Former National Guard Armory
Sapulpa, Oklahoma

Remediation Final Report

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

DEQ
OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY
...for a clean, attractive, prosperous Oklahoma

The Oklahoma Department of Environmental Quality (DEQ) is pleased to present the City of Sapulpa with the Final Remediation Report for the former Sapulpa 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 Sapulpa 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, mastic, and thermal pipe insulation and fittings
- Asbestos Abatement, including:
  - Removal of floor tile and mastic
  - Removal and replacement of pipe insulation and fittings.

TARGETED BROWNFIELD ASSESSMENT

On August 2, 2013, DEQ provided a Phase I Targeted Brownfield Assessment to the City of Sapulpa. 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) inspection
- Lead dust wipe sampling
- LBP abatement, including:
  - Scraping and sealing garage doors and frames, the exterior porch ceiling and beams, the wall logo in Room 19, and the door frame and lintel between Rooms 1 and 2.
- Lead dust abatement, including:
  - Cleaning of window sills and HEPA vacuuming and wet washing of floors in the building
- Proper disposal of associated waste

DEQ
OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY

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

DEEDS AND LEGAL DOCUMENTS

10/5

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

JAN 3 - 2012

At 10:25 o'clock A M AND RECORDED IN
BOOK 763 PAGE 1621-22
BY K. Weir DEPUTY

12 34

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 **the City of Sapulpa, Oklahoma,** Grantee, the following described real property and premises lying and situated in Creek County, State of Oklahoma, as follows:

The West 275 feet of Trackage Lot "6" in Westport Addition to the City of Sapulpa, Creek County, Oklahoma, less a tract thereof described as beginning at the Northwest corner of said Lot "C", thence East 125 feet, thence South 150 feet, thence West 125 feet, thence North 150 feet to the point of beginning; and,

All that part of the N ½ of the NE ¼ of the NE ¼ of the SW ¼ of the Section 34, Township 18 North, Range 11 East, lying North and West of the St. Louis & San Francisco Railway right-of-way;

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 21 day of December 2011.

STATE OF OKLAHOMA

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

COUNTY CLERK CREEK COUNTY OKLA

1621

This Transaction is Exempt from Documentary Tax Stamps. Title 68 O.S. § 3202(11)

ACKNOWLEDGMENT

STATE OF OKLAHOMA)
) ss
COUNTY OF OKLAHOMA)

Before me, Michael A. Mowry, Notary Public in and for this state, on this 21st day of December, 2011, personally appeared Major General Myles L. Deering, as Adjutant General of the State of Oklahoma, to me known to be the identical person who executed the within and foregoing Quitclaim Deed, and acknowledged to me that he executed the same as free and voluntary act and deed for the uses and purposes therein set forth.

Notary Public

My Commission Expires:

6/9/14

My Commission Number:

10004623

1622

This Transaction is Exempt from Documentary Tax Stamps. Title 68 O.S. § 3202(11).

(2)
1000
500

Return To:
The Oklahoma Military Department, a State Agency
Attn: Houston Cantrell
3515 Military Circle
Oklahoma City, OK 73111

I-2014-002245 Bk 0892 Pg 523
02/25/2014 11:58 am Pg 0523-0524
Fee: $ 15.00 Doc: $ 0.00
Jennifer Mortazavi - Creek County Clerk
State of Oklahoma

CORRECTION
QUITCLAIM DEED

This Deed is being re-filed to correct the legal description of the Deed filed in Book 763, Pages 1621-1622 in Creek County, Oklahoma and the legal description of the Deed filed in Book 579, Pages 541-542 in Creek County, Oklahoma.

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 **the City of Sapulpa, Oklahoma**, Grantee, the following described real property and premises lying and situated in Creek County, State of Oklahoma, as follows:

The West 275 feet of Trackage Lot **"C"** in Westport Addition to the City of Sapulpa, Creek County, Oklahoma, less a tract thereof described as beginning at the Northwest corner of said Lot "C," thence East 125 feet, thence South 150 feet, thence West 125 feet, thence North 150 feet to the point of beginning; and,

All that part of the N ½ of the NE ¼ of the NE ¼ of the SW ¼ of the Section 34, Township 18 North, Range 11 East, lying North and West of the St. Louis & San Francisco Railway right-of-way;

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.

This Transaction is Exempt from Documentary Tax Stamps, Title 68 O.S. § 3202(11).

Signed and delivered this 16 day of October 2013.

STATE OF OKLAHOMA

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

ACKNOWLEDGEMENT

STATE OF OKLAHOMA)
) **SS**
COUNTY OF OKLAHOMA)

Before me, Jennifer Meyer, in and for this state, on this 16 day of October, 2013, personally appeared Major General Myles L. Deering, as Adjutant General of the State of Oklahoma, to me known to be the identical person who executed the within and foregoing Quitclaim Deed, and acknowledged to me that he executed the same as a free and voluntary act and deed for the uses and purposes therein set forth.

JENNIFER MEYER NOTARY # 04006685 EXP. 01/23/16 STATE OF OKLAHOMA

Jennifer Meyer
Notary Public

My Commission Expires:

1/23/16

My Commission Number:

04006685

I-2014-002245 Bk 0892 Pg 524
02/25/2014 11:58 am Pg 0523-0524
Fee: $ 15.00 Doc: $ 0.00
Jennifer Mortazavi - Creek County Clerk
State of Oklahoma

This Transaction is Exempt from Documentary Tax Stamps, Title 68 O.S. § 3202(11).

(3)
1200
500

NOTICE OF REMEDIATION
FORMER SAPULPA ARMORY
SAPULPA, OKLAHOMA

LEGAL BASIS FOR NOTICE: The Oklahoma Department of Environmental Quality (DEQ) hereby files this Notice of Remediation pursuant to Oklahoma Statutes, 27A § 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.

The 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, Maintenance of said Engineering Controls herein described.

The Land Use Restrictions, Engineering Controls and Continuing Operation, 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 the 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 below 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 February 23, 2012, indicated that there was asbestos, lead-based paint, and lead dust in the building.

AFFECTED PROPERTY: The Affected Property is the former Sapulpa Armory located at 13 Sahoma Lake Road, City of Sapulpa, Creek County, Oklahoma, 74066.

The legal description is as follows:

The West 275 feet of Trackage Lot "C" in Westport Addition to the City of Sapulpa, Creek County, Oklahoma, less a tract thereof described as beginning at the Northwest corner of said Lot "C", thence East 125 feet, thence South 150 feet, thence West 125 feet, thence North 150 feet to the point of beginning; and,

All that part of the N ½ of the NE ¼ of the NE ¼ of the SW ¼ of Section 34, Township 18 North, Range 11 East, lying North and West of the St. Louis & San Francisco Railway right-of-way.

REMEDY: Remediation activities (Remedy) at the Affected Property included abatement of asbestos, lead-based paint and dust. The remedy was completed on August 29, 2013.

I-2014-002244 Bk 0892 Pg 520
02/25/2014 11:57 am Pg 0520-0522
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 Sapulpa, 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

I-2014-002244 Bk 0892 Pg 521
02/25/2014 11:57 am Pg 0520-0522
Fee: $ 17.00 Doc: $ 0.00
Jennifer Mortazavi - Creek County Clerk
State of Oklahoma

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.

(B) Sealant: Following cleanup, sealant was applied to the Drill Room floor where lead-based paint abatement was performed. Sealant should be inspected on a periodic basis and maintained as appropriate.

LAND USE RESTRICTIONS: The land use restrictions at the above-described Affected Property are:

> No residential use of the property by children age 6 or under. Residential use is defined as having a child present at the Affected Property for more than sixteen (16) hours a day in excess of 30 days per year.

These land use restrictions apply to the entirety of the Affected Property described herein above.

CHANGING LAND USE RESTRICTIONS: Changes to land use restrictions must be approved by the DEQ or its successor agency. The person requesting the change in land use must demonstrate to the DEQ's satisfaction that contamination at the site has reached levels appropriate

for the proposed new land uses and that further remediation is not necessary or that additional institutional or engineering controls are adequate to achieve levels protective of human health and the environment for the proposed uses.

The DEQ may require oversight costs, work plans, sampling, reports, and public participation as part of its review of the new information to support the requested change in land use restrictions. The person requesting the change will be required to follow agency procedures effective at the time of the request.

The DEQ at its discretion may determine, based on the new information submitted, that contaminants are present at the Site at levels that will not pose a risk to human health or the environment if the new land use restrictions being requested are allowed. Upon making this determination, the DEQ will file a recordable notice of remediation pursuant to state law in the land records in the in the office of the county clerk where the Site is located designating the new land use restrictions.

This Notice of Remediation and the restrictions and requirements contained herein run with the land and no change of ownership of the Affected Property will change the Land Use Restrictions.

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

2-5-2014
Date

ACKNOWLEDGMENT

LINDA YARBER NOTARY # 13002580 EXP. 03/15/17 PUBLIC STATE OF OKLAHOMA

STATE OF OKLAHOMA
COUNTY OF OKLAHOMA

Before me, a Notary Public, in and for said County and State, on this 5th day of February 2014, 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:

3-15, 2017.

Notary Public

I-2014-002244 Bk 0892 Pg 522
02/25/2014 11:57 amPg 0520-0522
Fee: $ 17.00 Doc: $ 0.00
Jennifer Mortazavi - Creek County Clerk
State of Oklahoma

MAINTENANCE PLAN

MAINTENANCE PLAN
FORMER SAPULPA ARMORY
SAPULPA, OKLAHOMA

The Armory located at 13 Sahoma Lake Road, Sapulpa, 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 February 22, 2012, indicated that there was asbestos, lead-based paint, and lead dust in the building. Remediation activities at the Former Sapulpa Armory included abatement of asbestos, lead-based paint, and lead dust. The remedy was completed on August 26, 2013. 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 interior and exterior portions of all four garage door frames and guards, the exterior porch ceiling and beams, the wall logo in Room 19, and the door frame and lintel between Room 1 and Room 2 were wet scraped, painted, 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. See Attachment 2 for Sapulpa Armory Floor Plan Map.
2. The emblem located in the center of the Drill Room floor was cleaned and sealed with acrylic. The emblem needs to be resealed if acrylic sealant shows signs of deterioration, damage, or flaking. See Attachment 2 for Sapulpa Armory Floor Plan Map.

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

Land use Restrictions

LAND USE RESTRICTIONS: The land use restrictions at the above-described Affected Property are:

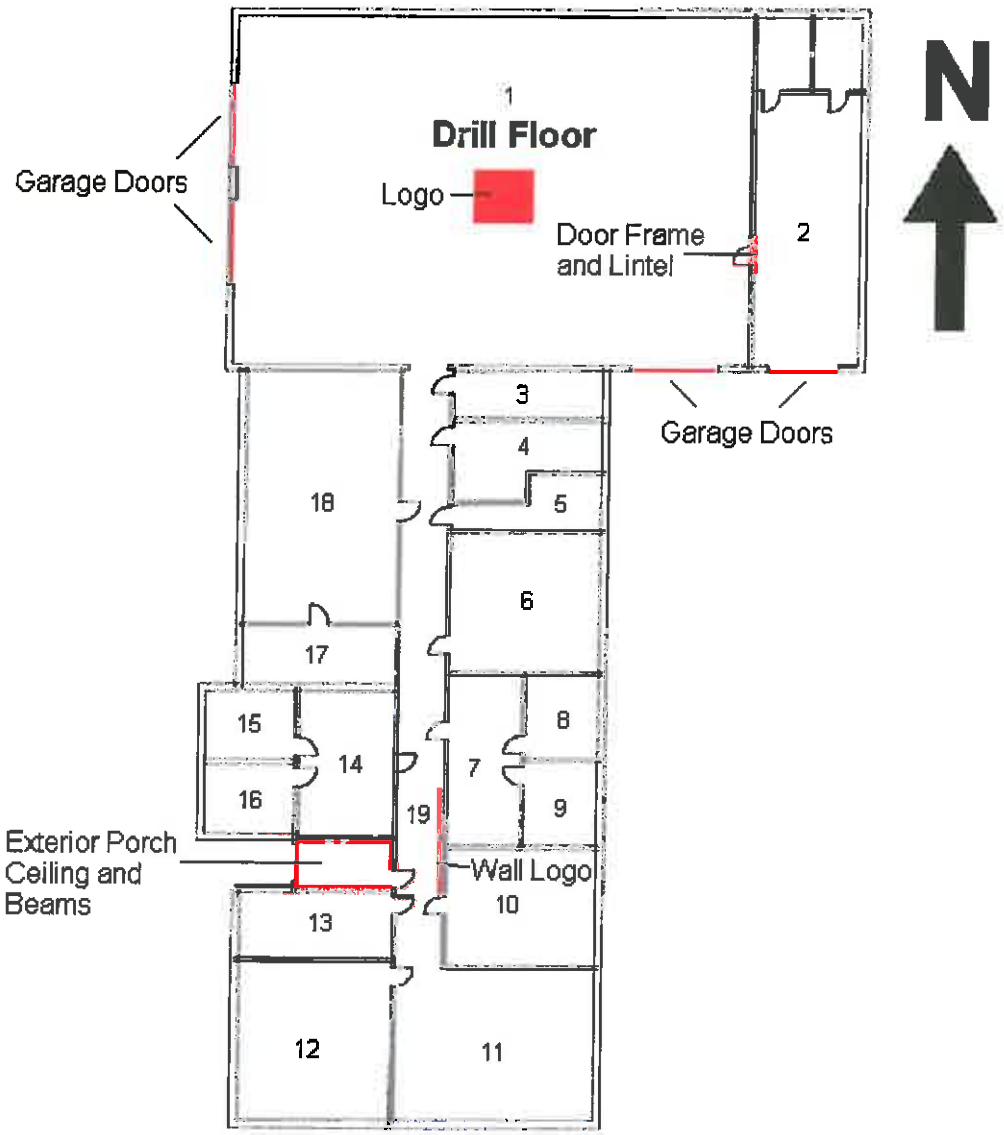
> No residential use of the property by children age 6 or under. Residential use is defined as having a child present at the Affected Property for more than sixteen (16) hours a day in excess of 30 days per year.

These land use restrictions apply to the entirety of the Affected Property described herein above.

ATTACHMENT 2

Floor Plan Map

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



ATTACHMENT 3

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
13 SAHOMA LAKE ROAD
SAPULPA, OKLAHOMA 74066

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

QUANTITATIVE FACILITY ASBESTOS SURVEY
SAPULPA NATIONAL GUARD ARMORY
13 SAHOMA LAKE ROAD
SAPULPA, 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 13 Sahoma Lake Road in Sapulpa, Oklahoma.

The objective of the survey was to assess the presence and quantities of asbestos containing building 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 44 samples were collected from 26 different homogeneous areas.

Laboratory results indicate the layer of gray floor tile located in Room14 and the black mastic located in Rooms 14 and 16 **contain non-friable asbestos.**

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

2.0 INTRODUCTION

On February 23, 2012, GMR & Associates, Inc. (GMR) performed a survey for ACM in the National Guard Armory located at 13 Sahoma Lake Road in Sapulpa, 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 1948, the Sapulpa Armory building has a total area of 9,880 square feet and is comprised of one floor constructed over a concrete slab. The building consists of a large central garage/staging area on the northern portion of the building with offices, bathrooms and workrooms extending to the south.

4.0 FINDING SUMMARY OF ASBESTOS CONTAINING MATERIALS

Laboratory results indicate the layer of gray floor tile located in Room14 and the black mastic located in Rooms 14 and 16 **contain non-friable asbestos.**

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

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 (SA-22A thru SA-22C)	225 Lineal Feet	Exposed in Rooms 3, 4, 5, 6, 8, 9, 10 and 11
Friable	Thermal Pipe Fittings – Water Pipe (SA-23A thru SA-23C)	25 Fittings (Observed)	Exposed in Rooms 3, 4, 5, 6, 8, 9, 10 and 11.
Category 1 Non-Friable	Gray Floor Tile (SA – 11A)	250 Square Feet	Room 14
Category I Non-Friable	Black Mastic	380 Square Feet	Rooms 14 & 16

Table 2
Bulk Samples and Analytical Results

Sample ID	Description	Approx. Amount	Asbestos Type & Percent
SA-01A	KALO Panels – White/Red	N/A	None Detected
SA-02A	White Window Glazing	N/A	None Detected
SA-03A	White Window Glazing	N/A	None Detected
SA-04A	White Sheetrock	N/A	None Detected
SA-04B	White Sheetrock	N/A	None Detected
SA-04C	White Sheetrock	N/A	None Detected
SA-04D	White Sheetrock	N/A	None Detected
SA-04E	White Sheetrock	N/A	None Detected
SA-04F	White Sheetrock	N/A	None Detected
SA-04G	White Sheetrock	N/A	None Detected
SA-05A	White Paneling (Layered)	N/A	None Detected
	Yellow Mastic	N/A	None Detected
SA-05B	White Paneling	N/A	None Detected
	Yellow Mastic	N/A	None Detected
SA-05C	White Paneling	N/A	None Detected
SA-06A	White Texture	N/A	None Detected
SA-06B	White Texture	N/A	None Detected
SA-06C	White Texture	N/A	None Detected
SA-07A	White Texture	N/A	None Detected
SA-07B	White Texture	N/A	None Detected
SA-07C	White Texture	N/A	None Detected
SA-08A	Brown Tape	N/A	None Detected
SA-08B	Brown Tape (Layered)	N/A	None Detected
	White Joint Compound	N/A	None Detected
SA-08C	Cream Tape (Layered)	N/A	None Detected
	White Joint Compound	N/A	None Detected
SA-09A	White Floor Tile	N/A	None Detected
SA-10A	Yellow Mastic	N/A	None Detected
SA-11A	Gray Floor Tile	***250 SF***	***10% Chrysotile***
SA-12A	Yellow Mastic	N/A	None Detected
SA-13A	Black Mastic	***250 SF***	***7% Chrysotile***
SA-14A	Black Mastic	***130 SF***	***5% Chrysotile***

Table 2 (continued)
Bulk Samples and Analytical Results

Sample ID	Description	Approx. Amount	Asbestos Type & Percent
SA-15A	White Floor Tile	N/A	None Detected
SA-16A	Yellow Mastic	N/A	None Detected
SA-17A	Cream Sheet Vinyl Flooring	N/A	None Detected
	Yellow Mastic	N/A	None Detected
	White Floor Tile	N/A	None Detected
SA-18A	Yellow Mastic	N/A	None Detected
SA-19A	White Ceiling Tile	N/A	None Detected
SA-20A	White Ceiling Tile	N/A	None Detected
SA-21A	White Ceiling Tile	N/A	None Detected
SA-22A	Gray Pipe Insulation	***225 LF***	***45% Chrysotile***
SA-22B	Gray Pipe Insulation		***45% Chrysotile***
SA-22C	Gray Pipe Insulation		***40% Chrysotile***
SA-23A	White Pipe Fitting Insulation	***25 EA***	***35% Chrysotile***
SA-23B			***35% Chrysotile***
SA-23C			***35% Chrysotile***
SA-24A	Siler Roofing	N/A	None Detected
SA-25A	Black Roofing	N/A	None Detected
SA-26A	Beige Roofing	N/A	None Detected

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. Non-friable material may be left in place and disposed of as demolition debris.

