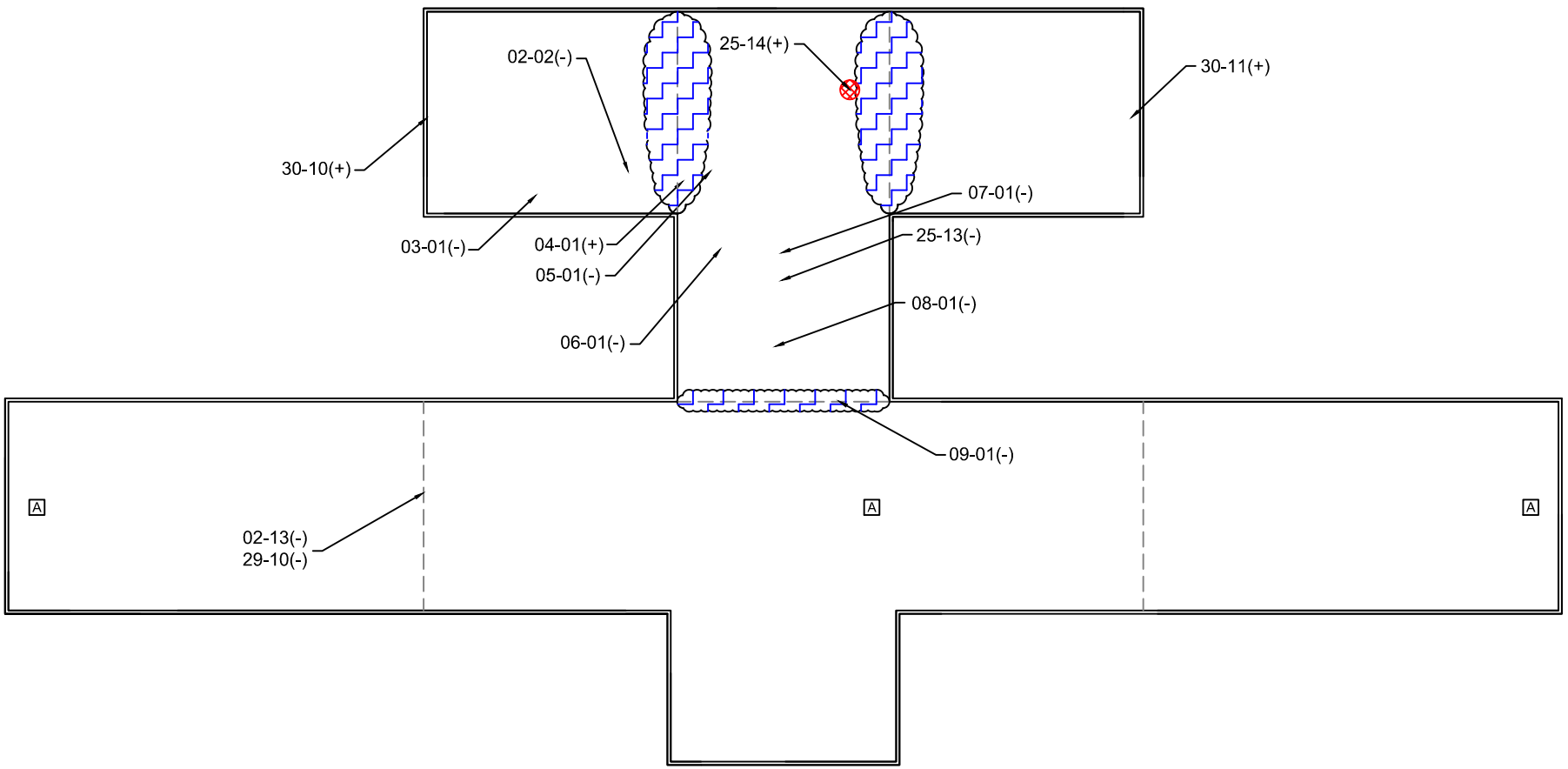
MCB CAMP LEJEUNE, NC

CY2016 ASBESTOS INSPECTION
M101-01
MCB CAMP LEJEUNE, NC

CHECKED BY: DD
DRAWN BY: ARD
SCALE: GRAPHIC
DATE: SEPTEMBER 2016
SHEET 1 OF 1

DANGER

ACM FIBROUS DEBRIS IDENTIFIED ON ABANDONED PIPE HANGERS



A ATTIC ACCESS

SAMPLE LEGEND ID

01-01 (+,-)

