



E-PROJECTS Work Order Number: 1168092

Appropriation: MCON

## PART SIX ATTACHMENTS

### Design-Build RFP for the SIMULATOR CENTER and RANGE CONTROL BUILDING

at

Marine Corps Base Camp Lejeune  
North Carolina

FY'16 MCON PROJECT P-1346

PREPARED BY:



HBA Architecture and Interior Design  
and  
Hankins and Anderson Architects and Engineers,  
A Joint Venture  
One Columbus Center, Suite 1000  
Virginia Beach, VA 23462  
(A/E Contract N40082-10-D-5301, Task Order 0025)

REQUEST FOR PROPOSAL PREPARED BY:

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**Final Submission**  
**20 November 2015**

REQUEST FOR PROPOSAL APPROVED BY:

Submitted by: Joseph Bovee, AIA  
For Commander, NAVFAC MID-ATLANTIC:  
Date: November 20, 2015

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**PART SIX - ATTACHMENTS**

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Report of Hazardous Materials

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# REPORT OF HAZARDOUS MATERIALS CONSULTING SERVICES

P1346 SIMULATOR CENTER AND RANGE  
DEVELOPMENT CONTROL BUILDING  
DEMOLISH BUILDINGS 134, 430 AND 529  
MARINE CORPS BASE, CAMP LEJEUNE  
JACKSONVILLE, NORTH CAROLINA  
JV PROJECT #09049.22B  
**GER** 130-6168

*Prepared for*  
HBA  
ONE COLUMBUS CENTER, SUITE 1000  
VIRGINIA BEACH, VIRGINIA

March 12, 2013



GeoEnvironmental Resources, Inc.

Environmental • Groundwater • Hazardous Materials • Geotechnical • Industrial Hygiene

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March 12, 2013

**HBA**

One Columbus Center, Suite 1000  
Virginia Beach, Virginia 23462

Attention: ***Mr. Macklin Smith***

Subject: **Hazardous Materials Sampling Report**

P1346 Simulator Center and Range Development Control Building  
Demolish Buildings 134, 430 and 529  
Marine Corps Base, Camp Lejeune  
Jacksonville, North Carolina  
A/E Contract No. N40085-10-D-5301, CTO 0024  
JV Project #09049.22B  
**GER 130-6168**

GeoEnvironmental Resources, Inc. has completed our hazardous materials sampling of the subject facility. This work was completed in accordance with our proposal P12-110-5622A, dated 7, November 2012. This report is relevant to the date of our field work and should not be relied upon for later dates.

We appreciate the opportunity of completing this work for HBA. If there are any questions concerning this report, please contact us.

Sincerely,  
GeoEnvironmental Resources, Inc.

Brian T. Hyde  
Hazardous Materials Project Manager  
NC Asbestos Inspector License # 12590

Matthew J. Rille  
Industrial Hygienist

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**Report of Hazardous Materials Consulting Services**  
***P-1346 Simulator Center and Range Development Control Building***  
***Demolish Buildings 134, 430 and 529***  
***Marine Corps Base, Camp Lejeune***  
***Jacksonville, North Carolina***

**GER** 130-6168

March 12, 2013

## **Project Description**

The proposed project will prepare a design-build RFP solicitation for a new simulator and range operations facility in the Hadnot Point area of Marine Corps Base (MCB) Camp Lejeune, North Carolina. The project will include a multistory simulator center building (88,964 SF), single story range operations building (20,301 SF), single story covered training area (5,231 SF), and single story boat shop/warehouse building (9,914 SF). Building construction is anticipated to include structural steel framing, CMU walls, brick veneer, standing seam metal roof, concrete slab floors with passive ventilation system and pile foundation systems. Site improvements will include light duty bituminous pavement for POV parking, heavy duty pavement for tactical vehicle parking, roadways and intersection improvements, a 150-foot tall communications tower, fencing, walks, utilities and storm water management using low impact development (LID) techniques to the extent possible. The specific site location and proposed facility layout are presently unknown. Anticipated structural loads and proposed site grading information is not available at this time.

The project also includes the demolition of existing buildings #529 (347 SM), #134 (347 SM) and #430 (347 SM), located off site at other parts of the base. Building 26 has been removed from the scope of work. Some prior sampling of buildings #529, #134 and # 430 has been conducted by the government and indicated the presence of suspect asbestos containing material (ACM).

All buildings are constructed of brick on concrete slab with asphalt shingle roofs. Interior materials consisted of typical floor tile, carpet, and drywall. All buildings were occupied and in use at the time of our surveys.

Our scope of work was to collect bulk samples of suspect asbestos-containing building materials (ACBM) and paint chip samples to determine lead concentrations. We also inspected existing lighting

fixtures to look for possible PCB-containing ballasts. Bulk samples were collected of visibly accessible materials expected to be disturbed by the demolition work. We were provided with existing asbestos sampling reports for Buildings 134, 430 and 529.

## **Previous Asbestos Documentation**

**GER** reviewed previous asbestos inspection reports that were performed in August of 2006. The inspection was performed by the government. The reports identified suspect materials sampled and a list of friable and non-friable asbestos-containing materials (ACM) and quantities in Buildings 134, 430 and 529. No friable ACM was identified in any of the buildings according to the previous inspection reports. Non-friable ACM described in the inspection report included the following:

### Building 134

- Heat shielding, white
- Textured material, gray

### Building 430

- 9" black floor tile and adhesive
- Black roof sealant at vents
- Heat shielding, white
- Transite panel material

### Building 529

- Transite panel material
- Heat shielding, white

Based on the previous asbestos reports, observations made during our site visit and conversation with William Parkin (Asbestos Program Manager), the following conditions were noted regarding previous identified ACM:

***Building 134*** - Asbestos-containing textured material on exterior foundation still exists. Asbestos-containing heat shielding/debris and transite panels have been removed and or cleaned up in attics.

***Building 430*** - Asbestos-containing 9" floor tile & mastic still exists in the office. Asbestos-containing black roof sealant at vents on roof still exists. Asbestos-containing heat shielding/debris and transite panels have been removed and or cleaned up in attics

***Building 529*** - No previously identified asbestos-containing materials were observed. Asbestos-containing heat shielding/debris and transite panels have been removed and or cleaned up in attics.

## Asbestos Bulk Sampling Results

In February of 2013, GER collected 42 total bulk samples of suspect ACM at Buildings 134, 430 and 529. The samples were collected by Brian T. Hyde, a North Carolina Licensed Asbestos Inspector. Samples were collected from accessible areas in the buildings. Samples of suspect ACM were collected from various interior finishes, exterior sealant, and roofing materials.

Table 1, attached, is a summary of the sample materials, sample location, and laboratory results.

Destructive activities such as breaking into walls, ceilings, or floors were not performed in order to obtain samples. Therefore, if during the renovation process suspect hazardous materials are uncovered, they must be properly addressed. At the time of our inspection the facility was fully operational and spaces were occupied by personnel. Every effort was made to access all spaces. The attic areas were not fully accessible at the time of our survey. Our scope of work did not include moving equipment or furniture in order to locate suspect hazardous materials.

As the sample results indicate, the following materials were determined to contain asbestos:

- **9" black floor tile & mastic**

Samples were analyzed using polarized light microscopy (PLM) and dispersion staining techniques. The analytical method was conducted in accordance with Method EPA-600/R-93/116 and/or EPA 600/M4-82-020. Analysis was performed by EMSL Analytical, Inc., a NVLAP participant, NVLAP number 101048-0.

The following categories of ACM were identified in Buildings 134 and 430:

### Non-Friable ACM

- ***Textured material, gray*** (2% Chrysotile): located on exterior foundation of **Building 134**. This material is classified as Category II ACM and was in good condition at the time of the survey. (Estimated quantity- 560 SF)
- ***9" black floor tile & adhesive*** - (5-7% Chrysotile): 9" floor tile and mastic is found in the office of **Building 430**. This material is classified as Category I ACM and was in good condition at the time of the survey. (Estimated quantity- 150 SF)
- ***Black roof sealant at vents*** (asbestos content not shown): located around perimeter of roof vents on **Building 430**. This material is classified as Category I ACM and was in good condition at the time of the survey. (Estimated quantity- 70 LF)

## Asbestos Discussion

The EPA defines asbestos-containing building materials (ACBM) as any material which contains greater than 1% asbestos by weight. Friable ACBM or material that may become friable must be removed prior to demolition. The following categories of asbestos-containing materials were identified:

### Non-Friable ACM

- ***Textured material, gray*** (2% Chrysotile): located on exterior foundation of **Building 134**. This material is classified as Category II ACM and was in good condition at the time of the survey. (Estimated quantity- 560 SF)
- ***9" black floor tile & adhesive*** - (5-7% Chrysotile): 9" floor tile and mastic is found in the office of **Building 430**. This material is classified as Category I ACM and was in good condition at the time of the survey. (Estimated quantity- 150 SF)
- ***Black roof sealant at vents*** (asbestos content not shown): located around perimeter of roof vents on **Building 430**. This material is classified as Category I ACM and was in good condition at the time of the survey. (Estimated quantity- 70 LF)

Under the National Emission Standard for Hazardous Air Pollutants (NESHAP), all friable ACBM or material that may become friable must be removed prior to demolition. Asbestos containing

**gray textured material on foundation, 9" black floor tile/mastic, and black asphalt sealant at vents** are classified as Category I and II non-friable ACM in buildings scheduled for demolition. Removal is not required, prior to demolition, if the material is in good condition and is not friable. However, wet methods must be used during the demolition process and personal and area monitoring should be performed. Additionally, recycling of demolition debris is prohibited. All demolition debris must be considered asbestos containing and be taken to a landfill that accepts Category I and II non-friable ACBM. However, the contractor may have the option of removing all asbestos containing materials prior to demolition which would allow the demolition debris to be classified as regular construction waste therefore allowing recycling.