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:	***$12,500.00***
Black Mastic	***$1,140.00***
Gray Floor Tile:	***$800.00***

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. 204755
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: 03/02/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Sapulpa Armory
Project Location: 13 Sahoma Lake Rd. Sapulpa, OK
Project Number: 2012017.001

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
001	SA-01A	Homogeneous	White Paneling	Asbestos Not Present	Cellulose	20	Gypsum
002	SA-02A	Homogeneous	White Window Glazing	Asbestos Not Present	Cellulose	<1	CaCO3
003	SA-03A	Homogeneous	White Window Glazing	Asbestos Not Present	Cellulose	<1	CaCO3
004	SA-04A	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	15	Gypsum
005	SA-04B	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	15	Gypsum
006	SA-04C	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	15	Gypsum
007	SA-04D	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	15	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. 204755
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: 03/02/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Sapulpa Armory
Project Location: 13 Sahoma Lake Rd. Sapulpa, OK
Project Number: 2012017.001

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
008	SA-04E	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	20	Gypsum
009	SA-04F	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	20	Gypsum
010	SA-04G	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	20	Gypsum
011	SA-05A	Layered	White Paneling	Asbestos Not Present	Cellulose	10	Gypsum
011a		Layered	Yellow Mastic	Asbestos Not Present	Cellulose	2	Glue
012	SA-05B	Layered	White Paneling	Asbestos Not Present	Cellulose	10	Gypsum
012a		Layered	Yellow Mastic	Asbestos Not Present	Cellulose	2	Glue

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. 204755
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: 03/02/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Sapulpa Armory
Project Location: 13 Sahoma Lake Rd. Sapulpa, OK
Project Number: 2012017.001

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
013	SA-05C	Homogeneous	White Paneling	Asbestos Not Present	Cellulose	10	Gypsum
014	SA-06A	Homogeneous	White Texture	Asbestos Not Present	Cellulose	2	CaCO3
015	SA-06B	Homogeneous	White Texture	Asbestos Not Present	Cellulose	<1	CaCO3
016	SA-06C	Homogeneous	White Texture	Asbestos Not Present	Cellulose	<1	CaCO3
017	SA-07A	Homogeneous	White Texture	Asbestos Not Present	Cellulose	2	CaCO3 Paint
018	SA-07B	Homogeneous	White Texture	Asbestos Not Present	Cellulose	<1	CaCO3
019	SA-07C	Homogeneous	White Texture	Asbestos Not Present	Cellulose	<1	CaCO3 Paint

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. 204755
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Client: GMR & Associates, Inc.
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Date Received: 02/23/2012
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Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Sapulpa Armory
Project Location: 13 Sahoma Lake Rd. Sapulpa, OK
Project Number: 2012017.001

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
020	SA-08A	Homogeneous	Brown Tape	Asbestos Not Present	Cellulose	60	Binder
021	SA-08B	Layered	White Joint Compound	Asbestos Present Chrysotile <1	Cellulose	<1	CaCO3
021a		Layered	Brown Tape	Asbestos Not Present	Cellulose	65	Binder
022	SA-08C	Layered	White Joint Compound	Asbestos Not Present	Cellulose	2	CaCO3
022a		Layered	Cream Tape	Asbestos Not Present	Cellulose	70	Binder
023	SA-09A	Homogeneous	White Floor Tile	Asbestos Not Present	Cellulose	<1	Vinyl CaCO3
024	SA-10A	Homogeneous	Yellow Mastic	Asbestos Not Present	Cellulose	<1	Glue

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. 204755
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: 03/02/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Sapulpa Armory
Project Location: 13 Sahoma Lake Rd. Sapulpa, OK
Project Number: 2012017.001

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
025	SA-11A	Homogeneous	Gray Floor Tile	Asbestos Present Chrysotile 10	Cellulose	<1	Vinyl CaCO3
026	SA-12A	Homogeneous	Yellow Mastic	Asbestos Not Present	Cellulose	<1	Glue
027	SA-13A	Homogeneous	Black Mastic	Asbestos Present Chrysotile 7	NA		Tar
028	SA-14A	Homogeneous	Black Mastic	Asbestos Present Chrysotile 5	Cellulose	<1	Tar
029	SA-15A	Homogeneous	White Floor Tile	Asbestos Not Present	Cellulose	<1	Vinyl CaCO3
030	SA-16A	Homogeneous	Yellow Mastic	Asbestos Not Present	Cellulose	2	Glue
031	SA-17A	Layered	Cream Sheet Vinyl	Asbestos Not Present	Cellulose	10	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. 204755
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: 03/02/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Sapulpa Armory
Project Location: 13 Sahoma Lake Rd. Sapulpa, OK
Project Number: 2012017.001

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
031a		Layered	Yellow Mastic	Asbestos Not Present	Cellulose	<1	Glue
031b		Layered	White Floor Tile	Asbestos Not Present	Cellulose	<1	Vinyl CaCO3
032	SA-18A	Homogeneous	Yellow Mastic	Asbestos Not Present	Cellulose	<1	Glue
033	SA-19A	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose Glass Fiber	30 30	Perlite Binder
034	SA-20A	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose	<1	Binder
035	SA-21A	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose	<1	Binder
036	SA-22A	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 45	Cellulose	5	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. 204755
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: 03/02/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Sapulpa Armory
Project Location: 13 Sahoma Lake Rd. Sapulpa, OK
Project Number: 2012017.001

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
037	SA-22B	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 45	Cellulose	3	Binder
038	SA-22C	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 40	Cellulose	8	Binder
039	SA-23A	Homogeneous	White Pipe Fitting Insulation	Asbestos Present Chrysotile 35	Cellulose	10	Binder
040	SA-23B	Homogeneous	White Pipe Fitting Insulation	Asbestos Present Chrysotile 35	Cellulose	10	Binder
041	SA-23C	Homogeneous	White Pipe Fitting Insulation	Asbestos Present Chrysotile 35	Cellulose	7	Binder
042	SA-24A	Homogeneous	Silver Roofing	Asbestos Not Present	Cellulose	2	Tar
043	SA-25A	Homogeneous	Black Roofing	Asbestos Not Present	Cellulose	<1	Tar

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. 204755
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: 03/02/2012
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

Project: Sapulpa Armory
Project Location: 13 Sahoma Lake Rd. Sapulpa, OK
Project Number: 2012017.001

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
044	SA-26A	Homogeneous	Beige Roofing	Asbestos Not Present	Cellulose Synthetic	<1 40	Binder

Stacey Holder, Analyst

3/5/2012
Date of Report

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

ASBESTOS 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.	204755
Accept / Reject	

Contact Information		Project Information	
Company: GMR	Phone: 918 645-9910	Project Name: Sapulpa Armory	
Contact: Mike Majors	Cell Phone:	Project Location: 13 Sahoma Lake Rd. Sapulpa, OK	
Account #:	E-mail: mmajors@gmrinc.com	Project ID: 2012017.001	

Report Results (☑ one box)	
☒	QuanTEM Website
☐	Other _____

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

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Howard Burch	2-23-12 1500		[illegible] 2/25/12 1500	

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
☒ 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	☒ 5 - Day

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	SA-01A	☑	Red	KALO Panels	3,200ft²	Layered
2	SA-02A	☑	grey	Interior Window Glazing		
3	SA-03A	☑	grey	Exterior Window Glazing		
4	SA-04A	☑	White	Dry Wall	[illegible]	3000ft²
5	SA-04B	☑	"	" "		
6	SA-04C	☑	"	" "		
7	SA-04D	☑	"	" "		
8	SA-04E	☑	"	" "		
9	SA-04F	☑	"	" "		
10	SA-04G	☑	"	" "		

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.	204755
Accept	Reject

Project Information

Company: GMR | Project Name: Sapulpa Armory | Project Location: 13 Sahoma Lake Rd, Sapulpa

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
11	SA-05A	☑	Tan	Wall Panel	640 ~~320~~ ft²	
12	SA-05B	☑	"	" "		
13	SA-05C	☑	"	" "		
14	SA-06A	☑	White	Surface Texture	125ft²	
15	SA-06B	☑	"	" "		
16	SA-06C	☑	"	" "		
17	SA-07A	☑	White	Surface Texture	300ft²	
18	SA-07B	☑	"	" "		
19	SA-07C	☑	"	" "		
20	SA-08A	☑	White	Joint Tape		
21	SA-08B	☑	"	" "		
22	SA-08C	☑	"	" "		
23	SA-09A	☑	White/Tan	Tile Flooring	20ft²	
24	SA-10A	☑	"	MASTIC		
25	SA-11A	☑	Grey	Grey Floor Tile		
26	SA-12A	☑	Yellow	Yellow Mastic	>550ft²	
27	SA-13A	☑	Black	Black Mastic		
28	SA-14A	☑	Black	Mastic - Black	135ft²	Formerly 9"x9" Tile
29	SA-15A	☑	White/Blue	12x12 Floor Tile	600ft²	
30	SA-16A	☑	Yellow	MASTIC		

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.	201755
Accept	Reject

Project Information

Company: GMR | Project Name: Sapulpa Armory | Project Location: 13 Sahoma Lake Rd, Sapulpa, OK

No.	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
31	SA-17A	☑	Beige	Vinyl Sheet Flooring	30SF	
32	SA-18A	☑	Yellow	Mastic		
33	SA-19A	☑	White	Ceiling Tile	135SF	
34	SA-20A	☑	White	" "		
35	SA-21A	☑	White	" "		
36	SA-22A	☑	Grey	Pipe Insulation	21LF	WRAP
37	SA-22B	☑	"	" "		
38	SA-22C	☑	"	" "		
39	SA-23A	☑	Gray	Pipe Fitting Insulation	2SFittings	WRAP
40	SA-23B	☑	"	" "		
41	SA-23C	☑	"	" "		
42	SA-24A	☑	Gray	Roof Coating		
43	SA-25A	☑	Black	Roof Coating		
44	SA-26A	☑	fibers	Roof Coating		
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

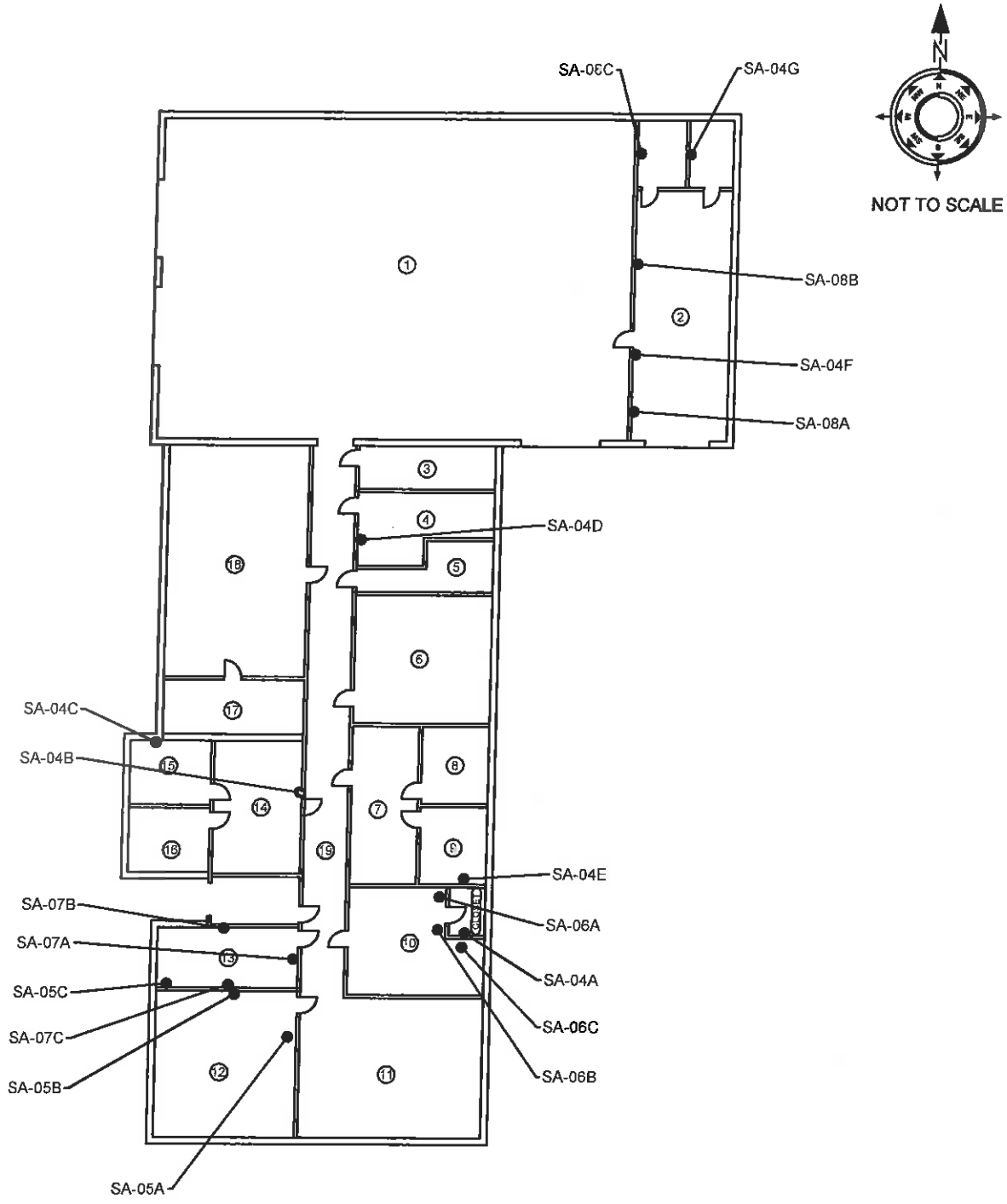
MARK COSTELLO
Commissioner of Labor

June 01, 2011
Date of Issuance

EXPIRES: June 01, 2012

Appendix C

Site Layout with Sample and Asbestos Locations



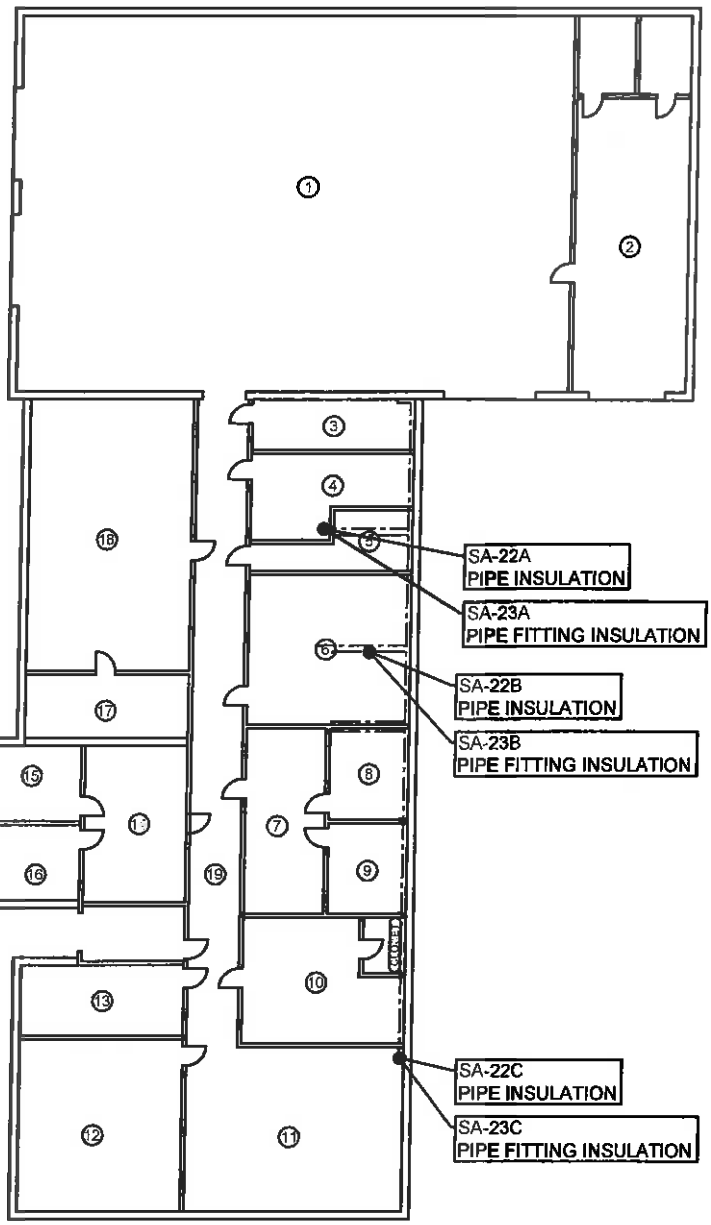
(#) DENOTES ROOM NUMBERS DEVELOPED FOR SURVEY