- SAMPLE IDENTIFICATION
- POSITIVE (+), NEGATIVE (-), OR TRACE (TR) FOR THE PRESENCE OF ASBESTOS
- HOMOGENOUS MATERIAL

BUILDING M101
ATTIC

6' 0' 6' 12' 24'

ACM LEGEND

- TRANSITE MATERIAL AND DEBRIS [HM04]
- FIBROUS DEBRIS [HM25]

REVISIONS

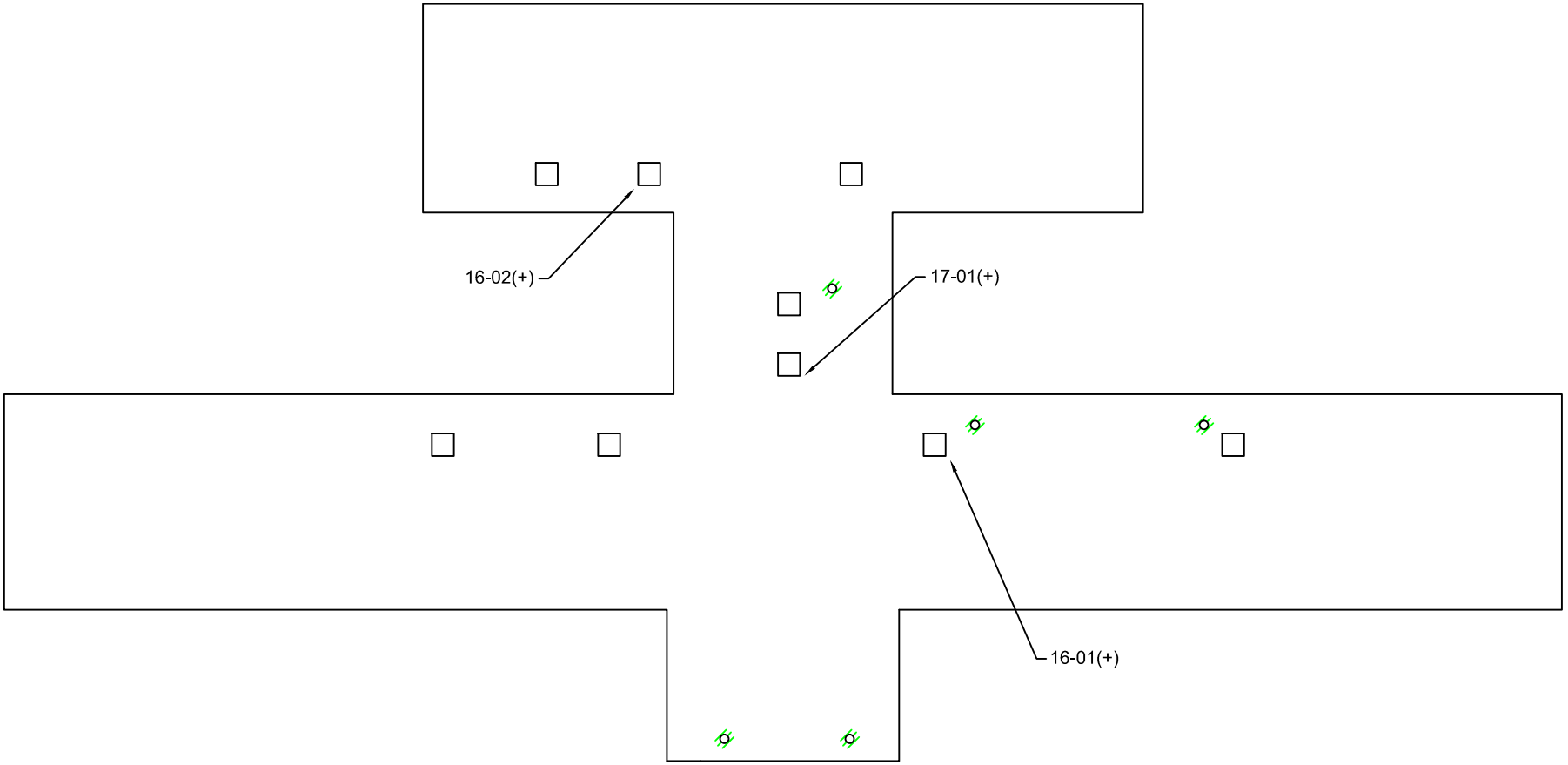
SYM	DESCRIPTION	DATE	APPROVED

AH Environmental Consultants

MCB CAMP LEJEUNE, NC

CY2016 ASBESTOS INSPECTION
M101-A
MCB CAMP LEJEUNE, NC

CHECKED BY: DD
DRAWN BY: ARD
SCALE: GRAPHIC
DATE: SEPTEMBER 2016
SHEET 1 OF 1



SAMPLE LEGEND ID

SAMPLE IDENTIFICATION

01-01 (+,-)

