Former National Guard Armory
Bristow, Oklahoma

Remediation Final Report

Prepared by:
Department of Environmental Quality
707 North Robinson
Oklahoma City, Oklahoma 73101

1. Deeds and Legal Documents
2. Maintenance Plan
3. Inspection Reports
4. Scope of Work
5. Final Abatement Reports
6. Confirmation Sampling

The Oklahoma Department of Environmental Quality (DEQ) is pleased to present the City of Bristow with the Final Remediation Report for the former Bristow Armory.

DEED NOTICE

A Notice of Remediation has been filed in the county courthouse and is included in this report. It summarizes remediation performed at the former Bristow Armory and describes continuing operation and maintenance and land use restrictions. This completes the DEQ cleanup of the property. For more detail on the activities described below, see enclosed reports.

ASBESTOS REMEDIATION

DEQ and its contractors completed the following activities:

- Asbestos inspection, including:
  Asbestos-containing floor tile, soffit paneling, and pipe insulation and fittings
- Asbestos Abatement, including:
  Removal of all asbestos-containing floor tile, soffit paneling, and pipe insulation and fittings

TARGETED BROWNFIELD ASSESSMENT

On November 12, 2013, DEQ provided a Phase I Targeted Brownfield Assessment to the City of Bristow. A copy of this report is available at http://www.deq.state.ok.us/lpdnew/scapIndex.htm

LEAD REMEDIATION

DEQ and its contractors completed the following activities:

- Lead-based paint (LBP) and lead dust inspection
- LBP abatement, including:
  Scraping and sealing window headers and lead pipes
- Lead dust abatement, including:
  HEPA vacuuming and wet washing of floors in the building
- Proper disposal of associated waste

DEQ
OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY

DEEDS AND LEGAL DOCUMENTS

JANELL DIEHL, COUNTY CLERK
STATE OF OKLAHOMA COUNTY OF CREEK
This Instrument Was Filed For Record ON

NOV 3 - 2011

At 2:30 o'clock P M AND RECORDED IN
BOOK 759 PAGE 668-70
BY K. Weir DEPUTY

11 12758

QUITCLAIM DEED

KNOW ALL MEN BY THESE PRESENTS:

That the State of Oklahoma, acting by and through the Oklahoma Military Department by its Adjutant General, Major General Myles L. Deering, a body corporate and politic and instrumentality of the State of Oklahoma, Grantor, in consideration of the sum of One and No/100 dollars and other valuable consideration in hand paid, the receipt and sufficiency of which are hereby acknowledged, do hereby quitclaim, grant, bargain, sell and convey unto **City of Bristow, Oklahoma,** Grantee, the following described real property and premises lying and situated in the Creek County, State of Oklahoma, as follows:

A piece or parcel of land lying in the SW ¼-SW ¼ Sec. 30-T16N-R9E, described by metes and bounds as follows: Beginning at a point on the East line of and 843.9 ft. North of the SE corner of the SW ¼-SW ¼ (known as lot 4) Sec. 30 T16N-R9E; thence in a Westerly direction along the said Cemetery Fence a distance of 250 ft., thence Northerly a distance of 250 ft., thence Easterly a distance of 250 ft., thence Southerly along the East line of said lot 4, a distance of 250 ft. to the point of beginning, containing 1.435 Acres more or less,

together with the improvements thereon and appurtenances thereunto belonging.

NOTICE: THE ABOVE DESCRIBED PROPERTY MAY HAVE BEEN CONTAMINATED WITH LEAD, ASBESTOS AND OTHER CONTAMINANTS.

TO HAVE AND TO HOLD the Real Property unto the Grantee its successors, and assigns.

Signed and delivered this 20 day of October 2011.

STATE OF OKLAHOMA

By: _____
Major General Myles L. Deering,
Adjutant General of the State of Oklahoma

668

This Conveyance is Exempt from Documentary Tax Stamps Tax per O.S. 3202(11)

1000
500

DEED NOTICE

NOTICE OF REMEDIATION
FORMER BRISTOW ARMORY
BRISTOW, OKLAHOMA

AFFECTED PROPERTY: The Affected Property is the former Bristow Armory located at 700 West 5th Avenue, City of Bristow, Creek County Oklahoma, 74010.

The legal description is as follows:

A piece or parcel of land lying in the SW¼ -SW¼ Sec. 30-T16N-R9E, described by metes and bounds as follows: Beginning at a point on the East line of and 843.9 ft. North of the SE corner of the SW¼-SW¼ (known as lot 4) Sec. 30 T16N-R9E; thence in a Westerly direction along the said Cemetery Fence at a distance of 250 ft., thence Northerly a distance of 250 ft., thence Easterly a distance of 250 ft., thence Southerly along the East line of said lot 4, a distance of 250 ft. to the point of beginning, containing 1.435 Acres more or less.

LEGAL BASIS FOR NOTICE: The Oklahoma Department of Environmental Quality (DEQ) hereby files this Notice of Remediation pursuant to Oklahoma Statutes, 27A O.S. § 2-7-123 (C). This Notice does not grant any right to any person not already allowed by law and shall not be construed to authorize or encourage any person or other legal entity to cause or increase pollution, to avoid compliance with state or federal laws and regulations regarding pollution or to escape responsibility for maintaining environmentally sound operations.

DEQ may take administrative or civil action to recover costs or to compel compliance with the Land Use Restrictions and to prevent damage to or interference with the Engineering Controls and Continuing Operation and Maintenance of said Engineering Controls herein described.

The Land Use Restrictions, Engineering Controls and Continuing Operation and Maintenance of said Engineering Controls shall apply to the Affected Property and to persons who own and/or use the Affected Property until such time as DEQ files a subsequent Notice of Remediation that changes or removes one or more of them. Activities that cause or could cause damage to the Remedy or the Engineering Controls or recontamination of soil or groundwater are prohibited.

REASON FOR NOTICE: The above described Affected Property was contaminated with materials that required remediation pursuant to state and federal environmental laws and regulations. Sampling performed by DEQ contractors, conducted on March 10th and 16th, 2012, indicated that there was asbestos, lead-based paint, and lead dust in the building.

REMEDY: Remediation activities (Remedy) at the Affected Property included abatement of asbestos, lead-based paint and dust. The remedy was completed on November 18, 2014.

I-2015-000672 Bk 0957 Pg 226
01/15/2015 3:09 pmPg 226-228
Fee: $ 17.00 Doc: $ 0.00
Jennifer Mortazavi - Creek County Clerk
State of Oklahoma

For more detailed information please refer to *Former National Guard Armory Bristow, Oklahoma Remediation Final Report.* To obtain a copy of the report, contact:

Oklahoma Department of Environmental Quality
Central Records

Mailing Address
P.O. Box 1677
Oklahoma City, Oklahoma 73101

Physical Address
707 N Robinson
Oklahoma City, OK 73102

Electronic Address
http://www.deq.state.ok.us/lpdnew/scapIndex.htm

DISCLAIMER

(A) **Lead:** DEQ did not test every painted surface inside and outside of the building; therefore, there is a potential for lead-based paint at the affected property.

(B) **Asbestos:** DEQ did not test all building materials inside and outside of the building; therefore, there is a potential for asbestos at the affected property.

CONTINUING OPERATION, MAINTENANCE AND MONITORING

(A) **Lead-based paint encapsulant:** Lead-based paint encapsulant was applied over lead-based paint on non-friction surfaces. These areas should be periodically inspected and maintained as appropriate.

Scott A. Thompson, Executive Director
Oklahoma Department of Environmental Quality

1-7-15
Date

I-2015-000672 Bk 0957 Pg 227
01/15/2015 3:09 pmPg 226-228
Fee: $ 17.00 Doc: $ 0.00
Jennifer Mortazavi - Creek County Clerk
State of Oklahoma

ACKNOWLEDGMENT

STATE OF OKLAHOMA
COUNTY OF OKLAHOMA

Before me, a Notary Public, in and for said County and State, on this 7th day of Jan, 2015, personally appeared Scott A. Thompson to me known to be the identical person who executed the within and foregoing instrument and acknowledged to me that executed the same as free and voluntary act and deed for the uses and purposed therein set forth. In Testimony Whereof, I have hereunto set my hand and official seal the day and year above written.

My Commission expires:

January 17, 2016

Teresa McPherson
Notary Public

TERESA MCPHERSON
Notary Public
State of Oklahoma
Commission # 00000781 Expires 01/17/16

I-2015-000672 Bk 0957 Pg 228
01/15/2015 3:09 pmPg 226-228
Fee: $ 17.00 Doc: $ 0.00
Jennifer Mortazavi - Creek County Clerk
State of Oklahoma

MAINTENANCE PLAN

MAINTENANCE PLAN
FORMER BRISTOW ARMORY
BRISTOW, OKLAHOMA

The Armory located at 700 West 5th Avenue, Bristow, Oklahoma, was contaminated with materials that required remediation pursuant to State and Federal environmental laws and regulations. Please refer to Attachment 1 for land use restrictions. Sampling performed by DEQ contractors, conducted on March 10th and 16th, 2012, indicated that there was asbestos, lead-based paint, and lead dust in the building. Remediation activities at the Affected Property included abatement of asbestos, lead-based paint, and lead dust. The remedy was completed on November 18th, 2014. The following maintenance plan is to be completed by the owner of the Affected Property. DEQ recommends inspection of remediated areas every 5 years. During site inspections the owner should note any signs of disrepair or improper maintenance. Continuing operation, maintenance and monitoring should include:

1. All 26 window headers above drill floor (Room 18) windows and the metal pipe in Room 6 were scraped and encapsulated with lead-based paint encapsulant. These surfaces need to be re-encapsulated if lead-based paint encapsulant shows signs of deterioration, damage, or flaking.
2. The tile walls in Room 6 and Room 7 and beige tile window sills in Rooms 2, 3, 4, 6, 7, and 17 contain lead. Tile walls and sills were left in place due to their good condition, but will need to be removed and replaced if the tile shows signs of deterioration or damage.
3. The transite pipes for the ceiling-mounted space heaters in Rooms 15, 16, 17, and 18 contain non-friable asbestos. Transite pipes were left in-place due to their good condition, but will need to be removed and replaced if the transite shows signs of deterioration or damage.

Note – A list of DEQ approved acrylic sealant and elastomeric encapsulants is attached (Attachment 3). DEQ did not test every painted surface and all building materials inside and outside of the building, therefore there is a potential for lead-based paint and asbestos at the affected property.

If you have any questions or concerns feel free to contact me at (405) 702-5112.

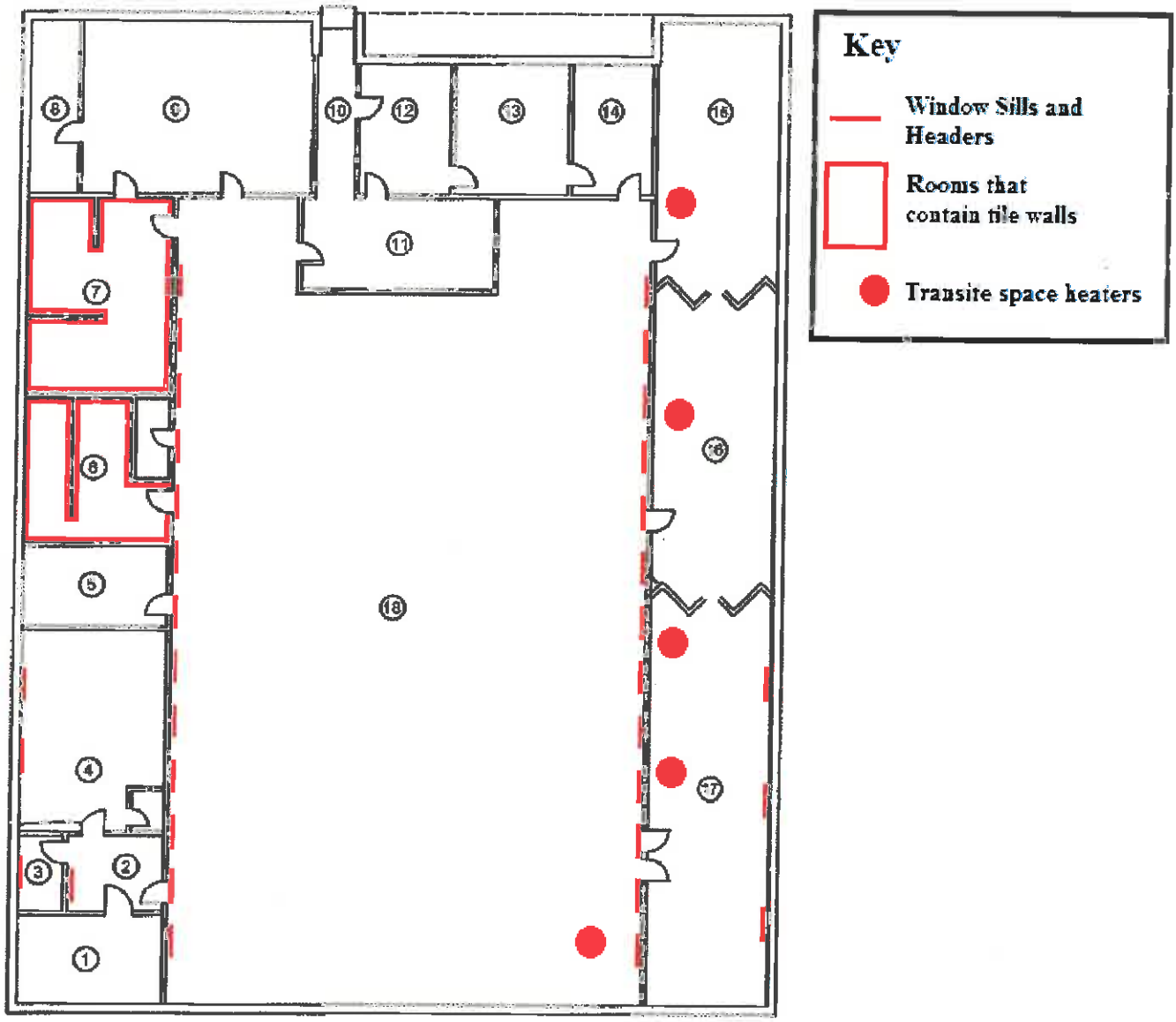
Sincerely,

Brittany Downs
Environmental Programs Specialist
DEQ Land Protection Division
Site Cleanup Assistance Program

ATTACHMENT 1

Floor Plan Map

Labeled areas represent walls and floors with encapsulant and/or sealant.



ATTACHMENT 2

DEQ Approved Sealants and Encapsulants List

Acrylic Sealant approved by DEQ

KM-669 Acrylic

Lead-Based Paint Encapsulants approved by DEQ

Encapsulant Manufacturer	Encapsulant Product(s)
Coronado Paint Company	LEAD BLOCK™
Dumond Chemicals	LEAD STOP™
Dynacraft Industries, Inc.	Back to Nature Protect-A-Coat
Encap Systems Corporation	EncapSeal™ I
Encap Systems Corporation	EncapSeal™ II
Fiberlock Technologies, Inc.	Child GUARD interior/exterior
Fiberlock Technologies, Inc.	L-B-C® Type III
Global Encasement, Inc.	LeadLock™
Grace Construction Products	Lead Seal®
Grace Construction Products	Barrier Coat® II
Insl-x Products Corporation	INSL-CAP™
SAFE Encasement Systems	SE-120 Protective Skin
Specification Chemicals, Inc.	NU-WAL® #2500 Coating

INSPECTION REPORTS

QUANTITATIVE FACILITY ASBESTOS SURVEY

NATIONAL GUARD ARMORY
700 WEST 5TH AVENUE
BRISTOW, OKLAHOMA 74010

GMR Project Number 2012017
March 10, 2012

Oklahoma Department of Environmental Quality
Land Protection Division
P. O. Box 1677
Oklahoma City, OK 73101-1677
Attention: Mr. Dustin Davidson

GMR & Associates, Inc.
ENGINEERS, PLANNERS, ENVIRONMENTAL SPECIALISTS, HYDROGEOLOGISTS
2520 West I-44 Service Road, Suite 200
P.O. Box 57827
Oklahoma City, OK 73157-7827
Telephone: 405-528-7017
Fax: 405-528-3346

Prepared by:

Howard Burch
ODOL AHERA Inspector License OK159522

Reviewed by:

James M. Reis
Vice President
Project Manager

TABLE OF CONTENTS

Tables

Appendices

QUANTITATIVE FACILITY ASBESTOS SURVEY
BRISTOW NATIONAL GUARD ARMORY
700 WEST 5TH AVENUE
BRISTOW, OKLAHOMA

1.0 EXECUTIVE SUMMARY

In February, 2012 GMR & Associates, Inc. (GMR) performed a survey for asbestos containing materials (ACM) in the National Guard Armory at 700 West 5th Avenue in Bristow, Oklahoma.

The objective of the survey was to assess the presence and quantities of asbestos containing materials. Bulk samples of suspect (ACM) were collected during the survey and submitted for laboratory analysis for asbestos content. During the survey, a total of 38 samples were collected from 20 different homogeneous areas.

Laboratory results indicate the sub-layer of gray floor tile located in Rooms 12, 13 and 14 and the transite soffit paneling under the entrance overhang **contain non-friable asbestos.**

Laboratory results indicate the thermal pipe insulation and fittings for the water supply line **contain friable asbestos.**

Transite (asbestos) vent piping on ceiling mounted space heaters were observed in Rooms 15, 16, 17 and 18. Samples from these locations could not be collected without jeopardizing the integrity of the vent pipe.

2.0 INTRODUCTION

On February 23, 2012, GMR & Associates, Inc. (GMR) performed a survey for ACM in the National Guard Armory located at 700 West 5th Avenue in Bristow, Oklahoma.

The objective of the survey was to assess the presence and quantities of ACM. Bulk samples of suspect ACM were collected during the survey and submitted for laboratory analysis for asbestos content.

3.0 BUILDING DESCRIPTION

Constructed in 1954, the Bristow Armory building has a total area of 11,216 square feet and is comprised of one floor constructed over a concrete slab. The building consists of a large central garage/staging area, with offices, bathrooms and workrooms located around the garage on the north, east and west.

4.0 FINDING SUMMARY OF ASBESTOS CONTAINING MATERIALS

Laboratory results indicate the sub-layer of gray floor tile located in Rooms 12, 13 and 14 and the transite soffit paneling under the entrance overhang **contain non-friable asbestos.**

Laboratory results indicate the thermal pipe insulation and fittings for the water supply line **contain friable asbestos.**

Transite vent piping on ceiling mounted space heaters were observed in Rooms 15, 16, 17 and 18. Samples from these locations could not be collected without jeopardizing the integrity of the vent pipe.

All other materials sampled did not contain asbestos. The asbestos sampling locations are shown in Appendix C, Figures 1-3.

Table 1
Summary of Asbestos Containing Building Materials

Material Category	Description	Quantities	General Location
Friable	Thermal Pipe Insulation – Water Pipe (BA-17A thru BA-17E)	400 Lineal Feet (LF)	Exposed in Rooms 6, 7, 15, 17, 18 and closet, east of Rm. 6.
Friable	Thermal Pipe Fittings – Water Pipe (BA-18A thru BA-18E)	30 Fittings (Observed)	Exposed in Rooms 6, 7, 15, 17, 18 and closet, east of Rm. 6.
Category 1 Non-Friable	Gray Floor Tile – Sub-floor (BA-04A, a)	500 Square Feet (SF)	Rooms 12, 13 and 14
Category II Non-Friable	Transite Soffits (BA-20A)	250 Square Feet	Entrance Overhang
Category II Non-Friable	Transite Vent Pipe and Fittings (Not-Sampled)	25 Lineal Feet	Ceiling Mounted Space Heaters – Room 15, 16, 17 and 18

Table 2
Bulk Samples and Analytical Results

Sample ID	Description	Approx. Amount	Asbestos Type & Percent
BA-01A	Tan Floor Tile	N/A	None Detected
BA-02A	Yellow Mastic	N/A	None Detected
BA-03A	Tan Floor Tile	N/A	None Detected
BA-04A	Mastic	N/A	None Detected
BA-04A (Sub-Layer)	Gray Floor Tile	500 SF	***8% Chrysotile***
BA-05A	2x4 White Ceiling Tile (Room 11)	N/A	None Detected
BA-06A	2x4 White Ceiling Tile (Room 10)	N/A	None Detected
BA-07A	Tan Wall Panels	N/A	None Detected
BA-07B	Tan Wall Panels	N/A	None Detected
BA-07C	Tan Wall Panels	N/A	None Detected
BA-07D	Tan Wall Panels	N/A	None Detected
BA-07E	Tan Wall Panels	N/A	None Detected

Table 2 (continued)
Bulk Samples and Analytical Results

Sample ID	Description	Approx. Amount	Asbestos Type & Percent
BA-08A	White Sheetrock	N/A	None Detected
BA-08B	White Texture	N/A	None Detected
	White Sheetrock	N/A	None Detected
BA-08C	White Texture	N/A	None Detected
	White Sheetrock	N/A	None Detected
BA-09A	Gray/Black Window Glazing	N/A	None Detected
BA-10A	Gray/Black Window Clazing	N/A	None Detected
BA-11A	White Sheetrock	N/A	None Detected
BA-11B	White Sheetrock	N/A	None Detected
BA-11C	White Sheetrock	N/A	None Detected
BA-12A	White Joint Compound	N/A	None Detected
	Cream Tape	N/A	None Detected
BA-12B	White Joint Compound	N/A	None Detected
	Cream Tape	N/A	None Detected
BA-12C	White Joint Compound	N/A	None Detected
	Cream Tape	N/A	None Detected
BA-13A	White Window Glazing	N/A	None Detected
BA-14A	Gray Insulation – Vault Door	N/A	None Detected
BA-15A	Cream Insulation – Folding Doors	N/A	None Detected
BA-16A	Silver/Black Gasket – Folding Doors	N/A	None Detected
BA-17A	Black/Beige Pipe Wrap	400 LF	***45% Chrysotile***
	Brown Pipe Wrap	N/A	None Detected
BA-17B	Black/Beige Pipe Wrap	400 LF	***45% Chrysotile***
	Brown Pipe Wrap	N/A	None Detected
BA-17C	Black/Beige Pipe Wrap	400 LF	***45% Chrysotile***
	Brown Pipe Wrap	N/A	None Detected
BA-17D	Black/Beige Pipe Wrap	400 LF	***40% Chrysotile***
	Brown Pipe Wrap	N/A	None Detected
BA-17E	Brown/White Pipe Wrap	400 LF	***45% Chrysotile***
	White Pipe Wrap	N/A	None Detected
BA-18A	Cream Pipe Wrap	30 EA	***5% Chrysotile***
	Light Gray Fitting	30 EA	***65% Chrysotile***
BA-18B	Beige Pipe Wrap	30 EA	***35% Chrysotile***
	Light Gray Fitting	30 EA	***60% Chrysotile***
BA-18C	Light Gray Fitting	30 EA	***70% Chrysotile***
BA-18D	Light Gray Fitting	30 EA	***65% Chrysotile***
BA-18E	Light Gray Fitting	30 EA	***70% Chrysotile***
BA-19A	White Roofing	N/A	None Detected
	Black Tar	N/A	None Detected
BA-20A	Gray Transite Soffits	250 SF	***20% Chrysotile***

SF = Square Feet; LF = Lineal Feet; EA = Each

5.0 SAMPLING PROCEDURES

5.1 SURVEY PROCEDURES

The asbestos survey involved visual Inspection and Sampling, Laboratory Analysis, and Quantity Assessment.

During the physical survey, sample collection data sheets were completed using the unique identification numbers previously described as a reference for the entry of more detailed information regarding the item being sampled. The individual sample numbers were recorded along with the item description, location within the area and condition of the material being sampled. Each sample was deposited in a sealable plastic bag or screw-top plastic collection container. The container was then marked with the sample identifier and recorded on the data sheet. All Inspectors are licensed as an AHERA Inspector by the State of Oklahoma. The completed survey forms and samples for each area were then taken to Quantem Laboratory, an accredited laboratory in Oklahoma City and the survey data was entered into a computer system for processing.

5.2 ANALYTICAL PROCEDURES

Bulk samples collected by GMR were analyzed by Quantem Laboratory in Oklahoma City, Oklahoma. Bulk samples were analyzed by Polarized Light Microscopy (PLM). All samples that were submitted were analyzed. Quantem laboratory is accredited through the American Industrial Hygiene Association (AIHA) or National Voluntary Laboratory Accreditation Program (NVLAP).

6.0 RECOMMENDATIONS

6.1 RECOMMENDED ACTIONS FOR PLANNED RENOVATIONS

Prepare specifications and Project Design for abatement of friable asbestos material and specifications for abatement of non-friable materials that would be disturbed during renovation activities.

6.2 RECOMMENDED ACTIONS FOR PLANNED DEMOLITION

Prepare specifications and Project Design for abatement of all friable asbestos materials and Transite soffits and vent piping. Remaining non-friable material may be left in place and disposed of as demolition debris. A licensed asbestos abatement contractor is not required for floor and mastic removal (Oklahoma Asbestos Control Act, page 36, 380:50-21-1); however personnel doing the work must follow work practices and have the training required in OSHA 29 CFR 1926.1101.

6.3 RECOMMENDED ACTIONS FOR ASBESTOS LEFT IN-PLACE

Prepare and implement an Operations and Management (O&M) Plan to manage the asbestos in place. The O&M plan shall meet the requirements established in the Oklahoma Control Act, page 26, 380:50-14-1.

7.0 BUDGETARY ABATEMENT COST ESTIMATE

Thermal pipe insulations and fittings:	***$21,500.00***
Transite Soffits:	***$1,800.00***
Transite heater vents and fittings:	***$300.00***
Gray Floor Tile:	***$1,250.00***

Appendix A

Laboratory Results and Chain of Custody Field Sheets

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
001	BA-01A	Homogeneous	Tan Floor Tile	Asbestos Not Present	Cellulose	<1	Vinyl CaCO3
002	BA-02A	Homogeneous	Yellow Mastic	Asbestos Not Present	Cellulose	<1	Glue
003	BA-03A	Homogeneous	Tan Floor Tile	Asbestos Not Present	Cellulose	<1	Vinyl CaCO3
004	BA-04A	Layered	Yellow Mastic	Asbestos Not Present	Cellulose	<1	Glue
004a		Layered	Gray Floor Tile	Asbestos Present Chrysotile 8	Cellulose	<1	Vinyl CaCO3
005	BA-05A	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose	<1	Binder
006	BA-06A	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose	<1	Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
007	BA-07A	Homogeneous	Tan Panel	Asbestos Not Present	Cellulose	20	Gypsum
008	BA-07B	Homogeneous	Tan Panel	Asbestos Not Present	Cellulose	20	Gypsum
009	BA-07C	Homogeneous	Tan Panel	Asbestos Not Present	Cellulose	15	Gypsum
010	BA-07D	Homogeneous	Tan Panel	Asbestos Not Present	Cellulose	15	Gypsum
011	BA-07E	Homogeneous	Tan Panel	Asbestos Not Present	Cellulose	20	Gypsum
012	BA-08A	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	20	Gypsum
013	BA-08B	Layered	White Texture	Asbestos Not Present	Cellulose	<1	CaCO3 Paint

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
013a		Layered	White Sheetrock	Asbestos Not Present	Cellulose	15	Gypsum
014	BA-08C	Layered	White Texture	Asbestos Not Present	Cellulose	<1	CaCO3 Paint
014a		Layered	White Sheetrock	Asbestos Not Present	Cellulose	15	Gypsum
015	BA-09A	Homogeneous	Gray/Black Window Glazing	Asbestos Not Present	Cellulose	<1	CaCO3 Binder
016	BA-10A	Homogeneous	Gray/Black Window Glazing	Asbestos Not Present	Cellulose	15	CaCO3 Binder
017	BA-11A	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	15	Gypsum
018	BA-11B	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	20	Gypsum

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
019	BA-11C	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	20	Gypsum
020	BA-12A	Layered	White Joint Compound	Asbestos Not Present	Cellulose	2	CaCO3
020a		Layered	Cream Tape	Asbestos Not Present	Cellulose	65	Binder
021	BA-12B	Layered	White Joint Compound	Asbestos Not Present	Cellulose	<1	CaCO3
021a		Layered	Cream Tape	Asbestos Not Present	Cellulose	60	Binder
022	BA-12C	Layered	White Joint Compound	Asbestos Not Present	Cellulose	2	CaCO3
022a		Layered	Cream Tape	Asbestos Not Present	Cellulose	65	Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
023	BA-13A	Homogeneous	White Window Glazing	Asbestos Not Present	Cellulose	<1	Binder
024	BA-14A	Homogeneous	Gray Insulation	Asbestos Not Present	Cellulose	<1	CaCO3 Vermiculite
025	BA-15A	Homogeneous	Cream Insulation	Asbestos Not Present	Cellulose	65	Binder
026	BA-16A	Homogeneous	Silver/Black Gasket	Asbestos Not Present	Cellulose	8	Binder
027	BA-17A	Layered	Black/Beige Pipe Wrap	Asbestos Present Chrysotile 45	Cellulose	10	Binder
027a		Layered	Brown Pipe Wrap	Asbestos Not Present	Cellulose	25	Binder
028	BA-17B	Layered	Black/Beige Pipe Wrap	Asbestos Present Chrysotile 45	Cellulose	8	Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
028a		Layered	Brown Pipe Wrap	Asbestos Not Present	Cellulose	15	Binder
029	BA-17C	Layered	Black/Beige Pipe Wrap	Asbestos Present Chrysotile 45	Cellulose	5	Binder
029a		Layered	Brown Pipe Wrap	Asbestos Not Present	Cellulose	60	Binder
030	BA-17D	Layered	Black/Beige Pipe Wrap	Asbestos Present Chrysotile 40	Cellulose	10	Binder
030a		Layered	Brown Pipe Wrap	Asbestos Not Present	Cellulose	60	Binder
031	BA-17E	Layered	Brown/White Pipe Wrap	Asbestos Present Chrysotile 45	Cellulose	10	Binder
031a		Layered	White Pipe Wrap	Asbestos Not Present	Cellulose	60	Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)		Non-Asbestos Fiber (%)		Non Fibrous
032	BA-18A	Layered	Cream Pipe Wrap	Asbestos Present Chrysotile	5	Cellulose	65	Binder
032a		Layered	Light Gray Pipe Fitting	Asbestos Present Chrysotile	65	NA		Binder
033	BA-18B	Layered	Beige Pipe Wrap	Asbestos Present Chrysotile	35	Cellulose	25	Binder
033a		Layered	Light Gray Pipe Fitting	Asbestos Present Chrysotile	60	NA		Binder
034	BA-18C	Homogeneous	Light Gray Pipe Fitting	Asbestos Present Chrysotile	70	Cellulose	2	Binder
035	BA-18D	Homogeneous	Light Gray Pipe Fitting	Asbestos Present Chrysotile	65	Cellulose	2	Binder
036	BA-18E	Homogeneous	Brown/White Pipe Fitting	Asbestos Present Chrysotile	70	Cellulose	2	Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
037	BA-19A	Layered	White Roofing	Asbestos Not Present	Synthetic	75	Binder
037a		Layered	Black Tar	Asbestos Not Present	Cellulose	<1	Tar
038	BA-20A	Homogeneous	Gray Transite	Asbestos Present Chrysotile 20	NA		Binder

Stacey Holder, Analyst

3/1/2012
Date of Report

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM LABORATORIES
www.QuanTEM.com

ASBESTOS CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 204756
(Accept) Reject

Report Results (☒ one box)
☒ QuanTEM Website
☐ Other ______

Contact Information			
Company:	GMR	Phone:	918/645-9910
Contact:	Mike Majors	Cell Phone:	
Account #:		E-mail:	mmajors@garinc.ne

Project Information	
Project Name:	Bristow Armory
Project Location:	700 W 5th, Bristow, OK
Project ID:	

Sampled By: Name: Majors / Burch Date: 2/22-12

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Howard Burch	2-23-12 1500		[signature] 2/23/12 1500	