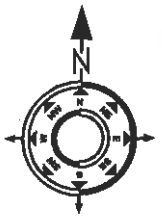
OK-### SAMPLES CONTAINING ASBESTOS

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
Sapulpa Armory
13 Sahoma Lake Road
Sapulpa, Oklahoma 74066





NOT TO SCALE

—·— DOMESTIC WATER PIPE (INSULATED)

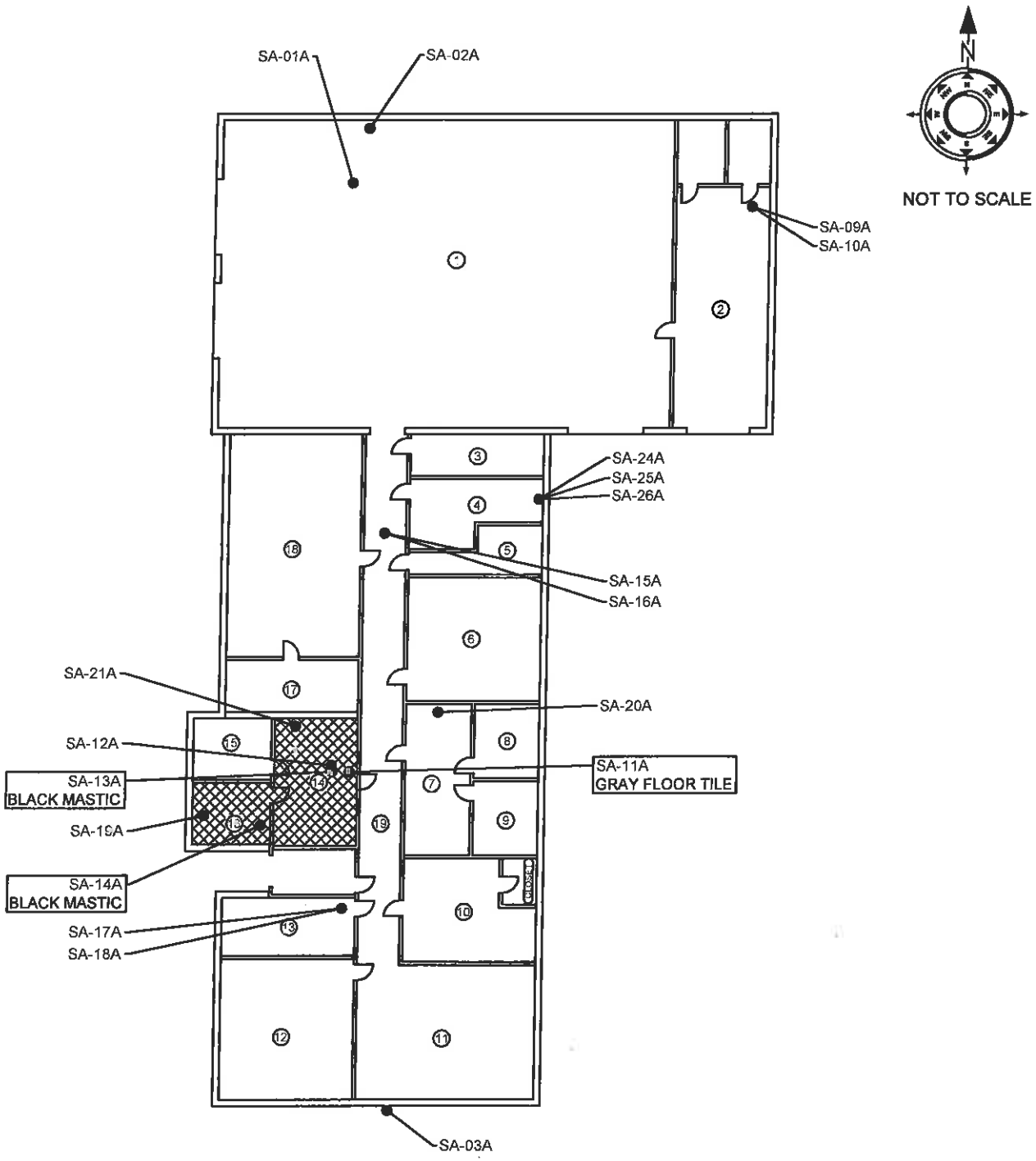
(#) DENOTES ROOM NUMBERS DEVELOPED FOR SURVEY

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
Sapulpa Armory
13 Sahoma Lake Road
Sapulpa, Oklahoma 74066

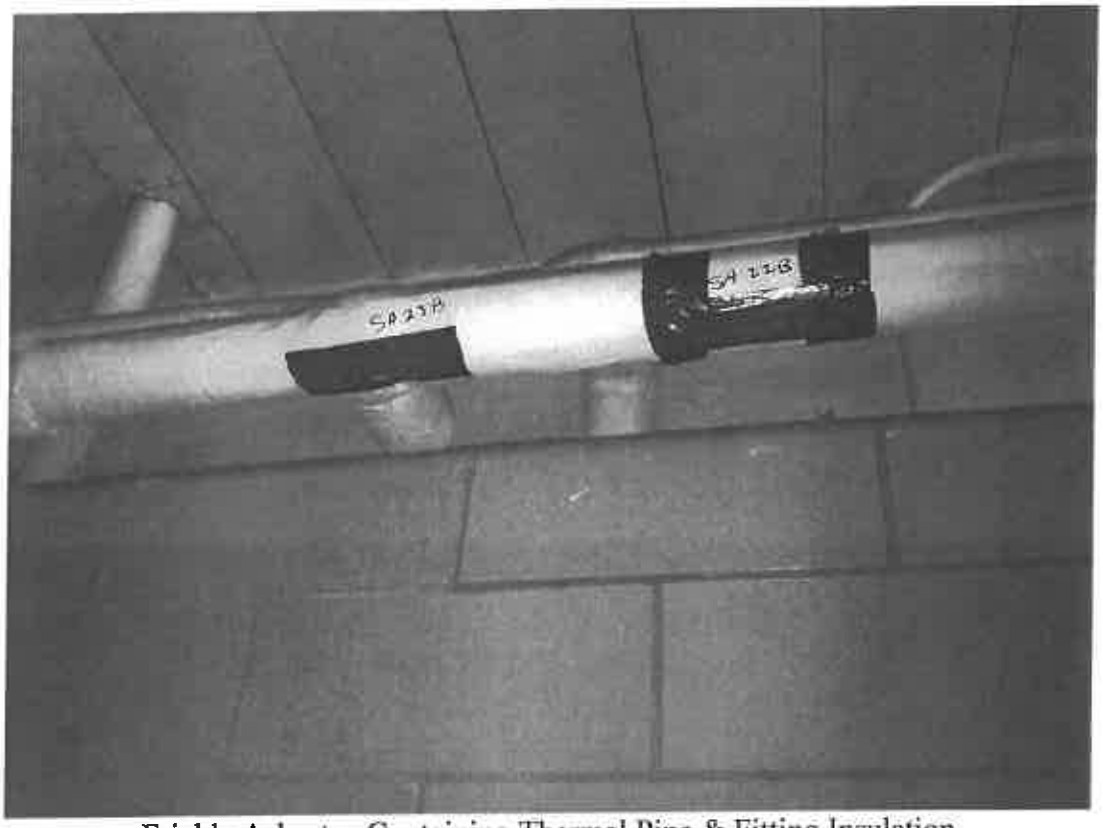


GMR
& Associates, Inc.
2520 West I-44 Service Road, Ste. 200
P.O Box 57827
Oklahoma City, OK 73157-7827
Phone: 405/528-7017, Fax: 405/528-3346

Figure 3
Asbestos Miscellaneous Sampling Locations
Sapulpa Armory
13 Sahoma Lake Road
Sapulpa, Oklahoma 74066

Appendix D

Photo Record



Friable Asbestos Containing Thermal Pipe & Fitting Insulation
(Sample # SA-22B and SA-23B)

Friable Asbestos Containing Thermal Pipe & Fitting Insulation
(Sample # SA-22C and SA-23C)

Black Mastic (Under Carpet) in Room 16
(Sample # SA-14A)

SURVEY FOR LEAD IN SETTLED DUST

NATIONAL GUARD ARMORY
13 SAHOMA LAKE ROAD
SAPULPA, OKLAHOMA

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
SAPULPA NATIONAL GUARD ARMORY
13 SAHOMA LAKE ROAD
SAPULPA, OKLAHOMA

1.0 EXECUTIVE SUMMARY

GMR & Associates, Inc. (GMR) has completed a Survey for Lead in Settled Dust (Survey) at the Sapulpa National Guard Armory, 13 Sahoma Lake Road, Sapulpa, 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 east and south 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 Room 2; and
- Lead concentrations in settled dust in excess of 250 $\mu g/ft^2$ were present on the window sills in Room 11.

2.0 INTRODUCTION

On February 22, 2012, GMR personnel performed a Survey for Lead in Settled Dust (Survey) at the Sapulpa National Guard Armory, 13 Sahoma Lake Road, Sapulpa, 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 1948, the Sapulpa Armory building has a total area of 9,880 square feet and is comprised of one floor constructed over a concrete slab. The building consists of a large central garage/staging area on the northern portion of the building with offices, bathrooms and workrooms extending to the south.

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 measured taped-off area was used for collection of sill samples. Sample SA-19-03 shown in the laboratory report is a field blank and is not a representative dust sample from a floor or sill. A total of 26 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	EPA/HUD Max. Level ($\mu g/ft^2$)
SA-02-01	71.6	Room 2 - Floor	570	40
SA-11-02	421	Room 11 - Sill	2	250

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.

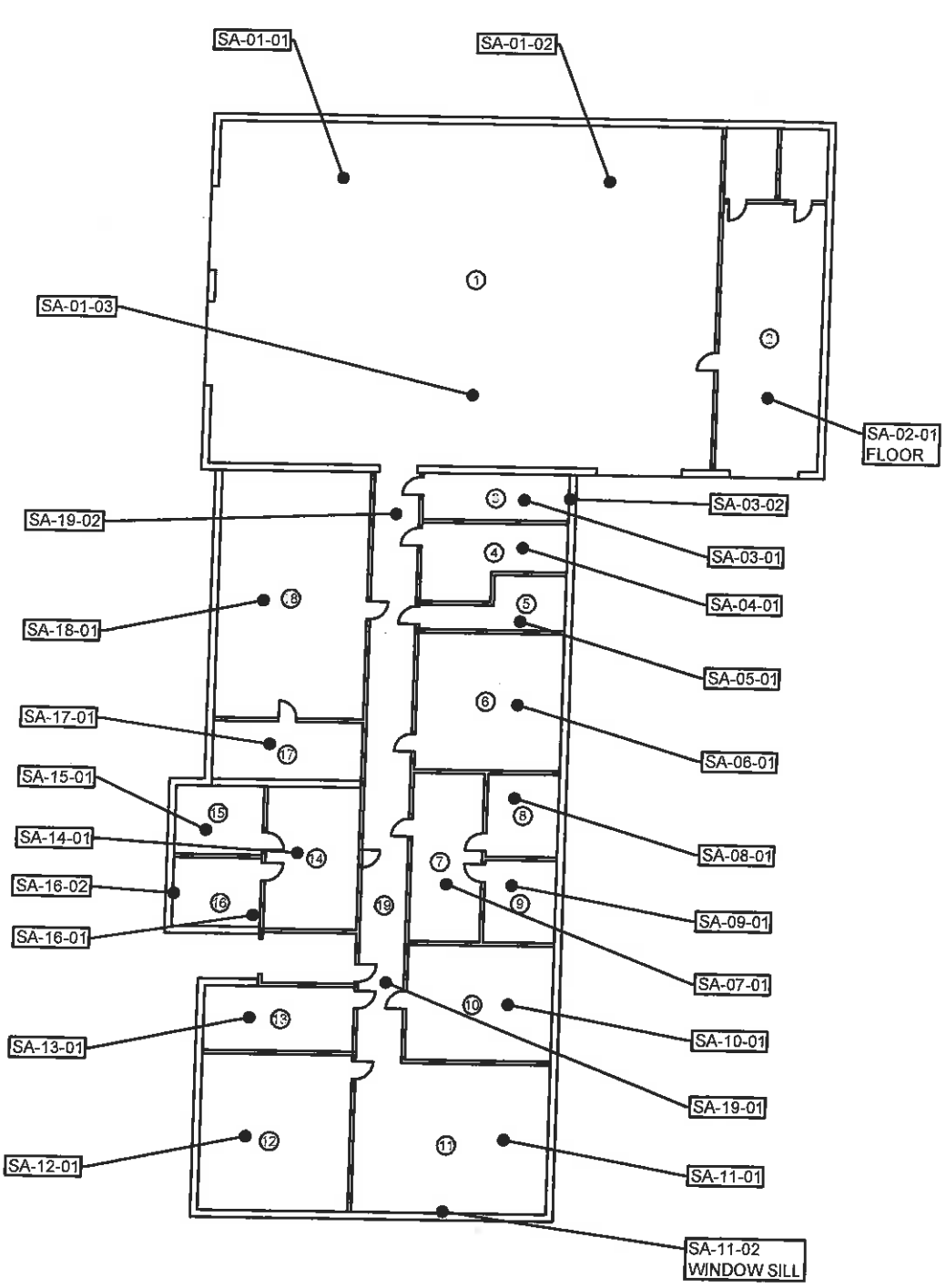
Issued on: 4/1/2011 **Expires on: 3/31/2012**

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 40 µg/ft²
OK-###	FLOOR SAMPLES WITH LESS THAN 40 µg/ft²
OK-###	SILL SAMPLES WITH GREATER THAN 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
Sapulpa Armory
13 Sahoma Lake Road
Sapulpa, Oklahoma 74066

Appendix C

Laboratory Results and Chain of Custody Field Sheets

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

Environmental Chemistry Analysis Report

uanTEM Set ID: 204789
Date Received: 02/24/12
eceived By: Sherrie Leftwich
ate Sampled:
Time Sampled:
nalyst: BM
ate of Report: 2/27/2012

IHA ID: 101352

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

Acct. No.: B216

Project: Sapulpa Armory
Location: Sapulpa, OK
Project No.: 2012017-001

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	SA-01-01	Wipe	Lead	21.5	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
002	SA-01-02	Wipe	Lead	34.2	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
003	SA-01-03	Wipe	Lead	19.5	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
004	SA-02-01	Wipe	Lead	71.6	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
005	SA-03-01	Wipe	Lead	37.1	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
006	SA-04-01	Wipe	Lead	30.9	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
007	SA-05-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
008	SA-06-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
009	SA-07-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
010	SA-08-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
011	SA-09-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
012	SA-10-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
013	SA-11-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
014	SA-12-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
015	SA-13-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
016	SA-14-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
017	SA-15-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)

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

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

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

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

uanTEM Set ID: 204789
ate Received: 02/24/12
Received By: Sherrie Leftwich
ate Sampled:
Time Sampled:
nalyst: BM
ate of Report: 2/27/2012

IHA ID: 101352

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

Acct. No.: B216

Project: Sapulpa Armory
Location: Sapulpa, OK
Project No.: 2012017-001

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	SA-16-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
019	SA-17-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
020	SA-18-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
021	SA-19-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
022	SA-19-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
023	SA-19-03	Wipe	Lead	<16.0	16	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
024	SA-03-02	Wipe	Lead	69.0	9.68	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
025	SA-11-02	Wipe	Lead	421	13.7	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)
026	SA-16-02	Wipe	Lead	107	11.6	ug/sq. Ft.	02/27/12 9:00	W EPA 7420 (1)

Authorized Signature: _____
Benton Miller, Analyst

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

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

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

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

'A Method 7420 (1) = EPA 600/R-93/200 Preperation Modified. EPA 7420 Analysis Modified
'A Method 7082 (2) = EPA 600/R-93/200 Preperation Modified. EPA 7082 Analysis Modified

Supplemental Report
QAQC Results

QA ID: 9713
Test: Lead
Date: 2/27/2012
Matrix: Wipe
Lab Number: 204789
Approved By: Benton Miller
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	0.309	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W2	0.000	5.438	5.454	100.3	5.434	99.9	0.4
MS-W1	0.000	5.470	5.416	99.0	5.414	99.0	0.0

Authorized Signature: _____

Benton Miller, 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. 204789	
Accept	Reject

Report Results (☑ one box)	
	QuanTEM Website
	Other

Contact Information		
Company: GMR & Assoc.	Phone: 405-529-7017	
Contact: Arless Murray	Cell Phone: 405-401-2933	
Account #:	E-mail: aemurray@gmrinc.net	
Sampled By:	Name: Arless Murray	Date: 2-22-12

Project Information	
Project Name:	Sapulpa Armory
Project Location:	Sapulpa, OK
Project ID:	Z012017-001

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
A. E. Murray	2/24/12 1300		Saftwice	2/24/12 1:00

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 / m³	mg / cm²
1	SA-01-01	Rm1-Floor-Conc.		12"x12"	C	✓						✓		
2	SA-01-02	Rm1-Floor-Conc		"	C	✓						✓		
3	SA-01-03	Rm1-Floor-Conc		"	C	✓						✓		
4	SA-02-01	Rm2-Floor-Conc		"	C	✓						✓		
5	SA-03-01	Rm3-Floor-Conc.		"	C	✓						✓		
6	SA-04-01	Rm4-Floor-Conc		"	C	✓						✓		
7	SA-05-01	Rm5-Floor-Conc		"	C	✓						✓		
8	SA-06-01	Rm6-Floor-Conc.		"	C	✓						✓		
9	SA-07-01	Rm7-Floor-Carpet		"	C	✓						✓		
10	SA-08-01	Rm8-Floor-Carpet		"	C	✓						✓		
11	SA-09-01	Rm9-Floor-Carpet		"	C	✓						✓		
12	SA-10-01	Rm10-Floor-Conc.		"	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