All asbestos abatement work shall be performed in accordance with local, state and Federal regulations including but not limited to:

29CFR1926.1101 - Asbestos

40CFR61 - National Emission Standards for Hazardous Air Pollutants

15A NCAC 13B.0100 North Carolina Solid Waste Management

10A NCAC 41C.600 North Carolina Asbestos Hazard Management Program

## Paint Sampling

Six total paint chip samples were collected by GER for Buildings 134, 430 and 529. The attached Table 2 lists the samples collected and laboratory results. The purpose of our sampling was to obtain representative data on the concentrations of lead, cadmium, and chromium in the existing painted surfaces scheduled to be disturbed by the work. Paint samples were collected from walls and door frames which will be disturbed during the demolition work.

Our inspection services were not intended to meet the requirements of HUD sampling protocols for lead paint. Paint samples were analyzed using inductively coupled plasma emission spectroscopy (ICP). The analytical method was conducted in accordance with the NIOSH 7082 Method by EMSL Analytical, Inc., a National Lead Laboratory Accreditation Program (NLLAP) approved participant.

As Table 2 indicates, concentrations of lead, cadmium and/or chromium were found above the laboratory's reporting limit (RL) in the samples collected.

## Lead, Paint Discussion

There are two frequently used standards to define lead-based paint, the Consumer Product and Safety Commission (CPSC) and the Department of Housing and Urban Development (HUD). In 1978, the CPSC, acting under the authority of the Consumer Product Safety Act, banned the sale of paint containing more than 0.06% lead by weight to consumers. The Department of Housing and Urban Development (HUD) defines lead-based paint as any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm<sup>2</sup> as measured by X-ray fluorescence (XRF) analyzer or laboratory analysis, or 0.5% by weight as measured by laboratory analysis.

The Occupational Safety and Health Administration (OSHA) *Lead in Construction Standard (29 CFR 1926.62)* does not define lead-based paint. However, to comply with OSHA, all painted surfaces with a lead concentration at or above the laboratory's minimum detection limit (MDL) should be considered lead containing. Compliance with this standard is required even for paints with less than 0.5% or 0.06% lead by weight. Therefore, painted surfaces exceeding the MDL should not be disturbed without taking the appropriate precautions when performing certain high risk tasks. Activities such as scraping, sanding, welding/torching and disturbance of painted surfaces could potentially release leaded dust. OSHA has categorized the following high risks tasks into three groups:

- Group 1:
  - manual demolition
  - manual scraping
  - heat-gun applications
  - power tool cleaning with dust collection system
  - spray paint with lead-based paints
- Group 2:
  - lead burning
  - using lead-containing mortar
  - power tool cleaning without dust collection system
  - rivet blasting
  - cleanup activities where dry expendable abrasives are used
  - movement and removal of abrasive
  - blasting enclosures

Group 3: abrasive blasting  
welding, cutting and burning on steel  
structures

**Laboratory sample results indicate that all out of the paint chip samples collected contain concentrations above the laboratory RL for lead. (Three paint chip samples were determined to contain lead based paint - Buildings 430 and 529)** Therefore, all existing painted surfaces scheduled for renovation in the building should be considered to be lead paint for the purposes of complying with 29 CFR 1926.62 in order to protect workers and the environment.

Paints containing cadmium and chromium are often found as protective coatings on structural steel or exterior coatings on metal surfaces. These paints tend to be red, yellow or orange and are typically the first layer. All of the bulk paint chip samples were also tested for cadmium and chromium. **Five out of six paint chip samples collected indicated concentrations above the laboratory RL for cadmium. All of the paint chip samples collected indicated concentrations above the RL for chromium.** The National Institute for Occupational Safety and Health (NIOSH) identifies chromium as a confirmed carcinogen and cadmium as a suspect carcinogen. Construction Standards established by OSHA for lead and chromium are:

Lead	29 CFR 1926.62
Cadmium	29 CFR 1926.1127
Chromium	29 CRF 1926.1126

The Permissible Exposure Limit (PEL) is an airborne measurement to address worker exposure. There is no direct correlation between lead, cadmium and chromium concentrations in the paint and worker exposure. Only when these concentrations are below the laboratory's detection limit, is worker exposure not an issue.

As the sample results indicate, the samples were determined to contain lead and chromium above the laboratory's detection limit. We, therefore, consider all painted surfaces as lead and chromium containing. Appropriate precautions should be taken during the disturbance of all painted surfaces to ensure protection of workers and the environment.

**Appropriate precautions should be taken during the disturbance of all painted**

**surfaces to ensure protection of workers and the environment.**

All lead, cadmium and chromium paint work shall be performed in accordance with all local, state and Federal regulations to protect workers and the environment, including but not limited to:

29CFR 1926.62 - Lead

29CFR 1926.1126 - Chromium

29CFR 1926.1127 - Cadmium

North Carolina Administrative Code

10A NCAC 41C.0800 Lead Based Paint Hazard Management Program

15A NCAC 13A.0100 North Carolina Hazardous Waste Management

### **Waste Classification For Painted Building Components**

Building components and demolition waste streams which are painted must be properly characterized prior to disposal. The EPA Resource Conservation and Recovery Act (RCRA) regulations establish the limits for RCRA leachable metals (lead, cadmium, chromium, etc.). Leachable metals means the amount of metals likely to leach from the waste into the surrounding soil/groundwater system of a landfill. The leachable concentration of chemicals in a waste stream is determined by an analytical method called the toxicity characteristic leaching procedure (TCLP). Waste stream TCLP concentrations that equal or exceed the RCRA limits must be transported to a hazardous waste treatment, storage, or disposal facility. Precautions should be implemented to prevent the storage of any hazardous waste for more the 90 days. Specific permits are necessary to store hazardous waste in excess of 90 days.

### **Polychlorinated Biphenyls**

On January 1, 1979, the Environmental Protection Agency (EPA) banned the manufacturing of light ballasts which contain PCB's. Therefore, all light ballasts manufactured prior to January 1, 1979 without "No-PCBs" markings must be considered PCB containing.

Light ballasts observed were manufactured by Lite Electronic, Sylvania and Triad. The lights consisted of two and four tube fluorescent lights in the

present fixtures. Our field investigation of a representative number of existing light fixtures indicated that light ballasts observed were marked "No PCBs". We did not view every light ballast and recommend that at least 10% of the light ballasts be considered as PCB containing and all of the light tubes should be considered as containing mercury.

## Limitations

This report has been prepared for the exclusive use of HBA and/or their agents. This service was performed in accordance with generally accepted environmental practices. No other warranty, expressed or implied, is made. Our conclusions and recommendations are based, in part, upon information provided to us by others and our site observations. We have not verified the completeness or accuracy of the information provided by others, unless otherwise noted. Our observations and recommendations are based upon conditions readily visible at the time of our site visit, January of 2013, and upon current industry standards. During our inspection, accessible areas were visually inspected for the presence of asbestos and lead based paints. The findings at these locations area assumed to be representative throughout the impacted areas of the building. Inaccessible areas, such as inside HVAC equipment and ducts were not visually inspected. Areas inspected for the above-referenced materials were limited to those designated by the client. The inspection did include the entire building and was limited to the areas described in the report.

Under this scope of services, **GER** assumes no responsibility regarding response actions (e.g. O&M Plans, Remediation, Notifications, etc.) initiated as a result of these findings. **GER** assumes no liability for the duties and responsibilities of the Client with respect to compliance with local, state and Federal regulations. Compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state and Federal regulations and should be performed by appropriately licensed personnel, as warranted.

# Bulk Sample Results / Laboratory Analysis Sheets

Table 1 - Asbestos Sample Results

Table 2 - Paint Sample Results

Table 1 - Asbestos Bulk Sample Results

NO.	SAMPLE LOCATION	SAMPLE MATERIAL	% & TYPE OF ASBESTOS
1	Range	Drywall	None detected
2	Classroom	Drywall	None detected
3	Range	Joint compound	None detected
4	Office	Joint compound	None detected
5	Range	Carpet mastic	None detected
6	Range	Carpet mastic	None detected
7	Exterior	Door caulk	None detected
8	Exterior	Door caulk	None detected
9	Exterior	Foundation coating	None detected
10	Exterior	Foundation coating	None detected
11	Roof	Asphalt shingle	None detected
12	Roof	Asphalt shingle	None detected

Table 1 - Asbestos Bulk Sample Results

NO.	SAMPLE LOCATION	SAMPLE MATERIAL	% & TYPE OF ASBESTOS
1	Range	Drywall	None detected
2	Office	Drywall	None detected
3	Range	Joint compound	None detected
4	Class room	Joint compound	None detected
<b>5</b>	<b>Office</b>	<b>9" black floor tile/mastic</b>	<b>5% Chrysotile (tile only)</b>
<b>6</b>	<b>Office</b>	<b>9" black floor tile/mastic</b>	<b>7% Chrysotile (tile only)</b>
7	Range	Carpet mastic	None detected
8	Range	Carpet mastic	None detected
9	Exterior	Door caulk	None detected
10	Exterior	Door caulk	None detected
11	Roof	Asphalt shingle	None detected
12	Roof	Asphalt shingle	None detected
13	Roof	Cement @ vent	None detected
14	Roof	Cement @ vent	None detected
15	Attic	Duct mastic sealer	None detected
16	Attic	Duct mastic sealer	None detected