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

PLM
- ☒ Bulk Analysis (EPA 600/R-93/116)
- ☐ 400 Point Count
- ☐ 1000 Point Count
- ☐ Gravimetric Preparation
- ☐ Particle ID

PLM
- ☐ Vermiculite Attic Insulation (EPA 600/R-04/004)
- ☐ Other

PCM
- ☐ NIOSH 7400

TEM
- ☐ Air- AHERA
- ☐ Air- NIOSH 7402
- ☐ Air- ISO 10312
- ☐ Drinking Water- EPA 100.2
- ☐ Waste Water- EPA 600/4-83-043

TEM
- ☐ Bulk- Presence / Absence EPA600/R-93/116
- ☐ Bulk- Quantitative [weight%]- Chatfield
- ☐ Dust- Presence / Absence
- ☐ Dust- Quantitative [fibers/sq.cm]- ASTM D5755
- ☐ Other

TURNAROUND TIME
- ☐ Rush
- ☐ Same Day
- ☐ 24 - Hour
- ☐ 3 - Day
- ☒ 5 - Day

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	BA-01A	☑	Tan	Floor Tile - Top Layer	715 (ft²)	
2	BA-02A	☑	Yellow	Mastic		
3	BA-03A	☑	Tan	Floor Tile - Base Layer	715	
4	BA-04A	☑	Yellow	Mastic		
5	BA-05A	☑	White	Ceiling Tile	240	
6	BA-06A	☑	White	" "	1665	
7	BA-07A	☑	Tan	Wall board - Panel	3100	
8	BA-07B	☑	"	"		
9	BA-07C	☑	"	"		
10	BA-07D	☑	"	"		

QUANTEM LABORATORIES
www.QuanTEM.com

ASBESTOS CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only	
Lab No. 204756	
Accept	Reject

Project Information

Company: GMR | Project Name: Bristow Armory | Project Location: 700 W 5th, Bristow, OK

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
11	BA-07E	✓	Tan	Wall Board - Top		
12	BA-08A	✓	White	Dry Wall	560ft²	
13	BA-08B	✓	"	" "		
14	BA-08C	✓	"	" "		
15	BA-09A	✓	Grey/Black	Window Glazing - Upper		Layered
16	BA-10A	✓	"	" "		"
17	BA-11A	✓	White	Dry Wall	500ft²	
18	BA-11B	✓	"	" "		
19	BA-11C	✓	"	" "		
20	BA-12A	✓	"	Tape / Joint Compound		Layered
21	BA-12B	✓	"	" "		
22	BA-12C	✓	"	" "		
23	BA-13A	✓	"	Lower Window Glazing		
24	BA-14A	✓	Grey	Vault Door Insulation		
25	BA-15A	✓	White	Folding Panel Doors		
26	BA-16A	✓	Blk	Gasket		
27	BA-17A	✓	Brn/White	Water pipe Insul. wrap	350 LF	Layered
28	BA-17B	✓	"	" " " "		"
29	BA-17C	✓	"	" " " "		"
30	BA 17D	✓	"	" " " "		"

SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

QUANTEM LABORATORIES
www.QuanTEM.com

ASBESTOS CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only	
Lab No. 201756	
Accept	Reject

Project Information

Company: GMK | Project Name: Bristow Armory | Project Location: 700 W 5th, Bristow, OK

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
31	BA - 17E	☑	Brn/White	Water Pipe Ins. Wrap		Layered
32	BA - 14A	☑	"	Water Pipe Ins. Fittings	30 Fittings	Layered
33	BA - 18B	☑	"	" " " "		"
34	BA - 18C	☑	"	" " " "		"
35	BA - 18D	☑	"	" " " "		"
36	BA - 18E	☑	"	" " " "		"
37	BA - 19A	☑	White	Roofing Fabric	1350 ft²	Layered
38	BA - 20A	☑	Grey	Transite Soffit - N Wall	240 ft²	
39		☐				
40		☐				
41		☐				
42		☐				
43		☐				
44		☐				
45		☐				
46		☐				
47		☐				
48		☐				
49		☐				
50		☐				

SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

Appendix B

Certifications

FEE. $25 00

Oklahoma Department of Labor

Howard Burch

has filed in the office of the Commissioner of Labor of the State of Oklahoma
an application for a Limited Asbestos Contractor's license for

AHERA INSPECTOR

Now, therefore, The Commissioner of Labor of the State of Oklahoma, by virtue of
the power vested in him by law hereby issues to the
applicant license **No. OK159522.**

Mark Costello

MARK COSTELLO
Commissioner of Labor

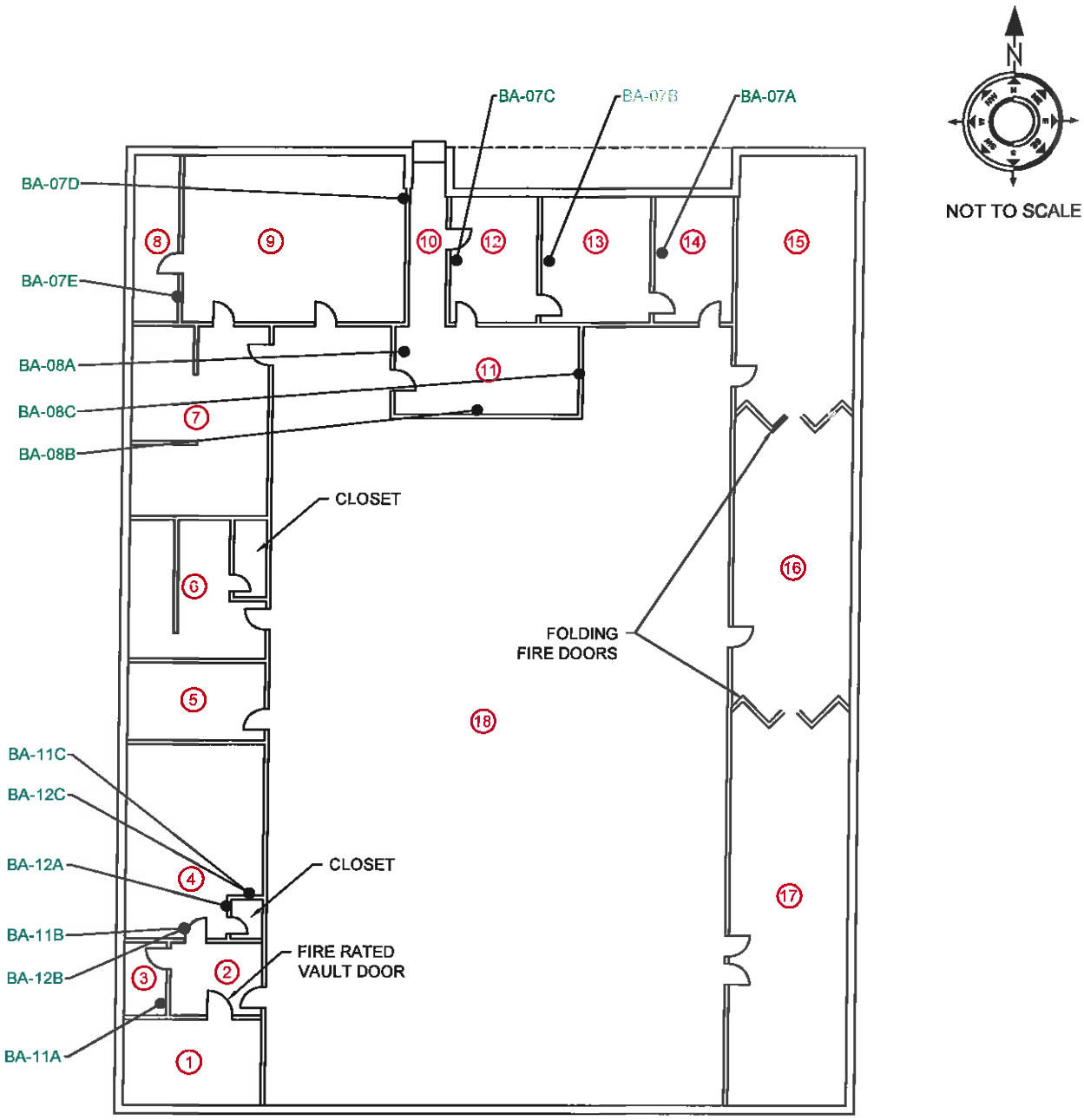
June 01, 2011

Date of Issuance

EXPIRES: June 01, 2012

Appendix C

Site Layout with Sample and Asbestos Locations



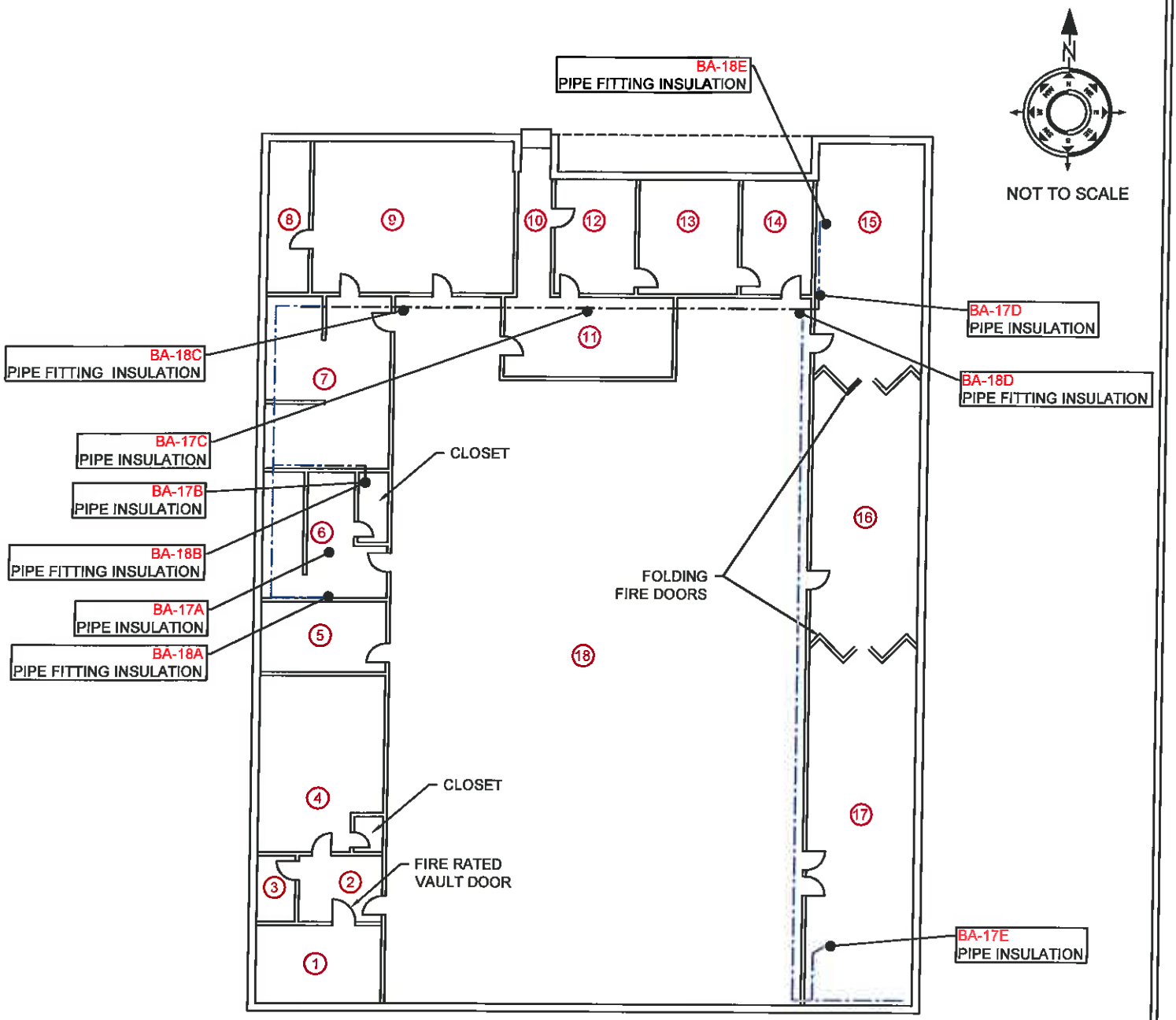
(#) DENOTES ROOM NUMBERS DEVELOPED FOR SURVEY

OK-### SAMPLES CONTAINING ASBESTOS

OK-### SAMPLES NOT CONTAINING ASBESTOS

GMR
& Associates, Inc.
2520 West I-44 Service Road, Ste. 200
P.O Box: 57827
Oklahoma City, OK 73157-7827
Phone: 405/528-7017, Fax: 405/528-3346

Figure 1
Asbestos Surface Sampling Locations
Bristow Armory
700 W. 5th Avenue
Bristow, Oklahoma 74010



DOMESTIC WATER PIPE (INSULATED)

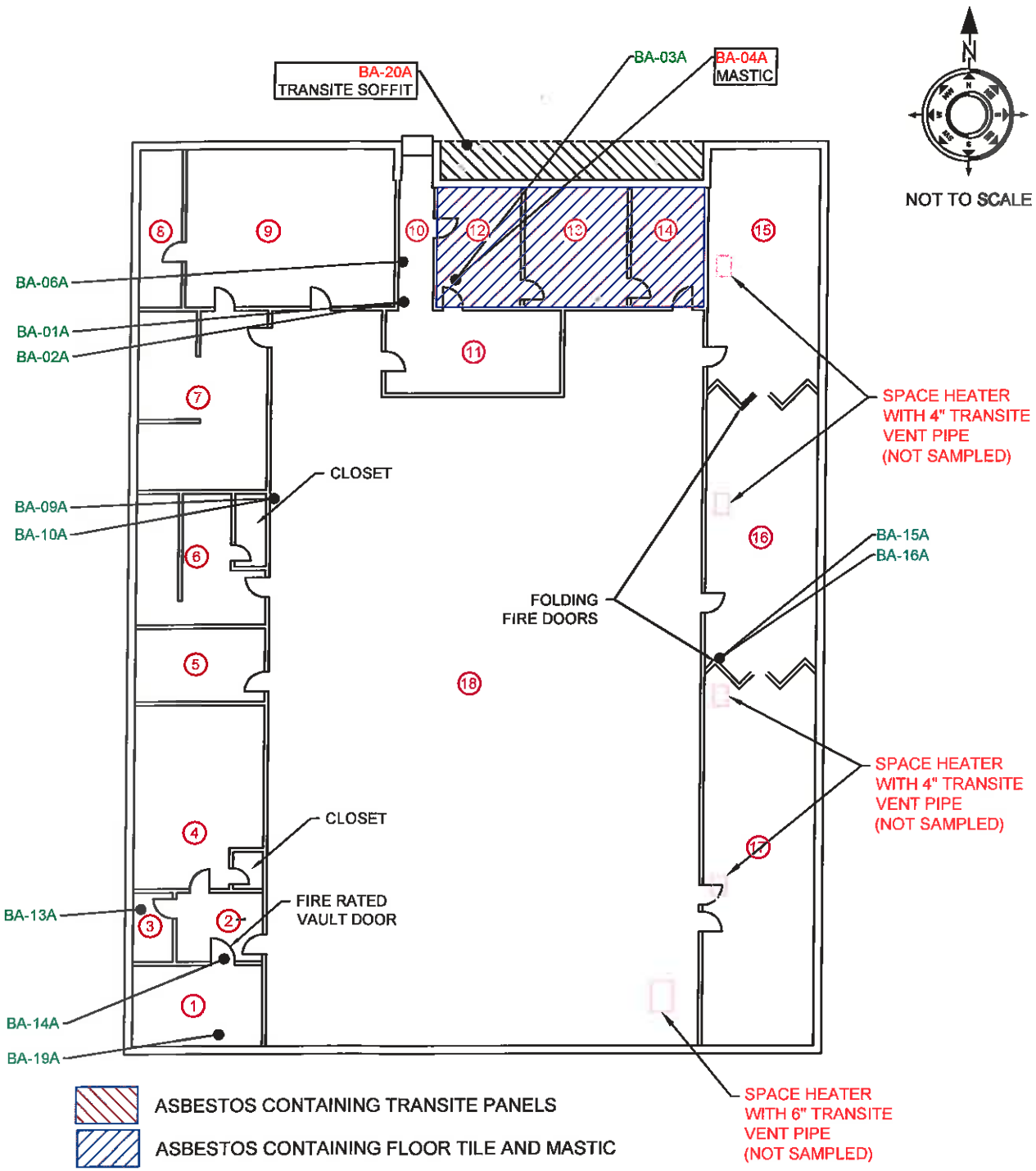
(#) DENOTES ROOM NUMBERS DEVELOPED FOR SURVEY

OK-### SAMPLES CONTAINING ASBESTOS

OK-### SAMPLES NOT CONTAINING ASBESTOS

GMR
& Associates, Inc.
2520 West I-44 Service Road, Ste. 200
P.O Box 57827
Oklahoma City, OK 73157-7827
Phone: 405/528-7017, Fax: 405.528-3346

Figure 2
Asbestos Thermal Sampling Locations
Bristow Armory
700 W. 5th Avenue
Bristow, Oklahoma 74010



GMR
& Associates, Inc.
2520 West I-44 Service Road, Ste. 200
P.O Box 57827
Oklahoma City, OK 73157-7827
Phone: 405/528-7017, Fax: 405/528-3346

Figure 3
Asbestos Miscellaneous Sampling Locations
Bristow Armory
700 W. 5th Avenue
Bristow, Oklahoma 74010

Appendix D

Photo Record

Friable Asbestos Containing Thermal Pipe Insulation
(Sample # BA-17C)

Friable Asbestos Containing Thermal Pipe Fitting
(Sample # BA-18C)

Non-Friable Gray Floor Tile (Sub-Layer) in Room 12
(Sample # BA-04A)

Non-Friable Transite Heater Vent Pipe
(Not Sampled)

LEAD-BASED PAINT INSPECTION REPORT

NATIONAL GUARD ARMORY
700 WEST 5TH AVENUE
BRISTOW, OKLAHOMA 74010

GMR Project Number 2012017
March 16, 2012

Oklahoma Department of Environmental Quality
Land Protection Division
P. O. Box 1677
Oklahoma City, OK 73101-1677
Attention: Mr. Dustin Davidson

GMR & Associates, Inc.
ENGINEERS, PLANNERS, ENVIRONMENTAL SPECIALISTS, HYDROGEOLOGISTS
2520 West I-44 Service Road, Suite 200
P.O. Box 57827
Oklahoma City, OK 73157-7827
Telephone: 405-528-7017
Fax: 405-528-3346

Prepared by:

Jason Lee
Basin Environmental and Safety Technologies
LBP Risk Assessor, OKRASR13451

Reviewed by:

Arless Murray, Jr.
President

EXECUTIVE SUMMARY

Basin Environmental and Safety Technologies (Basin) performed a lead-based paint inspection of the interior and exterior painted surfaces at the Former National Guard Armory building on February 22, 2012. The property is located at 700 W. 5th Ave., Bristow, OK 74010-2907 and is owned by the City of Bristow Oklahoma, 110 W. 7th Ave., Bristow, OK 74010 (918-367-6244). The inspection identified the presence, quantity, locations, and characteristics of lead on all interior and exterior painted surfaces and building components. Surfaces were tested according to the specifications described in the protocols for lead-based paint testing in the Department of Housing and Urban Development's (HUD) Guidelines, Chapter 7 (1997 revision) and any applicable Federal, State, and Local regulations.

The objective of the inspection was to identify surfaces with lead in concentrations above the Environmental Protection Agency's (EPA) threshold of 1.0 mg/cm^2 by X-Ray Fluorescence (XRF) analysis. A total of nineteen (19) room equivalents, including the building exterior were inspected.

Surfaces found to contain lead-based paint by XRF analysis are listed in the table below. All testing combinations not specifically tested, but identical to those represented below should be considered positive for lead-based paint unless otherwise noted. A listing of all tests can be found in **Appendix A**.

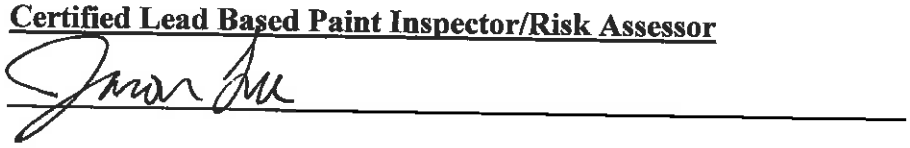
Reading Number	Room	Side	Component	Feature	Color	Condition	Substrate	Lead (mg/cm^2)
368	18	D	Window	Header	Gray	Fair	Metal	1.6
426	6	B		Pipe	Gray	Fair	Metal	1.5
537	Exterior	A	Porch	Ceiling	White	Poor	Metal	1.7

TABLE OF CONTENTS

I. CERTIFICATION

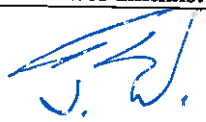
I certify that this inspection, conducted at the Former National Guard Armory located at 700 W. 5th Ave., Bristow, OK 74010-2907, complies with accepted standards, practices, and regulations promulgated by the U.S. Department of Housing and Urban Development, the Environmental Protection Agency, and the Oklahoma Department of Environmental Quality. The results accurately reflect the condition of the property at the time the inspection was performed.

Certified Lead Based Paint Inspector/Risk Assessor



Jason Lee
Certified Lead-Based Paint Inspector/Risk Assessor
Registration No: OKRASR13451 State: OK

Certified Lead Based Paint Firm No. OKFIRM13434
Basin Environmental and Safety Technologies
3120 S. Meridian Ave.
Oklahoma City, OK 73119
405-232-5737

Revision Number:	Review Date:	Reviewed By:	Reviewer Initials:
1.2	March 13, 2012	Todd Wolfard	

II. INTRODUCTION

Basin Environmental and Safety Technologies (Basin) performed a lead-based paint inspection of the interior and exterior painted surfaces at the Former National Guard Armory building on February 22, 2012. The property is located at 700 W. 5th Ave., Bristow, OK 74010-2907 and is owned by the City of Bristow Oklahoma, 110 W. 7th Ave., Bristow, OK 74010 (918-367-6244). The inspection identified the presence, quantity, locations, and characteristics of lead on all interior and exterior painted surfaces and building components. Surfaces were tested according to the specifications described in the protocols for lead-based paint testing in the Department of Housing and Urban Development's (HUD) Guidelines, Chapter 7 (1997 revision) and any applicable Federal, State, and Local regulations.

The objective of the inspection was to identify surfaces with lead in concentrations above the Environmental Protection Agency's (EPA) threshold of 1.0 mg/cm^2 by X-Ray Fluorescence (XRF) analysis. A total of nineteen (19) room equivalents, including the building exterior were inspected.

III. INSPECTION FINDINGS

Surfaces found to contain lead-based paint by XRF analysis are listed in **Tables 1 and 2** below. All testing combinations not specifically tested, but identical to those represented below should be considered positive for lead-based paint unless otherwise noted. A listing of all tests can be found in **Appendix A.**

Table 1: Window Components with Lead-Based Paint

Reading Number	Room	Side	Component	Feature	Color	Condition	Substrate	Lead (mg/cm^2)	Window Size & Quantity
368	18	D	Window	Header	Gray	Fair	Metal	1.6	36" x 36" (26)

Table 2: Miscellaneous Surfaces with Lead-Based Paint

Reading Number	Room	Side	Component	Feature	Color	Condition	Substrate	Lead (mg/cm^2)
426	6	B		Pipe	Gray	Fair	Metal	1.5
537	Exterior	A	Porch	Ceiling	White	Poor	Metal	1.7

Table 3: Lead-Containing Tile Locations

Reading Number	Room	Side	Component	Color	Condition	Substrate	Lead (mg/cm^2)
394	3	D	Window Sill	Beige	Intact	Tile	1.4
404	4	D	Window Sill	Beige	Intact	Tile	1.6
414	2	D	Window Sill	Beige	Intact	Tile	1.8
430	6	D	Window Sill	Beige	Intact	Tile	2.0

Table 3: Lead-Containing Tile Locations (continued)

Reading Number	Room	Side	Component	Color	Condition	Substrate	Lead (mg/cm2)
431	6	A	Wall	Beige	Intact	Tile	2.4
439	7	D	Window Sill	Beige	Intact	Tile	2.9
440	7	D	Wall	Beige	Intact	Tile	1.8
528	17	B	Window Sill	Beige	Intact	Tile	2.1

Note: Tile glazing containing lead is not classified as lead-based paint per 40 CFR 745.103

Photographs of lead-based paint locations can be found in **Appendix B**. Diagrams identifying room equivalents and lead-based paint locations can be found in **Appendix C**.

IV. SCOPE OF PROJECT

1. Background

The property, located at 700 W. 5th Ave., Bristow, OK 74010-2907, was constructed 1954. The property consists of a brick building with approximately 11,216 square feet of floor space. The building is composed of one single level structure containing nineteen (19) room equivalents. Exterior walls on the main building (and/or annex building) for the purposes of this report are considered a room equivalent.

2. Training

All inspectors utilized by Basin are EPA/Oklahoma Department of Environmental Quality (ODEQ) licensed Lead-Based Paint Inspector/Risk Assessors. Furthermore, all Inspector/Risk Assessors are aware of the hazards associated with and the safe handling of radioactive materials. See **Appendix D** for copies of appropriate training documentation.

3. Equipment

A Niton Model XLp703AW (Serial #10713) XRF Analyzer was used for the inspection. The instrument contained Cadmium-109 as its radioactive source. The source was installed on April 14, 2011. During the inspection, the XRF was used in K+L testing mode for all surfaces. The Performance Characteristics Sheet for the instrument can be found in **Appendix E**. The manufacturer calibration record for the instrument can be founding **Appendix F**.

4. Methodology

The inspection procedure used at this location complies with the EPA Performance Characteristic Sheet (PCS) for the specific XRF instrument used during the inspection; this includes adhering to the manufacturer's modifications and recommendations. The specific instrument used was manufactured by NITON Corporation, 900 Middlesex

Turnpike, Building 8, Billerica, Massachusetts 01821. The lead-based paint inspection and testing protocols followed are found in the *HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (June 1995), Chapter 7 (1997 Revision)* and all State and Local regulations were followed. The standard threshold for lead-based paint as per HUD/EPA and the ODEQ of 1.0 mg/cm^2 was utilized for classification of positive (above the threshold) and negative (below the threshold). When evaluating this report, it is assumed that (according to Chapter 7 of the HUD Guidelines) if one testing combination is positive for lead-based paint, then all other similar testing combinations are positive. The same assumption applies to negative readings. Any inconclusive readings are immediately followed by an additional reading of the same testing combination and test location.

Surfaces were classified by a testing combination consisting of the room equivalent, building component type, and substrate. The sides of room equivalents were labeled A, B, C, and D. Side A is the address (street facing) side of the building. Sides B, C, and D are identified clockwise of Side A while facing the address side of the building. Paint conditions were recorded as either "intact", "fair", or "poor." Paint in poor condition was defined as deterioration of more than two square feet on large components such as walls or 10% on smaller components such as baseboards. Paint in "fair" condition was defined as deterioration of less than or equal to two square feet on large components or 10% on smaller components. Paint in "intact" condition was defined as surfaces with no deteriorated paint. Interior painted surfaces that were tested included but were not limited to walls, doors, windows, trim, vents, stairwells, ceilings, cabinets, and bookcases.

Calibration of the XRF instrument was checked using a lead paint standard known to contain 1.0 mg/cm^2 of lead. The instrument was checked three times before the inspection begins and three times when the inspection is completed. Additionally, on days that the inspection lasted more than four hours, the instrument calibration was checked every four hours during the inspection. The instrument maintained a consistent calibration reading within the manufacturer's range of 0.8 – 1.2 mg/cm^2 for this inspection.

V. RECOMMENDATIONS

Options for controlling potential lead-based paint hazards include, but are not limited to:

- Removal and replacement of building components
- Removal of lead-based paint
- Encapsulation of lead-based paint
- Enclosure of lead-based paint

Based on conditions present at this property at the time of the inspection, Basin recommends the following interim control and abatement options:

- Repainting and maintenance of paint condition of drill floor window headers
- Remove and replace piping with lead-based paint in room 6
- Removal of deteriorated lead-based paint on exterior porch ceiling

Basin estimates the cost for the above mentioned lead-based paint abatement option to be between $6,000 and $9,000.

VI. LIMITATIONS

Environmental conditions are subject to change and conditions reported herein apply only to the date and time of the testing. Therefore, changes in environmental conditions including, but not limited to the condition of painted components may change following this inspection are not predicted by this report. Those areas that are not accessible at the time of the inspection should be considered positive for the presence of lead-based paint and lead hazards.

This document is the rendering of a professional service, the essence of which is to render advice, judgment, opinion, or professional skill. No attempt was made to document the condition of each and every structural or nonstructural element. In the event that additional information becomes available that could affect the conclusions reached in this investigation, Basin reserves the right to review and change if required, some or all of the opinions presented herein.