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LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 204789
(Accept) Reject

Project Information

Company: GMRG Assoc. | Project Name: Sapulpa Armory | Project Location: Sapulpa, 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 box)	Analysis: Pb	Units (☑ ONE box only): PPM	Wt %	mg / l	µg / ft²	µg / m³	mg / cm²
13	SA-11-01	Rm 11 - Floor - Conc		12"x12"	C	✓				✓		
14	SA-12-01	Rm 12 - Floor - Conc		"	C	✓				✓		
15	SA-13-01	Rm 13 - Floor - Carpet		"	C	✓				✓		
16	SA-14-01	Rm 14 - Floor - Carpet		"	C	✓				✓		
17	SA-15-01	Rm 15 - Floor - Carpet		"	C	✓				✓		
18	SA-16-01	Rm 16 - Floor - Carpet		"	C	✓				✓		
19	SA-17-01	Rm 17 - Floor - Conc		"	C	✓				✓		
20	SA-18-01	Rm 18 - Floor - Conc		"	C	✓				✓		
21	SA-19-01	Rm 19(S) - Floor - Tile		"	C	✓				✓		
22	SA-19-02	Rm 19(N) - Floor - Tile		"	C	✓				✓		
23	SA-19-03	Rm 19(W)		"	C	✓				✓		
24	SA-03-02	Rm 3 - Sill		7"x34"	C	✓				✓		
25	SA-11-02	Rm 11 - Sill		7"x24"	C	✓				✓		
26	SA-16-02	Rm 16 - Sill		11"x18"	C	✓				✓		
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"

LEAD-BASED PAINT INSPECTION REPORT

NATIONAL GUARD ARMORY
13 SAHOMA LAKE ROAD
SAPULPA, OKLAHOMA

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 13 Sahoma Lake Rd., Sapulpa, OK 74066 and is owned by the City of Sapulpa Oklahoma, PO Box 1130, Sapulpa, OK 74066 (918-248-5297). 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 twenty (20) 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.**

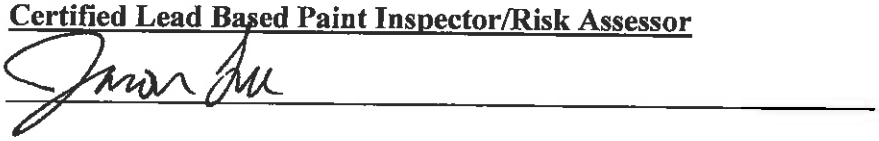
Reading Number	Room	Side	Component	Feature	Color	Condition	Substrate	Lead (mg/cm2)
552	1		Ceiling	Beam	Red	Fair	Metal	5.6
553	1		Ceiling	Cross Member	Red	Fair	Metal	3.7
570	2	A	Door	Header	Beige	Poor	Metal	8.7
582	2		Ceiling	Beam	Gray	Fair	Metal	2.4
778	19	C	Wall		Yellow	Intact	Concrete	2.3
785	Exterior	A	Porch	Ceiling	White	Intact	Wood	2.9
786	Exterior	A	Porch	Beam	White	Intact	Wood	2.1
794	Exterior	A	Garage Door	Fascia	White	Intact	Metal	1.6
795	Exterior	A	Garage Door	Fascia Plinth	White	Intact	Metal	4.3

TABLE OF CONTENTS

I. CERTIFICATION

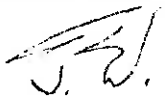
I certify that this inspection, conducted at the Former National Guard Armory located at 13 Sahoma Lake Rd., Sapulpa, OK 74066, complies with accepted standards, practices, and regulations promulgated by the U.S. Department of Housing and Urban Development, the Environmental Protection Agency, and the 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 13 Sahoma Lake Rd., Sapulpa, OK 74066 and is owned by the City of Sapulpa Oklahoma, PO Box 1130, Sapulpa, OK 74066 (918-248-5297). 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 twenty (20) 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: Door Components with Lead-Based Paint

Reading Number	Room	Side	Component	Feature	Color	Condition	Substrate	Lead (mg/cm2)	Door Size
570	2	A	Door	Header	Beige	Poor	Metal	8.7	68"

Table 2: Miscellaneous Surfaces with Lead-Based Paint

Reading Number	Room	Side	Component	Feature	Color	Condition	Substrate	Lead (mg/cm2)
552	1		Ceiling	Beam	Red	Fair	Metal	5.6
553	1		Ceiling	Cross Member	Red	Fair	Metal	3.7
582	2		Ceiling	Beam	Gray	Fair	Metal	2.4
778	19	C	Wall		Yellow	Intact	Concrete	2.3
785	Exterior	A	Porch	Ceiling	White	Intact	Wood	2.9
786	Exterior	A	Porch	Beam	White	Intact	Wood	2.1
794	Exterior	A	Garage Door	Fascia	White	Intact	Metal	1.6

Table 2: Miscellaneous Surfaces with Lead-Based Paint (Continued)

Reading Number	Room	Side	Component	Feature	Color	Condition	Substrate	Lead (mg/cm2)
795	Exterior	A	Garage Door	Fascia Plinth	White	Intact	Metal	4.3

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 13 Sahoma Lake Rd., Sapulpa, OK 74066, was constructed in 1948. The property consists of a brick building with 9,880 square feet of floor space. The building is composed of one single level structure containing twenty (20) room equivalents. Exterior walls on the main building (and/or annex building) for the purposes of this report are also 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 found in **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:

- Remove and replace metal door header in room 2
- Remove and replace garage door fascia and plinth

- Maintain other lead-based paint present on other ceiling components in intact condition using interim controls (i.e. repainting as necessary)

Basin estimates the cost for the above mentioned lead-based paint abatement option to be between $4,000 and $7,000.

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
548	2/22/2012 16:09	78.58	cps												4.86	0
549	2/22/2012 16:10	20.72	mg / cm ^2	Sapulpa Armory			Calibrate					Positive	1.03	1	1	0.1
550	2/22/2012 16:11	20.69	mg / cm ^2	Sapulpa Armory			Calibrate					Negative	1.05	1	0.9	0.1
551	2/22/2012 16:11	20.33	mg / cm ^2	Sapulpa Armory			Calibrate					Positive	1.06	1	1	0.1
552	2/22/2012 16:14	2.29	mg / cm ^2	Sapulpa Armory	1		Ceiling	Beam	Red	Fair	Metal	Positive	2	1	5.6	1.2
553	2/22/2012 16:15	1.53	mg / cm ^2	Sapulpa Armory	1		Ceiling	Crossmbr	Red	Fair	Metal	Positive	1.65	1	3.7	0.9
554	2/22/2012 16:17	2.68	mg / cm ^2	Sapulpa Armory	1	B	Window	Sash	Gray	Fair	Metal	Negative	1	1	0.26	0.11
555	2/22/2012 16:18	2.68	mg / cm ^2	Sapulpa Armory	1	B	Wall	Header	Gray	Fair	Metal	Negative	3.14	1	< LOD	0.44
556	2/22/2012 16:28	1.91	mg / cm ^2	Sapulpa Armory	1	A	Wall		White	Intact	Brick	Negative	1	1	< LOD	0.85
557	2/22/2012 16:29	2.29	mg / cm ^2	Sapulpa Armory	1	B	Wall		White	Intact	Brick	Negative	1	1	< LOD	0.03
558	2/22/2012 16:30	3.06	mg / cm ^2	Sapulpa Armory	1	C	Wall		White	Intact	Brick	Negative	1	1	< LOD	0.03
559	2/22/2012 16:30	1.92	mg / cm ^2	Sapulpa Armory	1	D	Wall		White	Intact	Brick	Negative	1	1	< LOD	0.03
560	2/22/2012 16:32	26.05	mg / cm ^2	Sapulpa Armory	1	D	Garage Door	Frame	White	Poor	Metal	Negative	10	1	0.25	0.08
561	2/22/2012 16:34	4.95	mg / cm ^2	Sapulpa Armory	1	A	Door		White	Poor	Wood	Negative	5.55	1	< LOD	0.24
562	2/22/2012 16:34	2.3	mg / cm ^2	Sapulpa Armory	1	A	Door	Frame	White	Fair	Metal	Negative	3.13	1	0.4	0.2
563	2/22/2012 16:35	1.91	mg / cm ^2	Sapulpa Armory	1	A		Pipe	White	Fair	Metal	Negative	1	1	< LOD	0.05
564	2/22/2012 16:37	3.07	mg / cm ^2	Sapulpa Armory	1	B		Conduit	White	Fair	Metal	Negative	1	1	< LOD	0.03
565	2/22/2012 16:39	2.67	mg / cm ^2	Sapulpa Armory	2	A	Wall		White	Fair	Drywall	Negative	3.29	1	< LOD	0.6
566	2/22/2012 16:39	3.06	mg / cm ^2	Sapulpa Armory	2	B	Wall		White	Fair	Drywall	Negative	2.28	1	< LOD	0.45
567	2/22/2012 16:39	4.57	mg / cm ^2	Sapulpa Armory	2	C	Wall		White	Fair	Drywall	Negative	2.36	1	< LOD	0.32
568	2/22/2012 16:40	1.9	mg / cm ^2	Sapulpa Armory	2	D	Wall		White	Fair	Brick	Negative	1.72	1	< LOD	0.19
569	2/22/2012 16:40	1.15	mg / cm ^2	Sapulpa Armory	2	A	Door		Beige	Fair	Metal	Negative	1.02	1	< LOD	0.16
570	2/22/2012 16:41	2.31	mg / cm ^2	Sapulpa Armory	2	A	Door	Header	Beige	Poor	Metal	Positive	5.56	1	8.7	3.4
571	2/22/2012 16:44	5.73	mg / cm ^2	Sapulpa Armory	2	A	Door	Frame	Beige	Poor	Wood	Negative	3.33	1	0.6	0.2
572	2/22/2012 16:45	1.91	mg / cm ^2	Sapulpa Armory	2	A	Wall	Board	Beige	Poor	Wood	Negative	2.45	1	< LOD	0.17
573	2/22/2012 16:47	76.52	cps												4.11	0
574	2/22/2012 16:52	1.91	mg / cm ^2	Sapulpa Armory	2	B	Baseboard		White	Fair	Wood	Negative	1.75	1	< LOD	0.7
575	2/22/2012 16:52	4.59	mg / cm ^2	Sapulpa Armory	2	C	Window	Frame	White	Fair	Wood	Negative	1.94	1	< LOD	0.31
576	2/22/2012 16:52	4.59	mg / cm ^2	Sapulpa Armory	2	C	Window	Apron	White	Fair	Wood	Negative	1.89	1	< LOD	0.28
577	2/22/2012 16:53	1.91	mg / cm ^2	Sapulpa Armory	2	C	Window	Sash	White	Poor	Metal	Negative	1.88	1	< LOD	0.21
578	2/22/2012 16:54	3.83	mg / cm ^2	Sapulpa Armory	2	B		Conduit	White	Fair	Metal	Negative	4.16	1	< LOD	0.26
579	2/22/2012 16:56	78.62	cps												4.15	0
580	2/22/2012 16:56	0.76	mg / cm ^2	Sapulpa Armory	2	B		Pipe	White	Fair	Metal	Negative	1	1	< LOD	0.01
581	2/22/2012 16:58	1.15	mg / cm ^2	Sapulpa Armory	2		Ceiling		Gray	Fair	Drywall	Negative	1.38	1	< LOD	0.01
582	2/22/2012 16:58	2.31	mg / cm ^2	Sapulpa Armory	2		Ceiling	Beam	Gray	Fair	Metal	Positive	1.47	1	2.4	0.5
583	2/22/2012 16:59	1.16	mg / cm ^2	Sapulpa Armory	2	A		Electrical Panel	White	Fair	Metal	Negative	6.36	1	< LOD	0.01
584	2/22/2012 16:59	1.15	mg / cm ^2	Sapulpa Armory	2	B	Garage Door		Gray	Poor	Metal	Negative	2.52	1	< LOD	0.01
585	2/22/2012 17:00	1.16	mg / cm ^2	Sapulpa Armory	2	B	Garage Door	Frame	Gray	Poor	Metal	Negative	1.24	1	< LOD	0.01
586	2/22/2012 17:01	1.53	mg / cm ^2	Sapulpa Armory	1		Floor		Yellow	Intact	Concrete	Negative	2.29	1	< LOD	0.01
587	2/22/2012 17:03	0.76	mg / cm ^2	Sapulpa Armory	3		Ceiling		White	Intact	Wood	Negative	2.7	1	< LOD	0.01
588	2/22/2012 17:03	1.15	mg / cm ^2	Sapulpa Armory	3		Ceiling	Beam	White	Intact	Wood	Negative	1	1	< LOD	0.01
589	2/22/2012 17:03	1.14	mg / cm ^2	Sapulpa Armory	3		Ceiling	Upper Trim	White	Intact	Wood	Negative	1.29	1	< LOD	0.01
590	2/22/2012 17:03	0.76	mg / cm ^2	Sapulpa Armory	3		Ceiling	Pipe	White	Fair	Metal	Negative	1	1	< LOD	0.01
591	2/22/2012 17:04	1.14	mg / cm ^2	Sapulpa Armory	3	A	Wall	Vent	White	Fair	Metal	Negative	1	1	< LOD	0.01
592	2/22/2012 17:05	1.15	mg / cm ^2	Sapulpa Armory	3	A	Wall		White	Fair	Concrete	Negative	6.96	1	< LOD	0.01
593	2/22/2012 17:05	1.14	mg / cm ^2	Sapulpa Armory	3	B	Wall		White	Fair	Concrete	Negative	3.85	1	< LOD	0.01
594	2/22/2012 17:05	0.76	mg / cm ^2	Sapulpa Armory	3	C	Wall		White	Fair	Concrete	Negative	1.12	1	< LOD	0.01
595	2/22/2012 17:05	1.14	mg / cm ^2	Sapulpa Armory	3	D	Wall		White	Fair	Concrete	Negative	7.05	1	< LOD	0.01
596	2/22/2012 17:06	1.16	mg / cm ^2	Sapulpa Armory	3	D	Wall	Board	White	Fair	Wood	Negative	1	1	< LOD	0.01
597	2/22/2012 17:06	1.16	mg / cm ^2	Sapulpa Armory	3	D	Wall	Pipe	White	Fair	Metal	Negative	2.01	1	< LOD	0.01
598	2/22/2012 17:07	1.15	mg / cm ^2	Sapulpa Armory	3	A	Door	Frame	White	Poor	Wood	Negative	1.57	1	< LOD	0.01