Table 1 - Asbestos Bulk Sample Results

NO.	SAMPLE LOCATION	SAMPLE MATERIAL	% & TYPE OF ASBESTOS
1	Armory storage	Drywall	None detected
2	Range	Drywall	None detected
3	Office	Joint compound	None detected
4	Range	Joint compound	None detected
5	Office	Carpet mastic	None detected
6	Armory storage	Carpet mastic	None detected
7	Exterior	Window caulk	None detected
8	Exterior	Door caulk	None detected
9	Exterior	Door caulk	None detected
10	Exterior	Window caulk	None detected
11	Roof	Asphalt shingle	None detected
12	Roof	Asphalt shingle	None detected
13	Roof	Cement @ vent	None detected
14	Roof	Cement @ vent	None detected

## Table 2 - PAINT CHIP SAMPLE RESULTS - Bldg. AS224

Note: Highlighted blocks indicate concentrations above the laboratory's reporting limit  
 Note: Bold number indicates lead based paint (>0.5%)

NO	SAMPLE LOCATION	COLOR	% LEAD	% CADMIUM	% CHROMIUM	LEAD > RL	CADMIUM > RL	CHROMIUM > RL
P-1	Building 134, metal door frame	Gray	0.0014	<0.00022	0.00044	X		X
P-2	Building 134, metal door frame	Black	0.0019	0.00044	0.0027	X	X	X
P-1	Building 430, metal roof vent	Gray	<b>9.2</b>	0.0037	0.0044	X	X	X
P-2	Building 430, metal door frame	Gray	0.0047	0.00039	0.00046	X	X	X
P-1	Building 529, metal door frame	Gray	<b>9.3</b>	0.0023	0.053	X	X	X
P-2	Building 529, metal roof vent	Gray	<b>8.1</b>	0.0024	0.066	X	X	X
NOTES: RL - Laboratory reporting limit								



# EMSL Analytical, Inc.

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EMSL Order: 041304819  
CustomerID: GEOE25  
CustomerPO:  
ProjectID:

Attn: **Brian Hyde**  
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Project: 130-6168  
Phone: (757) 463-3200  
Fax: (757) 463-3080  
Received: 03/02/13 11:20 AM  
Analysis Date: 3/6/2013  
Collected:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
Bldg 134-1 041304819-0001	Range - drywall	Gray Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (other)	None Detected
Bldg 134-2 041304819-0002	Classroom - drywall	Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
Bldg 134-3 041304819-0003	Range - joint compound	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 134-4 041304819-0004	Office - joint compound	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 134-5 041304819-0005	Range - carpet mastic	Yellow/Green Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
Bldg 134-6 041304819-0006	Range - carpet mastic	Yellow/Green Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
Bldg 134-7 041304819-0007	Exterior - door caulk	Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
Bldg 134-8 041304819-0008	Exterior - door caulk	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)  
Glenn Brennan (22)  
William Nguyen (21)

Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported 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. 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. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%  
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 03/06/2013 14:17:55

**EMSL Analytical, Inc.**

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 CustomerPO:  
 ProjectID:

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 Received: 03/02/13 11:20 AM  
 Analysis Date: 3/6/2013  
 Collected:

Project: 130-6168

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
Bldg 134-9 041304819-0009	Exterior - foundation coating	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 134-10 041304819-0010	Exterior - foundation coating	Gray Fibrous Homogeneous	3% Wollastonite	97% Non-fibrous (other)	None Detected
Recommend TEM					
Bldg 134-11 041304819-0011	Roof - asphalt shingle	Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (other)	None Detected
Bldg 134-12 041304819-0012	Roof - asphalt shingle	Black Fibrous Homogeneous	15% Fibrous (other)	85% Non-fibrous (other)	None Detected
Bldg 430-1 041304819-0013	Range - drywall	White Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (other)	None Detected
Bldg 430-2 041304819-0014	Office - drywall	White Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
Bldg 430-3 041304819-0015	Range - joint compound	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 430-4 041304819-0016	Classroom - joint compound	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)  
 \_\_\_\_\_  
 Glenn Brennan (22)  
 William Nguyen (21)

  
 Stephen Siegel, CIH, Laboratory Manager  
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 03/06/2013 14:17:55



# EMSL Analytical, Inc.

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Phone/Fax: (800) 220-3675 / (856) 786-5974  
<http://www.emsl.com> [cinnaslab@EMSL.com](mailto:cinnaslab@EMSL.com)

EMSL Order: 041304819  
CustomerID: GEOE25  
CustomerPO:  
ProjectID:

Attn: **Brian Hyde**  
**GeoEnvironmental Resources**  
**2712 Southern Blvd.**  
**Suite 101**  
**Virginia Beach, VA 23452**  
Project: 130-6168  
Phone: (757) 463-3200  
Fax: (757) 463-3080  
Received: 03/02/13 11:20 AM  
Analysis Date: 3/6/2013  
Collected:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
Bldg 430-5-tile 041304819-0017	Office - 9" black floor tile	Black Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile
Bldg 430-5-mastic 041304819-0017A	Office - mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 430-6-tile 041304819-0018	Office - 9" black floor tile	Black Non-Fibrous Homogeneous		93% Non-fibrous (other)	7% Chrysotile
Bldg 430-6-mastic 041304819-0018A	Office - mastic				Insufficient Material
Bldg 430-7 041304819-0019	Range - carpet mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 430-8 041304819-0020	Range - carpet mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 430-9 041304819-0021	Exterior - door caulk	Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
Bldg 430-10 041304819-0022	Exterior - door caulk	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)  
Glenn Brennan (22)  
William Nguyen (21)

  
Stephen Siegel, CIH, Laboratory Manager  
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

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 Fax: (757) 463-3080  
 Received: 03/02/13 11:20 AM  
 Analysis Date: 3/6/2013  
 Collected:

Project: 130-6168

**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
Bldg 430-11 041304819-0023	Roof - asphalt shingle	Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (other)	None Detected
Bldg 430-12 041304819-0024	Roof - asphalt shingle	Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (other)	None Detected
Bldg 430-13 041304819-0025	Roof - cement @ vent	Gray/Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
Bldg 430-14 041304819-0026	Roof - cement @ vent	Gray/Black Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
Bldg 430-15 041304819-0027	Attic - duct mastic sealer	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 430-16 041304819-0028	Attic - duct mastic sealer	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 529-1 041304819-0029	Armory storage - drywall	Brown/Gray Fibrous Heterogeneous	12% Cellulose	88% Non-fibrous (other)	None Detected
Bldg 529-2 041304819-0030	Range - drywall	Gray Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected

Analyst(s)  
 Glenn Brennan (22)  
 William Nguyen (21)

  
 Stephen Siegel, CIH, Laboratory Manager  
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 03/06/2013 14:17:55

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Attn: **Brian Hyde**  
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Phone: (757) 463-3200  
 Fax: (757) 463-3080  
 Received: 03/02/13 11:20 AM  
 Analysis Date: 3/6/2013  
 Collected:

Project: 130-6168

**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
Bldg 529-3 041304819-0031	Office - joint compound	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 529-4 041304819-0032	Range - joint compound	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 529-5 041304819-0033	Office - carpet mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 529-6 041304819-0034	Armory storage - carpet mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 529-7 041304819-0035	Exterior - window caulk	White/Red Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
Bldg 529-8 041304819-0036	Exterior - door caulk	Gray/White/Red Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 529-9 041304819-0037	Exterior - door caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 529-10 041304819-0038	Exterior - window caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)  
 \_\_\_\_\_  
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 William Nguyen (21)

  
 Stephen Siegel, CIH, Laboratory Manager  
 or other approved signatory

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Initial report from 03/06/2013 14:17:55



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EMSL Order: 041304819  
CustomerID: GEOE25  
CustomerPO:  
ProjectID:

Attn: **Brian Hyde**  
**GeoEnvironmental Resources**  
**2712 Southern Blvd.**  
**Suite 101**  
**Virginia Beach, VA 23452**  
Project: 130-6168  
Phone: (757) 463-3200  
Fax: (757) 463-3080  
Received: 03/02/13 11:20 AM  
Analysis Date: 3/6/2013  
Collected:

**Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy**

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
Bldg 529-11 041304819-0039	Roof - asphalt shingle	Black Fibrous Heterogeneous	15% Glass	85% Non-fibrous (other)	None Detected
Bldg 529-12 041304819-0040	Roof - asphalt shingle	Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (other)	None Detected
Bldg 529-13 041304819-0041	Roof - cement @ vent	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Bldg 529-14 041304819-0042	Roof - cement @ vent	Black Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected

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Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036

Initial report from 03/06/2013 14:17:55



**EMSL Analytical, Inc.**

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Phone: (856) 303-2500 Fax: (856) 858-4571 Email: [jsmith@emsl.com](mailto:jsmith@emsl.com)

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Attn:

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**GeoEnvironmental Resources**  
**2712 Southern Blvd.**  
**Suite 101**  
**Virginia Beach, VA 23452**

3/8/2013

Phone: (757) 463-3200  
Fax: (757) 463-3080

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 3/4/2013. The results are tabulated on the attached data pages for the following client designated project:

**130-6168**

The reference number for these samples is EMSL Order #011300824. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Reviewed and Approved By:

---

Julie Smith - Laboratory Director



The test results contained within this report meet the requirements of NELAC and/or the specific certification program that is applicable, unless otherwise noted.  
NELAC Certifications: NJ 03036, NY 10872, PA 68-00367

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

**EMSL Analytical, Inc.**

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Phone/Fax: (856) 303-2500 / (856) 858-4571

<http://www.emsl.com>[jsmith@emsl.com](mailto:jsmith@emsl.com)

EMSL Order: 011300824

CustomerID: GEOE25

CustomerPO:

ProjectID:

Attn: **Brian Hyde**  
**GeoEnvironmental Resources**  
**2712 Southern Blvd.**  
**Suite 101**  
**Virginia Beach, VA 23452**