APPENDIX A

Rd #	Time	Duration	Units	Site	Room	Side	Component	Feature	Color	Condition	Substrate	Results	Depth Index	Action Level	Lead (mg/cm2)	Lead Error
360	2/22/2012 11:52	78.52	cps												4.53	0
361	2/22/2012 11:53	31.04	mg / cm ^2				Calibrate					Positive	1.04	1	1	0.1
362	2/22/2012 11:54	21.09	mg / cm ^2				Calibrate					Positive	1.05	1	1	0.1
363	2/22/2012 11:54	20.69	mg / cm ^2				Calibrate					Negative	1.02	1	0.9	0.1
364	2/22/2012 11:59	7.23	mg / cm ^2	Bristow Armory	18		Ceiling		Gray	Intact	Wood	Negative	1.26	1	0.3	0.17
365	2/22/2012 11:59	5	mg / cm ^2	Bristow Armory	18		Ceiling	Beam	Gray	Intact	Metal	Negative	1.14	1	0.6	0.1
366	2/22/2012 12:00	3.06	mg / cm ^2	Bristow Armory	18		Ceiling	Crossmbr	Gray	Intact	Metal	Negative	3.09	1	< LOD	0.16
367	2/22/2012 12:02	3.82	mg / cm ^2	Bristow Armory	18	D	Window	Sash	Gray	Fair	Metal	Negative	1.16	1	0.8	0.1
368	2/22/2012 12:03	2.29	mg / cm ^2	Bristow Armory	18	D	Window	Header	Gray	Fair	Metal	Positive	1.37	1	1.6	0.4
369	2/22/2012 12:04	1.91	mg / cm ^2	Bristow Armory	18	D	Wall	Upper Trim	Gray	Fair	Wood	Negative	1.41	1	< LOD	0.64
370	2/22/2012 12:09	1.53	mg / cm ^2	Bristow Armory	18	C	Door	Frame	White	Fair	Metal	Negative	1	1	< LOD	0.03
371	2/22/2012 12:09	1.52	mg / cm ^2	Bristow Armory	18	C	Door		White	Fair	Metal	Negative	1	1	< LOD	0.03
372	2/22/2012 12:09	1.16	mg / cm ^2	Bristow Armory	18	C		Board	Gray	Fair	Wood	Negative	1	1	< LOD	0.67
373	2/22/2012 12:10	7.64	mg / cm ^2	Bristow Armory	18	B	Garage Door	Frame	Red	Fair	Wood	Negative	1.16	1	< LOD	0.24
374	2/22/2012 12:11	4.58	mg / cm ^2	Bristow Armory	18	B	Garage Door		Red	Fair	Wood	Negative	1.24	1	0.6	0.3
375	2/22/2012 12:12	1.15	mg / cm ^2	Bristow Armory	18	A	Wall		Blue	Fair	Drywall	Negative	1	1	< LOD	0.03
376	2/22/2012 12:12	1.53	mg / cm ^2	Bristow Armory	18	A	Bulletin Brd		White	Fair	Wood	Negative	1	1	< LOD	0.03
377	2/22/2012 12:13	1.91	mg / cm ^2	Bristow Armory	18	A	Wall	Electrical Panel	Red	Intact	Metal	Negative	1	1	< LOD	0.04
378	2/22/2012 12:16	2.67	mg / cm ^2	Bristow Armory	1	A	Wall		Brown	Intact	Brick	Negative	2.04	1	< LOD	0.11
379	2/22/2012 12:17	1.93	mg / cm ^2	Bristow Armory	1	B	Wall		Brown	Intact	Brick	Negative	2.6	1	< LOD	0.11
380	2/22/2012 12:17	1.91	mg / cm ^2	Bristow Armory	1	C	Wall		Brown	Intact	Brick	Negative	1	1	< LOD	0.05
381	2/22/2012 12:17	3.06	mg / cm ^2	Bristow Armory	1	D	Wall		Brown	Intact	Brick	Negative	1	1	< LOD	0.03
382	2/22/2012 12:19	1.53	mg / cm ^2	Bristow Armory	1	A	Door		Beige	Intact	Metal	Negative	1.81	1	< LOD	0.15
383	2/22/2012 12:19	4.58	mg / cm ^2	Bristow Armory	1	A	Door	Frame	Beige	Intact	Metal	Negative	1	1	0.03	0.02
384	2/22/2012 12:23	1.53	mg / cm ^2	Bristow Armory	1		Ceiling		Beige	Intact	Concrete	Negative	1	1	< LOD	0.03
385	2/22/2012 12:24	1.92	mg / cm ^2	Bristow Armory	2		Ceiling		Gray	Intact	Wood	Negative	1.21	1	< LOD	0.66
386	2/22/2012 12:24	1.53	mg / cm ^2	Bristow Armory	2		Ceiling	Beam	Gray	Intact	Wood	Negative	2.82	1	< LOD	0.8
387	2/22/2012 12:25	1.53	mg / cm ^2	Bristow Armory	2	A	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
388	2/22/2012 12:25	6.87	mg / cm ^2	Bristow Armory	2	B	Wall		White	Intact	Brick	Negative	3.46	1	< LOD	0.03
389	2/22/2012 12:26	1.52	mg / cm ^2	Bristow Armory	2	D	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
390	2/22/2012 12:27	1.9	mg / cm ^2	Bristow Armory	2	B	Door		Red	Intact	Wood	Negative	1.03	1	< LOD	0.1
391	2/22/2012 12:28	1.91	mg / cm ^2	Bristow Armory	2	B	Door	Frame	Red	Intact	Wood	Negative	4.43	1	< LOD	0.45
392	2/22/2012 12:29	1.91	mg / cm ^2	Bristow Armory	3	D	Window	Sash	Gray	Poor	Metal	Negative	1	1	0.6	0.2
393	2/22/2012 12:29	1.91	mg / cm ^2	Bristow Armory	3	D	Window	Header	Gray	Fair	Metal	Negative	1.06	1	0.4	0.2
394	2/22/2012 12:30	2.66	mg / cm ^2	Bristow Armory	3	D	Window	Sill	Beige	Intact	Tile	Positive	1.64	1	1.4	0.4
395	2/22/2012 12:31	3.07	mg / cm ^2	Bristow Armory	3	A	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
396	2/22/2012 12:31	4.59	mg / cm ^2	Bristow Armory	3		Ceiling		White	Intact	Wood	Negative	1.04	1	< LOD	0.32
397	2/22/2012 12:32	1.91	mg / cm ^2	Bristow Armory	3		Ceiling	Beam	White	Intact	Wood	Negative	2	1	< LOD	0.77
398	2/22/2012 12:32	1.91	mg / cm ^2	Bristow Armory	3		Ceiling	Upper Trim	White	Intact	Wood	Negative	2.31	1	< LOD	0.78
399	2/22/2012 12:33	1.53	mg / cm ^2	Bristow Armory	4		Ceiling	Upper Trim	White	Intact	Wood	Negative	1	1	< LOD	0.81
400	2/22/2012 12:33	2.31	mg / cm ^2	Bristow Armory	4		Ceiling		White	Intact	Wood	Negative	1.21	1	< LOD	0.75
401	2/22/2012 12:34	2.68	mg / cm ^2	Bristow Armory	4		Ceiling	Beam	White	Intact	Wood	Negative	2.09	1	< LOD	0.6
402	2/22/2012 12:35	4.58	mg / cm ^2	Bristow Armory	4	D	Window	Sash	Gray	Poor	Metal	Negative	1.15	1	< LOD	0.03
403	2/22/2012 12:35	1.93	mg / cm ^2	Bristow Armory	4	D	Window	Header	Gray	Poor	Metal	Negative	2.93	1	< LOD	0.22
404	2/22/2012 12:36	2.29	mg / cm ^2	Bristow Armory	4	D	Window	Sill	Beige	Intact	Tile	Positive	1.82	1	1.6	0.5
405	2/22/2012 12:37	1.53	mg / cm ^2	Bristow Armory	4	C	Door	Frame	Black	Intact	Metal	Negative	1	1	< LOD	0.03
406	2/22/2012 12:38	1.91	mg / cm ^2	Bristow Armory	4	C	Door		Black	Intact	Metal	Negative	1	1	< LOD	0.03
407	2/22/2012 12:40	1.14	mg / cm ^2	Bristow Armory	5	D	Door		White	Fair	Metal	Negative	1	1	< LOD	0.03
408	2/22/2012 12:40	1.53	mg / cm ^2	Bristow Armory	5	D	Door	Frame	White	Fair	Metal	Negative	1	1	< LOD	0.03

Rd #	Time	Duration	Units	Site	Room	Side	Component	Feature	Color	Condition	Substrate	Results	Depth Index	Action Level	Lead (mg/cm2)	Lead Error
409	2/22/2012 12:41	1.53	mg / cm ^2	Bristow Armory	5	B	Door	Frame	White	Fair	Wood	Negative	2.34	1	< LOD	0.21
410	2/22/2012 12:41	1.14	mg / cm ^2	Bristow Armory	5	B	Door		White	Fair	Wood	Negative	2.31	1	< LOD	0.72
411	2/22/2012 12:41	1.53	mg / cm ^2	Bristow Armory	5	B	Window	Frame	White	Fair	Wood	Negative	3.01	1	< LOD	0.45
412	2/22/2012 12:41	1.52	mg / cm ^2	Bristow Armory	5	D	Window	Frame	Red	Fair	Metal	Negative	2.25	1	< LOD	0.2
413	2/22/2012 12:42	1.15	mg / cm ^2	Bristow Armory	5	D	Window	Sash	White	Poor	Metal	Negative	1	1	< LOD	0.08
414	2/22/2012 12:43	1.91	mg / cm ^2	Bristow Armory	2	D	Window	Sill	Beige	Intact	Tile	Positive	1.71	1	1.8	0.6
415	2/22/2012 12:43	1.53	mg / cm ^2	Bristow Armory	5	C	Wall		White	Fair	Brick	Negative	1	1	< LOD	0.03
416	2/22/2012 12:44	2.29	mg / cm ^2	Bristow Armory	5	D	Wall		White	Fair	Brick	Negative	1	1	< LOD	0.03
417	2/22/2012 12:44	1.16	mg / cm ^2	Bristow Armory	5	A	Cabinet	Door	White	Fair	Wood	Negative	7.79	1	< LOD	0.7
418	2/22/2012 12:45	6.87	mg / cm ^2	Bristow Armory	5	A	Cabinet	Shelf	White	Fair	Wood	Negative	2.96	1	0.11	0.05
419	2/22/2012 12:46	4.99	mg / cm ^2	Bristow Armory	5		Ceiling		White	Fair	Wood	Negative	3.05	1	< LOD	0.32
420	2/22/2012 12:46	2.29	mg / cm ^2	Bristow Armory	5		Ceiling	Beam	White	Fair	Wood	Negative	2	1	< LOD	0.75
421	2/22/2012 12:46	1.91	mg / cm ^2	Bristow Armory	5		Ceiling	Upper Trim	White	Fair	Wood	Negative	1.94	1	< LOD	0.75
422	2/22/2012 12:47	1.16	mg / cm ^2	Bristow Armory	5		Ceiling	Duct	White	Intact	Metal	Negative	4.08	1	< LOD	0.49
423	2/22/2012 12:49	4.19	mg / cm ^2	Bristow Armory	6		Ceiling	Beam	White	Intact	Wood	Negative	2.12	1	< LOD	0.31
424	2/22/2012 12:49	0.76	mg / cm ^2	Bristow Armory	6		Ceiling		White	Intact	Wood	Negative	2.55	1	< LOD	1.08
425	2/22/2012 12:50	1.53	mg / cm ^2	Bristow Armory	6		Ceiling	Conduit	White	Intact	Metal	Negative	10	1	< LOD	0.76
426	2/22/2012 12:50	3.45	mg / cm ^2	Bristow Armory	6	B		Pipe	Gray	Fair	Metal	Positive	1.36	1	1.5	0.3
427	2/22/2012 12:51	4.21	mg / cm ^2	Bristow Armory	6	A		Divider	Beige	Intact	Metal	Negative	1.01	1	0.7	0.1
428	2/22/2012 12:52	1.15	mg / cm ^2	Bristow Armory	6	D	Window	Sash	Beige	Poor	Metal	Negative	1.39	1	< LOD	0.22
429	2/22/2012 12:52	1.15	mg / cm ^2	Bristow Armory	6	D	Window	Header	Gray	Poor	Metal	Negative	7.76	1	< LOD	0.68
430	2/22/2012 12:52	1.53	mg / cm ^2	Bristow Armory	6	D	Window	Sill	Beige	Intact	Tile	Positive	1.66	1	2	0.6
431	2/22/2012 12:53	1.54	mg / cm ^2	Bristow Armory	6	A	Wall		Beige	Intact	Tile	Positive	1.79	1	2.4	0.8
432	2/22/2012 12:53	1.53	mg / cm ^2	Bristow Armory	6	C	Wall	Board	Gray	Intact	Wood	Negative	2.06	1	< LOD	0.22
433	2/22/2012 12:54	1.14	mg / cm ^2	Bristow Armory	6	B	Door		Gray	Fair	Wood	Negative	1.52	1	< LOD	0.84
434	2/22/2012 12:54	1.92	mg / cm ^2	Bristow Armory	6	B	Door	Frame	Beige	Fair	Wood	Negative	3.25	1	< LOD	0.24
435	2/22/2012 12:55	1.91	mg / cm ^2	Bristow Armory	7	B	Door	Frame	Beige	Fair	Wood	Negative	2.82	1	< LOD	0.22
436	2/22/2012 12:56	1.53	mg / cm ^2	Bristow Armory	7	B	Door		Beige	Fair	Wood	Negative	3.06	1	< LOD	0.87
437	2/22/2012 12:56	1.53	mg / cm ^2	Bristow Armory	7	D	Window	Header	White	Fair	Metal	Negative	2.73	1	< LOD	0.27
438	2/22/2012 12:56	6.87	mg / cm ^2	Bristow Armory	7	D	Window	Frame	White	Fair	Metal	Negative	2.29	1	0.09	0.04
439	2/22/2012 12:57	1.53	mg / cm ^2	Bristow Armory	7	D	Window	Sill	Beige	Intact	Tile	Positive	2.59	1	2.9	1.1
440	2/22/2012 12:57	1.92	mg / cm ^2	Bristow Armory	7	D	Wall		Beige	Intact	Tile	Positive	1.71	1	1.8	0.6
441	2/22/2012 12:58	1.91	mg / cm ^2	Bristow Armory	7	A	Wall	Divider	Beige	Intact	Metal	Negative	1.63	1	< LOD	0.08
442	2/22/2012 12:59	1.52	mg / cm ^2	Bristow Armory	7	A	Wall		White	Intact	Brick	Negative	1	1	< LOD	0.03
443	2/22/2012 12:59	1.53	mg / cm ^2	Bristow Armory	7	B	Wall		White	Intact	Brick	Negative	1	1	< LOD	0.03
444	2/22/2012 12:59	1.53	mg / cm ^2	Bristow Armory	7	C	Wall		White	Intact	Brick	Negative	1	1	< LOD	0.03
445	2/22/2012 12:59	1.9	mg / cm ^2	Bristow Armory	7	D	Wall		White	Intact	Brick	Negative	1	1	< LOD	0.03
446	2/22/2012 13:00	4.2	mg / cm ^2	Bristow Armory	7		Ceiling	Upper Trim	White	Intact	Wood	Negative	1.84	1	< LOD	0.33
447	2/22/2012 13:00	1.91	mg / cm ^2	Bristow Armory	7		Ceiling	Beam	White	Intact	Wood	Negative	1.23	1	< LOD	0.75
448	2/22/2012 13:01	1.53	mg / cm ^2	Bristow Armory	7		Ceiling		White	Intact	Wood	Negative	1.33	1	< LOD	0.9
449	2/22/2012 13:01	1.53	mg / cm ^2	Bristow Armory	7		Ceiling	Conduit	White	Intact	Metal	Negative	2.95	1	< LOD	0.16
450	2/22/2012 13:02	2.31	mg / cm ^2	Bristow Armory	7	A	Wall	Board	White	Intact	Wood	Negative	1.58	1	< LOD	0.72
451	2/22/2012 13:03	1.92	mg / cm ^2	Bristow Armory	8	D	Wall	Board	Beige	Intact	Wood	Negative	1	1	< LOD	0.74
452	2/22/2012 13:04	1.91	mg / cm ^2	Bristow Armory	8	B	Door	Frame	Beige	Intact	Wood	Negative	4.11	1	< LOD	0.75
453	2/22/2012 13:04	3.83	mg / cm ^2	Bristow Armory	8	B	Door		Beige	Intact	Wood	Negative	1	1	0.4	0.2
454	2/22/2012 13:06	1.53	mg / cm ^2	Bristow Armory	8	B	Ceiling		White	Intact	Wood	Negative	1.59	1	< LOD	0.92
455	2/22/2012 13:06	1.91	mg / cm ^2	Bristow Armory	8	B	Ceiling	Beam	White	Intact	Wood	Negative	1.82	1	< LOD	0.8
456	2/22/2012 13:06	1.91	mg / cm ^2	Bristow Armory	8	B	Ceiling	Upper Trim	White	Intact	Wood	Negative	2.2	1	< LOD	0.16
457	2/22/2012 13:08	1.9	mg / cm ^2	Bristow Armory	9		Ceiling	Upper Trim	White	Intact	Wood	Negative	1	1	< LOD	0.03

Rd #	Time	Duration	Units	Site	Room	Side	Component	Feature	Color	Condition	Substrate	Results	Depth Index	Action Level	Lead (mg/cm2)	Lead Error
458	2/22/2012 13:09	4.22	mg / cm ^2	Bristow Armory	9		Ceiling	Beam	White	Intact	Wood	Negative	2.5	1	0.4	0.2
459	2/22/2012 13:09	3.84	mg / cm ^2	Bristow Armory	9		Ceiling		White	Intact	Wood	Negative	1.2	1	< LOD	0.3
460	2/22/2012 13:11	1.15	mg / cm ^2	Bristow Armory	9	C	Door		Beige	Intact	Wood	Negative	1	1	< LOD	0.03
461	2/22/2012 13:12	2.29	mg / cm ^2	Bristow Armory	9	C	Door	Frame	Beige	Intact	Wood	Negative	1.38	1	< LOD	0.59
462	2/22/2012 13:13	1.53	mg / cm ^2	Bristow Armory	9	A	Window	Sash	White	Poor	Metal	Negative	1.72	1	< LOD	0.12
463	2/22/2012 13:14	1.53	mg / cm ^2	Bristow Armory	10	C	Door	Frame	Beige	Fair	Wood	Negative	2.1	1	< LOD	0.21
464	2/22/2012 13:15	2.68	mg / cm ^2	Bristow Armory	10	C	Door		Beige	Fair	Wood	Negative	3.08	1	< LOD	0.22
465	2/22/2012 13:16	2.29	mg / cm ^2	Bristow Armory	10		Ceiling		White	Intact	Wood	Negative	1.11	1	< LOD	0.73
466	2/22/2012 13:17	1.54	mg / cm ^2	Bristow Armory	10		Ceiling	Beam	White	Intact	Wood	Negative	3.87	1	< LOD	0.83
467	2/22/2012 13:19	1.53	mg / cm ^2	Bristow Armory	11	A	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
468	2/22/2012 13:19	1.91	mg / cm ^2	Bristow Armory	11	B	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
469	2/22/2012 13:19	0.76	mg / cm ^2	Bristow Armory	11	C	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
470	2/22/2012 13:20	0.77	mg / cm ^2	Bristow Armory	11	D	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
471	2/22/2012 13:21	1.53	mg / cm ^2	Bristow Armory	11	D	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
472	2/22/2012 13:21	1.52	mg / cm ^2	Bristow Armory	11	D	Door		Beige	Intact	Wood	Negative	1.64	1	< LOD	0.15
473	2/22/2012 13:21	1.93	mg / cm ^2	Bristow Armory	11	D	Door	Frame	Beige	Fair	Wood	Negative	1.39	1	< LOD	0.72
474	2/22/2012 13:22	5.76	mg / cm ^2	Bristow Armory	11	A	Door	Threshold	White	Poor	Concrete	Negative	1.91	1	< LOD	0.45
475	2/22/2012 13:25	1.91	mg / cm ^2	Bristow Armory	14	C	Door	Frame	Red	Fair	Wood	Negative	2.44	1	< LOD	0.22
476	2/22/2012 13:25	0.76	mg / cm ^2	Bristow Armory	14	C	Door		Brown	Poor	Wood	Negative	1.32	1	< LOD	0.22
477	2/22/2012 13:26	1.53	mg / cm ^2	Bristow Armory	14		Ceiling		White	Intact	Wood	Negative	2.28	1	< LOD	0.86
478	2/22/2012 13:27	1.91	mg / cm ^2	Bristow Armory	14		Ceiling	Beam	White	Intact	Wood	Negative	2.07	1	< LOD	0.83
479	2/22/2012 13:27	1.53	mg / cm ^2	Bristow Armory	14		Ceiling	Upper Trim	White	Intact	Wood	Negative	3.88	1	< LOD	0.3
480	2/22/2012 13:27	1.54	mg / cm ^2	Bristow Armory	14		Ceiling	Conduit	White	Intact	Metal	Negative	1	1	< LOD	0.03
481	2/22/2012 13:29	2.29	mg / cm ^2	Bristow Armory	15		Ceiling	Conduit	White	Intact	Metal	Negative	1	1	< LOD	0.03
482	2/22/2012 13:29	4.21	mg / cm ^2	Bristow Armory	15		Ceiling	Upper Trim	White	Intact	Wood	Negative	2.27	1	< LOD	0.05
483	2/22/2012 13:29	1.91	mg / cm ^2	Bristow Armory	15		Ceiling	Beam	White	Intact	Wood	Negative	2.19	1	< LOD	0.13
484	2/22/2012 13:29	1.53	mg / cm ^2	Bristow Armory	15		Ceiling		White	Intact	Wood	Negative	1.36	1	< LOD	0.72
485	2/22/2012 13:30	1.53	mg / cm ^2	Bristow Armory	15		Door	Frame	Gray	Fair	Wood	Negative	3.97	1	< LOD	0.81
486	2/22/2012 13:30	1.15	mg / cm ^2	Bristow Armory	15		Door		Red	Fair	Wood	Negative	1.98	1	< LOD	0.94
487	2/22/2012 13:31	1.53	mg / cm ^2	Bristow Armory	15	C	Divider		White	Fair	Wood	Negative	2.06	1	< LOD	0.78
488	2/22/2012 13:31	4.59	mg / cm ^2	Bristow Armory	15	C	Divider	Frame	White	Fair	Wood	Negative	2.19	1	< LOD	0.06
489	2/22/2012 13:32	7.67	mg / cm ^2	Bristow Armory	15	B	Window	Sash	Gray	Poor	Metal	Negative	1.24	1	0.9	0.1
490	2/22/2012 13:33	2.29	mg / cm ^2	Bristow Armory	15	B	Window	Header	Gray	Fair	Metal	Negative	1.14	1	0.7	0.2
491	2/22/2012 13:34	4.19	mg / cm ^2	Bristow Armory	15	B	Wall		White	Fair	Brick	Negative	1.27	1	< LOD	0.03
492	2/22/2012 13:34	1.92	mg / cm ^2	Bristow Armory	15	D	Wall		White	Fair	Brick	Negative	1	1	< LOD	0.03
493	*2/22/2012 13:38*	*0.76*	*mg / cm ^2*	*Bristow Armory*	*15*	*B*	*Wall*		*White*	*Fair*	*Brick*	*Null*	*1*	*1*	*< LOD*	*0.03*
494	2/22/2012 13:38	2.29	mg / cm ^2	Bristow Armory	16	B	Wall		White	Fair	Brick	Negative	1	1	< LOD	0.03
495	2/22/2012 13:39	7.25	mg / cm ^2	Bristow Armory	16	D	Wall		White	Fair	Brick	Negative	1	1	< LOD	0.03
496	2/22/2012 13:39	2.29	mg / cm ^2	Bristow Armory	16	D	Wall	Divider	White	Fair	Wood	Negative	1.45	1	< LOD	0.75
497	2/22/2012 13:40	1.91	mg / cm ^2	Bristow Armory	16	D	Wall	Divider Frame	White	Fair	Wood	Negative	1	1	< LOD	0.67
498	2/22/2012 13:41	2.29	mg / cm ^2	Bristow Armory	16	C	Wall	Frame	Blue	Fair	Wood	Negative	1.22	1	< LOD	0.51
499	2/22/2012 13:41	3.83	mg / cm ^2	Bristow Armory	16	C	Wall	Door	Yellow	Fair	Wood	Negative	3.51	1	< LOD	0.09
500	2/22/2012 13:41	1.52	mg / cm ^2	Bristow Armory	16	D	Door	Frame	Red	Poor	Wood	Negative	1.81	1	< LOD	0.13
501	2/22/2012 13:42	1.53	mg / cm ^2	Bristow Armory	16	D	Door		Red	Poor	Wood	Negative	1.49	1	< LOD	0.85
502	2/22/2012 13:42	1.91	mg / cm ^2	Bristow Armory	16		Ceiling		White	Fair	Wood	Negative	2.88	1	< LOD	0.9
503	2/22/2012 13:43	1.54	mg / cm ^2	Bristow Armory	16		Ceiling	Beam	White	Fair	Wood	Negative	2.37	1	< LOD	0.91
504	2/22/2012 13:44	1.9	mg / cm ^2	Bristow Armory	16		Ceiling	Conduit	White	Fair	Metal	Negative	2.03	1	< LOD	0.08
505	2/22/2012 13:45	1.53	mg / cm ^2	Bristow Armory	16		Ceiling	Heater Support	White	Fair	Metal	Negative	3.7	1	< LOD	0.17
506	2/22/2012 13:52	1.53	mg / cm ^2	Bristow Armory	12		Ceiling	Upper Trim	White	Intact	Wood	Negative	1.39	1	< LOD	0.1

Rd #	Time	Duration	Units	Site	Room	Side	Component	Feature	Color	Condition	Substrate	Results	Depth Index	Action Level	Lead (mg/cm2)	Lead Error
507	2/22/2012 13:55	5.74	mg / cm ^2	Bristow Armory	12		Ceiling	Beam	White	Intact	Wood	Negative	2.11	1	0.4	0.2
508	2/22/2012 13:57	1.14	mg / cm ^2	Bristow Armory	12	A	Window	Frame	Beige	Intact	Metal	Negative	3	1	< LOD	0.37
509	2/22/2012 13:57	1.9	mg / cm ^2	Bristow Armory	12	A	Window	Sash	Beige	Poor	Metal	Negative	2.81	1	< LOD	0.22
510	2/22/2012 13:58	2.68	mg / cm ^2	Bristow Armory	12	D	Window	Frame	Brown	Intact	Wood	Negative	2.56	1	< LOD	0.7
511	2/22/2012 13:58	1.52	mg / cm ^2	Bristow Armory	12	D	Window	Door	Brown	Intact	Wood	Negative	2.62	1	< LOD	0.29
512	2/22/2012 13:59	1.91	mg / cm ^2	Bristow Armory	12	C	Door	Frame	Brown	Intact	Wood	Negative	2.88	1	< LOD	0.29
513	2/22/2012 14:00	0.77	mg / cm ^2	Bristow Armory	12	C	Door		White	Intact	Wood	Negative	10	1	< LOD	1.21
514	2/22/2012 14:00	1.53	mg / cm ^2	Bristow Armory	13	B	Door		Brown	Poor	Wood	Negative	2.72	1	< LOD	0.26
515	2/22/2012 14:00	1.14	mg / cm ^2	Bristow Armory	13	B	Door	Frame	Brown	Poor	Wood	Negative	1.65	1	< LOD	0.16
516	2/22/2012 14:01	1.93	mg / cm ^2	Bristow Armory	13	A	Window	Frame	Beige	Fair	Metal	Negative	2.5	1	< LOD	0.16
517	2/22/2012 14:01	1.92	mg / cm ^2	Bristow Armory	13	A	Window	Sash	Beige	Fair	Metal	Negative	2.52	1	< LOD	0.14
518	2/22/2012 14:03	1.53	mg / cm ^2	Bristow Armory	13		Ceiling		White	Fair	Wood	Negative	2.77	1	< LOD	0.92
519	2/22/2012 14:04	1.14	mg / cm ^2	Bristow Armory	13		Ceiling	Upper Trim	White	Fair	Wood	Negative	1.72	1	< LOD	0.13
520	2/22/2012 14:11	1.16	mg / cm ^2	Bristow Armory	17		Ceiling	Upper Trim	Gray	Fair	Wood	Negative	2.26	1	< LOD	0.21
521	2/22/2012 14:12	1.54	mg / cm ^2	Bristow Armory	17		Ceiling		Gray	Fair	Wood	Negative	1.05	1	< LOD	0.85
522	2/22/2012 14:12	3.44	mg / cm ^2	Bristow Armory	17		Ceiling	Beam	Gray	Fair	Wood	Negative	1.29	1	< LOD	0.39
523	2/22/2012 14:12	2.29	mg / cm ^2	Bristow Armory	17	D	Garage Door	Header	Gray	Fair	Wood	Negative	2.42	1	< LOD	0.72
524	2/22/2012 14:15	3.06	mg / cm ^2	Bristow Armory	17	D	Door		Gray	Fair	Wood	Negative	1	1	< LOD	0.45
525	2/22/2012 14:16	1.52	mg / cm ^2	Bristow Armory	17	D	Door	Frame	Red	Fair	Wood	Negative	2.06	1	< LOD	0.74
526	2/22/2012 14:16	1.53	mg / cm ^2	Bristow Armory	17	B	Window	Header	Gray	Poor	Metal	Negative	1.23	1	< LOD	0.19
527	2/22/2012 14:17	1.54	mg / cm ^2	Bristow Armory	17	B	Window	Sash	Gray	Poor	Metal	Negative	1	1	< LOD	0.08
528	2/22/2012 14:17	4.21	mg / cm ^2	Bristow Armory	17	B	Window	Sill	Beige	Intact	Tile	Positive	1.88	1	2.1	0.3
529	2/22/2012 14:19	9.53	mg / cm ^2	Bristow Armory	Exterior	C	Garage Door	Corner Board	White	Poor	Metal	Negative	5.47	1	0.3	0.15
530	2/22/2012 14:21	78.55	cps												4.31	0
531	2/22/2012 14:23	1.16	mg / cm ^2	Bristow Armory	Exterior	C	Door	Casing	White	Poor	Metal	Negative	10	1	< LOD	0.64
532	2/22/2012 14:23	1.53	mg / cm ^2	Bristow Armory	Exterior	C	Door	Frame	White	Poor	Wood	Negative	1	1	< LOD	0.58
533	2/22/2012 14:24	1.53	mg / cm ^2	Bristow Armory	Exterior	C	Wall	Fascia	White	Poor	Wood	Negative	6.47	1	< LOD	0.64
534	2/22/2012 14:26	8.05	mg / cm ^2	Bristow Armory	Exterior	A	Window	Frame	White	Poor	Metal	Negative	5.33	1	< LOD	0.16
535	2/22/2012 14:27	8.06	mg / cm ^2	Bristow Armory	Exterior	A	Window	Sash	White	Poor	Metal	Negative	4.62	1	0.19	0.12
536	2/22/2012 14:27	1.15	mg / cm ^2	Bristow Armory	Exterior	A	Window	Header	White	Poor	Metal	Negative	6.27	1	< LOD	0.74
537	2/22/2012 14:28	4.22	mg / cm ^2	Bristow Armory	Exterior	A	Porch	Ceiling	White	Poor	Metal	Positive	5.02	1	1.7	0.4
538	2/22/2012 14:30	2.29	mg / cm ^2	Bristow Armory	Exterior	A	Porch	Upper Trim	White	Poor	Wood	Negative	8.78	1	< LOD	0.64
539	2/22/2012 14:32	1.14	mg / cm ^2	Bristow Armory	Exterior	A		Pipe	White	Poor	Metal	Negative	1.09	1	< LOD	0.04
540	2/22/2012 14:32	1.53	mg / cm ^2	Bristow Armory	Exterior	A		Pipe	Red	Poor	Metal	Negative	1.41	1	< LOD	0.09
541	2/22/2012 14:33	1.91	mg / cm ^2	Bristow Armory	Exterior	A		Post	Yellow	Intact	Metal	Negative	1.53	1	< LOD	0.03
542	2/22/2012 14:33	1.91	mg / cm ^2	Bristow Armory	Exterior	A		Pole	Silver	Fair	Metal	Negative	1	1	< LOD	0.03
543	2/22/2012 14:34	1.52	mg / cm ^2	Bristow Armory	Exterior	A	Pavement	Stripe	Yellow	Fair	Concrete	Negative	1.76	1	< LOD	0.04
544	2/22/2012 14:35	1.14	mg / cm ^2	Bristow Armory	Exterior	A	Mailbox	Pole	Black	Fair	Wood	Negative	1	1	< LOD	0.72
545	2/22/2012 14:37	21.02	mg / cm ^2				Calibrate					Positive	1.02	1	1	0.1
546	2/22/2012 14:37	20.64	mg / cm ^2				Calibrate					Positive	1.04	1	1	0.1
547	2/22/2012 14:38	20.09	mg / cm ^2				Calibrate					Positive	1.13	1	1.1	0.1

APPENDIX B

Former Bristow Armory

Reading 368, Room 18, Metal Window Headers

Reading 426, Room 6, Metal Pipe

Reading 537, Exterior, Metal Porch Ceiling

APPENDIX C

8
9
10
12
13
14
15
11
7
16
6
5
18
NOTE: Windows located near ceiling of drill floor
4
17
3
2
1
# DENOTES ROOM NUMBERS DEVELOPED FOR SURVEY
GMR & Associates, Inc.
Engineering and Environmental Consultants
FIGURE 1: Window Components with Lead-Based Paint
N
W
E
S
LEGEND
Window Frames
Window Components
Window Frame & Components
Former Bristow Armory
700 West 5th Avenue
Bristow, Oklahoma 74010

8
9
10
12
13
14
15
11
7
6
16
5
13
4
17
3
2
1
# DENOTES ROOM NUMBERS DEVELOPED FOR SURVEY
GMR & Associates, Inc.
Engineering and Environmental Consultants
FIGURE 2: Miscellaneous Lead-Based Paint Locations
N
W
E
S
LEGEND
Metal Pipe
Porch Ceiling
Former Bristow Armory
700 West 5th Avenue
Bristow, Oklahoma 74010

SIDE D
SIDE C
SIDE A
SIDE B
8
9
10
12
13
14
15
11
7
6
16
5
18
4
17
3
2
1
# DENOTES ROOM NUMBERS DEVELOPED FOR SURVEY
GMR & Associates, Inc.
Engineering and Environmental Consultants
FIGURE 3: Lead-Containing Tile Locations
N
W
E
S
LEGEND
Lead Tile Walls
Lead Tile Window Sills
Former Bristow Armory
700 West 5th Avenue
Bristow, Oklahoma 74010

APPENDIX D

Department of Environmental Quality

This is to Certify That

JASON LEE

has met the specifications of the Oklahoma Lead-Based Paint Management Act
and is certified as a Lead-Based Paint

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR13451

This certificate is valid from the date of issuance and expires as prescribed by law.