Rd. #	Time	Duration	Units	Site	Room	Side	Component	Feature	Color	Condition	Substrate	Results	Depth Index	Action Level	Lead (mg/cm2)	Lead Error
599	2/22/2012 17:07	1.14	mg / cm ^2	Sapulpa Armory	3	A	Door		White	Fair	Wood	Negative	10	1	< LOD	0.01
600	2/22/2012 17:07	0.77	mg / cm ^2	Sapulpa Armory	3	C	Door		White	Poor	Metal	Negative	3.53	1	< LOD	0.01
601	2/22/2012 17:08	1.16	mg / cm ^2	Sapulpa Armory	3	C	Door		White	Poor	Metal	Negative	3.27	1	< LOD	0.01
602	2/22/2012 17:08	1.14	mg / cm ^2	Sapulpa Armory	3	C	Window	Sash	White	Fair	Metal	Negative	1.46	1	< LOD	0.01
603	2/22/2012 17:10	1.15	mg / cm ^2	Sapulpa Armory	3		Ceiling	Beam	Brown	Fair	Wood	Negative	2.14	1	< LOD	0.01
604	2/22/2012 17:10	0.78	mg / cm ^2	Sapulpa Armory	3		Ceiling		Brown	Fair	Wood	Negative	1.07	1	< LOD	0.01
605	2/22/2012 17:10	0.76	mg / cm ^2	Sapulpa Armory	3		Ceiling	Upper Trim	Brown	Fair	Wood	Negative	2.17	1	< LOD	0.01
606	2/22/2012 17:10	0.76	mg / cm ^2	Sapulpa Armory	3		Ceiling	Pipe	Brown	Fair	Metal	Negative	1	1	< LOD	0.01
607	2/22/2012 17:11	0.76	mg / cm ^2	Sapulpa Armory	3	A	Wall		White	Fair	Concrete	Negative	1	1	< LOD	0.01
608	2/22/2012 17:11	1.92	mg / cm ^2	Sapulpa Armory	3	B	Wall		White	Fair	Concrete	Negative	1.87	1	< LOD	0.01
609	2/22/2012 17:11	1.53	mg / cm ^2	Sapulpa Armory	3	C	Wall		White	Fair	Concrete	Negative	1.72	1	< LOD	0.01
610	2/22/2012 17:12	1.15	mg / cm ^2	Sapulpa Armory	3	D	Wall		White	Fair	Concrete	Negative	1	1	< LOD	0.01
611	2/22/2012 17:12	2.31	mg / cm ^2	Sapulpa Armory	3	D	Wall	Board	White	Intact	Wood	Negative	1	1	< LOD	0.01
612	2/22/2012 17:17	78.54	cps												4.6	0
613	2/22/2012 17:18	21.06	mg / cm ^2				Calibrate					Positive	1.07	1	1	0.1
614	2/22/2012 17:18	23.76	mg / cm ^2				Calibrate					Positive	1.06	1	1	0.1
615	2/22/2012 17:19	20.7	mg / cm ^2				Calibrate					Positive	1.05	1	1	0.1
616	2/22/2012 17:20	1.53	mg / cm ^2	Sapulpa Armory	4	D	Wall		White	Fair	Drywall	Negative	1.32	1	< LOD	0.05
617	2/22/2012 17:20	1.53	mg / cm ^2	Sapulpa Armory	4	A	Door		White	Fair	Metal	Negative	4.87	1	< LOD	0.26
618	2/22/2012 17:21	1.15	mg / cm ^2	Sapulpa Armory	4	A	Door	Frame	White	Fair	Wood	Negative	8.64	1	< LOD	0.67
619	2/22/2012 17:22	2.68	mg / cm ^2	Sapulpa Armory	5		Ceiling	Beam	White	Intact	Wood	Negative	1.88	1	< LOD	0.61
620	2/22/2012 17:22	1.53	mg / cm ^2	Sapulpa Armory	5		Ceiling		White	Intact	Wood	Negative	1.72	1	< LOD	0.53
621	2/22/2012 17:23	1.54	mg / cm ^2	Sapulpa Armory	5		Ceiling	Upper Trim	White	Intact	Wood	Negative	1	1	< LOD	0.51
622	2/22/2012 17:23	1.53	mg / cm ^2	Sapulpa Armory	5		Ceiling	Pipe	White	Intact	Ins.	Negative	1	1	< LOD	0.03
623	2/22/2012 17:24	1.53	mg / cm ^2	Sapulpa Armory	5	D	Ceiling	Pipe	White	Fair	Metal	Negative	2.63	1	< LOD	0.15
624	2/22/2012 17:24	0.76	mg / cm ^2	Sapulpa Armory	5	D	Wall	Vent	White	Fair	Metal	Negative	1	1	< LOD	0.03
625	2/22/2012 17:25	2.29	mg / cm ^2	Sapulpa Armory	5	A	Wall		White	Intact	Brick	Negative	1	1	< LOD	0.75
626	2/22/2012 17:25	1.93	mg / cm ^2	Sapulpa Armory	5	B	Wall		White	Intact	Brick	Negative	1	1	< LOD	0.8
627	2/22/2012 17:26	1.52	mg / cm ^2	Sapulpa Armory	5	C	Wall		White	Intact	Brick	Negative	1	1	< LOD	0.03
628	2/22/2012 17:26	3.05	mg / cm ^2	Sapulpa Armory	5	D	Wall		White	Intact	Brick	Negative	1	1	< LOD	0.42
629	2/22/2012 17:27	1.16	mg / cm ^2	Sapulpa Armory	5	D	Wall	Divider	White	Intact	Metal	Negative	1.09	1	< LOD	0.03
630	2/22/2012 17:27	3.44	mg / cm ^2	Sapulpa Armory	5	A	Wall	Board	White	Intact	Wood	Negative	1.68	1	< LOD	0.3
631	2/22/2012 17:28	1.52	mg / cm ^2	Sapulpa Armory	5	C	Window	Sash	White	Fair	Metal	Negative	1.47	1	< LOD	0.21
632	2/22/2012 17:29	1.52	mg / cm ^2	Sapulpa Armory	5	C	Window	Cage	White	Fair	Metal	Negative	3.26	1	< LOD	0.18
633	2/22/2012 17:31	1.15	mg / cm ^2	Sapulpa Armory	5	A	Door		Brown	Intact	Metal	Negative	1.81	1	< LOD	0.19
634	2/22/2012 17:32	1.15	mg / cm ^2	Sapulpa Armory	5	A	Door	Frame	Brown	Intact	Metal	Negative	1	1	< LOD	0.03
635	2/22/2012 17:33	1.53	mg / cm ^2	Sapulpa Armory	6		Ceiling	Beam	White	Intact	Wood	Negative	1.12	1	< LOD	0.63
636	2/22/2012 17:33	1.54	mg / cm ^2	Sapulpa Armory	6		Ceiling		White	Intact	Wood	Negative	1	1	< LOD	0.69
637	2/22/2012 17:33	1.54	mg / cm ^2	Sapulpa Armory	6		Ceiling	Upper Trim	White	Intact	Wood	Negative	1.47	1	< LOD	0.83
638	2/22/2012 17:34	0.78	mg / cm ^2	Sapulpa Armory	6		Ceiling	Pipe	White	Intact	Ins.	Negative	10	1	< LOD	0.97
639	2/22/2012 17:34	1.53	mg / cm ^2	Sapulpa Armory	6		Ceiling	Pipe	White	Intact	Metal	Negative	6.03	1	< LOD	0.46
640	2/22/2012 17:35	3.83	mg / cm ^2	Sapulpa Armory	6	A	Wall		Beige	Intact	Tile	Negative	1	1	< LOD	0.39
641	2/22/2012 17:35	1.91	mg / cm ^2	Sapulpa Armory	6	A	Wall		White	Intact	Brick	Negative	2.61	1	< LOD	0.13
642	2/22/2012 17:36	1.91	mg / cm ^2	Sapulpa Armory	6	B	Wall		White	Intact	Brick	Negative	6.27	1	< LOD	0.9
643	2/22/2012 17:36	1.53	mg / cm ^2	Sapulpa Armory	6	C	Wall		White	Intact	Brick	Negative	1	1	< LOD	0.04
644	2/22/2012 17:36	2.67	mg / cm ^2	Sapulpa Armory	6	D	Wall		White	Intact	Brick	Negative	3.62	1	< LOD	0.75
645	2/22/2012 17:36	1.53	mg / cm ^2	Sapulpa Armory	6	D	Door		White	Intact	Metal	Negative	1.98	1	< LOD	0.19
646	2/22/2012 17:36	1.91	mg / cm ^2	Sapulpa Armory	6	D	Door	Frame	White	Intact	Metal	Negative	1.24	1	< LOD	0.08
647	2/22/2012 17:37	1.14	mg / cm ^2	Sapulpa Armory	6	D	Wall	Bench	Beige	Poor	Wood	Negative	1	1	< LOD	0.71
648	2/22/2012 17:37	1.14	mg / cm ^2	Sapulpa Armory	6	C	Window	Sash	White	Fair	Metal	Negative	1.99	1	< LOD	0.18
649	2/22/2012 17:38	1.52	mg / cm ^2	Sapulpa Armory	6	B		Divider	White	Intact	Metal	Negative	1	1	< LOD	0.03

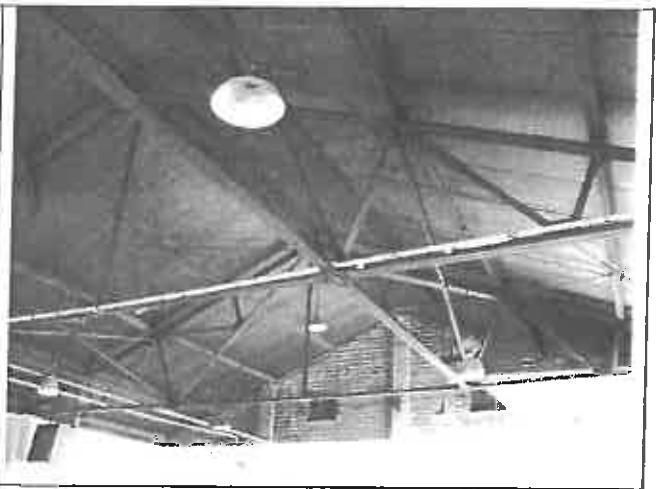
Rd #	Time	Duration	Units	Site	Room	Side	Component	Feature	Color	Condition	Substrate	Results	Depth Index	Action Level	Lead (mg/cm2)	Lead Error
650	2/22/2012 17:38	4.97	mg / cm ^2	Sapulpa Armory	6		Floor		Blue	Poor	Concrete	Negative	1.31	1	0.4	0.2
651	2/22/2012 17:41	2.29	mg / cm ^2	Sapulpa Armory	7		Ceiling		White	Intact	Wood	Negative	1	1	< LOD	0.53
652	2/22/2012 17:41	1.91	mg / cm ^2	Sapulpa Armory	7		Ceiling		White	Intact	Wood	Negative	1.58	1	< LOD	0.57
653	2/22/2012 17:42	1.92	mg / cm ^2	Sapulpa Armory	7	C	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
654	2/22/2012 17:42	1.92	mg / cm ^2	Sapulpa Armory	7	A	Door		White	Intact	Metal	Negative	2.42	1	< LOD	0.6
655	2/22/2012 17:43	1.53	mg / cm ^2	Sapulpa Armory	7	A	Door	Frame	White	Intact	Metal	Negative	10	1	< LOD	0.67
656	2/22/2012 17:43	1.53	mg / cm ^2	Sapulpa Armory	7	A	Wall	Frame	Stained	Intact	Wood	Negative	1	1	< LOD	0.65
657	2/22/2012 17:44	4.2	mg / cm ^2	Sapulpa Armory	8		Ceiling	Beam	White	Intact	Wood	Negative	1	1	< LOD	0.27
658	2/22/2012 17:44	1.14	mg / cm ^2	Sapulpa Armory	8		Ceiling		White	Intact	Wood	Negative	1	1	< LOD	0.73
659	2/22/2012 17:45	1.14	mg / cm ^2	Sapulpa Armory	8		Ceiling	Conduit	White	Intact	Metal	Negative	4.97	1	< LOD	0.55
660	2/22/2012 17:45	0.77	mg / cm ^2	Sapulpa Armory	8		Ceiling	Pipe	White	Intact	Ins.	Negative	10	1	< LOD	1.09
661	2/22/2012 17:46	1.53	mg / cm ^2	Sapulpa Armory	8	C	Window	Frame	Gray	Intact	Metal	Negative	1.06	1	< LOD	0.09
662	2/22/2012 17:47	1.52	mg / cm ^2	Sapulpa Armory	8	A	Wall		White	Intact	Drywall	Negative	1.17	1	< LOD	0.03
663	2/22/2012 17:47	1.53	mg / cm ^2	Sapulpa Armory	8	D	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
664	*2/22/2012 17:47*	*0.76*	*mg / cm ^2*	*Sapulpa Armory*	*8*	*D*	*Baseboard*		*White*	*Intact*	*Wood*	*Null*	*1*	*1*	*< LOD*	*1.24*
665	2/22/2012 17:47	1.52	mg / cm ^2	Sapulpa Armory	8	D	Baseboard		White	Intact	Wood	Negative	1	1	< LOD	0.58
666	2/22/2012 17:49	1.52	mg / cm ^2	Sapulpa Armory	9	A	Baseboard		White	Intact	Wood	Negative	1	1	< LOD	0.64
667	2/22/2012 17:49	2.68	mg / cm ^2	Sapulpa Armory	9	A	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
668	2/22/2012 17:49	1.53	mg / cm ^2	Sapulpa Armory	9	B	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
669	2/22/2012 17:50	1.53	mg / cm ^2	Sapulpa Armory	9	C	Window	Frame	Gray	Fair	Metal	Negative	1	1	< LOD	0.81
670	2/22/2012 17:51	1.16	mg / cm ^2	Sapulpa Armory	9		Ceiling	Beam	Gray	Fair	Wood	Negative	1.42	1	< LOD	0.63
671	2/22/2012 17:52	1.52	mg / cm ^2	Sapulpa Armory	9		Ceiling		Gray	Fair	Wood	Negative	1.65	1	< LOD	0.73
672	2/22/2012 17:53	1.52	mg / cm ^2	Sapulpa Armory	10		Ceiling		Gray	Fair	Wood	Negative	1	1	< LOD	0.79
673	2/22/2012 17:54	1.91	mg / cm ^2	Sapulpa Armory	10		Ceiling	Beam	Gray	Fair	Wood	Negative	1.49	1	< LOD	0.7
674	2/22/2012 17:54	1.52	mg / cm ^2	Sapulpa Armory	10	A	Wall		White	Intact	Drywall	Negative	1.85	1	< LOD	0.04
675	2/22/2012 17:54	1.53	mg / cm ^2	Sapulpa Armory	10	B	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
676	2/22/2012 17:55	1.52	mg / cm ^2	Sapulpa Armory	10	C	Wall		White	Intact	Wood	Negative	1	1	< LOD	0.03
677	2/22/2012 17:55	2.67	mg / cm ^2	Sapulpa Armory	10	C	Wall		White	Intact	Concrete	Negative	2.67	1	< LOD	0.67
678	2/22/2012 17:55	3.45	mg / cm ^2	Sapulpa Armory	10	D	Wall		White	Intact	Drywall	Negative	2.62	1	< LOD	0.03
679	2/22/2012 17:56	1.91	mg / cm ^2	Sapulpa Armory	10	C	Wall	Conduit	White	Intact	Metal	Negative	1	1	< LOD	0.03
680	2/22/2012 17:57	2.28	mg / cm ^2	Sapulpa Armory	10	C	Window	Frame	White	Fair	Metal	Negative	1.49	1	< LOD	0.07
681	2/22/2012 17:58	1.15	mg / cm ^2	Sapulpa Armory	10	A	Door	Frame	White	Poor	Metal	Negative	5.97	1	< LOD	0.4
682	2/22/2012 17:58	1.53	mg / cm ^2	Sapulpa Armory	10	A	Door		White	Intact	Wood	Negative	1	1	< LOD	0.67
683	2/22/2012 17:59	0.76	mg / cm ^2	Sapulpa Armory	9	A	Door		White	Intact	Wood	Negative	1	1	< LOD	0.03
684	2/22/2012 17:59	1.53	mg / cm ^2	Sapulpa Armory	9	A	Door	Frame	White	Intact	Wood	Negative	1.27	1	< LOD	0.89
685	2/22/2012 18:00	2.68	mg / cm ^2	Sapulpa Armory	11	D	Door	Frame	White	Fair	Metal	Negative	10	1	< LOD	0.59
686	2/22/2012 18:00	1.15	mg / cm ^2	Sapulpa Armory	11	D	Door		White	Fair	Metal	Negative	2.75	1	< LOD	0.11
687	2/22/2012 18:01	1.54	mg / cm ^2	Sapulpa Armory	11	A	Window	Sash	Gray	Poor	Metal	Negative	1	1	< LOD	0.07
688	2/22/2012 18:01	1.53	mg / cm ^2	Sapulpa Armory	11	A	Wall		White	Intact	Concrete	Negative	5.34	1	< LOD	0.91
689	2/22/2012 18:02	4.22	mg / cm ^2	Sapulpa Armory	11	B	Wall		White	Intact	Concrete	Negative	2.8	1	< LOD	0.04
690	2/22/2012 18:02	1.15	mg / cm ^2	Sapulpa Armory	11	C	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
691	2/22/2012 18:02	1.53	mg / cm ^2	Sapulpa Armory	11	D	Wall		White	Intact	Concrete	Negative	10	1	< LOD	0.82
692	2/22/2012 18:03	2.28	mg / cm ^2	Sapulpa Armory	11		Floor		Beige	Poor	Concrete	Negative	1	1	< LOD	0.75
693	2/22/2012 18:03	1.15	mg / cm ^2	Sapulpa Armory	11		Ceiling		Gray	Intact	Wood	Negative	1.74	1	< LOD	0.74
694	2/22/2012 18:04	4.21	mg / cm ^2	Sapulpa Armory	11		Ceiling	Beam	Beige	Intact	Wood	Negative	1.25	1	< LOD	0.25
695	2/22/2012 18:04	0.76	mg / cm ^2	Sapulpa Armory	11		Ceiling	Upper Trim	Beige	Intact	Wood	Negative	3.06	1	< LOD	1.07
696	2/22/2012 18:06	4.21	mg / cm ^2	Sapulpa Armory	12		Ceiling	Beam	Beige	Intact	Wood	Negative	1.67	1	< LOD	0.31
697	2/22/2012 18:08	1.16	mg / cm ^2	Sapulpa Armory	12		Ceiling		Beige	Intact	Wood	Negative	1.02	1	< LOD	0.79
698	2/22/2012 18:08	78.66	cps												4.16	0
699	2/22/2012 18:10	3.44	mg / cm ^2	Sapulpa Armory	12	C	Door		Stained	Fair	Wood	Negative	1.89	1	< LOD	0.29
700	2/22/2012 18:10	1.53	mg / cm ^2	Sapulpa Armory	12	A	Wall		White	Intact	Concrete	Negative	2.98	1	< LOD	0.16