Phone: (757) 463-3200  
 Fax: (757) 463-3080  
 Received: 03/04/13 8:00 AM  
 Collected: 2/28/2013

Project: 130-6168

**Analytical Results**

<i>Client Sample Description</i>		<i>Collected:</i>			<i>Lab ID:</i>			
P-1 Bldg 134		2/28/2013 3:00:00 PM			0001			
<i>Method</i>	<i>Parameter</i>	<i>Result</i>	<i>RL</i>	<i>Units</i>	<i>Prep Date</i>	<i>Analyst</i>	<i>Analysis Date</i>	<i>Analyst</i>
6010C	Cadmium	ND	0.00022	% wt	3/4/2013	JS	3/6/2013	BE
6010C	Chromium	0.00044	0.00022	% wt	3/4/2013	JS	3/6/2013	BE
6010C	Lead	0.0014	0.00022	% wt	3/4/2013	JS	3/6/2013	BE
P-2 Bldg 134		2/28/2013 3:00:00 PM			0002			
<i>Method</i>	<i>Parameter</i>	<i>Result</i>	<i>RL</i>	<i>Units</i>	<i>Prep Date</i>	<i>Analyst</i>	<i>Analysis Date</i>	<i>Analyst</i>
6010C	Cadmium	0.00044	0.00043	% wt	3/4/2013	JS	3/6/2013	BE
6010C	Chromium	0.0027	0.00043	% wt	3/4/2013	JS	3/6/2013	BE
6010C	Lead	0.0019	0.00043	% wt	3/4/2013	JS	3/6/2013	BE
P-1 Bldg 430		2/28/2013 2:00:00 PM			0003			
<i>Method</i>	<i>Parameter</i>	<i>Result</i>	<i>RL</i>	<i>Units</i>	<i>Prep Date</i>	<i>Analyst</i>	<i>Analysis Date</i>	<i>Analyst</i>
6010C	Cadmium	0.0037	0.00021	% wt	3/4/2013	JS	3/6/2013	BE
6010C	Chromium	0.0044	0.00021	% wt	3/4/2013	JS	3/6/2013	BE
6010C	Lead	9.2	0.21	% wt	3/4/2013	JS	3/6/2013	BE
P-2 Bldg 430		2/28/2013 2:00:00 PM			0004			
<i>Method</i>	<i>Parameter</i>	<i>Result</i>	<i>RL</i>	<i>Units</i>	<i>Prep Date</i>	<i>Analyst</i>	<i>Analysis Date</i>	<i>Analyst</i>
6010C	Cadmium	0.00039	0.00030	% wt	3/4/2013	JS	3/6/2013	BE
6010C	Chromium	0.00046	0.00030	% wt	3/4/2013	JS	3/6/2013	BE
6010C	Lead	0.0047	0.00030	% wt	3/4/2013	JS	3/6/2013	BE
P-1 Bldg 529		2/28/2013 1:00:00 PM			0005			
<i>Method</i>	<i>Parameter</i>	<i>Result</i>	<i>RL</i>	<i>Units</i>	<i>Prep Date</i>	<i>Analyst</i>	<i>Analysis Date</i>	<i>Analyst</i>
6010C	Cadmium	0.0023	0.00021	% wt	3/4/2013	JS	3/6/2013	BE
6010C	Chromium	0.053	0.0011	% wt	3/4/2013	JS	3/6/2013	BE
6010C	Lead	9.3	0.21	% wt	3/4/2013	JS	3/6/2013	BE
P-2 Bldg 529		2/28/2013 1:00:00 PM			0006			
<i>Method</i>	<i>Parameter</i>	<i>Result</i>	<i>RL</i>	<i>Units</i>	<i>Prep Date</i>	<i>Analyst</i>	<i>Analysis Date</i>	<i>Analyst</i>
6010C	Cadmium	0.0024	0.00021	% wt	3/4/2013	JS	3/6/2013	BE

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Phone: (757) 463-3200  
 Fax: (757) 463-3080  
 Received: 03/04/13 8:00 AM  
 Collected: 2/28/2013

Project: 130-6168

**Analytical Results**

**Client Sample Description** P-2 **Collected:** 2/28/2013 **Lab ID:** 0006  
 Bldg 529 1:00:00 PM

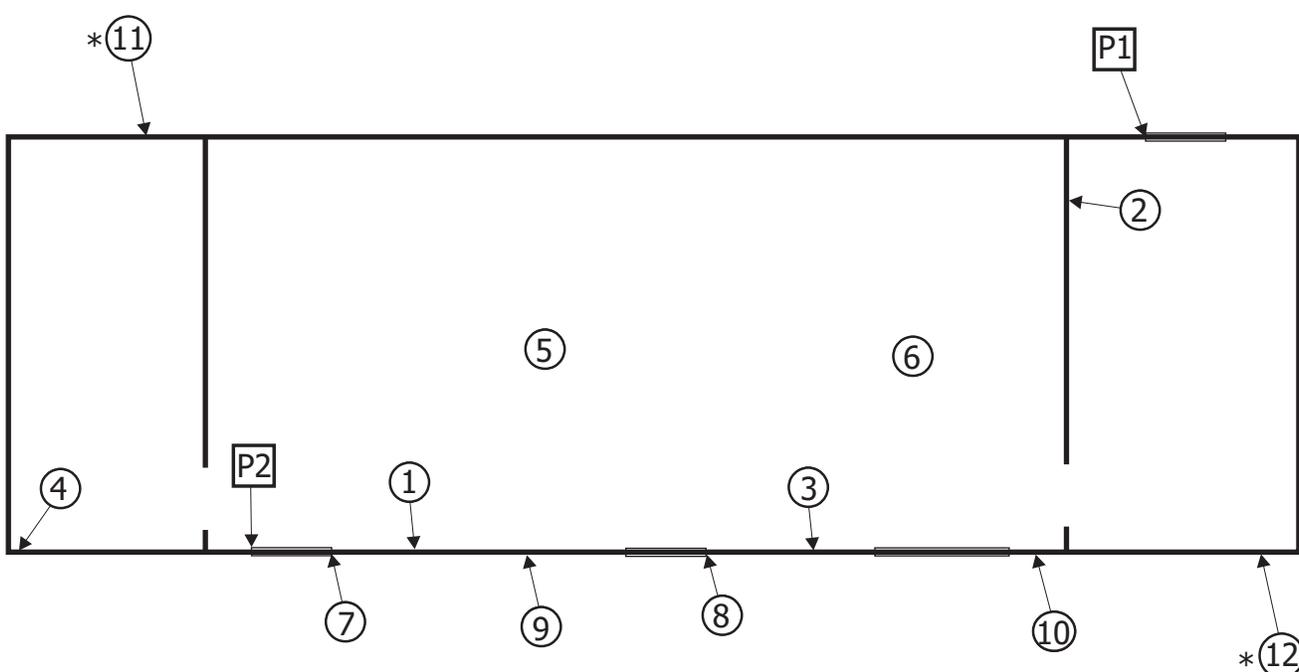
<i>Method</i>	<i>Parameter</i>	<i>Result</i>	<i>RL</i>	<i>Units</i>	<i>Prep Date</i>	<i>Analyst</i>	<i>Analysis Date</i>	<i>Analyst</i>
6010C	Chromium	0.066	0.0011	% wt	3/4/2013	JS	3/6/2013	BE
6010C	Lead	8.1	0.21	% wt	3/4/2013	JS	3/6/2013	BE

**Definitions:**

ND - indicates that the analyte was not detected at the reporting limit

RL - Reporting Limit

## SAMPLE LOCATION MAPS



Building 134 Floor Plan

LEGEND

- POSITIVE SAMPLE LOCATION FOR ASBESTOS
- NEGATIVE SAMPLE LOCATION FOR ASBESTOS
- PAINT SAMPLE LOCATION
- ◇ TCLP SAMPLE LOCATION

\* INDICATES ROOF SAMPLE LOCATION

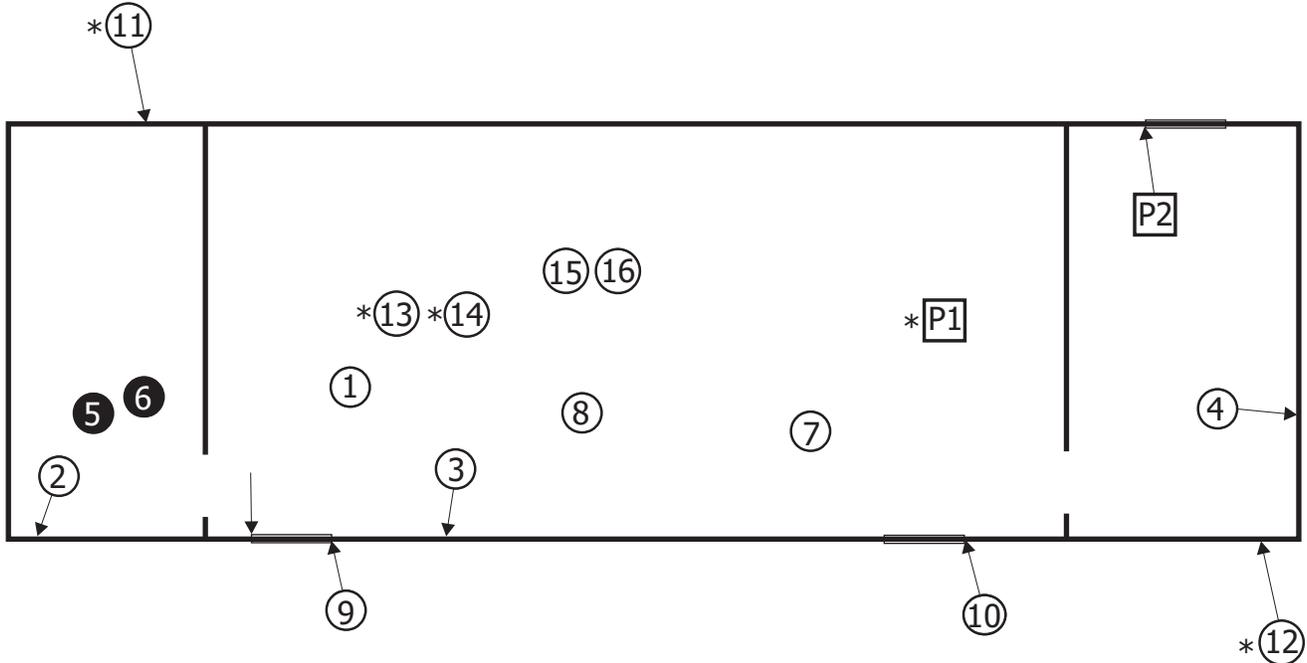
NOTE - THE LOCATION FROM WHICH THE SAMPLES WERE OBTAINED SHOULD NOT BE INTERPRETED AS THE ONLY LOCATION WHERE THE MATERIAL EXISTS.