Issued on: 4/1/2011 **Expires on: 3/31/2012**

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

BASIN ENVIRONMENTAL

has met the specifications of the Oklahoma Lead-Based Paint Management Act
and is certified as a Lead-Based Paint

FIRM

Certification #: OKFIRM13434

This certificate is valid from the date of issuance and expires as prescribed by law.

Issued on: 4/1/2011 Expires on: 3/31/2012

Division Director
Air Quality Division

OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Environmental Programs Manager
Air Quality Division

APPENDIX E

Performance Characteristic Sheet

EFFECTIVE DATE: **September 24, 2004** **EDITION NO.: 1**

MANUFACTURER AND MODEL:

Make: *Niton LLC*
Tested Model: *XLp 300*
Source: ^{109}Cd
Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A.
XLp 300A, XLp 301A, XLp 302A and XLp 303A.
XLi 700A, XLi 701A, XLi 702A and XLi 703A.
XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is <u>not</u> needed for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)						
	All Data			Median for laboratory-measured lead levels (mg/cm^2)		
Substrate	25^{th} Percentile	Median	75^{th} Percentile	Pb < 0.25	0.25 ≤ Pb<1.0	1.0 ≤ Pb
Wood Drywall	4	11	19	11	15	11
Metal	4	12	18	9	12	14
Brick Concrete Plaster	8	16	22	15	18	16

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

APPENDIX F

ThermoFisher SCIENTIFIC
The world leader in serving science

Certificate of Calibration

Paint QC (Service)
Document #: FRM018
Revision: A
Revision Date: Sept. 19, 2008

Serial Number: 10713 Model: XLp703A Software: 5.2D Date of Q.C.: 4/14/2011

Resolution: 379.84 Escale: 4.07 Source: Cd-109 Inspector: JC

K+L Mode 20 Second readings each

Std	L	Lerr	K	Kerr	DI	L Status	K Status
1.0 Surface Wood-1	1.10	0.10	0.90	0.30	1.0	OK	OK
1.0 Surface Wood-2	1.00	0.10	0.90	0.30	1.1	OK	OK
1.0 Buried Wood-1	1.10	0.10	0.80	0.30	2.4	OK	OK
1.0 Buried Wood-2	1.10	0.10	0.80	0.30	2.3	OK	OK
Blank Wood-1	0.00	0.02	0.13	0.22	2.6	OK	OK
Blank Wood-2	0.01	0.02	0.04	0.22	1.0	OK	OK
3.5 Surface Wood-1	3.70	0.20	3.30	0.40	1.3	OK	OK
3.5 Surface Wood-1	3.60	0.20	3.20	0.40	1.3	OK	OK
0.3 Surface Concrete-1	0.30	0.03	0.10	0.37	1.0	OK	OK
0.3 Surface Concrete-2	0.29	0.03	0.21	0.38	1.0	OK	OK
Steel-1	0.00	0.02	0.07	0.34	1.0	OK	OK
Steel-2	0.00	0.02	0.10	0.35	1.0	OK	OK
Pure Pb-1	10.10	1.30	84.80	1.90	1.7	OK	OK
Pure Pb-2	10.10	1.30	86.30	1.90	1.6	OK	OK
1.0 Surface Drywall-1	1.00	0.10	1.10	0.30	1.1	OK	OK
1.0 Surface Drywall-2	1.00	0.10	0.90	0.30	1.0	OK	OK

STD Mode Readings

Std	Time	Result	
Drywall-1	1.83	0.01	OK
Drywall-2	1.81	0.03	OK
French Plaster-1	1.22	0.01	OK
French Plaster-2	1.81	0.01	OK

This certificate is issued in accordance with Thermo Fisher Scientific factory specifications.
The measurements were found to be within specification limits at the time of service and calibration.

Standards are traceable to National Institute of Standards & Technology (NIST) standards.
**** - Not Certified**

Signed:

Thermo Fisher Scientific
Niton Analyzers

800 Middlesex Turnpike
Building 8
Billerica, MA 01821

www.thermo.com/niton
1-800-875-1578

ThermoFisher SCIENTIFIC

The world leader in serving science

Certificate of Calibration

Soil QC(Service)
Document#: FRM013
Revision B
Revision Date: Mar. 11, 2009

Unit Serial Number: 10713 Model: XLp 703AW Software: 520 Date of Q.C.: 4/14/2011

Resolution: 368.02 Escale: 4.07 Source: Cd-109 Inspector: JC

Run 1 reading per sample for 90 seconds
Elements that are in blue BOLD must be recorded
NA = Not Available

Elements not in blue need not be detected but record if they are

NIST HIGH 2710	Certified	Low	High	Measured	Err	
Mo	19	10	40	13.909	3.237	OK
Zr	NR			166.265	13.2	
Sr	330	280	380	313.754	12.839	OK
Rb	120	80	160	118.77	8.98	OK
Pb	5532	5400	5700	5567.199	101.251	OK
Se	NA	-60	60	5.046	12.273	OK
As	628	510	750	633.66	76.88	OK
Hg	32 6	0	50	25.4	22.7	OK
Zn	6952	6700	7250	7024.19	126.47	OK
Cu	2850	2700	3200	2848.41	100.63	OK
Ni	14.3	-50	150	24.23	65.19	OK
Co	10	-270	270	-99.05	176.316	OK
Fe	33800	31500	35500	33856.727	833.717	OK
Mn	10100	9500	11000	10206.4	418.0	OK
Cr	39	-100	120	56.51	309.327	OK

SiO2 (Blank)	Certified	Low	High	Measured	Err	
Mo	0	-10	10	0.134	1.328	OK
Zr	0	-10	10	1.346	2.125	OK
Sr	<210	-10	210	0.184	1.365	OK
Rb	0	-200	210	-0.697	1.247	OK
Pb	0	-20	20	-5.976	5.559	OK
Se	0	-10	10	-6.635	3.681	OK
As	0	-10	10	-0.459	4.04	OK
Hg	0	-10	10	-2.999	6.81	OK
Zn	0	-20	20	-2.266	13.51	OK
Cu	0	-30	30	1.616	15.285	OK
Ni	0	-50	50	6.444	22.567	OK
Co	0	-50	50	-8.063	16.813	OK
Fe	0	-100	300	0.944	28.597	OK
Mn	0	-70	70	23.169	39.865	OK
Cr	0	-120	120	-37.354	64.583	OK

NIST LOW	Certified	Low	High	Measured	Err	
Mo	2	-10	10	2.488	2.301	OK
Zr	160	115	210	163.048	10.585	OK
Sr	231	180	300	206.751	8.748	OK
Rb	96	60	115	74.47	5.62	OK
Pb	18.9	0	35	5.703	9.122	OK
Se	1.57	-30	30	-4.06	5.11	OK
As	17.7	0	35	16.43	7.39	OK
Hg	1 4	-10	10	8.6	9.5	OK
Zn	106	50	160	77.12	21.28	OK
Cu	34.6	0	60	42.85	23.35	OK
Ni	88	25	150	98.41	45.22	OK
Co	13.4	-250	250	130 63	135.709	OK
Fe	35000	25000	35000	26601.057	399.967	OK
Mn	538	0	700	614.1	185.0	OK
Cr	130	50	200	191 195	173.678	OK

RCRA	Certified*	Low	High	Measured	Err	
Mo	NA					OK
Zr	NA					OK
Sr	NA					OK
Rb	NA					OK
Pb	500	350	600	469.947	34.443	OK
Se	500	400	600	515.261	22.438	OK
As	500	300	600	441.857	30.442	OK
Hg	NA					OK
Zn	NA					OK
Cu	NA					OK
Ni	NA					OK
Co	NA					OK
Fe	NA					OK
Mn	NA					OK
Cr	500	275	600	461.544	241 123	OK

This certificate is issued in accordance with Thermo Fisher Scientific factory specifications.
The measurements were found to be within specification limits at the time of service and calibration.

Standards are traceable to National Institute of Standards & Technology (NIST) standards
*** - Not Certified**

Signed:

Thermo Fisher Scientific
Niton Analyzers

800 Middlesex Turnpike
Building 8
Billerica, MA 01821

www.thermo.com/niton
+1-800-875-1579

ThermoFisher SCIENTIFIC
The world leader in serving science

Certificate of Calibration

Thin Film QC (Service)
Revision: A
Revision Date: Sept. 24, 2008

Unit #: 10713 **Model:** XLp 703A **Date:** 4/15/2011 **Software:** 5.2D-Dual

Res: 383.7 **Escale:** 4.07 **Source:** Cd-109 **Inspector:** JC

Thin Film QC Sheet (1 reading at 30 seconds each sample)

Element:	Cert:	Read:	Error	OK?
Pb	51.7	54.47	2.74	OK
As	24.6	24.7	0.92	OK
Ni	40.4	42.72	2.21	OK
Cr	42.6	44.49	3.69	OK

37mm QC Readings (3 readings at 30 seconds each)

Element:	Cert:	Read:	Error	OK?
Pb	42	39.79	9.05	OK

Dust Wipe QC Readings (Pb only) (4 readings at 30 seconds each)

Wipe Type:	Cert:	Read:	Error	OK?
Blank:	N/A	0.91	1.61	OK
Dust Low:	34-51	43.12	10.1	OK
DustHigh:	356-534	480.8	38.5	OK

This certificate is issued in accordance with Thermo Fisher Scientific factory specifications.
The measurements were found to be within specification limits at the time of manufacture and calibration.

**** - Not Certified**

Signed:

Thermo Fisher Scientific
Niton Analyzers

800 Middlesex Turnpike
Building 8
Billerica, MA 01821

www.thermo.com/niton
1-800-875-1578

SURVEY FOR LEAD IN SETTLED DUST

NATIONAL GUARD ARMORY
700 WEST 5TH AVENUE
BRISTOW, OKLAHOMA 74010

GMR Project Number 2012017
March 16, 2012

Oklahoma Department of Environmental Quality
Land Protection Division
P. O. Box 1677
Oklahoma City, OK 73101-1677
Attention: Dustin Davidson

GMR & Associates, Inc.
ENGINEERS, PLANNERS, ENVIRONMENTAL SPECIALISTS, HYDROGEOLOGISTS
2520 West I-44 Service Road, Suite 200
P.O. Box 57827
Oklahoma City, OK 73157-7827
Telephone: 405-528-7017
Fax: 405-528-3346

Prepared by:

Arless E. Murray, Jr.
President
LBP Inspector, OKRASR13458

Reviewed by:

James M. Reis
Vice President
Project Manager

TABLE OF CONTENTS

Tables

Appendices

SURVEY FOR LEAD IN SETTLED DUST
BRISTOW NATIONAL GUARD ARMORY
700 W. 5th Street
BRISTOW, OKLAHOMA

1.0 EXECUTIVE SUMMARY

GMR & Associates, Inc. (GMR) has completed a Survey for Lead in Settled Dust (Survey) at the Bristow National Guard Armory, 700 W. 5th Street, Bristow, Oklahoma. The Survey was conducted on February 22, 2012 by Mr. Arless Murray of GMR.

The Survey included the collection of dust wipe samples from the floor in each room and from window sills located along the north, east and west sides of the building. The samples were collected using EPA/HUD wipe sampling protocols.

The laboratory analytical results of the floor and sill samples obtained at the armory were compared to EPA/HUD criteria. The EPA/HUD recommended maximum concentration for lead in settled dust is 40 micrograms per square foot ($\mu g/ft^2$) for floors and 250 $\mu g/ft^2$ for window sills.

The results of the wipe samples collected from the floors and window sills revealed the following:

- Lead concentrations in settled dust in excess of 40 $\mu g/ft^2$ were present on the floor in Rooms 1, 15, 16,17 and 18; and
- Lead concentrations in settled dust in excess of 250 $\mu g/ft^2$ were present on the window sills in Rooms 8 and 15.

2.0 INTRODUCTION

On February 22, 2012, GMR personnel performed a Survey for Lead in Settled Dust (Survey) at the Bristow National Guard Armory, 700 W. 5th Street, Bristow, Oklahoma. The purpose of the Survey was to identify the locations of lead contaminated dust in the Armory. The Survey was conducted by Mr. Arless Murray of GMR. The Lead-Based Risk Assessor Certifications is provided in Appendix A. A Site Layout Map of the building showing room numbers and sampling locations is included in Appendix B.

3.0 BUILDING DESCRIPTION

Constructed in the 1954, the Bristow Armory building has a total area of 11,216 square feet and is comprised of one floor constructed over a concrete slab. The building consists of a large central garage/drill area, with offices, bathrooms and workrooms/supply areas located around the garage/drill area on the north, east and west.

4.0 METHODOLOGY

One (1) dust wipe sample was obtained in each room, except for the drill room, where three (3) samples were obtained. A template measuring one square foot was used to provide a known sampling area for collection of floor samples. A measure taped-off area was used for collection of sill samples. Sample BR-17-02 shown in the laboratory report is a field blank, and not a representative dust sample from a floor or sill. A total of 24 samples were collected including one field blank.

The laboratory analytical results of the floor and sill samples obtained at the armory were compared to EPA/HUD criteria. The EPA/HUD recommended maximum concentration for lead in settled dust is 40 micrograms per square foot ($\mu g/ft^2$) for floors and 250 $\mu g/ft^2$ for window sills.

5.0 FINDING SUMMARY OF LEAD IN SETTLED DUST

Laboratory results from the dust wipe samples are presented in Appendix C. Floor and sill samples having lead levels greater than EPA/HUD recommended maximum concentrations are shown in Table 1 below. A layout of the building is presented in Appendix B.

Table 1
Positive Dust Wipe Locations

Sample No.	Lead Content ($\mu g/ft^2$)	Location	Approx. Sq. Footage of Location
BR-01-01	51.4	Room 1 - Floor	168
BR-08-02	305	Room 8 - Sill	2
BR-15-02	370	Room 15 - Sill	2
BR-15-01	78.9	Room 15 - Floor	435
BR-16-01	53.0	Room 16 - Floor	493
BR-17-01	140	Room 17 - Floor	668
BR-18-03	68.5	Room 18 - Floor	4,845

6.0 RECOMMENDATIONS

The floor and window sills that had elevated levels of lead in the settled dust should be cleaned using the following procedure:

- HEPA vacuum the entire floor area and the window sills if applicable;
- Wet clean the entire floor area and the window sills if applicable;
- HEPA vacuum the entire floor area and the window sills if applicable; and
- Perform dust wipe sampling to assure that all lead contaminated dust has been reduced to acceptable levels.

Appendix A

Certifications

Department of Environmental Quality

This is to Certify That

GMR & ASSOCIATES INC

has met the specifications of the Oklahoma Lead-Based Paint Management Act
and is certified as a Lead-Based Paint

FIRM

Certification #: OKFIRM13456

This certificate is valid from the date of issuance and expires as prescribed by law.

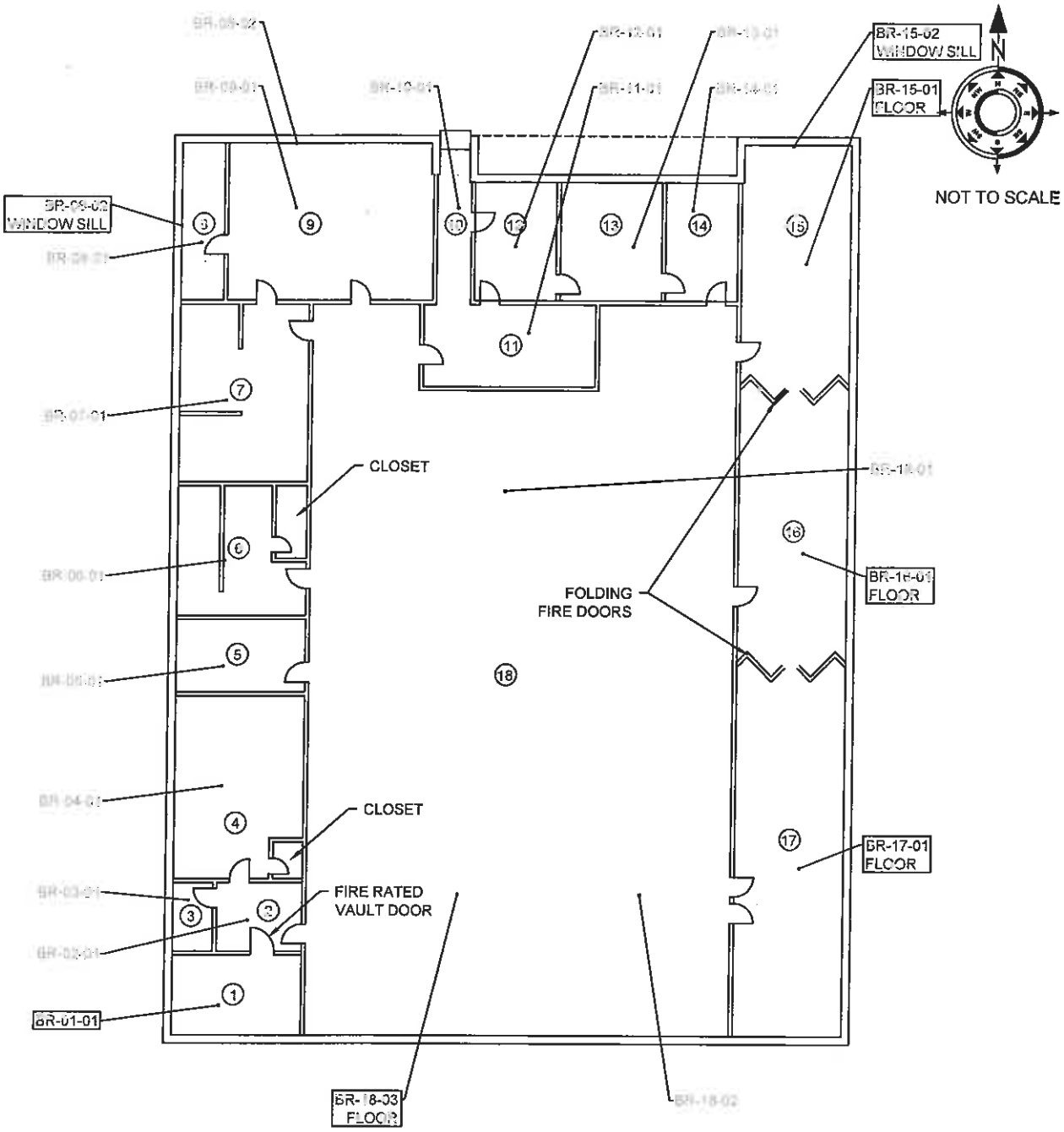
Issued on: 4/1/2011 Expires on: 3/31/2012

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

Appendix B

Site Layout with Sample Locations



(#) DENOTES ROOM NUMBERS DEVELOPED FOR SURVEY

OK-##: FLOOR SAMPLES WITH GREATER THAN OR EQUAL TO 40 µg/ft²

OK-### FLOOR SAMPLES WITH LESS THAN 40 µg/ft²

OK-###: SILL SAMPLES WITH GREATER THAN OR EQUAL TO 250 µg/ft²

OK-### SILL SAMPLES WITH LESS THAN 250 µg/ft²

GMR
& Associates, Inc.
2520 West I-44 Service Road, Ste. 200
P.O Box 57827
Oklahoma City, OK 73157-7827
Phone: 405/528-7017, Fax: 405/528-3346

Figure 1
Dust Sampling Locations
Bristow Armory
700 W. 5th Avenue
Bristow, Oklahoma 74010

Appendix C

Laboratory Results and Chain of Custody Field Sheets

QUANTEM® LABORATORIES

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Environmental Chemistry Analysis Report

QuanTEM Set ID: 204790
Date Received: 02/24/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 2/27/2012

AIHA ID: 101352

Client: GMR & Associates, Inc
PO Box 57827
Oklahoma City, OK 73157

Acct. No.: B216

Project: Bristow Armory
Location: 700 W. 5th St., Bristow, OK
Project No.: 2012017-001

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	BR-01-01	Wipe	Lead	51.4	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
002	BR-02-01	Wipe	Lead	22.6	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
003	BR-03-01	Wipe	Lead	39.3	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
004	BR-04-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
005	BR-05-01	Wipe	Lead	19.4	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
006	BR-06-01	Wipe	Lead	31.1	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
007	BR-07-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
008	BR-08-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
009	BR-09-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
010	BR-10-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
011	BR-11-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
012	BR-12-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
013	BR-08-02	Wipe	Lead	305	64	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
014	BR-09-02	Wipe	Lead	<64.0	64	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
015	BR-15-02	Wipe	Lead	370	64	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
016	BR-15-01	Wipe	Lead	78.9	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
017	BR-16-01	Wipe	Lead	53.0	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7420 (1) = EPA 600/R-93/200 Preperation Modified. EPA 7420 Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preperation Modified. EPA 7082 Analysis Modified

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Environmental Chemistry Analysis Report

QuanTEM Set ID: 204790
Date Received: 02/24/12
Received By: Sherrie Loftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 2/27/2012

AIHA ID: 101352

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Acct. No.: B216

Project: Bristow Armory
Location: 700 W. 5th St., Bristow, OK
Project No.: 2012017-001

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	BR-13-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
019	BR-14-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
020	BR-17-01	Wipe	Lead	140	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
021	BR-17-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
022	BR-18-01	Wipe	Lead	36.4	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
023	BR-18-02	Wipe	Lead	20.6	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)
024	BR-18-03	Wipe	Lead	68.5	16	ug/sq. Ft.	02/27/12 13:00	W EPA 7420 (1)

Authorized Signature: Rebecca Sparks

Rebecca Sparks, Analyst

Note. Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7420 (1) = EPA 600/R-93/200 Preperation Modified. EPA 7420 Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preperation Modified. EPA 7082 Analysis Modified

Supplemental Report
QAQC Results

QA ID: 9717 **Date:** 2/27/2012 **Lab Number:** 204790
Test: Lead **Matrix:** Wipe **Approved By:** Rebecca Sparks
Date Approved: 2/27/2012

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
ICB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.6	5.5
FCV	4.5	4.6	5.5
ICV	0.9	1.1	1.1
RLVS	0.256	0.312	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W3	0.000	5.416	5.087	93.9	5.472	101.0	7.3
MS-W2	0.000	5.492	5.623	102.4	5.152	93.8	8.7
MS-W1	0.000	5.525	5.333	96.5	4.958	89.7	7.3

Authorized Signature: Rebecca Sparks

Rebecca Sparks, Analyst

QUANTEM LABORATORIES
www.QuanTEM.com

LEAD CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 204790 — Accept (circled) / Reject

Report Results (☑ one box)
- QuanTEM Website
- Other ______

Contact Information

Company:	G-M R G Associates
Contact:	Arless Murray
Account #:	
Phone:	405-525-7017
Cell Phone:	405-410-2933
E-mail:	aemurray@gmrginc.net

Project Information

Project Name:	Bristow Armory
Project Location:	700 W. 5th St., Bristow, OK
Project ID:	2012017-001

Sampled By: Name: Arless Murray Date: 2-22-12

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Arless Murray	2/24/12 130		[illegible signature]	2/24/12 1100

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis: Pb			Units: PPM	Wt %	mg / l	µg /ft²	µg / m²	mg / cm²
1	BR-01-01	Rm 1 - Floor - Conc.		12"x12"	C	✓						✓		
2	BR-02-01	Rm 2 - Floor - Conc		12"x12"	C	✓						✓		
3	BR-03-01	Rm 3 - Floor - Conc.		"	C	✓						✓		
4	BR-04-01	Rm 4 - Floor - Conc.		"	C	✓						✓		
5	BR-05-01	Rm 5 - Floor - Conc		"	C	✓						✓		
6	BR-06-01	Rm 6 - Floor - Conc		"	C	✓						✓		
7	BR-07-01	Rm 7 - Floor - Conc		"	C	✓						✓		
8	BR-08-01	Rm 8 - Floor - Carpet		"	C	✓						✓		
9	BR-09-01	Rm 9 - Floor - Carpet		"	C	✓						✓		
10	BR-10-01	Rm 10 - Floor - Cer. Tile		"	C	✓						✓		
11	BR-11-01	Rm 11 - Floor - Tile		"	C	✓						✓		
12	BR-12-01	Rm 12 - Floor - Tile		"	C	✓						✓		

Sample Matrix Codes

A	Soil
B	Paint Chips
C	Surface / Dust Wipes
D	Bulk Miscellaneous
E	Air Cassette

TURNAROUND TIME

	Same Day
	24 - Hour
	3 - Day
X	5 - Day

QUANTEM LABORATORIES

www.QuanTEM.com

LEAD CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 2014790
Accept Reject

Project Information

Company: GMR & Associates | Project Name: Bristow Armory | Project Location: 700 W 5th St, Bristow, OK

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code key)	Analysis: Pb	Units (☑ ONE box only): PPM	Wt %	mg / l	µg / ft²	µg / m²	mg / cm²
13	BR-08-02	Rm 8 - Sill		2"x18"	C	✓				✓		
14	BR-07-02	Rm 9 - Sill		2"x18"	C	✓				✓		
15	BR-15-02	Rm 15 - Sill		2"x18"	C	✓				✓		
16	BR-15-01	Rm 15 - Floor - Conc		12"x12'	C	✓				✓		
17	BR-16-01	Rm 16 - Floor - Conc		"	C	✓				✓		
18	BR-13-01	Rm 13 - Floor - Tile		"	C	✓				✓		
19	BR-14-01	Rm 14 - Floor - Tile		"	C	✓				✓		
20	BR-17-01	Rm 17 - Floor - Conc		"	C	✓				✓		
21	BR-17-02	Rm 17 - BLK		"	C	✓				✓		
22	BR-18-01	Rm 18 - Floor - Conc.		"	C	✓				✓		
23	BR-18-02	Rm 18 - Floor - Conc.		"	C	✓				✓		
24	BR-18-03	Rm 19 - Floor - Conc		"	C	✓				✓		
25												
26												
27												
28												
29												
30												

Sample Matrix Codes

A	Soil
B	Paint Chips
C	Surface / Dust Wipes
D	Bulk Miscellaneous
E	Air Cassette

SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

SCOPES OF WORK

STATEMENT OF WORK
For
Remediation of Lead and Asbestos Contamination at The Former Bristow National Guard Armory

The Oklahoma Department of Environmental Quality (DEQ) is requesting a work plan and cost estimate for remediation services at a former National Guard armory located in Bristow, Oklahoma. This statement of work (SOW) describes the abatement of lead-based paint, remediation of lead contaminated dust, and removal and proper disposal of asbestos-containing material. This work must be performed to provide for safe re-use of the facility with unrestricted use such as storage areas, classrooms, or office space. A mandatory site visit and walk through will be held at the site to give a better understanding of the project. A floor plan map of the Bristow Armory is attached for review (**Attachment 1**).

The building is located at 700 West 5th Avenue, Bristow, Oklahoma 74010. The building will have available water and electricity to use during remediation.

SPECIAL PROVISIONS:

1. Work Schedule: The contractor shall schedule all work to be completed within 90 calendar days after date of the written "Notice to Proceed." Coordination of work shall be scheduled with DEQ.
    a. A pre-construction meeting shall be held at the site after the Notice to Proceed date to review Statement of Work and answer any questions the contractor may have.
    b. All on-site work shall be completed by the contractor five (5) days prior to the scheduled contract completion date, with the remaining five (5) days utilized for final inspection and correction of all deficiencies.
2. Conditions of Work: The following conditions of work will apply in accomplishment of this contract:
    a. All work shall be performed in accordance with all applicable State and Federal regulations.
    b. Contractor shall not cause damage to building structures, property, walls, fixtures, etc. during remediation/abatement process. If damage is caused to these items, contractor is responsible for repairing the damage.
    c. Coordination of work areas shall be scheduled with DEQ.
    d. Disposal of Removed Materials: All materials removed by the Contractor under this contract shall be disposed of in accordance with State and Federal regulations. DEQ will sign as generator, if necessary.

CONTRACTOR SHALL:

- Attend mandatory site walk throughs;
- Possess a current lead-based paint firm license and have a certified lead-based paint supervisor in order to perform lead-based paint abatement;
- Possess a current Oklahoma Department of Labor (ODOL) Asbestos Abatement Contractor License in order to perform asbestos abatement;

- Follow all appropriate OSHA requirements;
- Follow OSHA Lead in Construction Interim Final Standard (29 CFR 1926.62) for lead-based paint abatement, and lead dust remediation;

Submit With Cost Estimate and Work Plan:

- Copy of lead-based paint firm license;
- Copy of lead-based paint supervisor license;
- Copy of ODOL Asbestos Abatement Contractor License;
- Three references with name, type of project, phone number, and location of similar work in the last three years.

Submit After Contract Award:

- A work schedule to DEQ for approval

SEQUENCE OF EVENTS

The remediation of the building shall be as follows:

1. First – The asbestos abatement shall be completed.
2. Second – DEQ shall be contacted to confirm all asbestos has been appropriately removed.
3. Third – The lead-based paint abatement shall be completed.
4. Fourth – All floors of the entire building shall be cleaned.
5. Fifth – DEQ shall be contacted to perform third party confirmation sampling to confirm all floors have been appropriately remediated.

NON-FRIABLE ASBESTOS ABATEMENT INSTRUCTIONS

- Non-friable and/or non-regulated Asbestos Containing Material (ACM) shall be removed as described in the instructions listed below. For more details see the attached Bristow Armory Asbestos Inspection Report with floor plan map showing locations of ACM **(Attachment 2)**.
    - Remove floor tile from rooms 12, 13, and 14.
        - A total of 500 ft^2 of floor tile shall be removed.
    - Remove the transite soffit paneling under the entrance overhang
        - A total of 250 ft^2 of transite soffit paneling shall be removed.
        - Transite panels shall be replaced with like material (white fiber cement panel siding). Installation of new panels shall meet or exceed the quality of the existing panels. All joints must be flush and sealed with exterior caulk.

- Friable ACM shall be removed as described in the attached Asbestos Abatement Project Design **(Attachment 2).** For more details see the attached Bristow Armory Asbestos Inspection Report with floor plan map showing locations of ACM **(Attachment 2)**.
    - Remove approximately 400 lineal feet of asbestos-containing thermal pipe insulation.
    - Remove approximately 30 asbestos-containing thermal pipe insulation fittings.
    - All pipes with asbestos containing pipe insulation and pipe fittings removed shall be re-insulated with appropriate size of polyethylene foam pipe insulation or equivalent.

- Once Asbestos Abatement is complete, DEQ shall be contacted to confirm abatement has been appropriately performed and all asbestos has been removed.

LEAD-BASED PAINT ABATEMENT INSTRUCTIONS

See Lead-Based Paint Inspection Report
for details **(Attachment 5)**

1. **Non-Friction and Non-Impact Surfaces**
   - All items listed below shall be wet scraped, painted with a neutral colored primer, and encapsulated with DEQ approved elastomeric encapsulant. A list of DEQ approved elastomeric encapsulants is attached **(Attachment 4)**. Encapsulant shall be a minimum of 20 mils thick. The Lead-Based Paint and Settled Dust Sampling Report with floor plan maps detailing the locations of the lead-based paint is attached for review **(Attachment 5)**;
     - The metal pipe in Room 6
     - All 26 metal window headers above windows in the drill floor (Room 18)
   - Deteriorated paint removed from building surface will be properly disposed.

2. **Sampling and Disposal**
   - DEQ assumes that all lead-based paint chips removed from surfaces are considered hazardous waste. Lead-based paint removed from surfaces shall be disposed as appropriate.
   - If Contractor uses a paint stripper that exhibits a characteristic of hazardous waste, or contains hazardous waste constituents, it is the contractor's responsibility to characterize this waste under 40 CFR 262.11 and if it is determined to be hazardous waste, disposing of them as such. The final Report shall contain all relevant information regarding the wasted determination.
   - A completed and signed waste manifest, Land Disposal Notification Form, Certificate of Disposal, or any other forms demonstrating that the paint chips were properly disposed must be included in the Final Report.