Rd #	Time	Duration	Units	Site	Room	Side	Component	Feature	Color	Condition	Substrate	Results	Depth Index	Action Level	Lead (mg/cm2)	Lead Error
701	2/22/2012 18:11	1.53	mg / cm ^2	Sapulpa Armory	12	B	Wall		White	Intact	Drywall	Negative	1.84	1	< LOD	0.09
702	2/22/2012 18:11	0.76	mg / cm ^2	Sapulpa Armory	12	C	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.07
703	2/22/2012 18:12	1.92	mg / cm ^2	Sapulpa Armory	12	D	Wall		White	Intact	Concrete	Negative	3.9	1	< LOD	0.21
704	2/22/2012 18:13	1.9	mg / cm ^2	Sapulpa Armory	13		Ceiling		White	Fair	Wood	Negative	1	1	< LOD	0.75
705	2/22/2012 18:13	4.23	mg / cm ^2	Sapulpa Armory	13		Ceiling	Beam	White	Fair	Wood	Negative	1.63	1	< LOD	0.27
706	2/22/2012 18:14	1.53	mg / cm ^2	Sapulpa Armory	13		Ceiling	Upper Trim	White	Fair	Wood	Negative	1.42	1	< LOD	0.78
707	2/22/2012 18:14	0.76	mg / cm ^2	Sapulpa Armory	13	A	Wall	Conduit	White	Fair	Metal	Negative	1.27	1	< LOD	0.15
708	2/22/2012 18:15	1.52	mg / cm ^2	Sapulpa Armory	13	B	Wall		White	Intact	Drywall	Negative	4.32	1	< LOD	0.17
709	2/22/2012 18:15	4.21	mg / cm ^2	Sapulpa Armory	13	C	Wall		White	Intact	Drywall	Negative	1.32	1	< LOD	0.32
710	2/22/2012 18:15	0.76	mg / cm ^2	Sapulpa Armory	13	D	Wall		White	Intact	Drywall	Negative	1.11	1	< LOD	0.06
711	2/22/2012 18:15	1.15	mg / cm ^2	Sapulpa Armory	13	D	Wall	Chair Rail	Stained	Intact	Wood	Negative	1	1	< LOD	0.46
712	2/22/2012 18:16	1.15	mg / cm ^2	Sapulpa Armory	13	C	Bookcase	Frame	Stained	Intact	Wood	Negative	5.18	1	< LOD	0.8
713	2/22/2012 18:16	1.15	mg / cm ^2	Sapulpa Armory	13	C	Bookcase	Shelf	Stained	Intact	Wood	Negative	3.9	1	< LOD	0.7
714	2/22/2012 18:17	1.14	mg / cm ^2	Sapulpa Armory	13	A	Window	Frame	Blue	Fair	Metal	Negative	1.94	1	< LOD	0.3
715	2/22/2012 18:19	0.77	mg / cm ^2	Sapulpa Armory	14		Ceiling	Beam	Beige	Intact	Wood	Negative	1	1	< LOD	1.25
716	2/22/2012 18:20	1.16	mg / cm ^2	Sapulpa Armory	14		Ceiling	Upper Trim	Beige	Intact	Wood	Negative	3.03	1	< LOD	0.69
717	2/22/2012 18:20	1.52	mg / cm ^2	Sapulpa Armory	14		Ceiling	Conduit	Beige	Intact	Metal	Negative	1.24	1	< LOD	0.08
718	2/22/2012 18:20	1.55	mg / cm ^2	Sapulpa Armory	14		Ceiling		Beige	Intact	Wood	Negative	1.59	1	< LOD	0.87
719	2/22/2012 18:21	0.76	mg / cm ^2	Sapulpa Armory	14	C	Door		White	Fair	Metal	Negative	6.42	1	< LOD	1.05
720	2/22/2012 18:21	1.15	mg / cm ^2	Sapulpa Armory	14	C	Door	Frame	White	Fair	Metal	Negative	7.52	1	< LOD	0.81
721	2/22/2012 18:21	1.53	mg / cm ^2	Sapulpa Armory	14	A	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
722	2/22/2012 18:22	1.53	mg / cm ^2	Sapulpa Armory	14	B	Wall		White	Intact	Drywall	Negative	1.4	1	< LOD	0.03
723	2/22/2012 18:22	1.53	mg / cm ^2	Sapulpa Armory	14	C	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
724	2/22/2012 18:22	0.77	mg / cm ^2	Sapulpa Armory	14	D	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
725	2/22/2012 18:22	1.53	mg / cm ^2	Sapulpa Armory	15	A	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
726	2/22/2012 18:22	1.14	mg / cm ^2	Sapulpa Armory	15	B	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
727	2/22/2012 18:23	1.53	mg / cm ^2	Sapulpa Armory	15	C	Wall		White	Intact	Drywall	Negative	1.57	1	< LOD	0.03
728	2/22/2012 18:23	1.14	mg / cm ^2	Sapulpa Armory	15	D	Wall		White	Intact	Drywall	Negative	1	1	< LOD	0.03
729	2/22/2012 18:23	1.14	mg / cm ^2	Sapulpa Armory	15	D	Window	Sash	White	Intact	Metal	Negative	1	1	< LOD	0.03
730	2/22/2012 18:24	1.15	mg / cm ^2	Sapulpa Armory	15	D	Window	Sill	Brown	Intact	Wood	Negative	1.57	1	< LOD	0.82
731	2/22/2012 18:24	1.14	mg / cm ^2	Sapulpa Armory	15	C	Bulletin Brd	Frame	Brown	Intact	Wood	Negative	1.99	1	< LOD	0.88
732	2/22/2012 18:24	1.54	mg / cm ^2	Sapulpa Armory	15	C	Bulletin Brd	Shelf	Brown	Intact	Wood	Negative	1	1	< LOD	0.75
733	2/22/2012 18:24	1.52	mg / cm ^2	Sapulpa Armory	15	C	Door	Frame	White	Fair	Metal	Negative	10	1	< LOD	0.79
734	2/22/2012 18:25	4.58	mg / cm ^2	Sapulpa Armory	15	C	Door		White	Fair	Metal	Negative	3.49	1	< LOD	0.05
735	2/22/2012 18:25	3.05	mg / cm ^2	Sapulpa Armory	15		Ceiling		Beige	Fair	Wood	Negative	1.36	1	< LOD	0.31
736	*2/22/2012 18:25*	*1.14*	*mg / cm ^2*	*Sapulpa Armory*	*15*		*Ceiling*	*Beam*	*Beige*	*Fair*	*Wood*	*Null*	*2.28*	*1*	*< LOD*	*0.9*
737	2/22/2012 18:26	1.53	mg / cm ^2	Sapulpa Armory	15		Ceiling	Upper Trim	Beige	Fair	Wood	Negative	1.34	1	< LOD	0.68
738	2/22/2012 18:26	1.14	mg / cm ^2	Sapulpa Armory	15		Ceiling	Conduit	Beige	Fair	Metal	Negative	1.94	1	< LOD	0.17
739	2/22/2012 18:27	1.52	mg / cm ^2	Sapulpa Armory	16		Ceiling	Conduit	Beige	Fair	Metal	Negative	2.34	1	< LOD	0.17
740	2/22/2012 18:28	1.54	mg / cm ^2	Sapulpa Armory	16		Ceiling	Beam	Beige	Fair	Wood	Negative	2.41	1	< LOD	0.77
741	2/22/2012 18:28	1.92	mg / cm ^2	Sapulpa Armory	16		Ceiling	Upper Trim	Beige	Fair	Wood	Negative	1.6	1	< LOD	0.69
742	2/22/2012 18:28	1.15	mg / cm ^2	Sapulpa Armory	16		Ceiling		Beige	Fair	Wood	Negative	3.34	1	< LOD	0.64
743	2/22/2012 18:29	1.53	mg / cm ^2	Sapulpa Armory	16	B	Bookcase	Frame	White	Intact	Wood	Negative	1	1	< LOD	0.66
744	2/22/2012 18:29	1.52	mg / cm ^2	Sapulpa Armory	16	B	Bookcase	Shelf	White	Intact	Wood	Negative	1	1	< LOD	0.77
745	2/22/2012 18:29	1.53	mg / cm ^2	Sapulpa Armory	16	B	Wall	Radiator	White	Intact	Metal	Negative	3.38	1	< LOD	0.1
746	2/22/2012 18:30	1.52	mg / cm ^2	Sapulpa Armory	16	D	Window	Sash	White	Fair	Metal	Negative	3.61	1	< LOD	0.2
747	2/22/2012 18:30	1.9	mg / cm ^2	Sapulpa Armory	16	C	Door	Frame	White	Fair	Metal	Negative	10	1	< LOD	0.87
748	2/22/2012 18:30	1.52	mg / cm ^2	Sapulpa Armory	16	C	Door		White	Fair	Metal	Negative	1.5	1	< LOD	0.04
749	2/22/2012 18:31	1.14	mg / cm ^2	Sapulpa Armory	17	B	Door		Gray	Intact	Metal	Negative	1.63	1	< LOD	0.13
750	2/22/2012 18:32	0.77	mg / cm ^2	Sapulpa Armory	17	B	Door	Frame	Gray	Fair	Metal	Negative	1.49	1	< LOD	0.15
751	2/22/2012 18:32	1.53	mg / cm ^2	Sapulpa Armory	17	A	Wall		White	Fair	Brick	Negative	2.1	1	< LOD	0.12

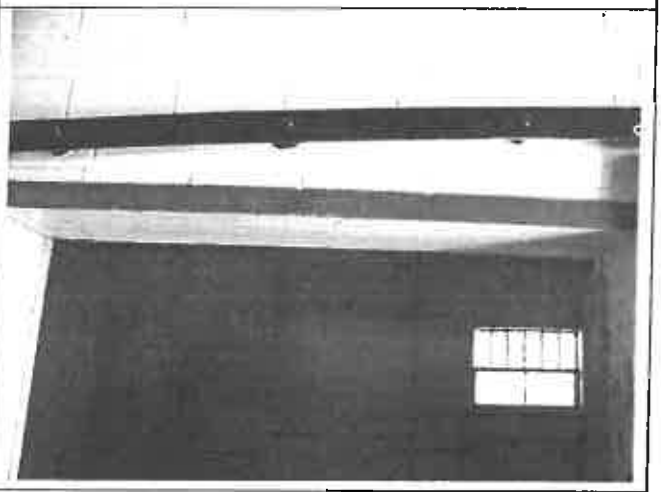
Rd #	Time	Duration	Units	Site	Room	Side	Component	Feature	Color	Condition	Substrate	Results	Depth Index	Action Level	Lead (mg/cm2)	Lead Error
752	2/22/2012 18:32	1.52	mg / cm ^2	Sapulpa Armory	17	B	Wall		White	Fair	Brick	Negative	1.69	1	< LOD	0.1
753	2/22/2012 18:35	78.59	cps												4.78	0
754	2/22/2012 18:35	0.76	mg / cm ^2	Sapulpa Amory	17	A	Wall		White	Fair	Brick	Negative	7.31	1	< LOD	0.01
755	2/22/2012 18:35	0.76	mg / cm ^2	Sapulpa Amory	17	B	Wall		White	Fair	Brick	Negative	2.08	1	< LOD	0.01
756	2/22/2012 18:36	0.77	mg / cm ^2	Sapulpa Amory	17	C	Wall		White	Fair	Brick	Negative	1	1	< LOD	0.01
757	2/22/2012 18:36	0.77	mg / cm ^2	Sapulpa Amory	17	D	Wall		White	Fair	Brick	Negative	1	1	< LOD	0.01
758	2/22/2012 18:36	0.76	mg / cm ^2	Sapulpa Amory	17	A	Bookcase	Frame	White	Poor	Wood	Negative	1	1	< LOD	0.01
759	2/22/2012 18:37	1.15	mg / cm ^2	Sapulpa Amory	17	A	Bookcase	Shelf	White	Poor	Wood	Negative	1	1	< LOD	0.01
760	2/22/2012 18:37	0.76	mg / cm ^2	Sapulpa Amory	17		Ceiling		White	Intact	Concrete	Negative	2.66	1	< LOD	0.01
761	2/22/2012 18:38	0.77	mg / cm ^2	Sapulpa Amory	18		Ceiling		Beige	Fair	Wood	Negative	1.31	1	< LOD	0.01
762	2/22/2012 18:38	0.77	mg / cm ^2	Sapulpa Amory	18		Ceiling	Beam	Beige	Fair	Wood	Negative	1	1	< LOD	0.01
763	2/22/2012 18:39	0.76	mg / cm ^2	Sapulpa Amory	18		Ceiling	Upper Trim	Beige	Fair	Wood	Negative	2.31	1	< LOD	0.01
764	2/22/2012 18:39	0.77	mg / cm ^2	Sapulpa Amory	18		Ceiling	Pipe	Beige	Fair	Wood	Negative	1	1	< LOD	0.01
765	2/22/2012 18:40	0.77	mg / cm ^2	Sapulpa Amory	18	A	Wall		White	Fair	Concrete	Negative	1	1	< LOD	0.01
766	2/22/2012 18:40	0.76	mg / cm ^2	Sapulpa Amory	18	B	Wall		White	Fair	Brick	Negative	3.41	1	< LOD	0.01
767	2/22/2012 18:40	0.76	mg / cm ^2	Sapulpa Amory	18	C	Wall		White	Fair	Concrete	Negative	10	1	< LOD	0.01
768	2/22/2012 18:40	1.16	mg / cm ^2	Sapulpa Amory	18	D	Wall		White	Fair	Concrete	Negative	1.26	1	< LOD	0.01
769	2/22/2012 18:41	1.14	mg / cm ^2	Sapulpa Amory	18	D	Wall	Port	White	Fair	Metal	Negative	2.21	1	< LOD	0.01
770	2/22/2012 18:42	0.76	mg / cm ^2	Sapulpa Amory	18	A	Window	Sash	Blue	Fair	Metal	Negative	1.29	1	< LOD	0.01
771	2/22/2012 18:42	1.16	mg / cm ^2	Sapulpa Amory	18	C	Door		White	Fair	Metal	Negative	2.88	1	< LOD	0.01
772	2/22/2012 18:43	1.53	mg / cm ^2	Sapulpa Amory	18	C	Door	Frame	White	Fair	Metal	Negative	4.38	1	< LOD	0.01
773	2/22/2012 18:45	1.15	mg / cm ^2	Sapulpa Amory	19		Ceiling		White	Fair	Drywall	Negative	1	1	< LOD	0.01
774	2/22/2012 18:45	1.16	mg / cm ^2	Sapulpa Amory	19	A	Door		White	Fair	Metal	Negative	1	1	< LOD	0.01
775	2/22/2012 18:45	0.76	mg / cm ^2	Sapulpa Amory	19	A	Door	Frame	White	Fair	Metal	Negative	4.05	1	< LOD	0.01
776	2/22/2012 18:46	0.76	mg / cm ^2	Sapulpa Amory	19	A	Wall		White	Intact	Concrete	Negative	10	1	< LOD	0.01
777	2/22/2012 18:46	0.39	mg / cm ^2	Sapulpa Amory	19	B	Wall		White	Intact	Concrete	Negative	1	1	< LOD	0.01
778	2/22/2012 18:46	3.06	mg / cm ^2	Sapulpa Amory	19	C	Wall		Yellow	Intact	Concrete	Positive	1.35	1	2.3	0.4
779	2/22/2012 18:47	1.52	mg / cm ^2	Sapulpa Amory	19	C	Wall		White	Intact	Concrete	Negative	1.9	1	< LOD	0.01
780	2/22/2012 18:48	1.16	mg / cm ^2	Sapulpa Amory	19	D	Wall		Yellow	Intact	Concrete	Negative	1.11	1	< LOD	0.01
781	2/22/2012 18:48	1.15	mg / cm ^2	Sapulpa Amory	19	C	Bookcase	Frame	Stained	Intact	Wood	Negative	1	1	< LOD	0.01
782	2/22/2012 18:49	0.76	mg / cm ^2	Sapulpa Amory	19	C	Bookcase	Shelf Support	Stained	Intact	Wood	Negative	10	1	< LOD	0.01
783	2/22/2012 18:49	0.76	mg / cm ^2	Sapulpa Amory	19	A	Bulletin Brd	Frame	Beige	Intact	Wood	Negative	1.36	1	< LOD	0.01
784	2/22/2012 18:50	1.15	mg / cm ^2	Sapulpa Amory	Exterior	A	Porch	Ceiling	White	Intact	Wood	Negative	8.76	1	< LOD	0.01
785	2/22/2012 18:50	2.3	mg / cm ^2	Sapulpa Amory	Exterior	A	Porch	Ceiling	White	Intact	Wood	Positive	7.48	1	2.9	1.5
786	2/22/2012 18:50	3.06	mg / cm ^2	Sapulpa Amory	Exterior	A	Porch	Beam	White	Intact	Wood	Positive	5.45	1	2.1	0.9
787	2/22/2012 18:51	3.45	mg / cm ^2	Sapulpa Amory	Exterior	A	Porch	Upper Trim	White	Intact	Wood	Negative	8.77	1	< LOD	0.01
788	2/22/2012 18:52	24.44	mg / cm ^2	Sapulpa Amory	Exterior	A	Porch	Upper Trim	White	Intact	Wood	Negative	10	1	< LOD	0.01
789	2/22/2012 18:52	1.14	mg / cm ^2	Sapulpa Amory	Exterior	A	Door	Header	White	Intact	Metal	Negative	10	1	< LOD	0.01
790	2/22/2012 18:53	1.16	mg / cm ^2	Sapulpa Amory	Exterior	B	Window	Sill	White	Fair	Concrete	Negative	4.17	1	< LOD	0.01
791	2/22/2012 18:54	21.3	mg / cm ^2	Sapulpa Amory	Exterior	B	Window	Sash	White	Fair	Concrete	Negative	10	1	< LOD	0.01
792	2/22/2012 18:54	1.15	mg / cm ^2	Sapulpa Amory	Exterior	A		Pole	Silver	Fair	Metal	Negative	2.2	1	< LOD	0.01
793	2/22/2012 18:55	2.68	mg / cm ^2	Sapulpa Amory	Exterior	A	Door		White	Poor	Metal	Negative	9.34	1	< LOD	0.01
794	2/22/2012 18:56	6.14	mg / cm ^2	Sapulpa Amory	Exterior	A	Garage Door	Fascia	White	Intact	Metal	Positive	1.61	1	1.6	0.2
795	2/22/2012 18:57	1.54	mg / cm ^2	Sapulpa Amory	Exterior	A	Garage Door	Fascia Plinth	White	Intact	Metal	Positive	2.12	1	4.3	1.2
796	2/22/2012 18:58	1.53	mg / cm ^2	Sapulpa Amory	Exterior	A	Door	Frame	White	Poor	Metal	Negative	5.48	1	< LOD	0.01
797	2/22/2012 19:01	8.8	mg / cm ^2	Sapulpa Amory	Exterior	C	Window	Frame	White	Poor	Metal	Negative	9.63	1	< LOD	0.01
798	2/22/2012 19:01	1.16	mg / cm ^2	Sapulpa Amory	Exterior	D	Garage Door		White	Poor	Metal	Negative	7.25	1	< LOD	0.01
799	2/22/2012 19:03	20.76	mg / cm ^2				Calibrate					Positive	1.06	1	1	0.1
800	2/22/2012 19:03	20.66	mg / cm ^2				Calibrate					Positive	1.05	1	1	0.1
801	2/22/2012 19:04	20.31	mg / cm ^2				Calibrate					Positive	1.08	1	1	0.1