**Sample Location Plan**

**PROJECT:**  
P-1346 DEMOLISH BUILDING 134  
MCB CAMP LEJEUNE  
NORTH CAROLINA



**NUMBER:** 130-6168  
**DATE:** MARCH 2013  
**SCALE:** NONE



Building 430 Floor Plan

LEGEND

- POSITIVE SAMPLE LOCATION FOR ASBESTOS
- NEGATIVE SAMPLE LOCATION FOR ASBESTOS
- PAINT SAMPLE LOCATION
- ◇ TCLP SAMPLE LOCATION

\* INDICATES ROOF SAMPLE LOCATION

NOTE - THE LOCATION FROM WHICH THE SAMPLES WERE OBTAINED SHOULD NOT BE INTERPRETED AS THE ONLY LOCATION WHERE THE MATERIAL EXISTS.

**Sample Location Plan**

**PROJECT:**

P-1346 DEMOLISH BUILDING 430  
MCB CAMP LEJEUNE  
NORTH CAROLINA



GeoEnvironmental Resources, Inc.

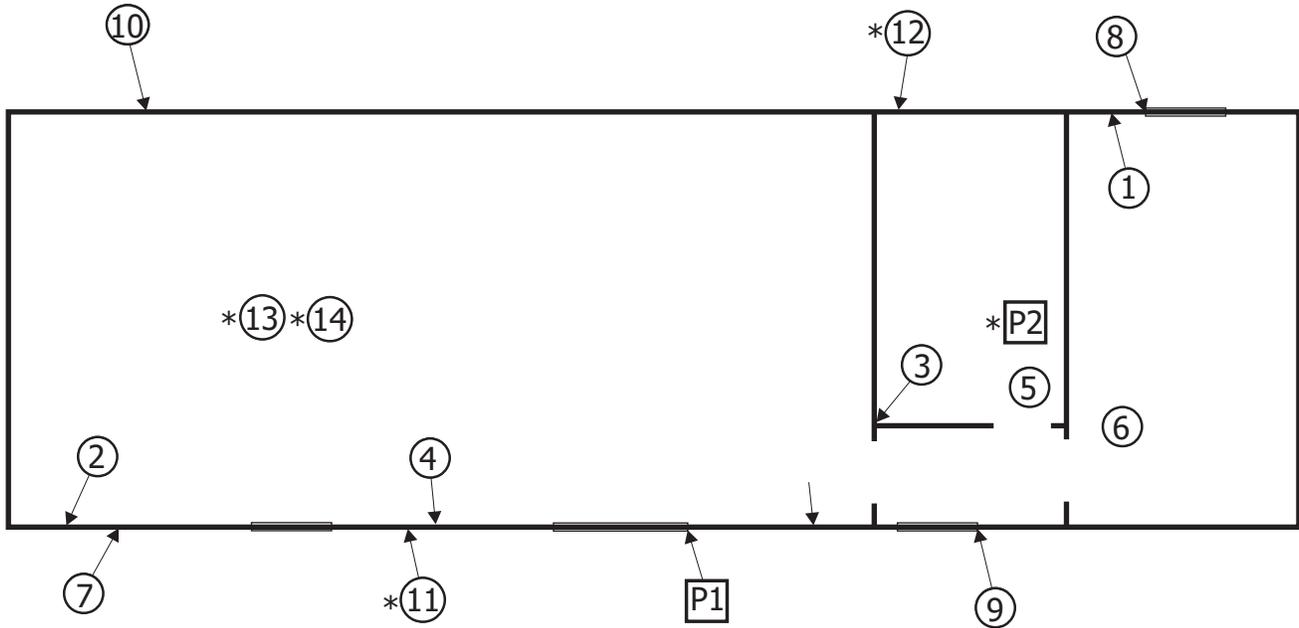
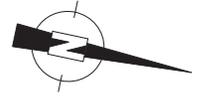
Consulting Engineers  
Environmental • Groundwater • Hazardous Materials • Geotechnical • Industrial Hygiene

**NUMBER: 130-6168**

**DATE: MARCH 2013**

**SCALE: NONE**

**DRAWING 2 OF 3**



Building 529 Floor Plan

LEGEND

- POSITIVE SAMPLE LOCATION FOR ASBESTOS
- NEGATIVE SAMPLE LOCATION FOR ASBESTOS
- PAINT SAMPLE LOCATION
- ◇ TCLP SAMPLE LOCATION

\* INDICATES ROOF SAMPLE LOCATION

NOTE - THE LOCATION FROM WHICH THE SAMPLES WERE OBTAINED SHOULD NOT BE INTERPRETED AS THE ONLY LOCATION WHERE THE MATERIAL EXISTS.

**Sample Location Plan**

**PROJECT:**

P-1346 DEMOLISH BUILDING 529  
MCB CAMP LEJEUNE  
NORTH CAROLINA



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Environmental • Groundwater • Hazardous Materials • Geotechnical • Industrial Hygiene

**NUMBER: 130-6168**

**DATE: MARCH 2013**

**SCALE: NONE**

**DRAWING 3 OF 3**

# PHOTOGRAPHIC DOCUMENTATION



Photo 1: Typical exterior materials at Building 134 included asphalt roof shingles and sealants. Exterior gray textured material on foundation is asbestos-containing.



Photo 2: Typical materials associated with the interior of Building 134 included carpet and drywall/joint compound. No interior materials were found to contain asbestos.

## Photographs

Project: P-1346 Simulator Center and Range  
Development Control Building  
Demolish Buildings 134, 430 and 529  
MCB Camp Lejeune, North Carolina

Number: Project # 130-6168

**GER**  
Consulting Engineers

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Photo Sheet I



Photo 3: Typical exterior materials at Building 430 included asphalt roof shingles, cements and sealants. Black roof sealant at vents is asbestos-containing.



Photo 4: Typical materials associated with the interior of Building 430 included carpet, floor tile and drywall/joint compound. 9" black floor tile in the office is asbestos-containing.

## Photographs

Project: P-1346 Simulator Center and Range  
Development Control Building  
Demolish Buildings 134, 430 and 529  
MCB Camp Lejeune, North Carolina

Number: Project # 130-6168

**GER**  
Consulting Engineers

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Photo Sheet 2



Photo 5: Typical exterior materials at Building 529 included asphalt roof shingles, cements and sealants. No exterior materials were found to contain asbestos.



Photo 6: Typical materials associated with the interior of Building 529 included carpet and drywall/joint compound. No interior materials were found to contain asbestos.

## Photographs

Project: P-1346 Simulator Center and Range  
Development Control Building  
Demolish Buildings 134, 430 and 529  
MCB Camp Lejeune, North Carolina

Number: Project # 130-6168

**GER**  
Consulting Engineers

GeoEnvironmental Resources, Inc.

Environmental • Groundwater • Hazardous Materials • Geotechnical • Industrial Hygiene

Photo Sheet 3

## PREVIOUS ASBESTOS REPORTS

**ASBESTOS INSPECTION REPORT of:**

**Building # 134**

**MCB CAMP LEJEUNE**



*Print Date*

***Friday, October 19, 2012***

# INSPECTION SUMMARY

**BLDG #:** 134  
**OCCUPANT:** ISMT FACILITY

**YEAR BUILT:** 1942  
**ASBESTOS MANAGER:** Billy Parkin 451-5837

**BUILDING COMMENTS:**

HAZ RANK 3/GREEN [AH MAY2011]  
 TEXTURED COATING, EXTERIOR WALLS

NOV2010 1B  
 HEAT SHIELD IN ATTIC IS DAMAGED AND LAYING ON DECK  
 PVS. ACM REMAINS, ADDL SAMPLING, ACM INCLUDES:  
 TEXTURED MATERIAL, EXT. FOUNDATION

09-10  
 BUILDING RENOVATIONS

JUN08  
 ADDL SAMPLING, ACM INCLUDES:  
 HEAT SHIELD, WHITE IN ATTIC

2002-2007  
 BLDG. NAX

JUN01  
 NO ASBESTOS CONTAINING MATERIAL IDENTIFIED

## 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
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No friable ACM records found in database

### *Non-friable ACM(s) identified*

DESCRIPTION	LOCATION	Date	Quantity
TEXTURED MATERIAL	EXTERIOR PERIMETER FOUNDATION, TEXTURED COATING ON CONCRETE	11/17/2010	560 SF