LEAD DUST REMEDIATION INSTRUCTIONS

See Survey for Lead in Settled Dust Report
for details (**Attachment 5**)

Sequence of Events

The initial cleaning of the building shall be as follows:

1. First Phase –
    a. The Drill Room Floor shall be cleaned
        i. Once the First Phase is complete, there will be a one to two week delay before starting the Second Phase.
2. Second Phase –
    a. All floors of the remaining building shall be cleaned

1. **Lead Dust Remediation (See Attachment 5)**

- Surfaces above the floors such as walls, shelves, etc. may have accumulated dust that has settled. This accumulation shall be removed prior to the cleaning of the floors. This shall be done to prevent recontamination of the floors after they are cleaned.

- All window sills shall require lead dust remediation.

- HEPA vacuum and wet wash all interior and exterior window sills.
    - Contact DEQ to perform post remediation wipe sampling to confirm window sills have been appropriately remediated to at or below 250 micrograms per square foot (ug/SF).
    - Areas above 250 ug/SF shall be cleaned and tested until results are at or below 250 ug/SF.

- Floors of the entire building shall require lead dust remediation;
    - Remove dust from all equipment, shelving, trash, etc, and remove these items from room before remediation begins;
    - Remove dust from all carpet, remove all carpet from rooms, and dispose of all carpet as non-hazardous waste before lead dust remediation of floor begins;
    - Dispose any materials, determined by the DEQ to be trash, as non-hazardous waste;
    - HEPA vacuum and wet wash floors of entire building;
        - Lead levels on the floor are high in many areas of the building and lead contaminated dust may be ground into the pores and cracks of the concrete. It may be necessary to clean floors several times or use alternate cleaning methods after HEPA vacuuming and wet washing to remove the lead dust from the concrete and get the lead levels down to 40 micrograms per square foot (ug/SF).

- Contact DEQ to perform post remediation wipe sampling to confirm that room floors with lead contamination have been appropriately remediated to 40 micrograms per square foot (ug/SF). See Section C (Confirmation and Clearance Sampling) for additional information;
- Areas above 40 ug/SF shall be re-cleaned and re-tested until results are at or below 40 ug/SF;
- Lead dust and appropriate cleaning materials shall be disposed as appropriate.

2. **Disposal of Materials**

- Lead contaminated dust from the cleaning of the building, wash water, poly sheeting, personal protective equipment, mop heads, towels, brushes, wipes, other cleaning equipment, etc. shall be disposed as appropriate;

3. **Confirmation and Clearance Sampling**

- Contractor may use his own lab to check progress of remediation, however all DEQ decisions shall be based on analytical data from samples taken by DEQ or DEQ consultant.
- DEQ or DEQ contractor will be responsible for taking all post remediation samples.
- DEQ shall be notified five (5) days prior to each sampling event.

- Contact Information: DEQ
  Contact: Brittany Downs
  Phone: (405) 702-5112

- The third-party sampling shall not be included in the contractors base bid;
- All post remediation sampling will be performed after all initial abatement, remediation, and cleaning is complete.

FINAL REPORT

- Write final report and submit to DEQ;

- Final report shall include:
  - A detailed summary of work including any warranties and data;
  - Copy of post remediation sampling report;
  - Waste manifests (if any); and
  - Photo documentation of work
    - Photo documentation of work will have color digital photos with captions describing photo;

- Final report will be submitted in hard copy and electronically on disc.

OWNER REPRESTATIVE

Owner's Representative:

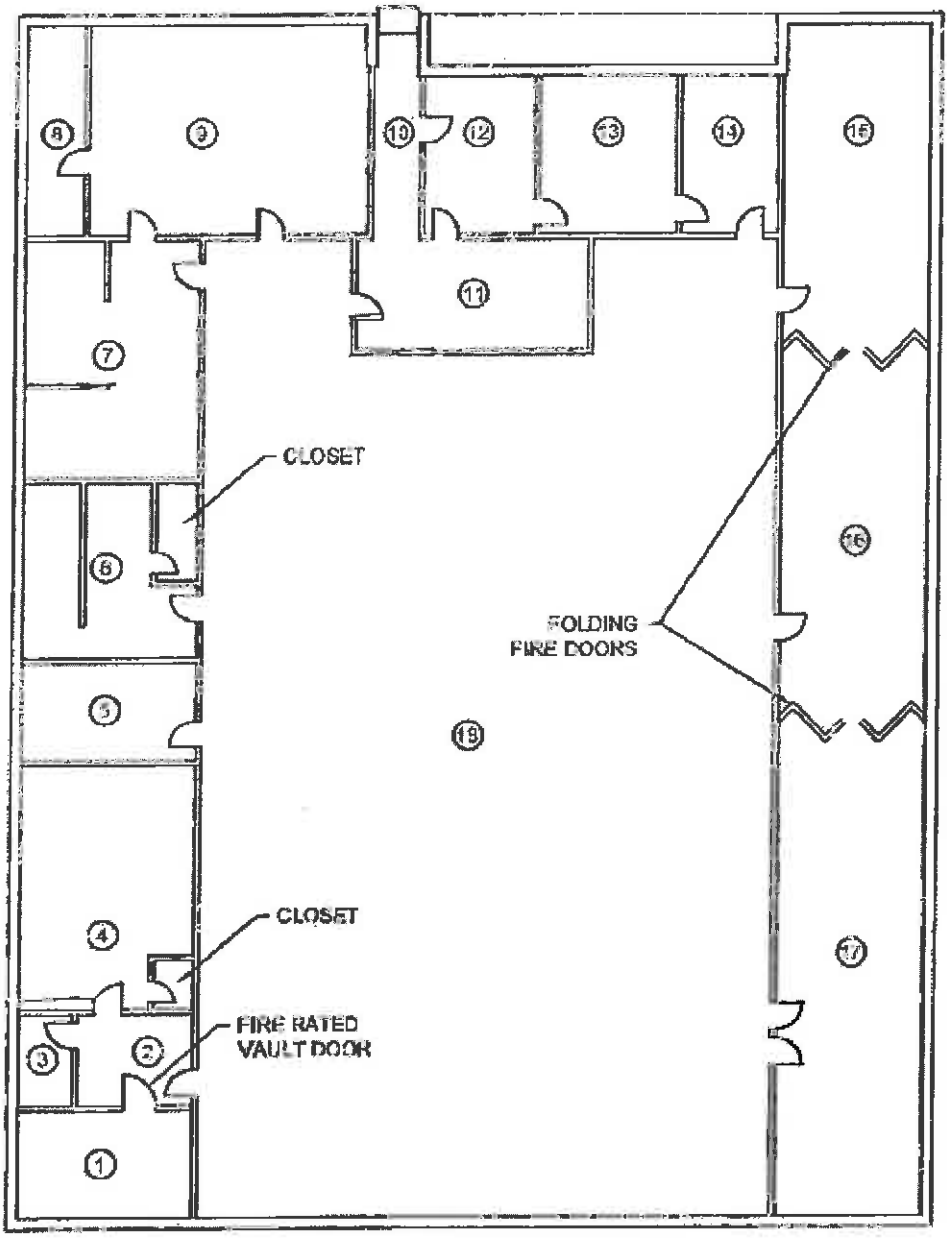
Brittany Downs
Oklahoma Department of Environmental Quality
Land Protection Division
707 N. Robinson
P.O. Box 1677
Oklahoma City, OK 73101-1677

Phone Numbers:
(405) 702-5112 (Office)
(405) 702-5101 (Fax)
E-Mail: brittany.downs@deq.ok.gov

ATTACHMENT 1

Bristow Armory Floor Plan Map

Bristow Armory Floor Plan Map



ATTACHMENT 2

Bristow Armory Asbestos Inspection Report
And
Bristow Armory Asbestos Project Design

GMR & Associates, Inc.

Engineering and Environmental Consultants

PROJECT DESIGN
For
ASBESTOS ABATEMENT

BRISTOW ARMORY
700 WEST 5TH AVENUE
BRISTOW, OKLAHOMA 74010

AUGUST 2013

OKLAHOMA DEPARTMENT OF LABOR
Please FAX Approval or Correspondence to:
c/o Mr. Brian D. Stanila
Environmental Programs Specialist II
Oklahoma Department of Environmental Quality
FAX: 405-702-5101
Telephone: 405-702-5138
Brian.Stanila@deq.ok.gov

Corporate Headquarters
2520 West I-44 Service Road, Suite 200
Oklahoma City, OK 73112
Telephone: 405-528-7017
Fax: 405-528-3346

Introduction

This Project Design was prepared for compliance with existing statutes and regulations governing the removal and disposal of asbestos-containing materials in facilities accessible to the public within the State of Oklahoma. It is designed to provide a prudent course of action for handling of asbestos in the best interests of the facility owner, building occupants and the general public.

1. Statement that DOL Abatement of Friable Asbestos Materials Rules Apply

This Project Design intends that the abatement be performed in compliance with the following state and federal regulations:

Asbestos Statutes and Abatement of Friable Asbestos Materials Rules (OAC 380:50) State of Oklahoma Department of Labor, Asbestos Division

Project Name: Bristow Armory, Bristow, Oklahoma

Occupancy: The building will be unoccupied during abatement

Project Type: Removal of pipe insulation and fittings

Abatement Contractor: To be Determined

Owner: City of Bristow, Oklahoma

Owner's Representative: GMR & Associates, Inc.

Regulatory Compliance

This Project Design intends that the abatement be performed in compliance with the following state and federal regulations:

Asbestos Statutes and Abatement of Friable Asbestos Materials Rules (OAC 380:50) State of Oklahoma Department of Labor, Asbestos Division

CFR 1910, General Industry Standards, latest edition, except for Section 1001(c) and (d)

CFR 1926, Construction Industry Standards, latest edition, except for Section 1100(c)(1) and (2)

CFR part 61, NESHAPS, latest edition

ANSI Z88.2, latest edition

Asbestos Hazard Emergency Response Act and 40 CFR Chapter I, Subchapter R, Part 763, Subpart E

American Conference of Governmental Industrial Hygienists' (ACGIH) Adopted Threshold Limit Value for Heat Stress

2. Work Sequencing and Phasing
The work will be performed in one phase.

*Sequence in each task shall be as follows:
1. Establish decontamination and load-out unit
2. Install critical barriers over openings
3. Establish emergency exits
4. Prep of the work areas
5. DOL prep inspection
6. Removal of ACM material
7. Lock-down
8. DOL visual inspection
9. Clearance monitoring
10. Tear down remaining containment except for critical barriers
11. DOL final inspection (*the load-out trailer will be available at final inspection).*

3. Means of Egress and Fire Protection
Primary emergency exits for work will be through the decontamination unit and the load out unit. The exit paths are shown on the Abatement Plan.

The fire protection plan includes two emergency exits:
1. Through the decontamination unit,
2. Through the load out unit as shown on the drawing.

Fire Extinguishers-The Abatement Contractor will provide Type 10 dry-charged ammonium phosphate fire extinguishers (10 lb) for the work area. The fire extinguishers will have a valid inspection tag and be decontaminated upon removal from the work area. A sufficient number of extinguishers will be provided to insure that all workers are within 75 feet of an extinguisher. An additional extinguisher will be provided exterior to the work area.

Battery powered emergency lighting will be provided at each emergency exit.

4. Quantity, type and location of asbestos materials to be abated
400 linear feet of ACM lines (40-45% chrysotile) and 30 fittings (65-70% chrysotile) exposed in Rooms 6,7,15,17, 18, and closet east of Room 6.

* Asbestos removal procedures per OAC 380:50-13 with glove-bag using wet methods.

*The number of glove-bags is estimated at 125.

5. Numbers of air monitoring pumps.

Five area pumps will be provided at the following locations:

1. Two inside the work area.
2. One outside the de-con unit
3. One outside the load-out.
4. One at the trailer during load-out.
5. One placed at the discretion of DOL

*Personnel pumps on the following:

1. Minimum of 2 workers and/or 25% of the workers in each work area.

*Clearance Monitoring:

1. In accordance with 40 OAC 380:50-11-2.

6. Numbers and locations of clean test samples and type of analysis

*Five PCM clearance samples will be taken in each glove-bag work area, in accordance with 40 OAC 380:50-11-2.

7. Numbers, capacities, location and discharge points of negative air machines

A negative pressure containment will not be required during glove-bag removal of ACM pipe insulation and fittings. However, negative air pressure must be maintained in each govlebag during asbestos removal. One (1) negative air machine having a capacity of 1,500 cfm shall be required to maintain a negative pressure through the decontamination unit.

8. Details of project containment (s)

Entry into and exit from the containments shall be through the decontamination unit.

All critical barriers shall be prepped with 6-mil poly and all holes sealed with poly or foam.

Power shall be supplied from a source in the building as designated by the City of Bristow. A GFCI board or GFCIs shall be supplied to protect power inside the containment. Electrical passing through the work area will be locked-out and tagged.

9. Details of decontamination system (s)

An attached decontamination facility per OAC 380:50-15-12 is planned for this work. The decontamination unit will consist of three chambers, a clean room, a shower and a dirty room. The airlocks for the decontamination unit will consist of triple 6 mil polyethylene overlapping flaps. The shower shall be equipped with a 5-micron waste water filter and 10-micron waste water pre-filter, liquid cleaning agent, non-porous shower grates and a functioning in-line water heater with capacity for 5 gallons per worker. Disposal of wastewater will be into the sanitary sewer. The specific locations will be determined during prep.

10. Soil Sampling
*No soils are involved.

11. Special Materials/Methods Required
*No special materials or methods are required.

12. Variances from the Rules
*No variances from the Rules are required at this time.

CERTIFICATION
This Project Design was prepared in accordance with OAC 380:50 and the Project Design Checklist issued by the Oklahoma Department of Labor.

A E Murray, Jr.

Arless Murray

Date 08/19/2013 OKPD-140097

Oklahoma Department of Labor

FEE: $0.00

Arless Murray Jr

has filed in the office of the Commissioner of Labor of the State of Oklahoma an application for a Limited Asbestos Contractor's license for

AHERA PROJECT DESIGNER

Now, therefore, The Commissioner of Labor of the State of Oklahoma, by virtue of the power vested in him by law hereby issues to the applicant license **No. OK-PD140097.**

Mark Costello

MARK COSTELLO
Commissioner of Labor

June 03, 2013
Date of Issuance

EXPIRES: May 31, 2014

ANALYTICAL RESULTS

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Re: QuanTEM ID 204756

QuanTEM appreciates the opportunity to provide analytical testing services to you. Attached are your reports and other supporting documentation for the above referenced project.

Thank you for making QuanTEM your lab of choice. If you have any question concerning this or other reports please feel free to contact us at 800-822-1650.

We continually work to improve our service. Help us out by providing feed back on your experience at www.QuanTEM.com. Click on Service Survey and fill out the form. We look forward to hearing from you.

Respectfully,
QuanTEM Laboratories, LLC.

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216
Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
001	BA-01A	Homogeneous	Tan Floor Tile	Asbestos Not Present	Cellulose <1	Vinyl CaCO3
002	BA-02A	Homogeneous	Yellow Mastic	Asbestos Not Present	Cellulose <1	Glue
003	BA-03A	Homogeneous	Tan Floor Tile	Asbestos Not Present	Cellulose <1	Vinyl CaCO3
004	BA-04A	Layered	Yellow Mastic	Asbestos Not Present	Cellulose <1	Glue
004a		Layered	Gray Floor Tile	Asbestos Present Chrysotile 8	Cellulose <1	Vinyl CaCO3
005	BA-05A	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose <1	Binder
006	BA-06A	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose <1	Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QUANTEM® LABORATORIES

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216
Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
007	BA-07A	Homogeneous	Tan Panel	Asbestos Not Present	Cellulose	20	Gypsum
008	BA-07B	Homogeneous	Tan Panel	Asbestos Not Present	Cellulose	20	Gypsum
009	BA-07C	Homogeneous	Tan Panel	Asbestos Not Present	Cellulose	15	Gypsum
010	BA-07D	Homogeneous	Tan Panel	Asbestos Not Present	Cellulose	15	Gypsum
011	BA-07E	Homogeneous	Tan Panel	Asbestos Not Present	Cellulose	20	Gypsum
012	BA-08A	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	20	Gypsum
013	BA-08B	Layered	White Texture	Asbestos Not Present	Cellulose	<1	CaCO3 Paint

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216
Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
013a		Layered	White Sheetrock	Asbestos Not Present	Cellulose	15	Gypsum
014	BA-08C	Layered	White Texture	Asbestos Not Present	Cellulose	<1	CaCO3 Paint
014a		Layered	White Sheetrock	Asbestos Not Present	Cellulose	15	Gypsum
015	BA-09A	Homogeneous	Gray/Black Window Glazing	Asbestos Not Present	Cellulose	<1	CaCO3 Binder
016	BA-10A	Homogeneous	Gray/Black Window Glazing	Asbestos Not Present	Cellulose	15	CaCO3 Binder
017	BA-11A	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	15	Gypsum
018	BA-11B	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	20	Gypsum

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QUANTEM® LABORATORIES

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216
Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
019	BA-11C	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	20	Gypsum
020	BA-12A	Layered	White Joint Compound	Asbestos Not Present	Cellulose	2	CaCO3
020a		Layered	Cream Tape	Asbestos Not Present	Cellulose	65	Binder
021	BA-12B	Layered	White Joint Compound	Asbestos Not Present	Cellulose	<1	CaCO3
021a		Layered	Cream Tape	Asbestos Not Present	Cellulose	60	Binder
022	BA-12C	Layered	White Joint Compound	Asbestos Not Present	Cellulose	2	CaCO3
022a		Layered	Cream Tape	Asbestos Not Present	Cellulose	65	Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216
Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
023	BA-13A	Homogeneous	White Window Glazing	Asbestos Not Present	Cellulose	<1	Binder
024	BA-14A	Homogeneous	Gray Insulation	Asbestos Not Present	Cellulose	<1	CaCO3 Vermiculite
025	BA-15A	Homogeneous	Cream Insulation	Asbestos Not Present	Cellulose	65	Binder
026	BA-16A	Homogeneous	Silver/Black Gasket	Asbestos Not Present	Cellulose	8	Binder
027	BA-17A	Layered	Black/Beige Pipe Wrap	Asbestos Present Chrysotile 45	Cellulose	10	Binder
027a		Layered	Brown Pipe Wrap	Asbestos Not Present	Cellulose	25	Binder
028	BA-17B	Layered	Black/Beige Pipe Wrap	Asbestos Present Chrysotile 45	Cellulose	8	Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No.: 204756
Account Number: B216
Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
028a		Layered	Brown Pipe Wrap	Asbestos Not Present	Cellulose	15	Binder
029	BA-17C	Layered	Black/Beige Pipe Wrap	Asbestos Present Chrysotile 45	Cellulose	5	Binder
029a		Layered	Brown Pipe Wrap	Asbestos Not Present	Cellulose	60	Binder
030	BA-17D	Layered	Black/Beige Pipe Wrap	Asbestos Present Chrysotile 40	Cellulose	10	Binder
030a		Layered	Brown Pipe Wrap	Asbestos Not Present	Cellulose	60	Binder
031	BA-17E	Layered	Brown/White Pipe Wrap	Asbestos Present Chrysotile 45	Cellulose	10	Binder
031a		Layered	White Pipe Wrap	Asbestos Not Present	Cellulose	60	Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216
Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
032	BA-18A	Layered	Cream Pipe Wrap	Asbestos Present Chrysotile 5	Cellulose 65	Binder
032a		Layered	Light Gray Pipe Fitting	Asbestos Present Chrysotile 65	NA	Binder
033	BA-18B	Layered	Beige Pipe Wrap	Asbestos Present Chrysotile 35	Cellulose 25	Binder
033a		Layered	Light Gray Pipe Fitting	Asbestos Present Chrysotile 60	NA	Binder
034	BA-18C	Homogeneous	Light Gray Pipe Fitting	Asbestos Present Chrysotile 70	Cellulose 2	Binder
035	BA-18D	Homogeneous	Light Gray Pipe Fitting	Asbestos Present Chrysotile 65	Cellulose 2	Binder
036	BA-18E	Homogeneous	Brown/White Pipe Fitting	Asbestos Present Chrysotile 70	Cellulose 2	Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QUANTEM® LABORATORIES

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 204756
Account Number: B216
Date Received: 02/23/2012
Received By: Leigh Armstrong
Date Analyzed: 02/29/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Client: GMR & Associates, Inc.
PO Box 57827
Oklahoma City, OK 73157

Project: Bristow Armory
Project Location: 700 W 5th, Bristow, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
037	BA-19A	Layered	White Roofing	Asbestos Not Present	Synthetic	75	Binder
037a		Layered	Black Tar	Asbestos Not Present	Cellulose	<1	Tar
038	BA-20A	Homogeneous	Gray Transite	Asbestos Present Chrysotile 20	NA		Binder

Stacey Holder, Analyst

3/1/2012
Date of Report

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM LABORATORIES
www.QuanTEM.com

ASBESTOS CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

Lab No. 204796 (Accept) Reject

Company: GMR	Phone: 918/645-9810	Project Name: Bristow Armory	[X] QuanTEM Website
Contact: Mike Majors	Cell Phone:	Project Location: 700 W 5th, Bristow, OK	[ ] Other
Account #:	E-mail: mmajors@garinc...	Project ID:	

Name: Majors / Burch Date: 2/2/12

Howard Burch	2-23-12 1500	[signature] 2/23/12	1500

PLM				Turnaround
[X] Bulk Analysis (EPA 600/R-93/116)	[ ] Vermiculite Attic Insulation (EPA 600/R-04/004)	[ ] Air- AHERA	[ ] Bulk- Presence / Absence EPA600/R-93/116	[ ] Rush
[ ] 400 Point Count	[ ] Other	[ ] Air- NIOSH 7402	[ ] Bulk- Quantitative [weight%]- Chatfield	[ ] Same Day
[ ] 1000 Point Count	PCM	[ ] Air- ISO 10312	[ ] Dust- Presence / Absence	[ ] 24 - Hour
[ ] Gravimetric Preparation	[ ] NIOSH 7400	[ ] Drinking Water- EPA 100.2	[ ] Dust- Quantitative [fibers/sq.cm]- ASTM D5755	[ ] 3 - Day
[ ] Particle ID		[ ] Waste Water- EPA 600/4-83-043	[ ] Other	[X] 5 - Day

No.	Sample ID	To Be Analyzed	Color	Description		
1	BA-01A	[X]	Tan	Floor Tile - Top Layer	715 (?)	
2	BA-02A	[X]	Yellow	Mastic		
3	BA-03A	[X]	Tan	Floor Tile - Base Layer	715	
4	BA-04A	[X]	Yellow	Mastic		
5	BA-05A	[X]	White	Ceiling Tile	240	
6	BA-06A	[X]	White	" "	1665	
7	BA-07A	[X]	Tan	Wall board - Panel	3100	
8	BA-07B	[X]	"	"		
9	BA-07C	[X]	"	"		
10	BA-07D	[X]	"	"		

SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

QUANTEM LABORATORIES
www.QuanTEM.com

ASBESTOS CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Laboratory Use Only
Lab No. 201756
Accept Reject

Project Information

Company: GMR | Project Name: Bristow Armory | Project Location: 700 W 5th Bristow, OK

No.	Sample ID (Uncharacterized Material)	To Be Analyzed	Color	Description	Quantity	Comments / Notes
11	BA-07E	☑	Tan	Wall Board - J		
12	BA-09A	☑	White	Dry Wall	560 ft²	
13	BA-09B	☑	"	" "		
14	BA-09C	☑	"	" "		
15	BA-09A	☑	Grey/Black	Window Glazing - Upper		Layered
16	BA-10A	☑	"	" "		"
17	BA-11A	☑	White	Dry Wall	500 ft²	
18	BA-11B	☑	"	" "		
19	BA-11C	☑	"	" "		
20	BA-12A	☑	"	Tape / Joint Compound		Layered
21	BA-12B	☑	"	" "		
22	BA-12C	☑	"	" "		
23	BA-13A	☑	"	Lower Window Glazing		
24	BA-14A	☑	Grey	Vault Door Insulation		
25	BA-15A	☑	White	Folding Panel Doors		
26	BA-16A	☑	BLK	Gasket		
27	BA-17A	☑	Brn/White	Water pipe Insul. WRAP	350 LF	Layered
28	BA-17B	☑	"	" " " "		"
29	BA-17C	☑	"	" " " "		"
30	BA 17D	☑	"	" " " "		"

SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

QuanTEM LABORATORIES
www.QuanTEM.com

ASBESTOS CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

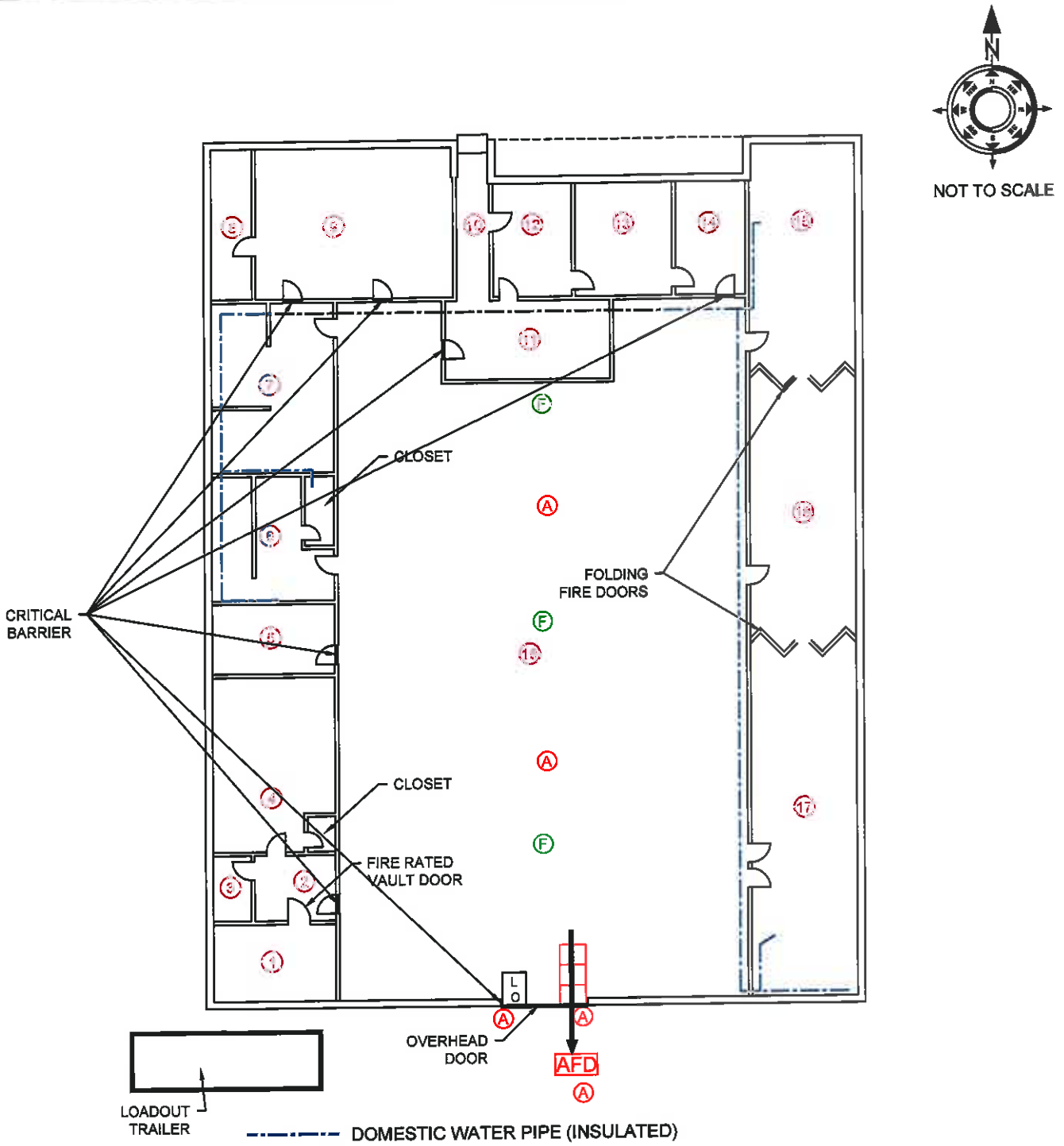
For Lab Use Only
Lab No. 204756
Accept Reject

Project Information

Company: GMR | Project Name: Bristow Armory | Project Location: 700 W 5th, Bristow, OK

No.	Sample ID	☑ To Be Analyzed	[illegible]	[illegible]	[illegible]	Comments/Notes
31	BA-17E	☑	Brn/White	Water Pipe Ins. Wrap		Layered
32	BA-18A	☑	"	Water Pipe Ins. Fittings	30 Fittings	Layered
33	BA-18B	☑	"	" " " "		"
34	BA-18C	☑	"	" " " "		"
35	BA-18D	☑	"	" " " "		"
36	BA-18E	☑	"	" " " "		"
37	BA-19A	☑	White	Roofing Fabric	13500ft²	Layered
38	BA-20A	☑	Grey	Transite Soffit - N Bldg.	240ft²	
39		☐				
40		☐				
41		☐				
42		☐				
43		☐				
44		☐				
45		☐				
46		☐				
47		☐				
48		☐				
49		☐				
50		☐				

PROJECT DESIGN DIAGRAM



GMR & Associates, Inc.
2520 West I-44 Service Road, Ste. 200
Oklahoma City, OK 73112
Phone: 405/528-7017, Fax: 405/528-3346

Figure 1
Asbestos Abatement Project Design
Bristow Armory
700 W. 5th Avenue
Bristow, Oklahoma 74010

Project Design Review Form

Oklahoma Department of Labor

Asbestos Division

3017 N. Stiles, Oklahoma City, OK 73105

Phone – (405)521-6464 Fax – (405)521-6025

Project Name: ODEQ-Bristow Armory

Project No: 13-7631 Date: 07/29/2013

Project Designer: Arless Murray

Approved: V

Disapproved: _____

	ITEM	ACCEPTED	REJECTED	COMMENTS
1.	A statement that DOL Abatement of Friable Materials Rules apply.	X		Page 1. Regulatory Compliance.
2.	Sequencing and phasing of work.	X		The work will be performed in one phase.
3.	Identification of means of egress and a fire protection plan and a diagram for emergency escape routes, and fire extinguisher placements.	X		Two emergency exits and three 10:ABC fire extinguisher identified in drawing. Emergency lighting will be in place.
4.	The quantity, type, percentage with bulk analysis unless presumed and a diagramed location of asbestos materials to be abated.	X		400 linear feet of piping containing 40-45% chrysotile and 30 pipe fittings containing 65-70% chrysotile. The material is located in rooms 6, 7, 15, 17, 18, and closet east of room 6.
5.	Abatement methods, and techniques, and numbers of containments, glove bags or mini-containments.	X		Asbestos removal procedures per OAC 380:50-13 with glove bag using wet methods. The number of glove bags is estimated at 125.
6.	Details of personal and area air monitoring samples.	X		Seven area monitors identified. 25% with a minimum of two personals.
7.	Numbers and locations of Clean Test samples and type of analysis to be employed.	X		Five PCM clearance samples will be taken in the work area.
8.	Numbers, capacities, a diagram to identify locations, and discharge points, if any, of negative air machines.	X		One negative air machine with a minimum of 1,500 CFM shall be required to maintain negative pressure through the decontamination unit.
9.	Details of project containment(s), glove bag or mini-containments, including drawings. Details shall include all applicable subchapters, including but not limited to scaffolding and live electric isolation.	X		Electric will be locked and tagged out. 6-mil critical barriers and drop cloths will be required.
10.	Details of decontamination system(s).	X		An attached decontamination unit.
11.	The extent to which asbestos-contaminated soils, if any, must be removed and the sampling methods of determining the efficacy of such removal.	X		None.
12.	Special materials or methods required to protect objects in the work area should be detailed, (plywood over carpeting or hardwood floors to prevent damage from scaffolds and/or falling materials.	X		None.
13.	Any variances from the Abatement of Friable Asbestos Materials Rules.	X		None.