APPENDIX B

Former Sapulpa Armory



Reading 552, Room 1, Metal Ceiling Beams & Cross Members

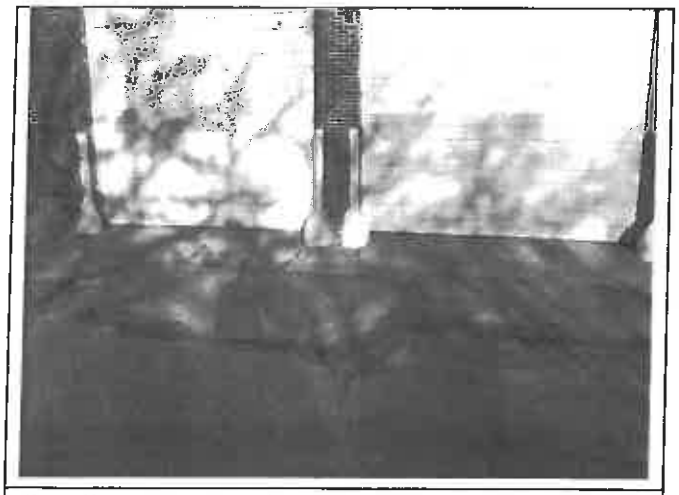


Reading 570, Room 2, Metal Door Header (68")

Reading 582, Room 2, Metal Ceiling Beams

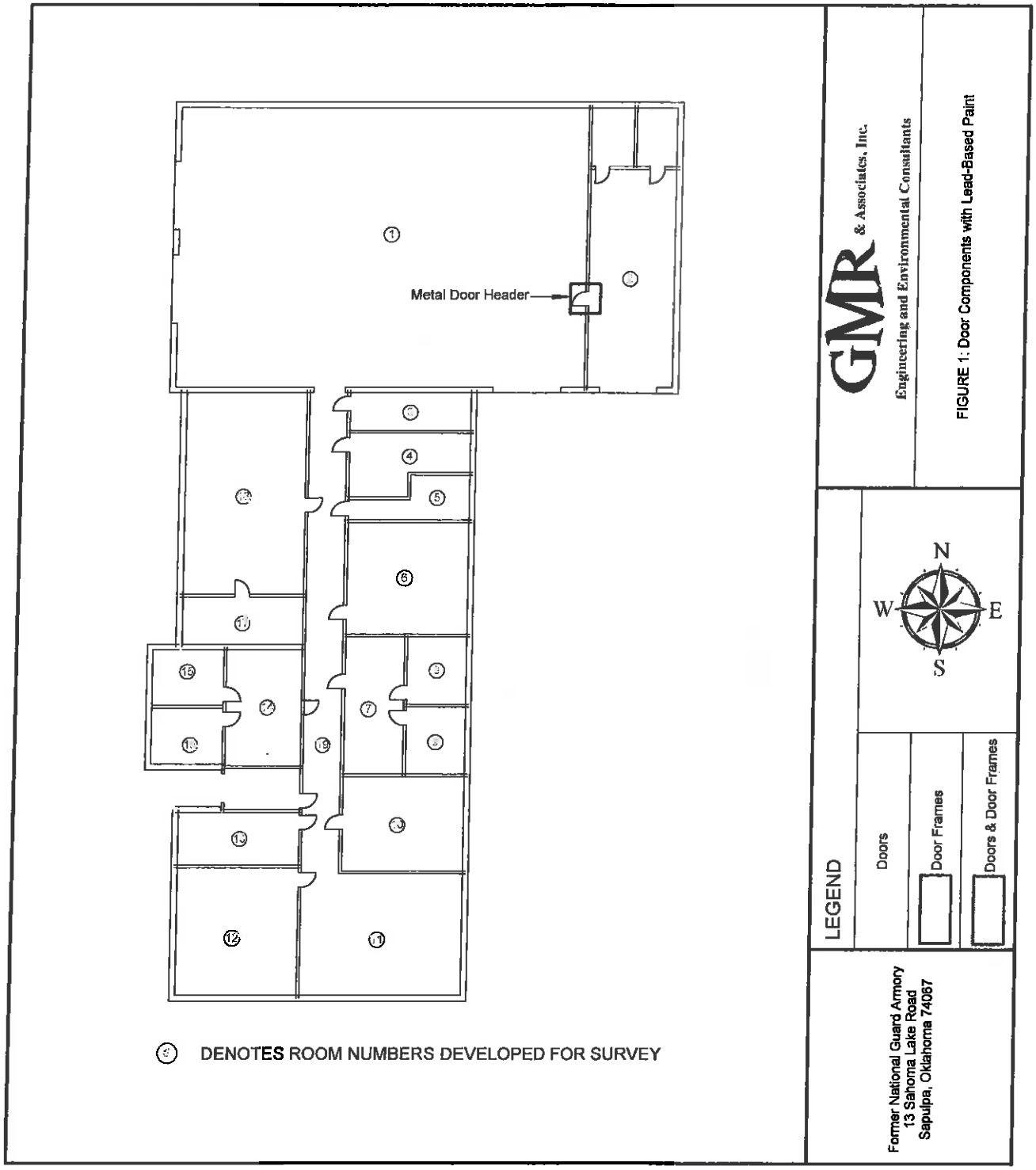
Reading 778, Room 18, Wall Logo (on Concrete)

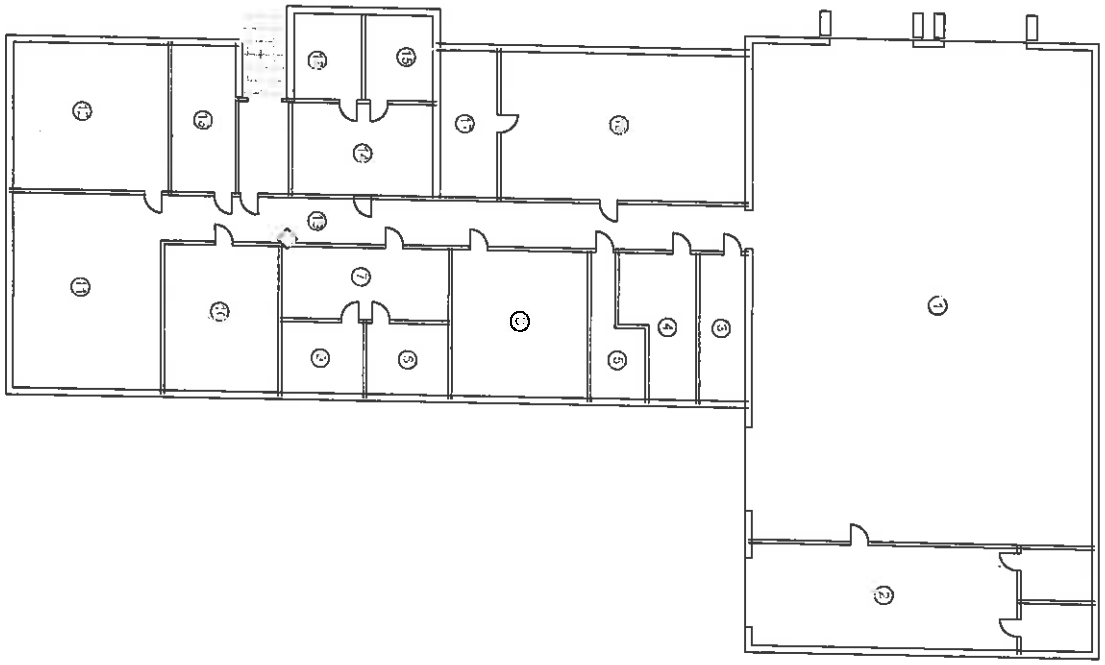
Reading 785, Exterior, Wood Porch Beams
Reading 786, Exterior, Wood Porch Ceiling



Reading 794, Exterior, Metal Garage Door Fascia
Reading 795, Exterior, Concrete Fascia Plinth

APPENDIX C


Metal Door Header
GMR & Associates, Inc.
Engineering and Environmental Consultants
FIGURE 1: Door Components with Lead-Based Paint
N
W
E
S
LEGEND
Doors
Door Frames
Doors & Door Frames
Former National Guard Armory
13 Sahoma Lake Road
Sapulpa, Oklahoma 74067
(#) DENOTES ROOM NUMBERS DEVELOPED FOR SURVEY



(#) DENOTES ROOM NUMBERS DEVELOPED FOR SURVEY

Former National Guard Armory
13 Sahoma Lake Road
Sapulpa, Oklahoma 74067

LEGEND

- Ceiling Beams
- Ceiling Cross Members
- Wall Logo
- Porch Components
- Garage Door Fascia & Plinth

GMR & Associates, Inc.
Engineering and Environmental Consultants

FIGURE 2: Miscellaneous Lead-Based Paint Locations

APPENDIX D

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

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

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
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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 analytical science

Certificate of Calibration

Soil QC(Service)
Document#: FRM013
Revision 8
Revision Date: Mar. 11, 2009

Unit Serial Number: 10713 Model: XLp 703AW Software: 5.2D Date of Q.C.: 4/14/2011

Resolution: 388.02 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	18	10	40	13.909	3.237	OK
Zr	NR			166.265	13.2	
Sr	330	280	380	313.754	12.639	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	633.68	76.68	OK
Hg	32.6	0	50	25.4	22.7	OK
Zn	6952	6700	7250	7024.19	128.47	OK
Cu	2950	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	533.717	OK
Mn	10100	9500	11000	10206.4	418.0	OK
Cr	39	-100	120	58.51	309.327	OK

SiO2 (Blank)	Certified	Low	High	Measured	Err	
Mo	0	-10	10	0.134	1.326	OK
Zr	0	-10	10	1.348	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	-6.976	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	15.265	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	23.183	33.885	OK
Cr	0	-120	120	-37.354	64.583	OK

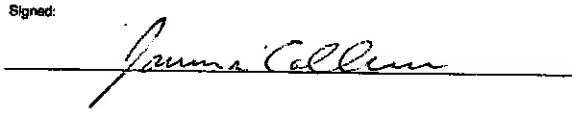
NIST LOW	Certified	Low	High	Measured	Err	
Mo	2	-10	10	2.488	2.301	OK
Zr	160	115	210	183.048	10.685	OK
Sr	231	180	300	206.751	6.748	OK
Rb	96	60	115	74.47	5.62	OK
Pb	18.9	0	35	5.703	9.122	OK
Se	1.57	-30	30	-4.06	5.11	OK
As	17.7	0	35	16.43	7.39	OK
Hg	1.4	-10	10	8.6	9.5	OK
Zn	106	50	160	77.12	21.28	OK
Cu	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	173.878	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	441.557	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:



ThermoFisher SCIENTIFIC
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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

SCOPES OF WORK

STATEMENT OF WORK
For
Remediation of Lead and Asbestos Contamination
At The Former Sapulpa National Guard Armory

The Oklahoma Department of Environmental Quality (DEQ) is requesting bids from qualified bidders for remediation services at a former National Guard armory located in Sapulpa, 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 to give a better understanding of the site. A floor plan map of the Sapulpa Armory is attached for review (**Attachment 1**).

The building is located at 13 Sahoma Road, Sapulpa, Oklahoma 74066. 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 complete within forty five (45) calendar days after date of the written "Notice to Proceed".
    a. A pre-construction meeting shall be held at the site after the Notice to Proceed date to review Scope 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 pre-bid meeting and site walk through;
- Posses a current lead-based paint firm license and have a certified lead-based paint supervisor in order to perform lead-based paint abatement;
- Posses 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 Bid:

- 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 Plan with planned activities and 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 – GMR 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 (IFR) and all floors have been appropriately remediated.

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 Sapulpa Armory Asbestos Inspection Report with floor plan map showing locations of ACM (**Attachment 2**).
    - Remove floor tile and mastic from Room 14
        - Total of 250 Square Feet of Asbestos Containing Floor Tile and Mastic
    - Remove carpet (where present) and mastic from Room 16
        - Total of 130 Square Feet of Asbestos Containing Mastic

- Friable ACM shall be removed as described in the attached Asbestos Abatement Project Design **(Attachment 2).** For more details see the attached Sapulpa Armory Asbestos Inspection Report with floor plan map showing locations of ACM **(Attachment 2).**
    - Remove approximately 225 lineal feet of Asbestos Containing Pipe Insulation.
    - Remove approximately 25 Asbestos Containing Pipe Fittings.
    - All pipes with asbestos containing pipe insulation and pipe fittings removed shall be re-insulated.

- Once Asbestos Abatement is complete, GMR 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**);
  - All interior and exterior portions of the garage door frames and guards
    - There are 4 garage doors in the building
  - The exterior porch ceiling and beams
  - The wall logo located in the hallway (Room 19)
  - The door frame and door lintel located between Room 1 and Room 2
- The sliding door and track located between Room 1 and Room 2 shall be removed, wrapped in 6 mil poly sheeting, and properly disposed.
- 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.
  - 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**)

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
    - 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 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).
    - Once Drill Room floor is clean, seal emblem located in the center of floor with KM 669 Acrylic Sealant or equivalent. Specifications attached (**Attachment 4**).
    - 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.

3. 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;

4. 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.
- DEQ 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: Dustin Davidson
  Phone: (405) 702-5115
- <u>The third-party sampling shall not be included in the contractors base bid;</u>
- All post remediation sampling will be performed after all initial abatement, remediation, and cleaning is complete.

5. 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 a bound hard copy and electronically on disc.

OWNER REPRESTATIVE

Owner's Representative:

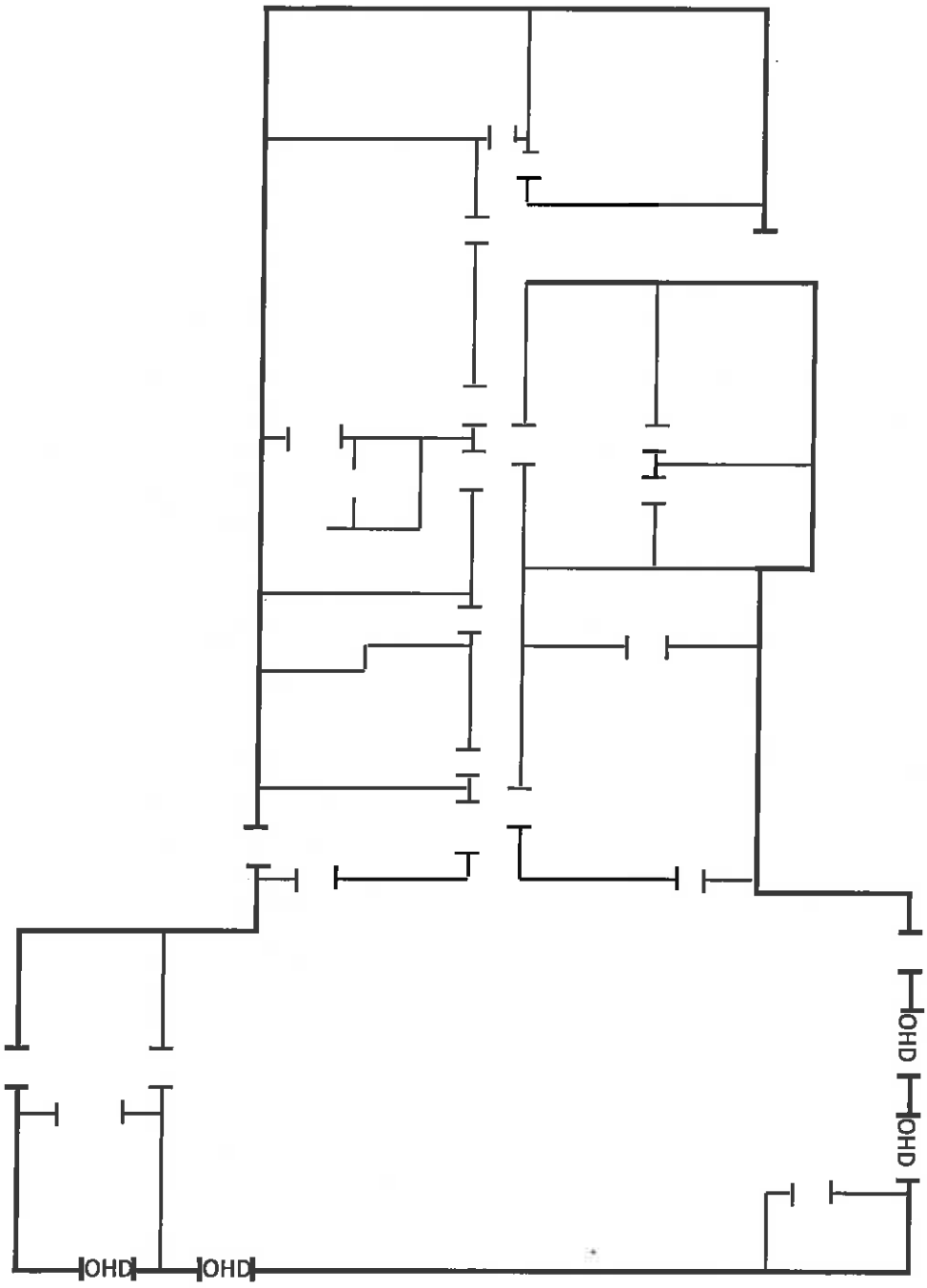
Dustin Davidson
Oklahoma Department of Environmental Quality
Land Protection Division
707 N. Robinson
Oklahoma City, OK 73102

Phone Numbers:
(405) 702-5115 (Office)
(405) 702-5101 (Fax)
E-Mail: Dustin.Davidson@deq.ok.gov

ATTACHMENT 1

Sapulpa Armory Floor Plan Map

Sapulpa Armory



Not to scale
Floor plan approximate

ATTACHMENT 2

Sapulpa Armory Asbestos Inspection Report
And
Sapulpa Armory Asbestos Project Design

GMR & Associates, Inc.