### *Tested Non ACM or REMOVED Materials*

DESCRIPTION	LOCATION	Date
JOINT MATERIAL	WALLS THROUGHOUT BUILDING (SEE ALSO HM03)	6/19/2001
JOINT MATERIAL	CEILINGS THROUGHOUT BUILDING (SEE ALSO HM02)	6/19/2001

TAR PAPER, BLACK	ROOFING SYSTEM UNDERLAYMENT (SEE ALSO HM14)	6/19/2001
SHINGLE ROOFING	ROOFING SYSTEM TOP LAYER (SEE ALSO HM14)	6/19/2001
EXTERIOR CAULKING,	NORTHSIDE AND SOUTHWEST DOORS	6/11/2008
EXTERIOR CAULKING,	WINDOWS THROUGHOUT	6/11/2008
DUCT SEALANT, WHITE	EXTERIOR HVAC UNIT, WEST END	6/11/2008
DRYWALL	INTERIOR DEBRIS (SEE ALSO HM02, 03)	6/11/2008
ASPHALT SHINGLE AND TAR PAPER	ATTIC DEBRIS, PREVIOUS ROOFING (SEE ALSO HM04, 05)	6/11/2008
ROOFING SEALANT, GRAY	ROOFING VENTS	6/11/2008
PLASTER WALLS	CENTER SIMULATOR ROOM	6/19/2001
HEAT SHIELDING, WHITE	ATTIC DEBRIS, NORTHEAST AND NORTHWEST	6/11/2008
MISCELLANEOUS SEALANT	NORTHSIDE WALLS ABOVE DOORS (PREVIOUS AWNING LOCATIONS)	11/17/2010
HEAT SHIELDING, WHITE	ATTIC DEBRIS, NORTHEAST AND NORTHWEST	11/17/2010
EXTERIOR CAULKING,	WINDOWS THROUGHOUT	11/17/2010

- 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: William (Billy) Parkin**

**Phone: (910) 451-5837**

# SAMPLES COLLECTED

Sample	HA	Description	Sample Date	Sample Location	Chr (%)	Amo (%)	Oth (%)
134-01-01	01	PLASTER WALLS	6/19/2001	CNTR SIMULATOR RM, WEST WALL	0	0	0
134-02-01	02	JOINT MATERIAL	6/19/2001	WEST OFFICE, EAST WALL	0	0	0
134-03-01	03	JOINT MATERIAL	6/19/2001	EAST STORAGE, CNTR	0	0	0
134-04-01	04	TAR PAPER, BLACK	6/19/2001	ROOF, NORTHSIDE CNTR WEST	0	0	0
134-05-01	05	SHINGLE ROOFING	6/19/2001	ROOF, NORTHSIDE CNTR WEST	0	0	0
134-10-10	10	EXTERIOR CAULKING, ,WHITE	6/11/2008	SOUTHWEST DOOR	0	0	0
134-11-10	11	EXTERIOR CAULKING, WHITE	6/11/2008	SOUTHSIDE, WEST WINDOW	0	0	0
134-11-20	11	EXTERIOR CAULKING, WHITE	11/17/2010	NORTHSIDE, CNTR WINDOW	0	0	0
134-11-21	11	EXTERIOR CAULKING, WHITE	11/17/2010	EAST END, NORTH WINDOW	0	0	0
134-12-10	12	DUCT SEALANT, WHITE	6/11/2008	WEST CNTR EXT.	0	0	0
134-13-10	13	DRYWALL	6/11/2008	WEST OFFICE, EAST CNTR	0	0	0
134-14-10	14	ASPHALT SHINGLE AND TAR PAPER	6/11/2008	ATTIC	0	0	0
134-15-00ri10	15	HEAT SHIELDING, WHITE	11/17/2010	N/A	19	19	19
134-15-10	15	HEAT SHIELDING, WHITE	6/11/2008	ATTIC, NW OLD FLUE	75	0	0
134-16-10	16	ROOFING SEALANT, GRAY	6/11/2008	ROOF, NW VENT	0	0	0
134-20-20	20	MISCELLANEOUS SEALANT BLACK	11/17/2010	NORTHSIDE, EAST DOOR OVHD	0	0	0
134-22-20	22	TEXTURED MATERIAL GRAY	11/17/2010	NE EXT. CORNER	2	0	0

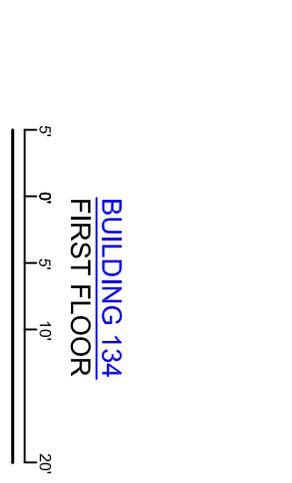
- ASBESTOS NOTIFICATION
- ATTIC ACCESS
- CONCRETE
- ELECTRICAL PANEL
- INFORMATION PACKET
- MERCURY THERMOSTAT
- RAISED FLOORING

**SAMPLE LEGEND**

0-401 (+/-) SAMPLE IDENTIFICATION

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

HOMOGENEOUS MATERIAL



**BUILDING 134**

**FIRST FLOOR**

**ACM LEGEND**

TEXTURED MATERIAL, GRAY (HM22)

CY2010 ASBESTOS INSPECTION  
134-01  
MCB CAMP LEJEUNE, NC



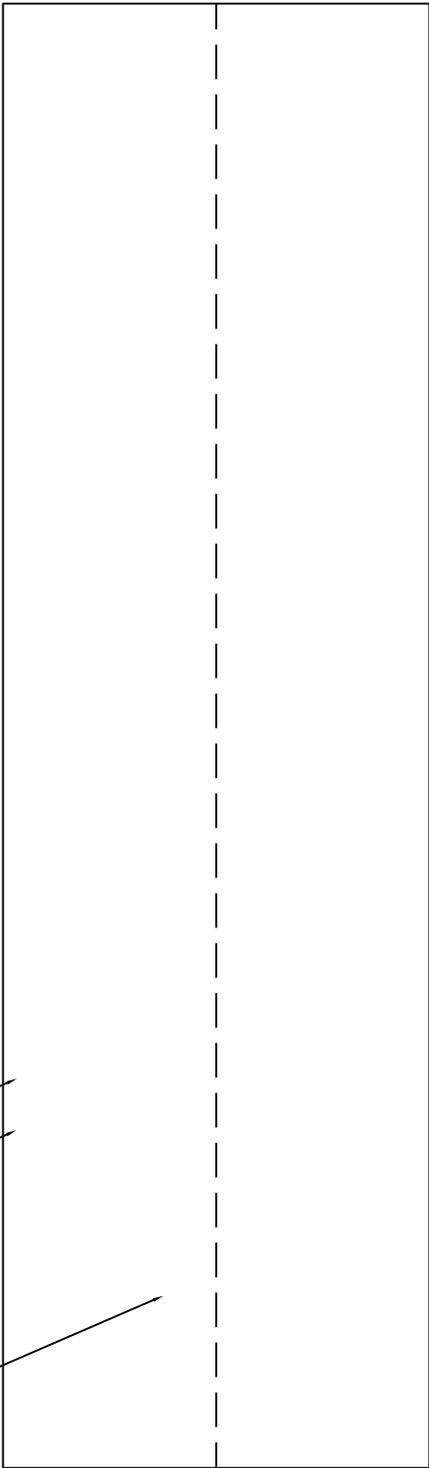
MCB CAMP LEJEUNE, NC



SY#	DESCRIPTION	DATE	APPROVED



**SAMPLE LEGEND**  
 SAMPLE IDENTIFICATION  
 0-401 (-) → POSITIVE (+), NEGATIVE (-), OR TRACE (TR) FOR THE PRESENCE OF ASBESTOS  
 → HOMOGENEOUS MATERIAL



**NO ACM IDENTIFIED**  
**BUILDING 134**  
**ROOF**



04-01(-)  
 05-01(-)  
 16-10(-)

DATE: 08/11/10  
 TIME: 10:30 AM

CY2010 ASBESTOS INSPECTION  
 134-R  
 MCB CAMP LEJEUNE, NC



MCB CAMP LEJEUNE, NC



SY#	DESCRIPTION	DATE	APPROVED

REVISIONS

**ASBESTOS INSPECTION REPORT of:**

**Building # 430**

**MCB CAMP LEJEUNE**



*Print Date*

***Friday, October 19, 2012***

# INSPECTION SUMMARY

**BLDG #:** 430

**YEAR BUILT:** 1942

**OCCUPANT:** ISMT SIMULATOR

**ASBESTOS MANAGER:** Billy Parkin 451-5837

**BUILDING COMMENTS:**

HAZ RANK 3/GREEN [AH OCT2011]  
SSSD, TRANSITE PANEL DEBRIS IN ATTIC REMOVED

SEP09 1B  
FRIABLE ACM HEAT SHIELD IN ATTIC (INTACT)  
PVS. ACM REMAINS, ADDL ACM INCLUDES:  
ROOFING SEALANT, BLACK

DEC06  
PVS. ACM REMAINS, ADDL ACM INCLUDES:  
HEAT SHIELD DEBRIS  
TRANSITE PANEL DEBRIS

INSPECT JAN 04  
ACM INCLUDES:  
9" BLACK FLOOR TILE AND 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*

DESCRIPTION	LOCATION	Date	Quantity
No friable ACM records found in database			

### *Non-friable ACM(s) identified*

DESCRIPTION	LOCATION	Date	Quantity
9" BLACK FLOOR TILE AND ADHESIVE	SOUTHWEST OFFICE/ROOM, SOUTHSIDE	1/14/2004	144 SF
TRANSITE PANEL MATERIAL	ATTIC SOUTH CENTER AND SOUTH WEST DEBRIS FIELDS	12/14/2006	4 SF
ROOFING SEALANT, BLACK	ROOF RIDGE VENT BOXES PERIMETERS	9/2/2009	
TRANSITE PANEL MATERIAL	ATTIC SOUTH CENTER AND SOUTH WEST DEBRIS FIELDS	9/2/2009	4 SF
9" BLACK FLOOR TILE AND ADHESIVE	SOUTHWEST OFFICE/ROOM	12/14/2006	144 SF
9" BLACK FLOOR TILE AND ADHESIVE	SOUTHWEST OFFICE/ROOM, SOUTHSIDE	9/2/2009	144 SF
TRANSITE PANEL MATERIAL	ATTIC SOUTH CENTER AND SOUTH WEST DEBRIS FIELDS	6/8/2011	2 SF