The Department of Labor reserves the right to require additional engineering or environmental controls consistent with the Abatement of Friable Asbestos Materials Rules which may be necessary because of discrepancies between this Project Design and field conditions or from unanticipated changes in field conditions.

REVIEWED BY: _____ DATE: 8-20-13 REVIEWED BY: _____ DATE: 8/27/13

ATTACHMENT 3

Health & Safety Aspects to Consider

Health & Safety Aspects to Consider

Project Goal: To ensure that former National Guard Armories are free of lead dust. Specifically, indoor firing ranges (IFR's) and other areas that contain lead contamination.

Please Note: the following information is from the Departments of the Army and the Air Force, National Guard Bureau, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges (**Attachment 4**).

Health and Medical Aspects

Health Effects

29 Code of Federal Regulations (CFR) 1910.1025, Appendix A, identifies lead as a highly toxic metal. Elemental lead is indestructible and common in the environment. Lead can enter the body by inhalation (breathing) or ingestion (eating). In addition, lead is a cumulative poison. It accumulates in the blood, bones, and organs, including the kidneys, brain and liver. Effects include nervous and reproductive system disorders, delays in neurological and physical development, cognitive and behavioral changes, and hypertension. Symptoms include loss of appetite, difficulty sleeping, irritability, fatigue, headache, and inability to concentrate. It can stay in the bones for decades. Worker awareness and training are important to ensure that employees can recognize the symptoms of exposure and get prompt medical attention.

Medical Surveillance for occupational Exposure to Lead

a. 29 CFR 1910.1025(j)(i-ii), Medical Surveillance - General: "The employer shall institute a medical surveillance program for all employees who are or may be exposed above the action level for more than 30 days per year. The employer shall assure all medical examinations and procedures are performed by or under the supervision of a licensed physician."

b. The DOD 6055.5-M, Occupational Medical Surveillance Manual - Table 2-I lists medical surveillance criteria for employees "who are or may be exposed above the action level for 30 days/year."

Personal Protective Equipment

29 CFR 1910.1025(f)(2),for housekeeping and rehabilitation the employer shall select respirators from among those approved for protection against dust, fume, and mist by the National Institute for Occupational Safety and Health (NIOSH), under the provision of 42 CFR part 84. The employer shall institute a respiratory protection program in accordance with 29 CFR 1910.134(b), (d), (e), and (f). As a minimum, personnel conducting the decontamination of the range shall be provided with the following personal protective equipment.

a. Under 29 CFR 1910.1025 (g). For employees engaged in range rehabilitation and/or range conversion, the employer shall provide at no cost to the employee, and ensure that the employee uses appropriate protective work clothing and equipment such as, but not limited to:

(1) Protective coveralls with hood and shoe covers or disposable Tyvek ™ full body suit.

(2) Disposable rubber gloves; and disposable shoe coverlets (If necessary).

(3) Full-face air purifying respirator with P-100 cartridges.

b. The employer shall provide the clothing required in a clean and dry condition at least daily to employees engaged in the conversion of IFRs.

c. The employer shall provide for the cleaning, laundering, or disposal of used or contaminated protective clothing and equipment.

d. The employer shall assure that all protective clothing is removed at the completion of a work shift only in areas designated for that purpose (Change Areas or Change Rooms).

e. The employer shall ensure that contaminated protective clothing that is to be cleaned, laundered, or disposed of, is placed in a closed container in the change area that seals sufficiently enough to prevent dispersion of lead dust.

f. The employer shall further inform in writing any person who cleans or launders protective clothing or equipment of the potentially harmful effects of exposure to lead.

g. The employer shall ensure that the containers of contaminated protective clothing and equipment are labeled as follows: CAUTION: *CLOTHING CONTAMINATED WITH LEAD. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS.*

Education, Maintenance, Cleaning and Conversion

Worker Education

a. 29 CFR 1910.1025, Appendix 13, requires an information and training program for **all employees exposed** to lead above the action level **or** who may suffer skin or eye irritation from lead. The program must inform the employees of the specific hazards associated with their work environment, protective measures which can be taken, the danger of lead to their bodies (including their reproductive systems), and their rights under the standard. In addition you must make readily available to all employees, including those exposed below the action level, a copy of this standard and its appendices. This training program shall be repeated annually for personnel in range cleanup operations.

b. The supervisor shall ensure that each individual employee is informed of the following:

(1) The content of the standard and its appendices.

(2) The specific nature of operations that could result in exposure to lead above the action level.

(3) The purpose, proper selection, fitting, use, and limitations of respirators.

(4) The purpose and a description of medical surveillance program.

(5) Eating and drinking are prohibited in lead contaminated areas.

(6) Smoking and smoking materials shall not be permitted in contaminated areas.

(7) Employees must wash their hands and other exposed skin whenever they leave the work area.

(8) The engineering controls and work practices associated with the individual's job assignment.

(9) The contents of any compliance plan in effect.

(10) Instructions to employees that chelating agents should not routinely be used to remove lead from their bodies and should not be used at all except under the direction of a licensed physician.

REFERENCES

Section 1 Required Publications

There are no entries in this section

Section II Related Publications

ASTM E1792-03
Standard Specification for Wipe Sampling Materials for Lead in Surface Dust

AR 11-34
The Respiratory Protection Program

AR 40-5
Preventive Medicine

DODI 6055.5
Industrial Hygiene and Occupational Health

DOD 6055.5-M
Occupational Medical Surveillance Manual

29 CFR, Part 1910
Occupational Safety and Health Administration, Department of Labor

National Institute for Occupational Safety and Health (NIOSH) 76-130
Lead Exposure and Design Considerations for Indoor Firing Ranges, Department of Health, Education and Welfare

NGR 385-15
Policy and Responsibilities for Inspection, Evaluation and Operation Army National Guard National Guard Indoor Firing Ranges (IFRs).

NGR 415-5
Army National Guard Military Construction Program Development and Execution

NGR 420-10
Construction and Facilities Management Office Operations

Technical Manual, 5th Edition
Occupational Safety and Health Administration, Department of Labor Section III

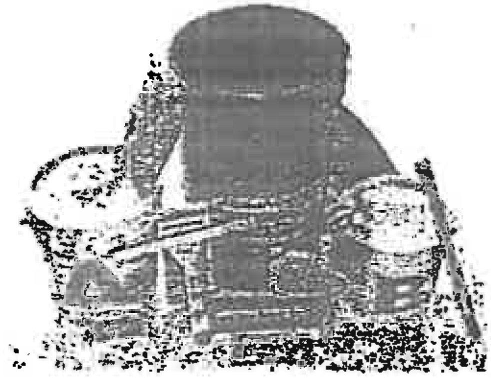
ATTACHMENT 4

DEQ Approved Lead-Based Paint Encapsulants List

Sealant and Encapsulant Specifications

Lead-Based Paint Encapsulants

Encapsulant Manufacturer	Encapsulant Product(s)
Coronado Paint Company	LEAD BLOCK™
Dumond Chemicals	LEAD STOP™
Dynacraft Industries, Inc.	Back to Nature Protect-A-Coat
Encap Systems Corporation	EncapSeal™ I
Encap Systems Corporation	EncapSeal™ II
Fiberlock Technologies, Inc.	Child GUARD interior/exterior
Fiberlock Technologies, Inc.	L-B-C® Type III
Global Encasement, Inc.	LeadLock™
Grace Construction Products	Lead Seal®
Grace Construction Products	Barrier Coat® II
Insl-x Products Corporation	INSL-CAP™
SAFE Encasement Systems	SE-120 Protective Skin
Specification Chemicals, Inc.	NU-WAL® #2500 Coating



Epoxy-Coat 3 Gallon Interior High Gloss [redacted] Garage Floor Coating Kit

Item #: 373342 | Model #: SK-0000

Be the first to

[redacted]

Description

3-Gallon Interior High Gloss [redacted] Garage Floor Coating Kit

- Commercial/industrial grade
- 100% solids
- Over 30 years experience with automotive, industrial, commercial and government customers
- After-hours, live technical support
- Over 3 times stronger than concrete
- 10.3 times more durable than water-based epoxies
- 4.8 times thicker than water based epoxies
- Self-leveling

Specifications

Warranty	Lifetime	Combustible	No
Sheen/Finish	High Gloss	Waterproof	Yes
Paint Color	[redacted]	Number of Coats Recommended	1.0
Unit of Measure	Gallon (s)	Sand and water cleanup	No
Unit of Measure Quantity	3.0	Low-odor formula	Yes
Coverage (Sq. Feet)	500.0	Mildew-resistant finish	Yes
Base Material	Epoxy	Scrubbable and washable finish	Yes
Color Family	[redacted]	Stain-Resistant	Yes
Where to Use	Interior	Fade-Resistant	Yes
Tintable	[redacted]	UV-resistant	Yes
Primer Recommended	No	Type	Other
Dry To Touch	18 Hours	Paint and Primer in One	Yes
Flammable	No		

KELLY-MOORE PAINTS

INDUSTRIAL COATINGS

HIGH PERFORMANCE SYSTEMS

KM-669

Acrylic Sealer

THIS PRODUCT MAY NOT BE AVAILABLE IN SOME AREAS DUE TO VOC REGULATIONS
Contact your Kelly-Moore representative for more information

Product Description
A one component, solvent borne, high gloss, clear acrylic sealer designed for use on concrete, masonry, and brick. Dustproofs concrete by penetrating surface pores leaving a tough, durable film.

Performance Features

- Non-Yellowing
- Excellent Adhesion to Concrete
- Good Water & Salt Chemical Resistance
- Good Abrasion Resistance
- Can be Sprayed, Padded or Rolled

Product Specifications

Resin Type	Acrylic
Color Range	Clear
Finish	High Gloss
Drying Time	8 hours to recoat
Practical Coverage	250-450 Sq. Ft. / Gallon
Recommended Dry Film Thickness	1.2 - 2.2 mils per coat
Solids By Volume	35%
Sizes	Five gallon pails
V.O.C.	560 Grams per liter
Clean Up	KM-S-74 or KM-SA-50

Surface Preparation
WARNING! If you scrape, sand or remove old paint from any surface, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Carefully clean up with a wet mop or HEPA vacuum. Before you start, find out how to protect yourself and your family by contacting the U.S. EPA/Lead Information Hotline at 1-800-424-LEAD (5323) or log on to www.epa.gov/lead.

Surface Preparation:
Remove all dirt, grease, oil, soil, chemical contaminants, and other matter. Allow surface to dry.

Application Procedure:
When mixing, use an EXPLOSION PROOF SLOW SPEED DRILL WITH A JIFFY MIXER. Apply a uniform wet film, do not puddle material. Do not cover more area than can be worked in 10 minutes due to fast dry time. When spraying, use a low pressure machine. Two coats may be necessary depending on porosity or type of service.

For safety and product curing, proper ventilation is necessary throughout application and cure.

Dry Times: 8 hours

See Precautions and Limited Warranty next page

KM-669 (cont.)

Precautions
KM-669 is Flammable. KM-669 contains flammable solvents. Keep away from all sources of ignition during mixing, application, and cure. In confined areas, provide adequate forced air ventilation. The use of goggles, fresh air masks or NIOSH approved respirators, protective skin cream and protective clothing is a recommended standard practice when spraying coatings.

Proper Disposal
For proper disposal of excess material, please contact your local city or county waste management agency.

Limited Warranty: The statements made on this bulletin, product labels or by any of our agents concerning this material are given for information only. They are believed to be true and accurate and are intended to provide a guide to approved construction practices and materials. As workmanship, weather, construction equipment, quality of other materials and other variables affecting results are all beyond our control, Kelly-Moore Paint Company, Inc., does not make nor does it authorize any agent or representative to make any warranty of MERCHANTABILITY OR FITNESS for any purpose or any other warranty, guarantee or representation, expressed or implied, concerning this material except that it conforms to Kelly-Moore's quality control standards. Any liability whatsoever of Kelly-Moore Paint Company, Inc. to the buyer or user of this product is limited to the purchaser's cost of the product itself.

SEE MATERIAL SAFETY DATA SHEETS FOR FULL SAFETY PRECAUTIONS.

KM-669 IS FOR PROFESSIONAL USE ONLY

KM-669 IS FOR INDUSTRIAL USE ONLY

KEEP AWAY FROM CHILDREN

MATERIAL SAFETY DATA SHEET

For Coatings, Resins & Related Materials

Section I

Manufactured For: Kelly-Moore Paints
Address: 987 Commercial Street
San Carlos, CA 94070

Prep Date: 07/28/06

Emergencies Involving Spills, Leaks, Fires, Exposure, Or Accident Contact Chemtrec: 1-800-424-9300

Product Class: Acrylic Lacquer Sealer
Trade Name: KM-669 CLEAR
H.M.I.S. Codes: H F R P
2* 3 0 -

Information Phone: 1-888-677-2468

Section II - HAZARDOUS INGREDIENTS

Ingredient	C.A.S.#	Weight Percent	Occupt. Exposure Limits OSHA PEL	ACGIH TLV	Vapor Pressure mm Hg & Temp.F	
Acrylic Resins	Mixture	30-40	Not Established		Not Determined	
*Xylene	1330-20-7	40-50	100 ppm	100 ppm	5.1	63
*Ethyl Benzene	100-41-4	15-20	100 ppm	100 ppm	7.1	68

*Indicates toxic chemical(s) subject to reporting requirements of Section 313 of Title III and of 40 CFR 372.

Section III - PHYSICAL DATA

Boiling Range (Deg. F): 240*
Evaporation Rate: Slower than Ether
Percent Volatile By Volume: 70 ± 3%

Vapor Density: Heavier than air
Weight Per Gallon (lbs.): 7.75 ± .25

Section IV - FIRE & EXPLOSION HAZARD DATA

Flash Point (Deg. F): 80*

Lower Explosive Limit: 1.0

Extinguishing Media: Foam, alcohol foam, CO2, dry chemical, water spray

OSHA Flammability Classification: Flammable Liquid IC

Special Firefighting Procedures: Wear a NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Use water to keep fire exposed containers cool. Water may be ineffective as an extinguishing agent.

Unusual Fire & Explosion Hazards: Vapors are heavier than air and may travel along the ground or be moved by ventilation to ignition sources at locations distant from material handling point. Pressure may build up in containers and create an explosion hazard.

KM-669 CLEAR

Section V - HEALTH HAZARD DATA

THIS PRODUCT IS FLAMMABLE

Effects Of Overexposure:
Eyes: Irritation, burning, tearing and redness.
Skin: Moderate irritation or defatting of skin upon prolonged or repeated contact.
Ingestion: Abdominal pain, nausea, vomiting and diarrhea.
Inhalation: Excessive exposure to vapors can cause headache, dizziness, uncoordination, nausea and loss of consciousness.

Emergency & First Aid Procedures:
Eyes: Flush with water for 15 minutes.
Skin: Remove contaminated clothing; wash skin with soap and water.
Ingestion: Do not induce vomiting. Get medical attention immediately.
Inhalation: Move to fresh air; aid breathing if necessary.

In all cases, consult a physician for best treatment.

Chemical listed as carcinogen or potential carcinogen:
NTP: No IARC: No OSHA: No

Section VI - REACTIVITY DATA

Stability: Product Stable
Conditions to Avoid: All sources of ignition
Incompatibility (Materials to Avoid): Oxidizing agents, strong acids & bases
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, nitrogen oxides and organic compounds.
Hazardous Polymerization: Will Not Occur

Section VII - SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Released Or Spilled: Dike spill area. Absorb spill with inert absorbent material. Place in sealed metal containers for proper disposal.

Waste Disposal Method: Dispose of in accordance with local, state and federal regulations.

Section VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection: Use a NIOSH/MSHA jointly approved respirator
Ventilation: Use mechanical ventilation
Protective Gloves: Neoprene or rubber
Eye Protection: Chemical splash goggles
Other Protective Equipment: Protective clothing, barrier cream, eye bath, safety shower

Section IX - SPECIAL PRECAUTIONS

Precautions To Be Taken In Handling & Storing: Store in dry area. Keep away from open flames and high temperatures.
Other Precautions: Minimize contact. Avoid breathing vapors. Practice good industrial hygiene and safe working practices.

State and Local Regulations
California Proposition 65
This product contains the following substances known to the State of California to cause cancer, birth defects or other reproductive hazards: Benzene, Toluene.

ATTACHMENT 5

Bristow Armory Lead-Based Paint Inspection Report

FINAL ABATEMENT REPORTS

ENVIRONMENTAL
ACTION
INC.

November 26, 2014

Oklahoma Department of Labor
4001 North Lincoln Blvd.
Oklahoma City, OK 73105

RE: Bristow Armory

The following documents are enclosed for your records:

- Air monitoring results
- Waste disposal manifest

Please call if you need any additional information in order to complete your file.

Sincerely,
ENVIRONMENTAL ACTION, INC.

Darwin Chesnut
Oklahoma City Operations Manager

ENCLOSURES

Tulsa Office: P.O. Box 1029 • Jenks, OK 74037 • (918) 298-4080
OKC Office: 1644 NW 5th Street • Oklahoma City, OK 73106 • (405) 684-8900

Asbestos Daily Air Monitoring Forms

ATECH
ASBESTOS SUPPORT TECHNOLOGIES, INC.
P.O. Box 771 Blanchard, OK. 73010 405.618.7660

Collection Date:	10-29-14	Client:	EAI
Activities:	GLOVE-BAG	Contact Name:	NASH HARJO
Project Number:		Contact Info.:	
Project Name:	FORMER ARMORY	Contractor:	EAI
Address:	700 WEST 5TH STREET	Supervisor:	NASH HARJO

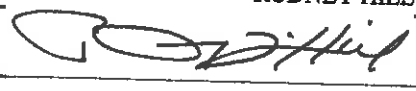
Sample I.D.	Sampling Location	Start Time	End Time	Total Minutes	Start Flow	End Flow	Average Flow	Total Volume	Fiber Count	Fields	F/mm^2	F/cc	L.C.L.	U.C.L.	Detection Limit
01	TONY McCUTCHEN 279571	09: 56	16: 08	372.00	2.30	2.10	2.20	818.4	6.5	100	8.2803	B.D.L.	0.0024	0.0054	0.0060
02	ADRIAN DOVER 401168	09: 56	16: 08	372.00	2.30	2.30	2.30	855.6	3.5	100	4.4586	B.D.L.	0.0012	0.0028	0.0057
03	WORK AREA	09: 56	16: 08	372.00	2.30	2.30	2.30	855.6	3.0	100	3.8217	B.D.L.	0.0011	0.0024	0.0057
04	NEG. AIR	09: 58	16: 05	367.00	2.30	2.00	2.15	789.05	1.0	100	1.2739	B.D.L.	0.0004	0.0009	0.0062
05	CLEAN ROOM	09: 58	16: 06	368.00	2.30	2.10	2.20	809.6	4.5	100	5.7325	B.D.L.	0.0017	0.0038	0.0061
06	LOAD-OUT	09: 59	16: 05	366.00	2.30	2.10	2.20	805.2	2.0	100	2.5478	B.D.L.	0.0007	0.0017	0.0061
07	BLANK								0	100					
08	BLANK								0	100					
09	CLEARANCE NE	16: 38	18: 39	121.00	10.00	10.00	10.00	1210	2.5	100	3.1847	B.D.L.	0.0006	0.0014	0.0041
10	CLEARANCE SE	16: 38	18: 39	121.00	10.00	10.00	10.00	1210	2.0	100	2.5478	B.D.L.	0.0005	0.0011	0.0041
11	CLEARANCE CENTER	16: 38	18: 40	122.00	10.00	10.00	10.00	1220	3.5	100	4.4586	B.D.L.	0.0009	0.0019	0.0040
12	CLEARANCE SW	16: 38	18: 40	122.00	10.00	10.00	10.00	1220	3.5	100	4.4586	B.D.L.	0.0009	0.0019	0.0040
13	CLEARANCE NW	16: 38	18: 40	122.00	10.00	10.00	10.00	1220	2.0	100	2.5478	B.D.L.	0.0005	0.0011	0.0040

Personal Protective Equipment
Tyvek
Full Face APR

Analytical Method:	NIOSH 7400
AIHA PAT ID#	212734
Microscope:	100
Filter Area:	385
Field Area:	0.01

Field Technician: RODNEY HILL

Analyst (Print): RODNEY HILL

Analyst Signature: 

Date: 10-29-14

WASTE CONNECTIONS INC.
Connect with the Future

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV.
If waste is NOT asbestos waste, complete only Sections I, II and III.

No. 0069067

Section I — GENERATOR (Generator completes all of Section I)

a. Generator Name: City of Bristow
b. Generating Location: Old Armory Bldg.
c. Address: 110 E 7th
Bristow, OK 74010
d. Address: N 5th St.
e. Phone No.: 981-367-8244
f. Phone No.:
If owner of the generating facility differs from the generator, provide:
g. Owner's Name:
h. Purchase Order No.:
i. WC WASTE CODE: O K 2 1 | 1 2 4 2 4
j. Description of Waste: RQ, Asbestos,9,NA2212,PGIII
k. Quantity: 12 | Units: Y3 | Containers No.: | TYPE: T

TYPE	
DM	METAL DRUM
DP	PLASTIC DRUM
B	BAG
BA	6 MIL. PLASTIC BAG or WRAP
T	TRUCK
O	OTHER

UNITS	
P	POUNDS
Y	YARDS
M³	CUBIC METERS
Y³	CUBIC YARDS
O	OTHER

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

Nash Marjo — Generator Authorized Agent Name
[signature] — Signature
Shipment Date: 1/ 1 7 1 4

Section II — TRANSPORTER (Generator complete a-d, Transporter I complete e-g, Transporter II complete h-n)

TRANSPORTER I

a. Name: Lowder Transportation Co., Inc.
b. Address: P. O. Box 837
Shawnee,OK 74802
c. Driver Name/Title: T. Lowder,Driver
d. Phone No.: 405-615-4075
e. Truck No.: 108
f. Vehicle License No./State: 121974 OK
Acknowledgment of Receipt of Materials:
g. [signature] — Driver Signature
Shipment Date: 1 / 7 . 1

TRANSPORTER II

h. Name:
i. Address:
j. Driver Name/Title:
k. Phone No.:
l. Truck No.:
m. Vehicle License No./State:
Acknowledgment of Receipt of Materials:
n. Driver Signature
Shipment Date:

Section III — DESTINATION (Generator completes a-d, destination site completes e-f)

a. Site Name: **WASTE CONNECTIONS**
b. Physical Address: **Oklahoma City Landfill**
7600 S.W. 15th • Oklahoma City, OK 73128
c. Phone No.: **(405) 745-3091**
d. Fax No.: **(405) 745-3611**
e. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.
f. [handwritten name] — Name of Authorized Agent
[signature] — Signature
Receipt Date: 1 09 14
02/ 1223665

Section IV — ASBESTOS (Generator completes a-d, f, g. Shipper* completes e)

a. Shipper's* Name: Environmental Action,Inc.
b. Shipper's* Phone No.: 981-298-4050
c. Shipper's* Address: P. O. Box 1029, Jenks,OK 74037
d. Shipper's* Special Handling Instructions and additional information:

CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Shipper's* Name & Title: Nash Marjo,Supe.
b. Shipper's* Phone No.:
Date: 1 / 7 1 4
f. Name and Address of Responsible Agency: DEQ, 707 N.Robinson,OKC,OK 73101
g. [x] Friable; [ ] Non-friable; [ ] Both ______% friable ______% nonfriable

*Shipper refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation, or both.
WC1000 (Rev. 6/12)

White - Destination Retain Green - Return to Generator Canary - Return to Operator Pink - Transporter Retain Goldenrod - Generator Retain

STATE OF OKLAHOMA

DEPARTMENT OF ENVIRONMENTAL QUALITY – TULSA OFFICE
3105 E. Skelly Dr., Tulsa, Ok. 74105 - (918) 293-1614 (918) 293-1631 (fax)

EPA / ODEQ - NESHAP ASBESTOS PROGRAM

FIELD / ABATEMENT SITE / INCIDENT / COMPLAINT - REPORT
***** ACTION REQUESTED / FINDINGS / DETERMINATION / ORDERS *****

DATE: 10.22.14 **DEQ FILE #:** 1952 **INSPECTOR:** René J. Koester

FACILITY / EPA SOURCE & POINT #: 039-B4002-001 **THD PERMIT #:** – NA –

COMPANY / CONTRACTOR / FIELD REPRESENTATIVE: Nash Hargis

COMPANY / CONTRACTOR REPRESENTED / ADDRESS: EAG, 2516 S. Peoria Ave., Tulsa, Ok. 74133 % Darwin Chesnut @ 918-[illegible]-4020

LOCATION / SITE OF ACTION / INCIDENT / REQUEST: Bristow Armory, 100 West 5th St., Bristow, Ok 74010 % Ok Military Dept., 3501 N. Lincoln Blvd, Ok City & ODEQ

ACTION REQUESTED / INCIDENT / PROPOSAL: post-abatement inspection of ACM / TSI, ~400 l.ft. glovebag removal; ~1200 ft² of VAT;

DECISION RENDERED / ORDER GIVEN: abatement completed and acceptable & lock down applied; air counts submitted to DOL; waste ok and on site; also removal of Cat. I (VAT), ~1200 ft², completed; abatement of lead paint contamination in progress also;

Looks good!

COMMENTS: Air sampling for ACM and Project Design by ASTECH (not on site); ACM abatement started earlier than notified to accommodate DOL schedule;

SIGNATURES: René J. Koester Nash Hargis

EPA/ ODEQ NESHAP INSPECTOR **COMPANY REPRESENTATIVE**

Oklahoma Department of Labor
Mark Costello, Commissioner
www.labor.ok.gov

Oklahoma City
3017 North Stiles, Suite 100
Oklahoma City, OK 73105
405-521-6464
888-269-5353
Fax 405-521-6025

Abatement Preparation Inspection Form

Abatement Project: [illegible] Date: 10 - 29 - 14 Time: 9 : 00
Project No.: 13-1631 Phase:
Project Address/Location: [illegible] City: [illegible] Zip:
Contractor: [illegible] Contact Person: [illegible]
Project Phone No.: Contractor's Home/Office Phone No.: [illegible]
Project Owner: Owner's Rep.:

A = Acceptable.
D = Denied; must be correct and re-inspected before asbestos removal is begun.
N/A = Not applicable to this project.

X = Deficiencies which must be corrected before asbestos removal begins. If the only deficiencies are the "X" type, after correction, asbestos abatement may begin
** Beginning asbestos removal before the deficiencies are correct shall constitute a Serious Violation. **

	A	D	N/A	X
(1) Work site barriers and warning signs	☑	☐	☐	☐
(2) Toilet facilities provided	☑	☐	☐	☐
(3) Worker licenses	☑	☐	☐	☐
(4) Emergency telephone #'s	☑	☐	☐	☐
(5) OSHA forms, poster (min. wage, workers comp, equal opportunity)	☑	☐	☐	☐
(6) Air mon., results from prior phases, if applicable	☐	☐	☑	☐
(7) Respirator program and project design on-site	☑	☐	☐	☐
(8) Respirator, air system and equipment manuals	☐	☐	☑	☐
(9) Compressor does not discharge oil	☐	☐	☑	☐
(10) CO monitor, high temp and low pressure alarm tested on-site	☐	☐	☑	☐
(11) Cascade system secure and certificate of air quality	☐	☐	☑	☐
(12) Automatic back-up air of proper quantity in full containers	☐	☐	☑	☐
(13) Bull hoses and respirators free of oil residue	☐	☐	☑	☐
(14) In-line pressure gauge at manifold	☐	☐	☑	☐
(15) NIOSH approved respirators, clean, parts in working order	☑	☐	☐	☐
(16) Electrical panel outside work area	☐	☐	☑	☐
(17) Temporary wiring installed by licensed electrician LIC #:	☐	☐	☑	☐
(18) Temporary panel boards properly grounded	☐	☐	☑	☐
(19) Ground fault interruption provided from outside work area	☑	☐	☐	☐
(20) Live electrical requirement met	☑	☐	☐	☐
(21) Extension cords in acceptable condition	☑	☐	☐	☐
(22) Equipment properly grounded	☑	☐	☐	☐
(23) Tension relief on electric cords	☑	☐	☐	☐
(24) De-con firmly constructed, opaque, with triple flaps	☑	☐	☐	☐
(25) De-con trailers properly grounded	☐	☐	☑	☐
(26) Storage lockers for workers and ODOL inspectors' street clothes	☑	☐	☐	☐
(27) Shower with hot water supply, stable nonskid surface, lights	☑	☐	☐	☐
(28) Shower drains, filter, proper water disposal	☑	☐	☐	☐
(29) Soap from dispenser, and towels provided	☑	☐	☐	☐
(30) Hearing protection provided if required	☐	☐	☑	☐
(31) Hard hats provided, if required	☐	☐	☑	☐
(32) Appropriate footwear/safety shoes provided, if required	☐	☐	☑	☐
(33) Electrical system in abatement area locked out / tagged out	☐	☐	☑	☐
(34) Ventilation serving or passing through the abatement area deactivated	☑	☐	☐	☐
(35) Critical barriers in place	☑	☐	☐	☐
(36) Neg. air quantity and pressure drop, confirmed on-site with recording manometer	☐	☐	☑	☐
(37) Neg. air machine(s) have properly installed filters, clean pre-filters	☑	☐	☐	☐
(38) Prep. work secure with negative air on	☑	☐	☐	☐
(39) Make-up air sources provide adequate circulation and air cleaning	☐	☐	☑	☐
(40) Access controlled	☑	☐	☐	☐
(41) Scaffolding over 10' high has 42" siderails and 4" toeboards	☑	☐	☐	☐
(42) Scaffolding from 4' to10' high, but less than 42" wide, has side rails	☑	☐	☐	☐
(43) Scaffolding with people working under has mesh or solid barrier on platform	☑	☐	☐	☐
(44) Scaffolding floorboards in good condition and secured	☑	☐	☐	☐
(45) Aerial lifts have full-body harness with shock lanyards	☐	☐	☑	☐
(46) Ladders are non-conducting and stable	☑	☐	☐	☐
(47) Heat stress monitors in place	☐	☐	☑	☐
(48) HEPA vacuum is clean with filters properly installed	☑	☐	☐	☐
(49) Temporary lighting is adequate and and properly wired and grounded	☑	☐	☐	☐
(50) 10 # ABC fire extinguishers inspected	☑	☐	☐	☐
(51) Adequate escape routes are properly marked and illuminated with emergency lighting and battery back-up	☑	☐	☐	☐
(52) Acceptable amended water sprayers and chemicals provided	☑	☐	☐	☐
(53) Load-out sealed unless needed for make-up air	☑	☐	☐	☐
(54) Disposal bags and/or barrels provided and properly labeled	☑	☐	☐	☐
(55) Disposal vehicle properly lined	☑	☐	☐	☐
(56) Disposal vehicle properly tagged and marked	☑	☐	☐	☐
(57) Area monitoring locations identified	☑	☐	☐	☐

[5] # OF GLOVEBAGS [ ] # OF FULL CONTAINMENTS [1] # OF MINI CONTAINMENTS

Recommendation & Remarks:

Orders: [illegible]

[illegible]
Inspector's Signature

[illegible]
Contractor's or Representative's Signature

Oklahoma Department of Labor

Mark Costello, Commissioner

Asbestos Division

3017 North Stiles, Suite 100
Oklahoma City, OK 73105
(405-521-6464) FAX (405-521-6025)

Visual/Final Inspection Form

DOL Project #: 13-7964

Facility: Bristow Armory

Contractor #:

Address/Location: 700 W 5th

Owner/Occupant:

Contact Name:

Facility Phone #:

Month: 11 Day: 03 Year: 14 Time: 11:00

County #: FY #:

Address City: Bristow

Contractor: EAI

Contractor's Rep.: Nash Harjo

Contractor's Phone #: (405) 659-2485

1. Description of Area: floor bag with ... piping ... main room, 2 side rooms, 2 bathroom

2. Areas requiring further cleaning: None

3. Air Counts (PCM/TEM) On-Site?: Yes all clearances below .01 VCL

4. DOL Recommendations: [illegible]

5. Will a FINAL inspection be required?: This is the final - Final is accepted

6. Notes: This completes the project

7. Note any violations cited: 380:50-

8. Contractor's Comments:

Keith H. Hunt
Inspector's Signature

Nash Harjo
Contractor's Signature

Revised 3/2014

White Copy: DOL Yellow Copy: Consultant Pink Copy: Contractor/Owner

Oklahoma Department of Labor

☒ **Initial Notification**

☐ **Revised Notification**

☐ **Emergency Notification**

Mark Costello
COMMISSIONER

ASBESTOS PROJECT CHECKLIST

NAME	ADDRESS	CITY	PHONE
Job Site: Former Bristow Armory	700 West 5th Avenue	Bristow Oklahoma	N/A
Contractor: ENVIRONMENTAL ACTION	PO BOX 1029	JENKS OK	918-298-4080
Site Owner: OMES CAP	2401 N. Lincoln Blvd., Suite 106, Oklahoma City, OK 73105		405-522-6762
Gen. Contractor N/A			
Project Designer: Arless Murray	2520 West I-44 Service Road, Ste 200	OKC, OK	405 528-3346
Air Monitoring Firm: ASTECH	PO Box 771	Blanchard, OK	405 618-7660
Air Monitoring Firm: N/A			
Landfill: WASTE CONNECTIONS	7600 SW 15TH	OKC OK	405-745-3002
Hauler: Lowder Transportation	PO Box 307	Shawnee, OK	405 275-8538

MOBILIZATION DATE: 10/20/2014 SCHEDULED DATE OF ASBESTOS REMOVAL:10/30/2014
PROJECT COMPLETION DATE: 11/15/2014 RENOVATION: X DEMOLITION :_____EMER:_____

Type and percentage asbestos (attach lab reports): Submitted with approved project design

AMOUNT OF ASBESTOS TO BE ABATED: 400 LF of TSI – 30 fittings

ABATEMENT TECHNIQUES: 380:50-13

SUBMITTALS NECESSARY BEFORE ABATEMENT MAY BEGIN. CHECK OF ONLY THOSE ATTACHED TO THIS CHECKLIST OR WHICH ARE ON FILE AT THE OKLAHOMA STATE DEPARTMENT OF LABOR.