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

HOMOGENOUS MATERIAL

BUILDING M101

ROOF

6' 0' 6' 12' 24'

ACM LEGEND

ROOFING SEALANT, GRAY [HM16]

REVISIONS

SYM	DESCRIPTION	DATE	APPROVED

AH Environmental Consultants

MCB CAMP LEJEUNE, NC

CY2016 ASBESTOS INSPECTION
M101-R
MCB CAMP LEJEUNE, NC

CHECKED BY: DD
DRAWN BY: ARD
SCALE: GRAPHIC
DATE: SEPTEMBER 2016
SHEET 1 OF 1

APPENDIX 4

XRF FIELD DATA SHEETS

XRF LBP TESTING DATA SHEET								
PROJECT NAME/ADDRESS/UNIT NO. Bldg M 101; 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			**SIGNATURE**		
SAMPLE #	**SUBSTRATE[1]**	**COMPONENT**	**COLOR[2]**	**TEST LOCATION**	**LEVEL**	**XRF READING**	**UNITS[3]**	**CLASSIFICATION[4]**
107	C	Water table	Bk	See Figure 2	1st	0.20	mg/cm^2	N
108	C	Water table	W	See Figure 2	1st	0.24	mg/cm^2	N
109	C	Water table	W	See Figure 2	1st	> 1.0	mg/cm^2	P
110	W	Roof joist	W	See Figure 2	1st	> 5.0	mg/cm^2	P
111	W	Soffit	W	See Figure 2	1st	0.33	mg/cm^2	N
112	W	Roof joist	W	See Figure 2	1st	0.97	mg/cm^2	N
113	W	Soffit	W	See Figure 2	1st	> 5.0	mg/cm^2	P
114	W	Wall	W	See Figure 2	1st	0.00	mg/cm^2	N
115	W	Window sill	W	See Figure 2	1st	0.00	mg/cm^2	N
116	W	Window casing	W	See Figure 2	1st	0.00	mg/cm^2	N
117	W	Column	W	See Figure 2	1st	0.00	mg/cm^2	N
118	W	Ceiling	W	See Figure 2	1st	0.00	mg/cm^2	N
119	W	Column	W	See Figure 2	1st	0.00	mg/cm^2	N
120	W	Ceiling	W	See Figure 2	1st	0.00	mg/cm^2	N
121	W	Door	W	See Figure 2	1st	0.00	mg/cm^2	N
122	W	Door	W	See Figure 2	1st	0.00	mg/cm^2	N
123	W	Wall	W	See Figure 2	1st	0.00	mg/cm^2	N
124	C	Foundation wall/water table	W	See Figure 2	1st	0.05	mg/cm^2	N
125	C	Foundation wall/water table	W	See Figure 2	1st	0.10	mg/cm^2	N
126	W	Wall	W	See Figure 2	1st	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

XRF LBP TESTING DATA SHEET								
PROJECT NAME/ADDRESS/UNIT NO. Bldg M 101; 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			**SIGNATURE**		
SAMPLE #	**SUBSTRATE[1]**	**COMPONENT**	**COLOR[2]**	**TEST LOCATION**	**LEVEL**	**XRF READING**	**UNITS[3]**	**CLASSIFICATION[4]**
127	W	Wall	Bk	See Figure 2	1st	0.00	mg/cm^2	N
128	W	Wall	W	See Figure 2	1st	0.00	mg/cm^2	N
129	W	Door overhang support	W	See Figure 2	1st	0.00	mg/cm^2	N
130	W	Overhang ceiling	W	See Figure 2	1st	0.00	mg/cm^2	N
131	W	Overhang joist	W	See Figure 2	1st	0.00	mg/cm^2	N
132	W	Door	W	See Figure 2	1st	0.00	mg/cm^2	N
133	W	Door frame	W	See Figure 2	1st	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
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3) mg/cm2 – milligrams/square centimeter

4) N – Negative
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