### *Tested Non ACM or REMOVED Materials*

*Print Date: Friday, October 19, 2012*

<i>DESCRIPTION</i>	<i>LOCATION</i>	<i>Date</i>
EXTERIOR CAULKING, DRYWALL	WINDOWS AND DOORS	1/14/2004
JOINT MATERIAL	INTERIOR WALLS AND CEILINGS	1/14/2004
ELECTRICAL WRAPPED WIRING	ATTIC SOUTH CENTER (EAST) DEBRIS	12/14/2006
ELECTRICAL WRAPPED WIRING	ATTIC SOUTH CENTER EAST (DEBRIS)	12/14/2006
FELT PAPER	ATTIC CENTER (DEBRIS)	12/14/2006
SHINGLE ROOFING	ROOFING SYSTEM (DEBRIS) IN ATTIC	12/14/2006
DUCT SEALANT, GRAY	ATTIC HVAC TRUNK LINE DOWN CENTERLINE	12/14/2006
HEAT SHIELDING, WHITE	ATTIC SOUTH CENTER (EAST)	12/14/2006
DRYWALL	INTERIOR WALLS AND CEILINGS	12/14/2006
JOINT MATERIAL	INTERIOR WALLS AND CEILINGS	12/14/2006
HEAT SHIELDING, WHITE	ATTIC SOUTH CENTER (EAST) REMNANTS	9/2/2009

- 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.

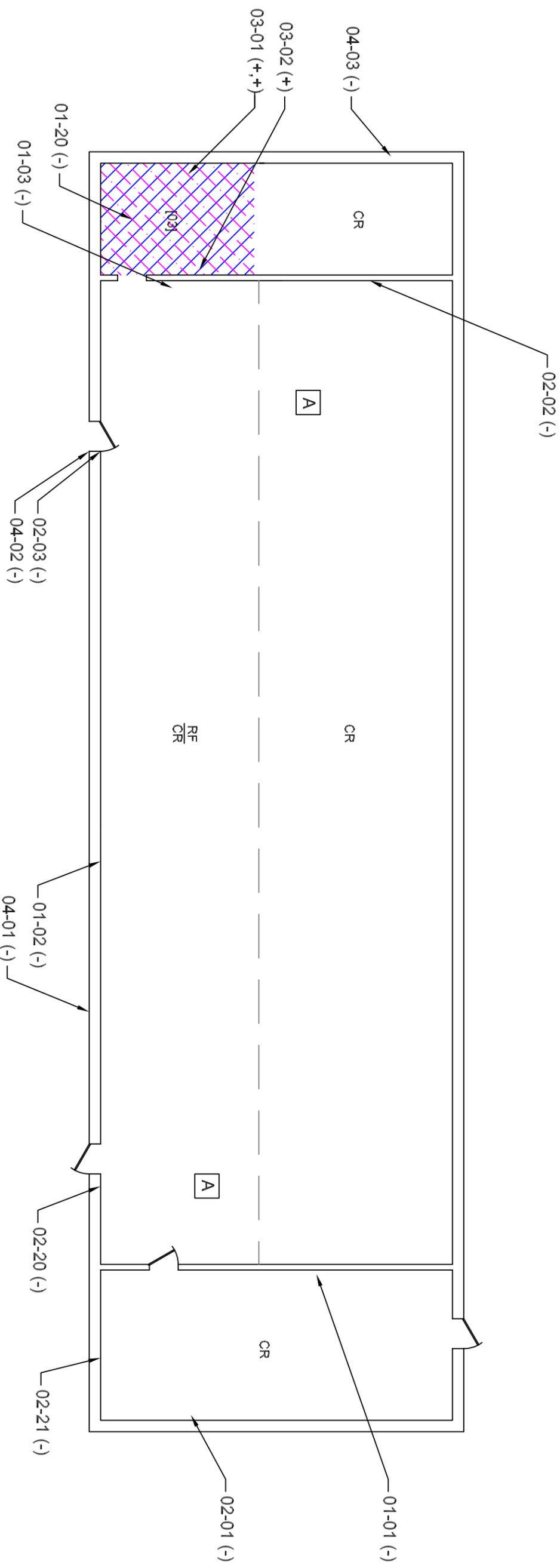
**CAMP LEJEUNE Asbestos Program Manager: William (Billy) Parkin**

**Phone: (910) 451-5837**

# SAMPLES COLLECTED

Sample	HA	Description	Sample Date	Sample Location	Chr (%)	Amo (%)	Oth (%)
430-01-01	01	DRYWALL	1/14/2004	EAST ROOM, WALL	0	0	0
430-01-02	01	DRYWALL	1/14/2004	SOUTH WALL, MAIN ROOM	0	0	0
430-01-03	01	DRYWALL	1/14/2004	WEST WALL, MAIN ROOM	0	0	0
430-01-20	01	DRYWALL	12/14/2006	WEST ROOM, SOUTH CEILING	0	0	0
430-02-01	02	JOINT MATERIAL	1/14/2004	EAST ROOM, WALL	0	0	0
430-02-02	02	JOINT MATERIAL	1/14/2004	WEST WALL, MAIN ROOM	0	0	0
430-02-03	02	JOINT MATERIAL	1/14/2004	SOUTH WALL, MAIN ROOM	0	0	0
430-02-20	02	JOINT MATERIAL	12/14/2006	MAIN ROOM SE WALL	0	0	0
430-02-21	02	JOINT MATERIAL	12/14/2006	EAST ROOM, SOUTH WALL	0	0	0
430-03-00ri06	03	9" BLACK FLOOR TILE AND ADHESIVE	12/14/2006	N/A	9	9	9
430-03-00ri08	03	9" BLACK FLOOR TILE AND ADHESIVE	9/2/2009	N/A	9	9	9
430-03-01	03	9" BLACK FLOOR TILE AND ADHESIVE	1/14/2004	WEST ROOM, SOUTHSIDE	5	0	0
430-03-02	03	9" BLACK FLOOR TILE AND ADHESIVE	1/14/2004	WEST ROOM, SOUTHSIDE	4	0	0
430-04-01	04	EXTERIOR CAULKING, GREEN	1/14/2004	SOUTHSIDE WINDOW, EAST	0	0	0
430-04-02	04	EXTERIOR CAULKING, GREEN	1/14/2004	SOUTHSIDE DOOR, WEST	0	0	0
430-04-03	04	EXTERIOR CAULKING, GREEN	1/14/2004	WESTSIDE WINDOW, NORTH	0	0	0
430-10-00ri08	10	HEAT SHIELDING, WHITE	9/2/2009	N/A	9	9	9
430-10-20	10	HEAT SHIELDING, WHITE	12/14/2006	ATTIC, SOUTH CNTR	85	0	0
430-11-00ri08	11	TRANSITE PANEL MATERIAL	9/2/2009	N/A	9	9	9
430-11-00ri11	11	TRANSITE PANEL MATERIAL	6/8/2011	N/A	9	9	9
430-11-20	11	TRANSITE PANEL MATERIAL	12/14/2006	ATTIC SOUTH CNTR	15	0	0

Sample	HA	Description	Sample Date	Sample Location	Chr (%)	Amo (%)	Oth (%)
430-12-20	12	ELECTRICAL WRAPPED THIN WIRING	12/14/2006	ATTIC SOUTH CNTR EAST	0	0	0
430-13-20	13	ELECTRICAL WRAPPED THICK WIRING	12/14/2006	NORTH SIDE OF ATTIC	0	0	0
430-14-20	14	FELT PAPER	12/14/2006	ATTIC CNTR	0	0	0
430-15-20	15	SHINGLE ROOFING	12/14/2006	ATTIC CENTER	0	0	0
430-16-20	16	DUCT SEALANT, GRAY	12/14/2006	ATTIC CNTR EAST	0	0	0
430-20-30	20	ROOFING SEALANT, BLACK	9/2/2009	WEST VENT, SE	0	0	0
430-20-31	20	ROOFING SEALANT, BLACK	9/2/2009	EAST VENT, SE	0	0	0



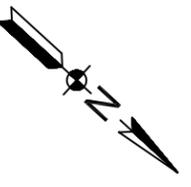
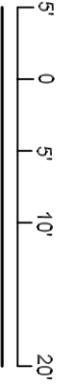
[A] ATTIC ACCESS  
 [HM] HOMOGENEOUS NUMBER  
 CR CONCRETE  
 RF RAISED FLOOR

SAMPLE LEGEND ID

SAMPLE IDENTIFICATION

01-01 (+-) POSITIVE (+) OR NEGATIVE (-) FOR THE PRESENCE OF ASBESTOS.  
 HOMOGENEOUS AREA  
 MAX - NOT ACCESSIBLE (AREA)

**BUILDING 430**  
**FIRST FLOOR**



ACM LEGEND

 9" BLACK FLOOR TILE AND MASTIC [HM03]

Checked by: JLD  
 Drawn by: JLD  
 Scale: As Shown  
 Date: December 2008  
 Sheet: 1 of 3