_____Variances

N/ANESHAPS Notification (Copy)

___Project specifications

___Bonds and/or Insurance Certificates

___Plans for Decontamination Facilities

___Respirator Program

___Employee Physicals

___Permission from owner for all rented vehicles/trailers used to haul asbestos-containing material.

___# of Mini-containments

TBD# of Glovebags

__# of Containments

_1_# of Phases

FEES

- *$ 600.00 per containment*
- *$ 200.00 per project not part of a definite containment.*
- *$ 200.00 per project with multiple glovebags or mini-containment, plus $ 5.00 per such glovebag or mini-containment*

Comments:

10/17/2014

Contractor/Responsible Party Signature **Date**

H:\ACCESS\506\AsbestosProjectChecklist.wpd

EPA NOTIFICATION OF DEMOLITION OR RENOVATION

OFFICE USE ONLY: DATE RECEIVED: _____ *JOB / PERMIT / ID NUMBER* _____

****

I. FACILITY INFORMATION:

OWNER: OMES CAP PHONE: 405 522-6762

STREET ADDRESS: 2401 N. Lincoln Blvd. CITY: Oklahoma City STATE: OK ZIP: 73105

FACILITY REPRESENTATIVE Laurie Ryan PHONE: 405 522-6762

ASBESTOS ABATEMENT CONTRACTOR: Environmental Action, Inc.

STREET ADDRESS: 8526 S. Peoria Ave. CITY: Tulsa STATE: OK ZIP: 74132

REPRESENTATIVE: Don Jolley PHONE: (918) 298-4080

PAGER: None CELL PHONE: (918) 645-8157

AIR MONITORING FIRM OR OTHER OPERATOR ASTECH

STREET ADDRESS: P.O. Box 771 CITY: Blanchard STATE: OK ZIP: 73010

REPRESENTATIVE: Rodney Hill PHONE: 405 618-7660

II. TYPE OF NOTIFICATION: (O=ORIGINAL) OR (R=REVISED) O

III. TYPE OF OPERATION: (D=DEMOLITION) (R=RENOVATION) (ER=EMERGENCY RENOVATION) R

IV. IS ASBESTOS CONTAINING MATERIAL (ACM) PRESENT? YES XXXXX NO _____

V. FACILITY / BUILDING DESCRIPTION (BE SPECIFIC AND DETAILED AS TO NAME, # FLOORS, EXACT ACM LOCATION, ROOM NUMBERS, ETC.)

FACILITY: Bristow Armory ADDRESS: 700 West 5th Street

CITY: Bristow STATE: OK ZIP CODE: 74010 COUNTY: Creek

WHERE IS ACM LOCATED? Thermal Insulation on domestic water lines

BUILDING SIZE: SQ. FEET: 11,500 AGE: 60+ YEARS # OF FLOORS: 1

PRESENT USE: Bristow City storage PREVIOUS USE: Armory

VI. PROCEDURES USED TO DETERMINE PRESENCE OF ACM INCLUDING ANALYTICAL METHODS:

Visual inspection of the building -- suspect materials were collected -- analysis by polarized light microscopy

NAME OF EPA ACCREDITED INSPECTOR WHO PERFORMED INSPECTION AND SAMPLING INCLUDING AFFILIATION AND OKLAHOMA DOL LICENSE NUMBER:

Howard Burch - GMR - ODOL AHERA Inspector License # 159522

EPA NOTIFICATION OF DEMOLITION OR RENOVATION CONTINUED

VII. AMOUNTS OF REGULATED ASBESTOS CONTAINING MATERIAL (RACM) TO BE REMOVED; ALSO AMOUNTS OF CATEGORY I OR II MATERIALS WHICH (WILL) WILL NOT BE REMOVED (circle one)

PIPES --LINEAR FT: 400 SURFACING AREA — SQUARE FEET: 0 OFF FACILITY COMPONENT:

CUBIC FEET: _____ CATEGORY I - SQ FT: _____ CATEGORY II - SQ. / LN. FT.: 750

VIII. SCHEDULED DATES OF ASBESTOS REMOVAL: START: 10/30/2014 FINISH: 11/15/2014

IX. SCHEDULED DATES OF DEMO / RENO: START: None FINISH: None

X. DESCRIPTION OF THE PLANNED ASBESTOS REMOVAL TECHNIQUES TO BE EMPLOYED:
(e.g. gross removal, glove bagging, manual scrape, etc.)

TSI-Glovebag

XI. DESCRIPTION OF THE CONTROLS AND WORK PRACTICES TO BE USED TO PREVENT ASBESTOS FIBER EMISSIONS (e.g. full containment with negative pressure, adequate wetting):

wet removal glovebag

XII. LICENSED ASBESTOS WASTE TRANSPORTER: Lowder Transportation

ADDRESS: PO Box 307 CITY: Shawnee STATE: OK ZIP: 74802

REPRESENTATIVE: Tom Lowder PHONE: 405 615-4075

XIII. STATE PERMITTED ASBESTOS WASTE DISPOSAL SITE: Waste Connections of Oklahoma

ADDRESS: 7600 SW 15th CITY: Oklahoma City STATE: OK ZIP: 73125

REPRESENTATIVE: Inger Monet PHONE: (405) 745-3002

XIV: IS DEMOLITION ORDERED BY A GOVERNMENT AGENCY? YES: _____ NO: XXXX

NAME OF AGENCY: N/A REPRESENTATIVE: _____

DATE OF ORDER: _____ DATE DEMOLITION IS TO START: _____

XV. IS THIS RENOVATION REQUIRED DUE TO AN EMERGENCY YES: _____ NO: XXXX

DATE OF EMERGENCY: HOUR OF DAY EMERGENCY OCCURRED: _____

DESCRIPTION OF THE SUDDEN, UNEXPECTED EVENT CAUSING THE EMERGENCY: _____

EXPLANATION OF HOW THIS CAUSED 1) UNSAFE CONDITIONS; 2) SERIOUS DISRUPTION OF NORMAL BUILDING OPERATIONS; AND/OR 3) IMPOSES AN UNREASONABLE FINANCIAL BURDEN? (be specific & detailed)

EPA NOTIFICATION OF DEMOLITION OR RENOVATION CONTINUED

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NON-FRIABLE ASBESTOS BECOMES FRIABLE (crumbled, pulverized, abraded, or reduced to powder, etc.):

Stop work, wet the materials, collect and bag loose materials, notify DEQ

****

XVII. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR, PART 61, SUBPART M - NESHAP) WILL BE ON SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE OF HIS/HER TRAINING AND CERTIFICATION / LICENSING WILL BE AVAILABLE (OR BE POSTED) FOR INSPECTION DURING BUSINESS HOURS:

SIGNATURE OF OWNER / OPERATOR : Darwin Chesnut DATE: 10/17/2014

PRINTED NAME: Darwin Chesnut

****

XVIII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT TO THE BEST OF MY KNOWLEDGE:

SIGNATURE OF OWNER / OPERATOR : Darwin Chesnut DATE: 10/17/2014

PRINTED NAME: Darwin Chesnut

****

DEFINITION: OWNER OR OPERATOR Any person who owns, leases, operates, controls or supervises the facility being demolished or renovated or any person who owns, leases, operates, controls or supervises the demolition or renovation, or both.

****

ADDITIONAL COMMENTS:

EPA NESHAP AUTHORITY:

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
Air Quality Division, 707 N. Robinson, P.O. Box 1677
OKC, OK 73101-1677 or
Tulsa Regional Office, 3105 East Skelly Drive, Suite 200
Tulsa, OK 74105

NOTE: Please submit your Notification to the DEQ office closer to your job site.

ENVIRONMENTAL ACTION INC.
P.O. BOX 1029
JENKS, OK, 74037
(918) 298-4080

DAILY FIELD ACTIVITY LOG

Monday

SUPERVISOR: Nash Hargo	DATE: 10-27-14	Page 1 of
PROJECT NAME: Bristow Armory		PROJECT NO. 5503
FIELD ACTIVITY SUBJECT:		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS: 07:00 Crew on site
Begin Head Hepa Vacuuming + Wet wipe in Rm #s - 1, 2, 3, 4.
Then is 87 - Glove bags - (9:00) - Start clean in Rm's 15, 16 + 17.
11:30 lunch
12:30 BACK TO WORK. Continue w/ cleaning in Rm's 15, 16 + 17. / Done w/ 1, 2, 3, 4.
Start in AM 5, 6, + 7.
5:00 Pickup Work Area's
5:15 Shut Down For the Day.

Note: 830 N.H - speaks w/ Bernita Hart w/ ODEQ Sets Prep inspection on 87 Glove bags @ 9:00 A.m. Wensday - 10-29-14
10:00 - A.m. Call Rene Roesler w/ ODEQ Advised him of the Prep Inspection.

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
J. Lambert / D. Chesnut	
WEATHER CONDITIONS:	IMPORTANT TELEPHONE CALLS:

IH PERSONNEL ON SITE:

SIGNATURE: [signature] DATE: 10-27-14

ENVIRONMENTAL ACTION INC.
P.O. BOX 1029
JENKS, OK, 74037
(918) 298-4080

DAILY FIELD ACTIVITY LOG

Tuesday

SUPERVISOR: Nash Hargo	DATE: 10-28-14	Page 2 of
PROJECT NAME: Bristow Armory		PROJECT NO. 5503
FIELD ACTIVITY SUBJECT:		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS: 07:00 Crew on site
Crew is clearing Rm # 8.
9:00 Crew is HepA Vaccuming the Drill Floor + Will start to Wet Wipe + Mop.
10:00 J. Grommer here - he + 1-wkr Will Load Pl Tile Bags + Trash into his Truck + Take To RR-Spur in Stroud + Unload.
12:00 Lunch
1:00 Continue w/ Drill Fl. + Loading Out of Bags.
5:00 Pickup Work Area.
5:15 Secure trailer + Bldg, Shut Down For the Day.

8:30 Spoke w/ R. Hill w/ Astech Advised him of the Prep inspection Tomorrow Morning he Said he Would have Someone here to Cover the Job.

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
WEATHER CONDITIONS:	IMPORTANT TELEPHONE CALLS:
IH PERSONNEL ON SITE:	
SIGNATURE:	DATE: 10-28-14

ENVIRONMENTAL ACTION INC.
P.O. BOX 1029
JENKS, OK, 74037
(918) 298-4080

DAILY FIELD ACTIVITY LOG

Wensday

SUPERVISOR: Wash Hargo | DATE: 10-29-14 | Page 3 of

PROJECT NAME: Bristow Armory | PROJECT NO. 5503

FIELD ACTIVITY SUBJECT:

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS: 07:00 Crew on Site
Do Last minute Detailing of Glovebag openations, Make Sure Decon up + Running
Prep Insp is @ 9:00 A.M.-All is Accepted-10:00 begin Removal-(Glovebagging).
10:30 called ODOL-Ash. Div. to Setup Visual Finale Inspection For Monday 11-03-14
First thing that morning (No Answer) LEFT Message For B. Hart
12:00 lunch
1:00 Back to Work / Continue w/ Glovebagging.
2:30 N.H-Spoke w/ B. Hart-ODOL Abs-Div Set up Visual/Finale Inspection For
monday-11-03-14 @ 10:00 A.M. Per: B. Hart./ If Clearance Samples Are Acceptable
Glovebags Done/ Start clearances-Will have Results E-mailed to ODOL + to
E.A.I OFF in the Morning. / 5:15 Shut Down For the Day.

Note B. Hart Advised EAI that we Could Continue w/ The LBP-clearing in the Bldg.
E-mail Results 1ST thing in the Morning.

7:30 T. Grummer Shows up Need 3-Workers to Do A-Tile.
8:30-R. Hill here w/ Astech to run Air.
9:00-K. Hunt w/ ODOL-Ash. Div. here For Prep Insp. All is good (Accepted.)

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
WEATHER CONDITIONS: Cool-42°-A.M.	IMPORTANT TELEPHONE CALLS:

IH PERSONNEL ON SITE: Rodney Hill w/ Astech

SIGNATURE: | DATE: 10-29-14

ENVIRONMENTAL ACTION INC.
P.O. BOX 1029
JENKS, OK, 74037
(918) 298-4080

DAILY FIELD ACTIVITY LOG

Thursday

SUPERVISOR: Nash Harjo | DATE: 10-30-14 | Page 4 of

PROJECT NAME: Bristow Armory | PROJECT NO. 5503

FIELD ACTIVITY SUBJECT:

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS: 07:00 Crew on site.
Clearances Are Acceptable, Crew Will Tear Down Criticals.
9:00 Start Cleaning For Lead Dust in Drill Rm Windows + Sills Hepa Vac, Wet Wipe + Paint Top Sill.
11:00 R. Koesler here w/ODEQ Advises Contractor that All Looks good. (See Insp Report File)
12:00 lunch
1:00 back to Work East Side of Drill Rm Windows Done, Will Start on the West Side
4:00 West Side Drill Room Windows Done- gather All Tools + Supplies, clean Out Equitment Trailer, Take Out Trash bags.
5:00 Secure Trailer, + Bldg Shut Down For the Week.

Note: City Inspector Stops in Looks @ Awning Said he Would try to get Something Done on the Damaged Wood.

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
R. Koesler w/ODEQ	
WEATHER CONDITIONS:	IMPORTANT TELEPHONE CALLS:

IH PERSONNEL ON SITE:

SIGNATURE: Nash H | DATE: 10-30-14

ENVIRONMENTAL ACTION INC.
P.O. BOX 1029
JENKS, OK, 74037
(918) 298-4080

DAILY FIELD ACTIVITY LOG

SUPERVISOR: Nash Hasjo | DATE: 11-03-14 (Monday) | Page 5 of

PROJECT NAME: Bristow Armory | PROJECT NO. 5503

FIELD ACTIVITY SUBJECT:

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS: 07:00 Crew on Site.
Start w/ Finale cleaning of Floors Starting in the Vault Rm on West Side moving toward the North Stopping @ the Ladies Rm Until Visual/Finale Insp on Glovebags which is @ 10:00 A.m. this morning.
11:00 - K. Hunt w/ODEL said he would be here About 11:20 A.m. / 11:25 A.m. — Inspector here looks Pipe Over, All is good Visual / Finale Accepted
11:30 lunch
12:30 Start on East Side N. End Hepa Vaccuing + cleaning (Wet wiping).
4:45 Start cleaning up Work Areas, Secure Trailer, Bldg.
5:00 Shut Down For the Day.

VISITORS ON SITE:
D. Lovett w/ EAI Insulators

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
10:00 A.m, Visual/Finale Insp @ this morning.

WEATHER CONDITIONS:

IMPORTANT TELEPHONE CALLS:

IH PERSONNEL ON SITE: ——

SIGNATURE: [signature] | DATE: 5503/ 11-03-14

ENVIRONMENTAL ACTION INC.
P.O. BOX 1029
JENKS, OK, 74037
(918) 298-4080

DAILY FIELD ACTIVITY LOG

Tuesday

SUPERVISOR: Nash Harjo | DATE: 11-04-14 | Page 6 of

PROJECT NAME: Bristow Armory | PROJECT NO. 5503

FIELD ACTIVITY SUBJECT:

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS: 07:00 Crew on site:
Continue w/ East Side Hepa Vaccumming & Wet Wiping./Swiffer/1-Wkr is Putting Finishing Touches on the ~~Bath~~ Kitchen, Ladies+mens Room.
11:30 Lunch
12:30 back to Work. 3-Wkrs Will begin to Hepa Vac+ Mop/Wet Wipe Drill Rm A. Starting on the South End Working towards the North.
3:30 -2-wkrs begin to tear Down Decon Unit.
5:00 - clean up Work Area's, Secure Trailer + Bldg.
5:15 - Shut Down For the Day.

Note Advised. Ed Pack w/ Enecon that Looks Like Thursday 3:00 p.m. for testing on Lead Dust. He said That he would be there.

VISITORS ON SITE:
D. Chesit / James Lambert

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:

WEATHER CONDITIONS:
Cool / Rain

IMPORTANT TELEPHONE CALLS:

IH PERSONNEL ON SITE: —

SIGNATURE: [signature] | DATE: 11-04-14

ENVIRONMENTAL ACTION INC.
P.O. BOX 1029
JENKS, OK, 74037
(918) 298-4080

DAILY FIELD ACTIVITY LOG

Wensday

SUPERVISOR: Nash Harjo	DATE: 11-05-14	Page 7 of
PROJECT NAME: Bristow Armory	PROJECT NO. 5503	
FIELD ACTIVITY SUBJECT:		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS: 07:00 Crew on Site.
Continue w/ Tear down of Decon Unit + Hepa Vac, Mop/Wet wipe of Drill Room Floor. Starting on South End + Progressing To the North End.
9:00 N. Harjo + J. Meadows go to Jenks/Lowes To Pickup Fiber-Cement Siding for SoFFiT.
10:30 unload Siding Put up In Bldg. / Spoke w/ David Haggard he Said he Would be here Approx. 8:00 A.m. in the Morning to install Siding Panels on SoFFiT.
11:30 lunch.
12:30 Continue w/ Drill Room Floor Hepa Vac/mop/Wet Wipe.
4:30 pickup Tools, Equit, Supplies Clean up Work Areas
5:15 Shut Down For the Day.

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
WEATHER CONDITIONS: Cool 45° Am.	IMPORTANT TELEPHONE CALLS:

IH PERSONNEL ON SITE: —

SIGNATURE: Nash Harjo DATE: 11-05-14

ENVIRONMENTAL ACTION INC.
P.O. BOX 1029
JENKS, OK, 74037
(918) 298-4080

DAILY FIELD ACTIVITY LOG

SUPERVISOR: Nash Harjo	DATE: 11/6/14 Thursday	Page 8 of
PROJECT NAME: Bristow Armory.		PROJECT NO. 5503
FIELD ACTIVITY SUBJECT:		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS: 07:00 Crew on Site:
Continue w/ Drill Rm FL. Wipe All Window Sills.
Clean the remainder of Office Floors.

Note: 2d Pack w/ Evercon Should be here Approx 2:00p.m. to Test Floors + Window Sills

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS: Joe Meadows Dr. Appt. @ 1:00 P.M. Take off 11:30
WEATHER CONDITIONS:	IMPORTANT TELEPHONE CALLS:
IH PERSONNEL ON SITE:	
SIGNATURE:	DATE: 11-6-14

Tuesday in		
Jack McLeod	7:00	
John T McLeod	7:00	
✓ Josè L. Borrayo	7:00	10 hrs
✓ Adrian Doval	7:00	10 hrs
✓ ALEXIS SABLON	7:00	10 hrs
Sam Grammer	1:00 pm	
✓ Delton T Bagby	1:00 PM	
✓ Maikol Moreno	1:00 PM	5 hrs

monday

John T McLeod 7:00
Jack McLeod 7:00

10-22-14 Wednesday in		
Delton T Bagby	7:00	
Shawn Staats	7:00	
Tony McCutcheon	7:00	
✓ ALEXIS SABLON	7:00	10 hrs
Adrian Doval	7:00	10 hrs
✓ Josè L. Borrayo	7:00	10 hrs
✓ Maikol Moreno	7:00	10 hrs
John T McLeod	7:00	
John McLeod	7:00	
Brandon Whitekiller	7:00	
Nash Honjo	1:00	

10/23/14 - Thursday

✓ Josè L. Borrayo	7:00	- 10 hrs
John T McLeod	7:00	
✓ Jack McLeod	7:00	
✓ Maikol Moreno	7:00	10 hrs

ENVIRONMENTAL ACTION INC

Daily Sign In Sheet

LOCATION	DAY	DATE	SHEET # 1
Bristow Armory	Monday	10-27-14	Job # 5503

		Name		IN	OUT	IN	OUT
	1	Nick Berg	-	07:00	11:30	12:30	5:15
	2	John McLeod	.	07:00			
	3	John T McLeod	.	7:00			
C	4	Adrian Doval	.	7:00			
C	5	ALEXIS SABLON	.	7:00			
C	6	Maikol Morero	.	7:00			
C	7	JOSE L. BARRAYO	.	7:00			
	8	Tony McCutchen	.	7:00			
	9	Shaun Staats	.	7:00			
	10	DeLton Bagby	.	↓	↓	12:30	↓
	11						
	12						
	13						
	14						
	15						
	16						
	17						
	18						
	19						
	20						
	21						
	22						
	23						
	24						
	25						
	26						
	27						
	28						
	29						
	30						
	31						
	32						

1 - Supr | 9 - wkrs

ENVIRONMENTAL ACTION INC

Daily Sign In Sheet

LOCATION	DAY	DATE	SHEET # 2
Bristow Armory	Tuesday	10-28-14	Job #-5503

		Name		IN	OUT	IN	OUT
	1	Mosh Dang	-	06:45	12:00	1:00	5:15
	2	Dalton T Bagby	.	7:00			
C	3	Maikol Moreno	.	7:00			
C	4	ALEXIS SABLON	.	7:00			
C	5	Adrian Duval	.	7:00			
C	6	Jose L. Bokkayo	.	7:00			
	7						
	8						
	9						
	10						
	11						
	12						
	13						
	14						
	15						
	16						
	17						
	18						
	19						
	20						
	21						
	22						
	23						
	24						
	25						
	26						
	27						
	28						
	29						
	30						
	31						
	32						

1 - Supr | 5 - wkrs

ENVIRONMENTAL ACTION INC

Daily Sign In Sheet

Wensday

LOCATION	DAY	DATE	SHEET # 3
Bristow Armory	Wensday	10-29-14	Job # 5503

	Name		IN	OUT	IN	OUT
1	Mark Id	- ✓	06:30	12:00	1:00	5:00
2	Tony McCutcheon	- ✓	06:50			
3	John McLeod	- ✓	06:50			
4	Shawn Starts	- ✓	6:50			
5	John T McLeod	- ✓	6:50			
6	Delton T Bagby	- ✓	7:00			
C 7	Adrian Daval	-	7:00	12:00	1:00	
C 8	ALEXIS SABLON	-	7:00	12:00	1:00	5:00
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

1-Supr / 7-wkrs - Sent @ 8:17A.M

ENVIRONMENTAL ACTION INC

Daily Sign In Sheet

LOCATION	DAY	DATE	SHEET # 4
Bristow Armory	Thursday	10-30-14	Job # 5503

		Name	IN	OUT	IN	OUT
	1	Mark Hamp	07:00	12:00	1:00	5:00
	2	John McLeod	07:00			
	3	John J McLeod	7:00			
	4	Delton T Bagby	7:00			
C	5	ALEXIS SABLON	7:00			
C	6	Maikol Moreno	7:00			
C	7	Adrian Doval	7:00			
C	8	Josh L. Barkayo	7:00			
	9					
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					
	32					

1- Supr / 7- wkrs - Sent @ 8:34 a.m.

ENVIRONMENTAL ACTION INC

Daily Sign In Sheet

LOCATION	DAY	DATE	SHEET # 5
Bristow Armory	Monday	11-03-14	Job # 5503

	Name	IN	OUT	IN	OUT
1	Mike Hughes	07:00	11:30	12:30	5:10
2	John T mcLeod	7:00			
3	Shaun Staats	07:00			
4	Tony McClutchen	07:00			
5	John mcLeod	7:00			
6	Delton T Bagby	7:00			
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

1 - Supr / 5 - wkrs / Sent @ - 8:23 - A.m.

ENVIRONMENTAL ACTION INC

Daily Sign In Sheet

LOCATION	DAY	DATE	SHEET # 6
Bristow Armory	Tuesday	11-04-14	Job # 5503

	Name	IN	OUT	IN	OUT
1	Mark Hays	07:00	11:30	12:30	5:15
2	John T McLeod	7:00			
3	John McLeod	7:00			
4	Joe Meadows	7:00			
5	Shawn Staats	07:00			
6	Tony McCutcheon	07:00			
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

1- Supv / 5-wkrs - Sent - 8:33 A.M.

ENVIRONMENTAL ACTION INC

Daily Sign In Sheet

LOCATION	DAY	DATE	SHEET # 7
Bristow Armory	Wenesday	11-05-14	Job # 5503

	Name	IN	OUT	IN	OUT
1	Mark [illegible]	07:00	11:30	12:30	5:15
2	Tony McCutcheon	7:00			
3	[illegible] McCann	7:00			
4	Shawn Staats	07:00			
5	John T McLead	7:00			
6	Joe Meadows	7:00			
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

1 – Supr / 5 – wkrs / Sent @ – 8:03 – h.m.

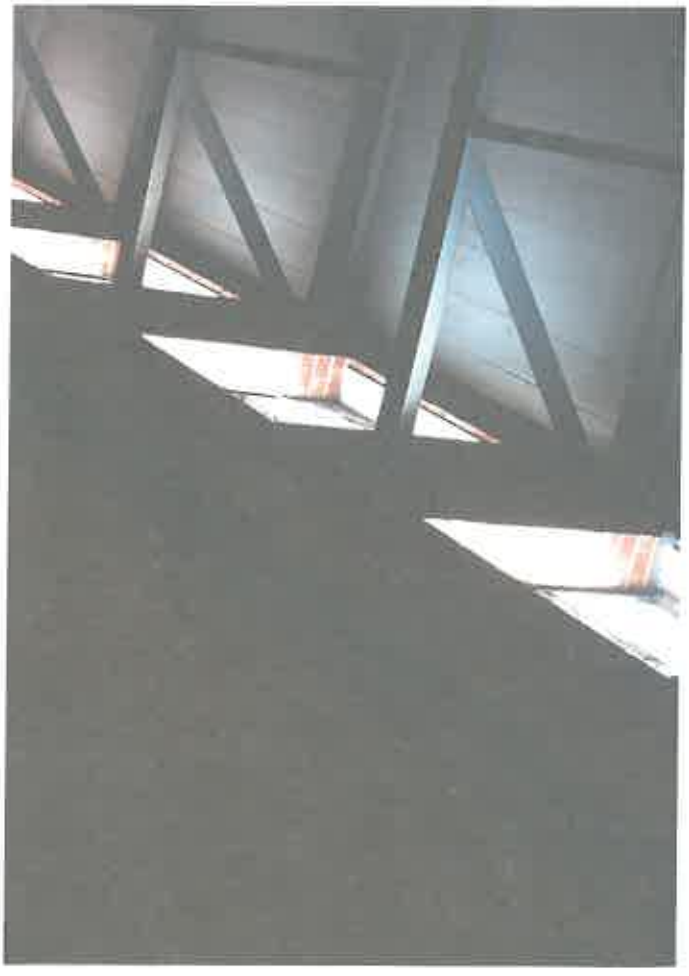
ENVIRONMENTAL ACTION INC

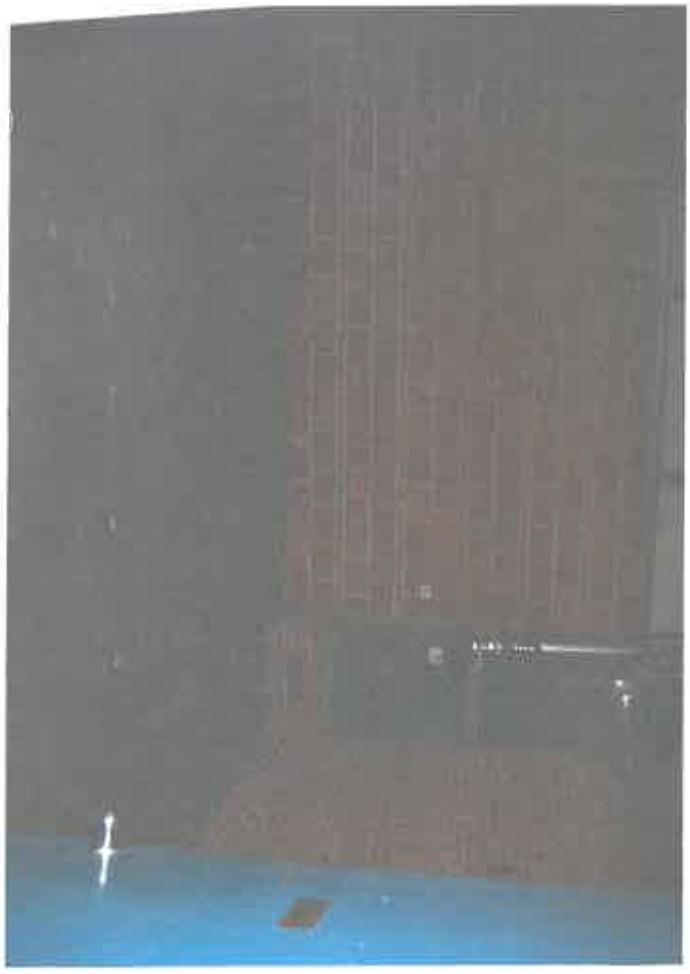
Daily Sign In Sheet

LOCATION	DAY	DATE	SHEET # 8
Bristow Armory	Thursday	11-6-14	Job #- 5503

	Name	IN	OUT	IN	OUT
1	[illegible signature]	07:00			
2	Shawn Staats	07:00			
3	Tony McCutchen	07:00			
4	John T McLeod	7:00			
5	John McLeod	7:00			
6	Joe Meadows	7:00			
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

1 – Supr / 5 – wkrs / Sent @ – 8:06 A.m.