CY2008 ASBESTOS INSPECTION  
 430-01  
 MCB CAMP LEJEUNE, NC



MCB CAMP LEJEUNE, NC



NO.	DESCRIPTION	DATE	APPROVED



**ASBESTOS INSPECTION REPORT of:**

**Building # 529**

**MCB CAMP LEJEUNE**



*Print Date*

***Friday, October 19, 2012***

# INSPECTION SUMMARY

**BLDG #:** 529

**YEAR BUILT:** 1942

**OCCUPANT:** INDOOR SIMULATED  
MARKSMANSHIP TRAINING (ISMT)  
FACILITY- HQ

**ASBESTOS MANAGER:** Billy Parkin 451-5837

## **BUILDING COMMENTS:**

HAZ RANK 0/BUE [AH OCT2011]  
TRANSITE DEBRIS REMOVED SSSD, NO IDENTIFIED ACM REMAINS

APR2011 1B  
ACM HEAT SHIELDING ON NAIL HEADS IN ATTIC, RECOMMEND SSSD REMOVAL  
PVS. ACM REMAINS, ADDL SAMPLING, NO ADDL ACM

FEB08  
ADDL SAMPLING, ACM INCLUDES:  
HEAT SHIELD DEBRIS ON NAIL HEADS  
TRANSITE PANEL MATERIAL

JUN01  
NO ASBESTOS CONTAINING MATERIALS IDENTIFIED

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## 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***

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

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### ***Non-friable ACM(s) identified***

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

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### ***Tested Non ACM or REMOVED Materials***

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<i>DESCRIPTION</i>	<i>LOCATION</i>	<i>Date</i>
TAR PAPER, BLACK	ROOFING UNDERLAYMENT AND ATTIC DEBRIS (PREVIOUS ROOFING)	2/8/2008
DRYWALL	INTERIOR DIVIDING WALLS AND CEILING	6/27/2001
CARPET ADHESIVE	NORTH OFFICE, FOYER, AND STORAGE	6/27/2001
EXTERIOR CAULKING,	METAL DOORS	6/27/2001
EXTERIOR CAULKING,	EASTSIDE AND WESTSIDE WINDOWS	6/27/2001

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RESIDUAL MASTIC	NORTH OFFICE, UNDER CARPET	6/27/2001
JOINT MATERIAL	INTERIOR WALLS AND CEILING	6/27/2001
SHINGLE ROOFING	ROOFING SYSTEM TOP LAYER	6/27/2001
TRANSITE PANEL MATERIAL	ATTIC DEBRIS, CENTER EAST AND WEST, SOUTH CENTER	2/8/2008
ROOFING SEALANT, BLACK	ROOFING BOX RIDGE VENT FLASHINGS	2/8/2008
HEAT SHIELDING, WHITE	SOUTHWEST ATTIC DEBRIS ON NAIL HEADS	2/8/2008
CONCRETE EXPANSION JOINT MATERIAL	CONCRETE SLAB PERIMETER AND CENTER EXPANSION JOINTS	4/5/2011
DRYWALL	INTERIOR DIVIDING WALLS AND CEILING	4/5/2011
HEAT SHIELDING, WHITE	SOUTHWEST ATTIC DEBRIS ON NAIL HEADS	4/5/2011
TRANSITE PANEL MATERIAL	ATTIC DEBRIS, CENTER EAST AND WEST, SOUTH CENTER	4/5/2011
TRANSITE PANEL MATERIAL	ATTIC DEBRIS, CENTER EAST AND WEST, SOUTH CENTER	5/4/2011

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- 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.

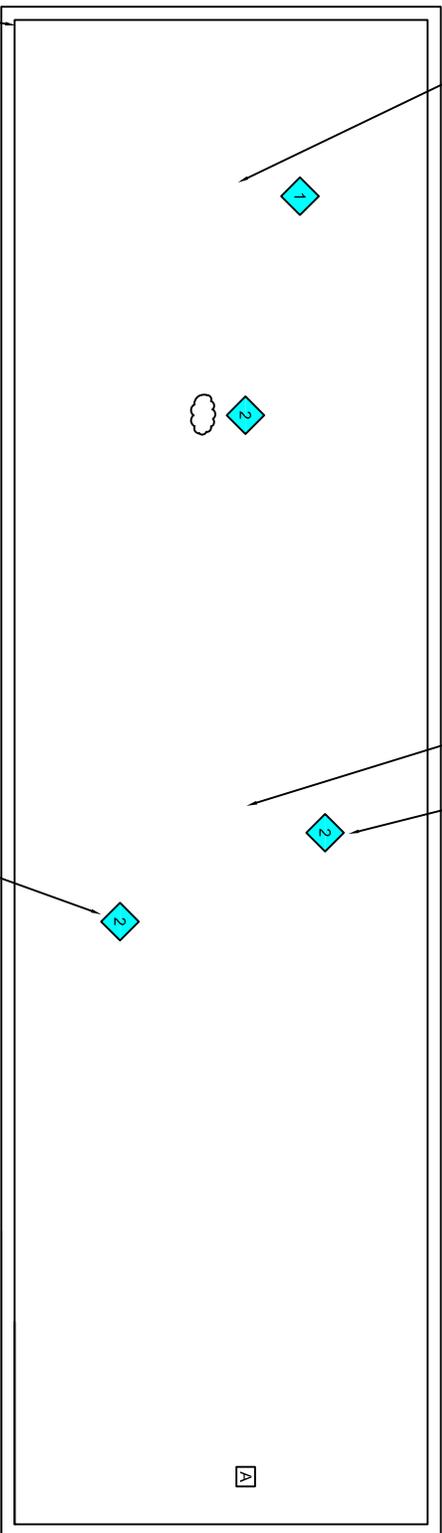
**CAMP LEJEUNE Asbestos Program Manager: William (Billy) Parkin**

**Phone: (910) 451-5837**

# SAMPLES COLLECTED

Sample	HA	Description	Sample Date	Sample Location	Chr (%)	Amo (%)	Oth (%)
529-01-01	01	CARPET ADHESIVE YELLOW	6/27/2001	NORTH STRGE, NORTH CNTR	0	0	0
529-01-02	01	CARPET ADHESIVE YELLOW	6/27/2001	NE FOYER	0	0	0
529-02-01	02	EXTERIOR CAULKING, GRAY	6/27/2001	NE SINGLE DOOR	0	0	0
529-03-01	03	EXTERIOR CAULKING, WHITE	6/27/2001	EASTSIDE, SOUTH WINDOW	0	0	0
529-04-01	04	RESIDUAL MASTIC BLACK	6/27/2001	NORTH OFFICE	0	0	0
529-05-01	05	DRYWALL	6/27/2001	NORTH STORAGE, CNTR EAST	0	0	0
529-05-20	05	DRYWALL	4/5/2011	NORTH STRGE, EAST WALL	0	0	0
529-06-01	06	JOINT MATERIAL	6/27/2001	NE ENTRY FOYER	0	0	0
529-07-01	07	SHINGLE ROOFING BROWN	6/27/2001	ROOF, SE CORNER	0	0	0
529-10-00ri10	10	TRANSITE PANEL MATERIAL GRAY	4/5/2011	N/A	9	9	9
529-10-00ri11	10	TRANSITE PANEL MATERIAL GRAY	5/4/2011	N/A	9	9	9
529-10-10	10	TRANSITE PANEL MATERIAL GRAY	2/8/2008	ATTIC, CNTR EAST	20	0	0
529-11-10	11	TAR PAPER, BLACK	2/8/2008	ATTIC, CNTR WEST	0	0	0
529-12-10	12	ROOFING SEALANT, BLACK	2/8/2008	ROOF, SOUTH VENT, SOUTH	0	0	0
529-12-11	12	ROOFING SEALANT, BLACK	2/8/2008	ROOF, NORTH VENT, SOUTH	0	0	0
529-13-00	13	HEAT SHIELDING, WHITE	2/8/2008	N/A	9	9	9
529-13-00ri10	13	HEAT SHIELDING, WHITE	4/5/2011	N/A	9	9	9
529-20-20	20	CONCRETE EXPANSION JOINT MATERIAL BLACK	4/5/2011	SOUTH RM, SOUTH CNTR JNT	0	0	0
529-20-21	20	CONCRETE EXPANSION JOINT MATERIAL BLACK	4/5/2011	SOUTH RM, NORTH CNTR JNT	0	0	0





A ATTIC ACCESS

SAMPLE LEGEND

SAMPLE IDENTIFICATION

0-101 (+/-)  
 POSITIVE (+), NEGATIVE (-), OR TRACE (TR) FOR THE PRESENCE OF ASBESTOS  
 HOMOGENEOUS MATERIAL

**SSSD 2011**

- ◆ 1 HEAT SHIELD DEBRIS REMOVED
- ◆ 2 TRANSITE AND FELT DEBRIS REMOVED

**BUILDING 529**  
**ATTIC/ROOF**



ACM LEGEND



TRANSITE PANEL MATERIAL DEBRIS (TMM/10)

DATE	TIME

CY2011 ASBESTOS SSSD ABATEMENT  
 529-A/R  
 MCB CAMP LEJEUENE, NC



MCB CAMP LEJEUENE, NC



SYN.	DESCRIPTION	DATE	APPROVED

## CERTIFICATIONS & LICENSES

**North Carolina  
Asbestos Accreditation**



Brian T Hyde  
9318 Mason Creek Rd  
Norfolk, VA 23503

97842

EXPIRATION			
10-31-2013			
DOB	SEX	HT	WT
11-18-1971	M	6'0"	185
CLASS	#	EXP	
INSPECTOR	12590	10-13	