CONFIRMATION SAMPLING

ARMORY LEAD CONFIRMATION SAMPLING
BRISTOW ARMORY
700 WEST 5th AVENUE
BRISTOW, OKLAHOMA

Prepared For:
Oklahoma Department of Environmental Quality
Land Protection Division
707 N. Robinson Avenue
Oklahoma City, OK 73102

November 21, 2014

ENERCON
ENERCON SERVICES, INC.
1601 N.W. Expressway, Suite 1000
Oklahoma City, Oklahoma 73118
(405) 722-7693 Fax: (405) 722-7694

Prepared by:

Emmett W. Muenker, M.E.
Lead-Based Paint Inspector/Risk Assessor
OKRASR-11260

Reviewed by:

Edward A. Pack
Lead-Based Paint Inspector
OKINSR13725

TABLE OF CONTENTS

APPENDICES

1.0 PURPOSE AND SCOPE

This clearance sampling was requested by the Oklahoma Department of Environmental Quality, Land Protection Division, in order to confirm that lead remediation at the Bristow Armory, 700 West 5th Avenue, Bristow, Oklahoma, had been satisfactorily completed. Enercon was contracted to conduct confirmation wipe samples following remediation using the sampling protocols described in the Scope of Work provided in Appendix A.

2.0 BACKGROUND

The State of Oklahoma has determined that a number of armories located throughout the State that are no longer needed are to be transferred to local communities. Prior to these transfers, environmental investigations were conducted by the Oklahoma Department of Environmental Quality to determine if there were any environmental issues associated with these armories. As a result, inspections for lead contamination and lead-based paint were conducted, resulting in contracts for remediation of lead contamination by private contractors. In order to determine if the contamination has been satisfactorily remediated, confirmation testing was scheduled following remediation. An independent, third party firm licensed by the State to conduct Lead-Based Paint Inspections and Clearance Tests was engaged to complete the testing. The lead remediation contractor for the Bristow Armory was Environmental Action, Inc., 8526 South Peoria Avenue, Tulsa, Oklahoma 74132.

3.0 CONFIRMATION PROCEDURES

Confirmation of the adequacy of remediation is accomplished by collecting wipe samples on the floors and/or walls of the armory on a room by room basis using the sampling criteria set forth in the Scope of Work (Appendix A). All wipe samples are collected by an Oklahoma-licensed LBP Inspector or Risk Assessor who is employed by an Oklahoma-licensed Lead-Based Paint Firm. Copies of these licenses are provided in Appendix B. The procedure involves using a floor plan layout of the armory to mark all sample locations and collecting samples using a 12" by 12" template and lead wipes to collect the samples. The floors were gridded using a 3 x 3 grid for rooms 50 feet long or less. For rooms longer than 50 feet, the room was divided into two halves, with each half using a 3 x 3 grid for sampling. For other areas of the armories, wipe samples were collected from the floor in areas where lead-based paint abatement had been completed and from a 3 x 3 gridded area for elevated lead dust levels. Following remediation, confirmation wipe samples were collected. If any sample exceeded 40 $\mu g/ft^2$, the entire 3 x 3 gridded area was re-cleaned and re-tested. Sample

locations were collected within ten feet of the doorway for smaller rooms and closets, and all rooms (including the drill floor) were sampled using a 3 x 3 grid. Ten (10) randomly selected window sills were sampled and if any sample exceeded 250 $\mu g/ft^2$, the window sill was required to be re-cleaned and re-tested. Procedures for individual wipe samples as outlined for EPA/HUD dust wipe sampling were used for this project.

4.0 CONFIRMATION SAMPLING

4.1 Results of Initial Confirmation Sampling in the Drill Floor, Office Areas, and Other Rooms

On November 6, 2014, initial confirmation wipe samples were collected from the floors of the Drill Floor, Office Areas, and other rooms. Sixty-seven (67) samples were collected initially, including fifty-seven (57) floor samples and ten (10) wipe samples collected from randomly selected window sills. One (1) floor sample exceeded the 40 $\mu g/ft^2$ threshold. All window sill samples were below the 250 $\mu g/ft^2$ threshold. A floor plan layout showing the location of the wipe samples, the room that exceeded the threshold amount, the laboratory report and chain of custody are found in Appendix C.

4.2 Results of Final Confirmation Re-Sampling in Office Area, Room 8

On November 17, 2014, following additional cleaning in the one room (Room 8) that exceeded the threshold, three (3) re-sampling confirmation wipe samples were collected. These samples were below the threshold. A floor plan layout showing the location of the wipe samples, the laboratory report and chain of custody are found in Appendix D.

5.0 CONCLUSIONS

Based upon the foregoing confirmation sampling, it is concluded that the lead hazard associated with the floors and window sills in the Drill Room, Office Areas, and other rooms have been effectively mitigated.

APPENDIX A

SCOPE OF WORK
For
Armory Lead Confirmation Sampling
At
Bristow, Pauls Valley, Lawton, Anadarko and Eufaula Armories

The Department of Environmental Quality will soon be hiring contractors to remediate lead-based paint and lead contaminated dust from former National Guard Armories located in Bristow, Pauls Valley, Lawton, Anadarko, and Eufaula Oklahoma. Once abatement is complete, confirmation wipe samples will need to be taken on floors in areas where lead-based paint abatement was performed, on window sills, and in rooms that previously tested high for lead dust on floors. Attached is the Confirmation Sampling Instructions (Attachment 1).

Below is a detailed list of what will be required at each site.

- Perform each sampling event within five (5) days of notice from remediation contractor.
- Provide DEQ with sampling plan for approval prior to each sampling event.
- Travel to the each armory up to (5) times to take confirmation wipe samples.
    - Bristow Armory – Up to 100 samples will be taken.
    - Pauls Valley – Up to 100 samples will be taken.
    - Lawton Armory - Up to 150 samples will be taken.
    - Anadarko Armory - Up to 300 samples will be taken.
    - Eufaula Armory - Up to 300 samples will be taken.
- A total of 950 confirmation wipe samples will be taken for this project.
- Samples will be run with a 24 hour turnaround time and results with sample location map will be submitted to DEQ for review.
- Once all sampling is complete at an armory, a Confirmation Sampling Report will be submitted to DEQ for approval.
    - A total of five (5) Confirmation Sampling Reports shall be submitted.
    - One report will be submitted for each armory.

Room Floors

A. All Rooms that had lead samples above 40 ug/SF in the inspection report will require confirmation samples to be taken.

B. All Rooms and hallways connected to rooms that had samples above 40 ug/SF in the inspection report will require confirmation samples to be taken.

1. A 3 section by 3 section grid system shall be used. Samples shall not be collected on all one section or end of a grid. A total of 3 samples shall be collected per 3 section by 3 section grid.
    - Room floors shall be divided into a 3 section by 3 section grid. (Figure 1 and Figure 2)
    - The Drill Floor shall be divided in half and a 3 section by 3 section grid shall be established on each half. (Figure 3 and Figure 4)
2. Sample results in excess of **40 ug/SF** are considered to have failed. If a sample fails, the entire 3 section by 3 section grid shall be re-cleaned and re-sampled.
3. DEQ reserves the right to take additional confirmation samples.

Figure 1. **ACCEPTABLE FOR SURFACES LESS THAN 50 FEET**

Wipe Sample		
	Wipe Sample	
		Wipe Sample

Figure 2. **NOT ACCEPTABLE FOR SURFACES LESS THAN 50 FEET**

Wipe Sample	**OR** Wipe Sample	Wipe Sample
Wipe Sample		
Wipe Sample		

Figure 3. **ACCEPTABLE FOR SURFACES GREATER THAN 50 FEET**

Wipe Sample					Wipe Sample
	Wipe Sample		Wipe Sample		
		Wipe Sample		Wipe Sample	

Surface Center

Figure 4. **NOT ACCEPTABLE FOR SURFACES GREATER THAN 50 FEET**

				Wipe Sample	
Wipe Sample	Wipe Sample	Wipe Sample		Wipe Sample	
				Wipe Sample	

Surface Center

APPENDIX B

Department of Environmental Quality

This is to Certify That

ENERCON SERVICES INC

has met the specifications of the Oklahoma Lead-Based Paint Management Act
and is certified as a Lead-Based Paint

FIRM

Certification #: OKFIRM11152

This certificate is valid from the date of issuance and expires as prescribed by law.

Issued on: 4/1/2014 Expires on: 3/31/2015

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

EMMETT MUENKER

has met the specifications of the Oklahoma Lead-Based Paint Management Act
and is certified as a Lead-Based Paint

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR11260

This certificate is valid from the date of issuance and expires as prescribed by law.

Issued on: 4/1/2014 Expires on: 3/31/2015

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

EDWARD PACK

has met the specifications of the Oklahoma Lead-Based Paint Management Act
and is certified as a Lead-Based Paint

INSPECTOR

Certification #: OKINSR13725

This certificate is valid from the date of issuance and expires as prescribed by law.

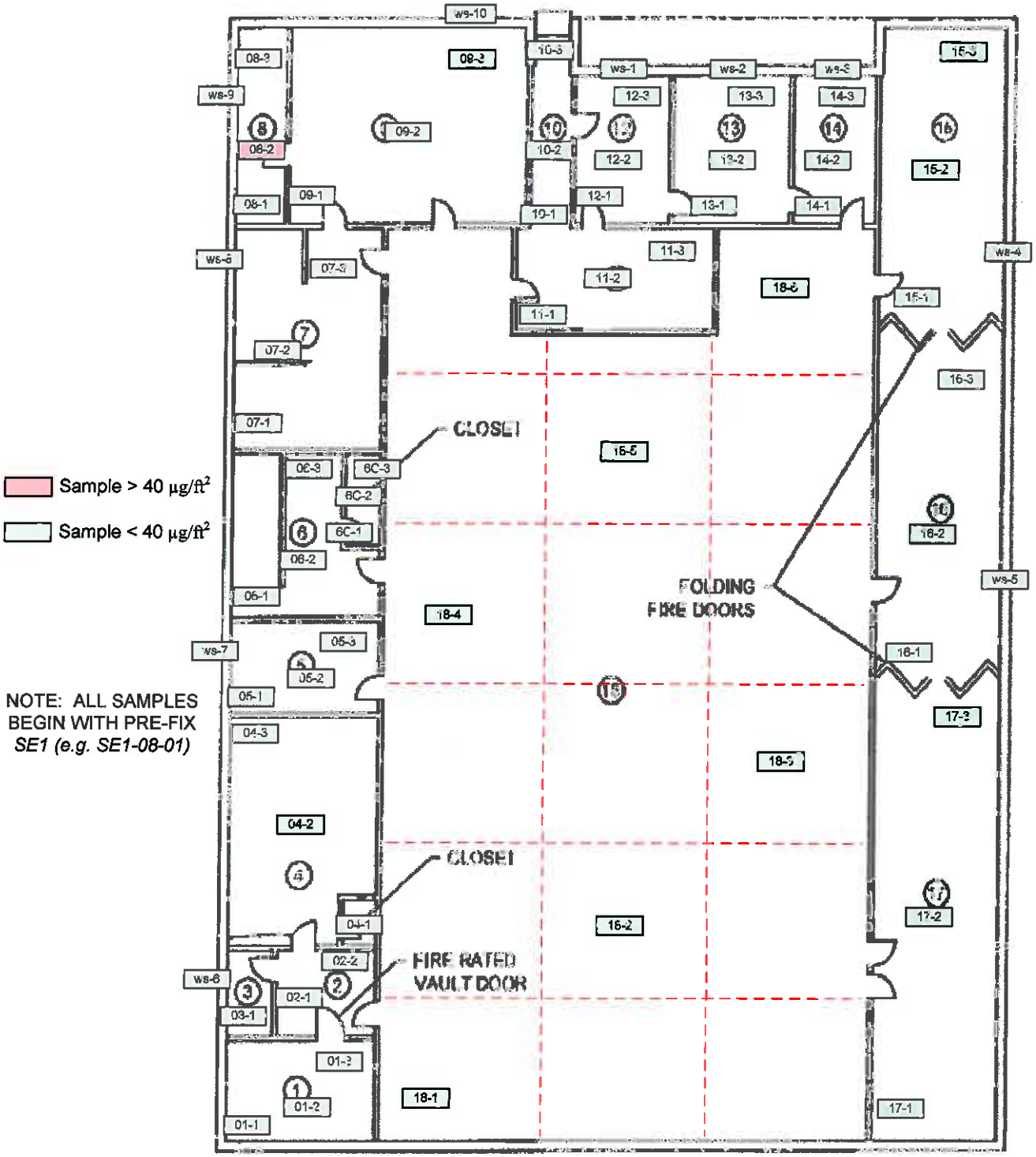
Issued on: **6/13/2013** Expires on: **3/31/2014**

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

APPENDIX C

LEAD WIPE TESTING – POST REMEDIATION
DATE OF TESTING – 11/6/2014



BRISTOW ARMORY

QUANTEM® LABORATORIES

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Environmental Chemistry Analysis Report

QuanTEM Set ID: 243690
Date Received: 11/07/14
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 11/11/2014

AIHA ID: 101352

Client: Enercon Services, Inc.
1601 Northwest Expressway
Suite 1000
Oklahoma City, OK 73118

Acct. No.: A845

Project: Bristow Armory
Location: 700 W. 5th St., Bristow, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	SE1-01-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
002	SE1-01-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
003	SE1-01-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
004	SE1-02-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
005	SE1-02-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
006	SE1-03-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
007	SE1-04-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
008	SE1-04-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
009	SE1-04-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
010	SE1-05-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
011	SE1-05-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
012	SE1-05-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
013	SE1-06-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
014	SE1-06-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
015	SE1-06-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
016	SE-06C-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
017	SE-06C-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100

Note: Sample results have not been corrected for blank values.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Environmental Chemistry Analysis Report

QuanTEM Set ID: 243690
Date Received: 11/07/14
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 11/11/2014

AIHA ID: 101352

Client: Enercon Services, Inc.
1601 Northwest Expressway
Suite 1000
Oklahoma City, OK 73118

Acct. No.: A845

Project: Bristow Armory
Location: 700 W. 5th St., Bristow, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	SE-06C-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
019	SE-07-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
020	SE-07-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
021	SE-07-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/07/14 14:30	W NIOSH 9100
022	SE-08-01	Wipe	Lead	13.1	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
023	SE-08-02	Wipe	Lead	50.1	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
024	SE-08-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
025	SE-09-01	Wipe	Lead	36.4	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
026	SE-09-02	Wipe	Lead	20.0	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
027	SE-09-03	Wipe	Lead	38.1	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
028	SE1-10-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
029	SE1-10-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
030	SE1-10-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
031	SE1-11-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
032	SE1-11-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
033	SE1-11-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
034	SE-12-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100

Note: Sample results have not been corrected for blank values.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Environmental Chemistry Analysis Report

QuanTEM Set ID: 243690
Date Received: 11/07/14
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 11/11/2014

AIHA ID: 101352

Client: Enercon Services, Inc.
1601 Northwest Expressway
Suite 1000
Oklahoma City, OK 73118

Acct. No.: A845

Project: Bristow Armory
Location: 700 W. 5th St., Bristow, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
035	SE-12-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
036	SE-12-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
037	SE-13-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
038	SE-13-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
039	SE-13-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
040	SE-14-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
041	SE-14-02	Wipe	Lead	11.4	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
042	SE-14-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
043	SE-15-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
044	SE-15-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
045	SE-15-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
046	SE1-16-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
047	SE1-16-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
048	SE1-16-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
049	SE1-17-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
050	SE1-17-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
051	SE1-17-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission. QuanTEM is not responsible for user-supplied data used in calculations.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Environmental Chemistry Analysis Report

QuanTEM Set ID: 243690
Date Received: 11/07/14
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 11/11/2014

AIHA ID: 101352

Client: Enercon Services, Inc.
1601 Northwest Expressway
Suite 1000
Oklahoma City, OK 73118

Acct. No.: A845

Project: Bristow Armory
Location: 700 W. 5th St., Bristow, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
052	SE-18-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
053	SE-18-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
054	SE-18-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
055	SE-18-04	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
056	SE-18-05	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
057	SE-18-06	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
058	SE-WS-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
059	SE-WS-02	Wipe	Lead	13.7	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
060	SE-WS-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
061	SE-WS-04	Wipe	Lead	15.3	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
062	SE-WS-06	Wipe	Lead	25.6	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
063	SE-WS-07	Wipe	Lead	9.39	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
064	SE-WS-08	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
065	SE-WS-09	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
066	SE-WS-10	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100
067	SE1-WS-05	Wipe	Lead	18.0	9	ug/sq. Ft.	11/10/14 9:45	W NIOSH 9100

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission. QuanTEM is not responsible for user-supplied data used in calculations.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Environmental Chemistry Analysis Report

QuanTEM Set ID: 243690
Date Received: 11/07/14
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 11/11/2014

AIHA ID: 101352

Client: Enercon Services, Inc.
1601 Northwest Expressway
Suite 1000
Oklahoma City, OK 73118

Acct. No.: A845

Project: Bristow Armory
Location: 700 W. 5th St., Bristow, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method

Authorized Signature: _____
Carter Cox, Lab Tech

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission. QuanTEM is not responsible for user-supplied data used in calculations.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified
EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified

Supplemental Report
QAQC Results

QA ID: 12518 **Date:** 11/7/2014 **Lab Number:** 243690
Test: Lead **Matrix:** Wipe **Approved By:** Benton Miller
Date Approved: 11/7/2014

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5.1	5.5
FCV	4.5	5.2	5.5
ICV	0.9	0.99	1.1
RLVS	0.144	0.213	0.216

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W2	0.000	5.455	4.898	89.8	5.249	96.2	6.9
MS-W1	0.000	5.455	5.586	102.4	5.391	98.8	3.6

Supplemental Report
QAQC Results

QA ID: 12519 **Date:** 11/10/2014 **Lab Number:** 243690
Test: Lead **Matrix:** Wipe **Approved By:** Carter Cox
Date Approved: 11/10/2014

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5	5.5
FCV	4.5	4.8	5.5
ICV	0.9	0.98	1.1
RLVS	0.144	0.195	0.216

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W1	0.000	5.433	5.259	96.8	5.476	100.8	4.1

Authorized Signature: _____
Carter Cox, Analyst

QuanTEM LABORATORIES
www.QuanTEM.com

LEAD CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only	
Lab No.	243690
(Accept)	Reject

Contact Information			
Company:	ENERCON SERVICES, INC	Phone:	(405) 722-7693
Contact:	E. PACK	Cell Phone:	(405) 414-5303
Account #:		E-mail:	EPACK@ENERCON.COM

Project Information	
Project Name:	BRISTOW ARMORY
Project Location:	700 W. 5TH ST., BRISTOW, OK
Project ID:	

Report Results (☑ one box)	
✓	QuanTEM Website
✓	Other EMAIL

Sampled By: Name: E. PACK Date: Nov. 6, 2014

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
E Pack	11/7/14 907 am	HAND	Judy Rowan	11/7/14 9:15

REQUESTED SERVICES [illegible]

No.	Sample ID (10 Characters Max)	Sample Description	[illegible]	[illegible]	[illegible]	Pb			PPM	Wt %	mg / l	µg / ft²	µg / m³	mg / cm²
1	SE1-01-01	Rm. 1			C	✓						✓		
2	SE1-01-02	↓			C	✓						✓		
3	SE1-01-03				C	✓						✓		
4	SE1-02-01	Rooms 2 & 3 (Per B. Downs)			C	✓						✓		
5	SE1-02-02	↓			C	✓						✓		
6	SE1-03-01				C	✓						✓		
7	XXXXX				C	✓						✓		
8	XXXXX				C	✓						✓		
9	XXXXX				C	✓						✓		
7 ~~10~~	SE1-04-01	Rm 4			C	✓						✓		
8 ~~11~~	SE1-04-02	↓			C	✓						✓		
9 ~~12~~	SE1-04-03				C	✓						✓		

Sample Matrix Codes	
A	Soil
B	Paint Chips
C	Surface / Dust Wipes
D	Bulk Miscellaneous
E	Air Cassette

TURNAROUND TIME	
	Same Day
✓	24 - Hour
	3 - Day
	5 - Day

SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

QUANTEM LABORATORIES
www.QuanTEM.com

LEAD CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 243690
(Accept) Reject

Project Information

Company: ENERCON SERVICES, INC | Project Name: BRISTOW ARMORY | Project Location: 700 W. 5TH ST., BRISTOW, OK

REQUIRED SERVICES (Please fill in the Appropriate Boxes)

	No.	Sample ID (10 Characters Max)	Sample Description	Vol. (Units)	Volume Area (Length x Width)	Analysis: Pb			Units (fill ONE box only): PPM	Wt %	mg / l	µg /ft²	µg / m³	mg / cm²
10	13	SE1-05-01 •	Rm. 5											
11	14	SE1-05-02 •	↓											
12	15	SE1-05-03 •	↓											
13	16	SE1-06-01 •	Rm. 6											
14	17	SE1-06-02 •	↓											
15	18	SE1-06-03 •	↓											
16	19	SE-06C-01 •	Rm. 6 Closet											
17	20	SE-06C-02 •	↓											
18	21	SE-06C-03 •	↓											
19	22	SE-07-01 •	Rm. 7											
20	23	SE-07-02 •	↓											
21	24	SE-07-03 •	↓											
22	25	SE-08-01 •	Rm. 8											
23	26	SE-08-02 •	↓											
24	27	SE-08-03 •	↓											
25	28	SE-09-01 •	Rm. 9											
26	29	SE-09-02 •	↓											
27	30	SE-09-03 •	↓											

Sample Matrix Codes	
A	Soil
B	Paint Chips
C	Surface / Dust Wipes
D	Bulk Miscellaneous
E	Air Cassette

SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

QuanTEM LABORATORIES
www.QuanTEM.com

LEAD CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 243690
Accept (circled) Reject

Project Information

Company: ENERCON SERVICES, INC | Project Name: BRISTOW ARMORY | Project Location: 700 W. 5TH ST., BRISTOW, OK

[illegible]

	No.	Sample ID (10 Characters Max)	Sample Description	Volume [illegible]	Wiped Area [illegible]	[illegible]	Analysis: Pb			Units (ONE box only): PPM	Wt %	mg / l	µg /ft²	µg / m³	mg / cm²
28	13	SE1-10-01 •	Rm. 10												
29	14	SE1-10-02 •	↓												
30	15	SE1-10-03 •	↓												
31	16	SE1-11-01 •	Rm. 11												
32	17	SE1-11-02 •	↓												
33	18	SE1-11-03 •	↓												
34	19	SE-12-01 •	Rm. 12												
35	20	SE-12-02 •	↓												
36	21	SE-12-03 •	↓												
37	22	SE-13-01 •	Rm. 13												
38	23	SE-13-02 •	↓												
39	24	SE-13-03 •	↓												
40	25	SE-14-01 •	Rm. ~~14~~ [illegible]												
41	26	SE-14-02 •	↓												
42	27	SE-14-03 •	↓												
43	28	SE-15-01 •	Rm. 15												
44	29	SE-15-02 •	↓												
45	30	SE-15-03 •	↓												

Sample Matrix Codes	
A	Soil
B	Paint Chips
C	Surface / Dust Wipes
D	Bulk Miscellaneous
E	Air Cassette

SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

QUANTEM LABORATORIES
www.QuanTEM.com

LEAD CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 243690
Accept / Reject

Project Information

Company: ENERCON SERVICES, INC | Project Name: BRISTOW ARMORY | Project Location: 700 W. 5TH ST., BRISTOW, OK

REQUESTED SERVICES (Please fill in the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (if liquid)	Volume Area (Length x Width)	Analytes: Pb	Units (fill ONE box only): PPM	Wt %	mg / l	µg / ft²	µg / m³	mg / cm²
46 13	SE1-16-01 •	Rm. 16									
47 14	SE1-16-02 •										
48 15	SE1-16-03 •										
49 16	SE1-17-01 •	Rm. 17									
50 17	SE1-17-02 •										
51 18	SE1-17-03 •										
52 19	SE-18-01 •	Rm. 18									
53 20	SE-18-02 •										
54 21	SE-18-03 •										
55 22	SE-18-04 •										
56 23	SE-18-05 •										
57 24	SE-18-06 •										
58 25	SE-WS-01 •	Window Sill									
59 26	SE-WS-02 •										
60 27	SE-WS-03 •										
61 28	SE-WS-04 •										
62 29	SE-WS-06 •										
63 30	SE-WS-07 •										

Sample Matrix Codes	
A	Soil
B	Paint Chips
C	Surface / Dust Wipes
D	Bulk Miscellaneous
E	Air Cassette

SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

QUANTEM LABORATORIES
www.QuanTEM.com

LEAD CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 243690
Accept (circled) Reject

Project Information

Company: ENERCON SERVICES, INC | Project Name: BRISTOW ARMORY | Project Location: 700 W. 5TH ST., BRISTOW, OK

REQUESTED SERVICES (Please Check Appropriate Boxes)

	No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume/Area (Length x Width)	Matrix Code	Analysis: Pb			Units: PPM	Wt %	mg / l	µg / ft²	µg / m³	mg / cm²
64	13	SE-WS-08 •	Window Sill												
65	14	SE-WS-09 •	↓												
66	15	SE-WS-10 •													
*67	16	SEI-WS-05													
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	25														
	26														
	27														
	28														
	29														
	30														

Sample Matrix Codes	
A	Soil
B	Paint Chips
C	Surface / Dust Wipes
D	Bulk Miscellaneous
E	Air Cassette

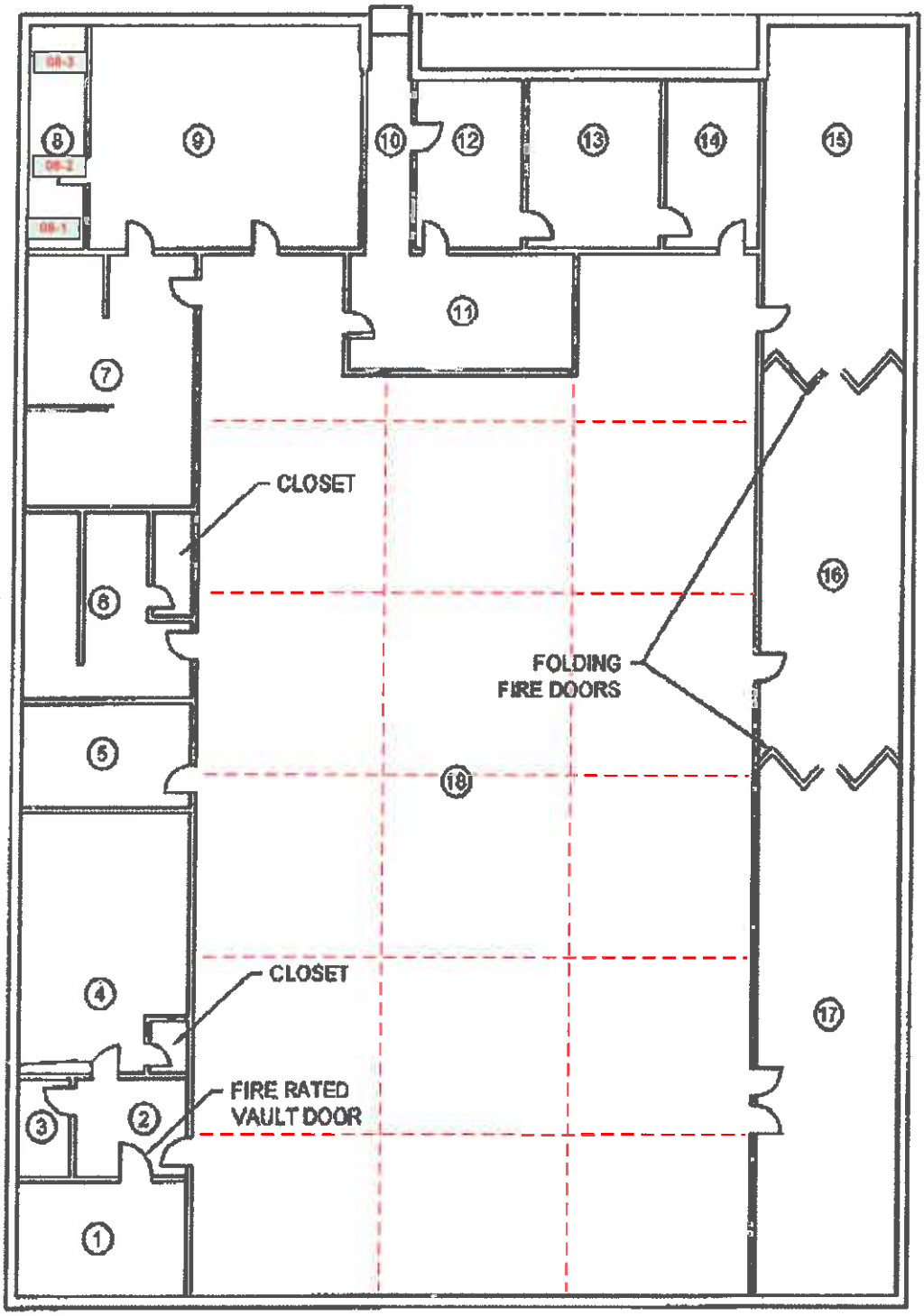
SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

* Added to COC, SNL
11/7/14

APPENDIX D

LEAD WIPE TESTING – POST REMEDIATION
DATE OF RE-TESTING – 11/17/2014

NOTE: RE-SAMPLES IN RM. 8 (SHOWN HERE IN BOLD, RED NUMERALS) ARE DESIGNATED IN THE LAB REPORT AND ELSEWHERE WITH THE PRE-FIX "SE2"



Sample < 40 µg/ft²

BRISTOW ARMORY

QUANTEM LABORATORIES

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Environmental Chemistry Analysis Report

QuanTEM Set ID: 243974
Date Received: 11/17/14
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 11/18/2014

AIHA ID: 101352

Client: Enercon Services, Inc.
1601 Northwest Expressway
Suite 1000
Oklahoma City, OK 73118

Acct. No.: A845

Project: Bristow Armory
Location: 700 W. 5th St., Bristow, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	SE2-08-01	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/18/14 14:20	W NIOSH 9100
002	SE2-08-02	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/18/14 14:20	W NIOSH 9100
003	SE2-08-03	Wipe	Lead	<9.00	9	ug/sq. Ft.	11/18/14 14:20	W NIOSH 9100

Authorized Signature: _____

Benton Miller, Analyst

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission. QuanTEM is not responsible for user-supplied data used in calculations.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified

Supplemental Report
QAQC Results

QA ID: 12540
Test: Lead

Date: 11/18/2014
Matrix: Wipe

Lab Number: 243974
Approved By: Benton Miller
Date Approved: 11/18/2014

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5.4	5.5
FCV	4.5	5.3	5.5
ICV	0.9	1.04	1.1
RLVS	0.144	0.213	0.216

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W1	0.000	5.433	5.110	94.0	5.303	97.6	3.7

Authorized Signature: _____

Benton Miller, Analyst

LEAD CHAIN OF CUSTODY

QUANTEM LABORATORIES
www.QuanTEM.com

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT – PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 243974
Accept Reject

Report Results (☑ one box)
- ✓ QuanTEM Website
- ✓ Other email

Contact Information		Project Information	
Company: ENERCON SERVICES, INC	Phone: 405 722-7693	Project Name: BRISTOW ARMORY	
Contact: E. PACK	Cell Phone: 405 414 5503	Project Location: 700 W. 5th ST. BRISTOW OK	
Account #:	E-mail: epack@enercon	Project ID:	

Sampled By: Name: Date:

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
E PACK	11/17/14 1450	HAND	Shaftwick	11/12/14 2:30

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters) Area	Volume Area (Length x Width)	Sample Matrix (see matrix codes below)	Analysis: Pb			Units (☑ ONE box only): PPM	Wt %	mg / l	µg /ft²	µg / m³	mg / cm²
1	GEZ-08-01	Rm 8 - Pre-clean	Sq.ft		C							✓		
2	-02	〃	〃		C							✓		
3	-03	〃	〃		C							✓		
4														
5														
6														
7														
8														
9														
10														
11														
12														

Sample Matrix Codes

A	Soil
B	Paint Chips
C	Surface / Dust Wipes
D	Bulk Miscellaneous
E	Air Cassette

TURNAROUND TIME

	Same Day
✓	24 - Hour
	3 - Day
	5 - Day

SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"