Engineering and Environmental Consultants

PROJECT DESIGN
for
ASBESTOS ABATEMENT

Sapulpa Armory
13 Sahoma Lake Road
Sapulpa, Oklahoma

November 2012

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

PROJECT DESIGN
FOR
ASBESTOS ABATEMENT
SAPULPA ARMORY

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: Sapulpa Armory, 13 Sahoma Lake Road, Sapulpa, 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 Sapulpa

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 a Type 10 dry-charged ammonium phosphate fire extinguisher (10 lb) for the work area. The fire extinguisher 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 one.

4. Quantity, type and location of asbestos materials to be abated

225 linear feet of ACM lines (40-45% chrysotile and 25 fittings (35% chrysotile) along the east side of the building, Rooms 3, 4, 5, 6, 8, 9, 10 and 11.

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

*The number of glove-bags is estimated at 75.

5. Numbers of air monitoring pumps.

In glovebag removal areas:

*Four area pumps, one at each of the following locations.

1. One inside the work area.

2. One outside the de-con unit.
3. One at the trailer during load-out.
4. 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 PLM 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. Two (2) air filtration devices, each having a minimum capacity of 1500 cfm, will be required. The machines will have a capacity to provide four (4) changes of air per hour. The exhausts will be to the exterior of the building through either window or overhead door in the drill room.

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 Sapulpa. A GFCI board or GFCIs shall be supplied to protect power inside the containment.

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. Negative air flow will be maintained with a flow of makeup air from the clean room through the shower to the dirty room.

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 11/12/2012 OKPD-140097

FEE. $0.00

Oklahoma Department of Labor

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

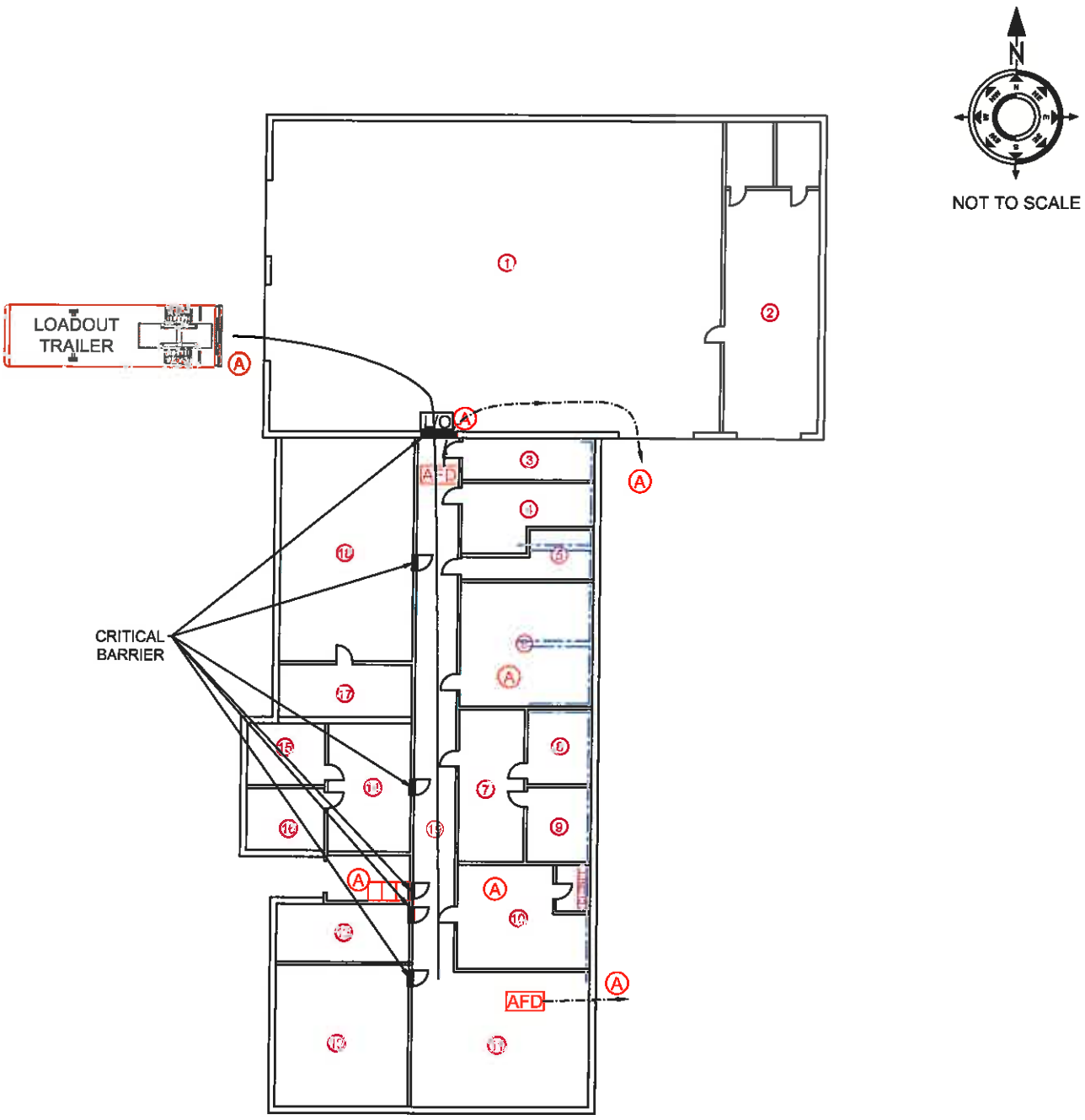
Now, therefore, The Commissioner of Labor of the State of Oklahoma, by virtue of
the power vested in him by law hereby issues to the
applicant license No. **OK-PD140097.**

Mark Costello

MARK COSTELLO
Commissioner of Labor

June 07, 2011
Date of Issuance

EXPIRES: June 03, 2012



GMR
& Associates, Inc.
2520 West I-44 Service Road, Ste. 200
P.O Box 57027
Oklahoma City, OK 73157-7827
Phone: 405.528-7017, Fax: 405.528-3346

Asbestos Abatement Project Design
Sapulpa Armory
13 Sahoma Lake Road
Sapulpa, Oklahoma 74066

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 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

ATTACHMENT 5

Lead-Based Paint Inspection Report
and
Survey for Lead in Settled Dust Report
For
Sapulpa Armory

FINAL ABATEMENT REPORTS

FINAL REPORT

FOR

SAPULPA ARMORY

13 SAHOMA ROAD
SAPULPA, OK 74066-8574

BY

ABATEMENT SYSTEMS, INC.
P.O. BOX 773
BROKEN ARROW, OK. 74013
(918) 251-2504 / (800) 256-2096
Abatement2@aol.com

FINAL REPORT – SAPULPA ARMORY

TABLE OF CONTENTS

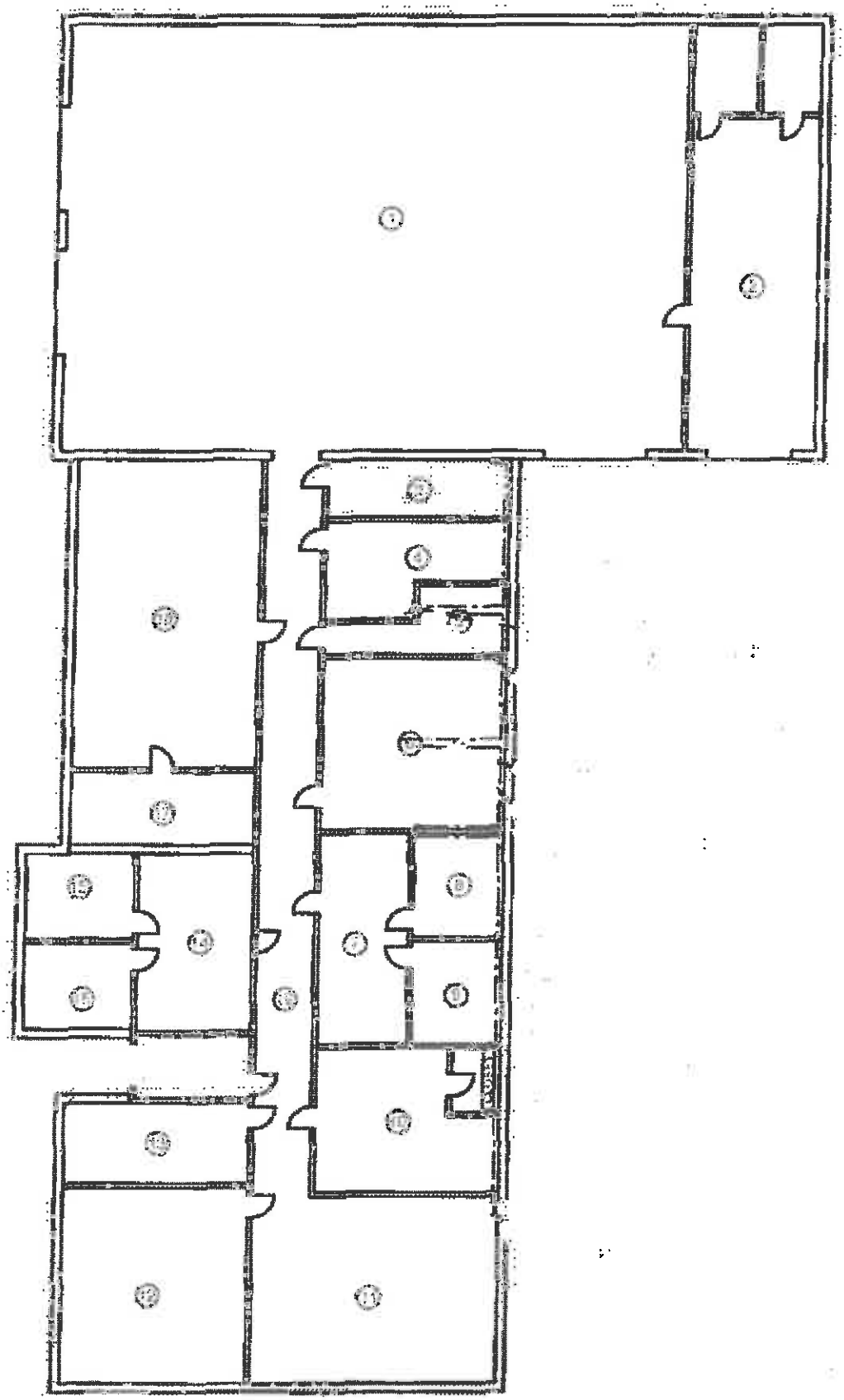
SUMMARY OF WORK – SAPULPA ARMORY

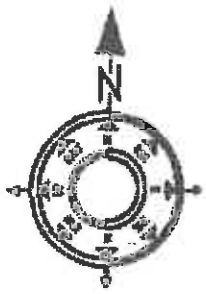
Prepared abatement area(s) and began asbestos abatement in accordance with the contract. Floor tile and mastic was removed from room 14. Carpet was removed (where present) and mastic from room 16. Carpet removal in room 15 exposed additional floor tile and mastic not included in Scope of Work or Drawings which was then removed after owner approval. Asbestos Containing Pipe Insulation and Asbestos Containing Pipe Fittings were removed per contract. Additional Asbestos Pipe Insulation not included in Scope of Work or Drawings was removed after owner approval. All pipes with asbestos containing pipe insulation and pipe fittings were reinsulated. GMR was then contacted to confirm abatement was appropriately performed and all asbestos removed.

All interior and exterior portions of the garage door frames and guards were wet scraped, painted, and encapsulated per contract as were the exterior porch ceiling and beams, the wall logo located in the hallway (Room 19) and the door frame and door lintel located between Room 1 and Room 2. The sliding door and track located between Room 1 and Room 2 was removed, wrapped in 6 mil poly sheeting and stored securely before proper disposal.

All surfaces above the floors (walls, shelving, etc.) were wiped and HEPA vacuumed prior to cleaning the floors. All window sills were wiped and HEPA vacuumed. The floors of the entire building were then HEPA vacuumed and wet washed after any equipment, shelving, etc. were removed from the work area. The floors were then sealed where necessary. DEQ was then contacted for confirmation and clearance sampling. Asbestos and lead contaminated wastes were removed, as necessary, and stored securely before proper disposal.

SAPULPA ARMORY
13 SAHOMA ROAD, SAPULPA, OK 74066





NOT TO SCALE

Subj: **Sapulpa Armory**
Date: 8/29/2013 11.16.13 A.M. Central Daylight Time
From: [redacted]
To: [redacted]

The sample cleared so were all done.

Dustin Davidson
Environmental Programs Specialist
Department of Environmental Quality
(405)-702-5115
dustin.davidson@deq.ok.gov

Subj: **FW: Chemistry Report- Sapulpa Armory**
Date: 8/21/2013 10:02:08 A.M. Central Daylight Time
From: [redacted]
To: [redacted]

The only sample that failed was right in front of the sliding metal door that was removed. Do you want to schedule a final walk through? If you clean that area the morning before the walkthrough, I will take the sample during the walkthrough.

Dustin Davidson
Environmental Programs Specialist
Department of Environmental Quality
(405)-702-5115
dustin.davidson@deq.ok.gov

From: Login [mailto:loginasbestos@quantem.com]
Sent: Tuesday, August 20, 2013 9:13 AM
To: Davidson, Dustin W.
Cc: Stanila, Brian D.
Subject: Chemistry Report- Sapulpa Armory

Thank you,

Sherrie Leftwich
Sample Receiving
Quantem Labs, LLC
800-822-1650
405-755-7205 Fax
www.quantem.com

2037 Heritage Park Drive / Oklahoma City OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Marshall Environmental Management, Inc.
1601 SW 89th Street, Ste. A-100
Oklahoma City, OK 73159

Re: QuanTEM ID 225623

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) 755-2068

Environmental Chemistry Analysis Report

QuanTEM Set ID: 225623
Date Received: 08/19/13
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 8/19/2013

AIHA ID: 101352

Client: Marshall Environmental Management, Inc.
1601 SW 89th Street, Ste. A-100
Oklahoma City, OK 73159

Acct. No.: A331

Project: Sapulpa Armory
Location: Sapulpa, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	A1	Wipe	Lead	16.5	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
002	A2	Wipe	Lead	33.3	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
003	A3	Wipe	Lead	17.1	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
004	A4	Wipe	Lead	36.5	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
005	A5	Wipe	Lead	67.1	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
006	A6	Wipe	Lead	10.1	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
007	A7	Wipe	Lead	<9.00	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
008	A8	Wipe	Lead	<9.00	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
009	A9	Wipe	Lead	24.0	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
010	A10	Wipe	Lead	17.2	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
011	A11	Wipe	Lead	24.1	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
012	A12	Wipe	Lead	9.62	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
013	A13	Wipe	Lead	4.52	4.52	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
014	A14	Wipe	Lead	7.09	4.52	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
015	A15	Wipe	Lead	34.7	4.52	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
016	A16	Wipe	Lead	42.2	4.52	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
017	A17	Wipe	Lead	13.9	9	ug/sq. Ft.	08/19/13 15:45	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:	225623
Date Received:	08/19/13
Received By:	Sherrie Lettwich
Date Sampled:	
Time Sampled:	
Analyst:	BM
Date of Report:	8/19/2013

AIHA ID: 101352

Client:	Marshall Environmental Management, Inc 1601 SW 89th Street, Ste. A-100 Oklahoma City, OK 73159
Acct. No.:	A331
Project:	Sapulpa Armory
Location:	Sapulpa, OK
Project No.:	N/A

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

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:	11308	**Date:**	8/19/2013	**Lab Number:**	225623
Test:	Lead	**Matrix:**	Wipe	**Approved By:**	Benton Miller
				Date Approved:	8/19/2013

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	5.3	5.5
ICV	0.9	1.1	1.1
RLVS	0.144	0.174	0.216

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W5	0.000	5.444	5.146	94.5	5.333	98.0	3.6
MS-W4	0.000	5.444	5.057	92.9	5.199	95.5	2.8
MS-W3	0.000	5.455	5.597	102.6	5.288	96.9	5.7
MS-W2	0.000	5.433	5.334	98.2	5.293	97.4	0.8
MS-W1	0.000	5.444	5.335	98.0	5.402	99.2	1.2

Authorized Signature: BM

Benton Miller, 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

Page 1 of 2

For Lab Use Only
Lab No. 225623
Accept Reject

Contact Information

Company: Marshall Environmental
Contact: Jamie Marshall
Account #:
Phone: 666-0401
Cell Phone:
Email: marshenv@sbcglobal.net

Project Information

Project Name: Sapulpa Armory
Project Location: Sapulpa, OK
Project ID:

Report Results (☑ one box)
QuanTEM Website
X Other
dustin.davidson@deq.ok.gov
brian.stanila@deq.ok.gov

Sampled By: Name: Rachel Woods Date: 8/7/13

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
[signature]	8-14-13/12:00		S. [signature]	8/15/13 9:40

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 - Use)	Analysis: Pb	PPM	Wt %	mg / l	µg / ft²	µg / m³	mg / cm²
1	A1	Room 7- SW Floor		1ft²	C	X				X		
2	A2	Room 7- NW Floor		↓	↓	↓				↓		
3	A3	Room 7- Center Floor										
4	A4	Room 1- SE Floor										
5	A5	Room 1- E. Floor										
6	A6	Room 2- W Floor										
7	A7	Room 2- S. Floor										
8	A8	Room 2- NW. Floor										
9	A9	Room 2- NE. Floor										
10	A10	Room 2- E. Floor										
11	A11	Room 19- S. Floor										
12	A12	Room 11- S. Floor		↓	↓	↓				↓		

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) 822-1660 • (405) 755-7272 • Fax (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 225623
Accept / Reject

Project Information

Company: Marshall Environmental Project Name: Sapulpa Armory Project Location: Sapulpa, OK

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

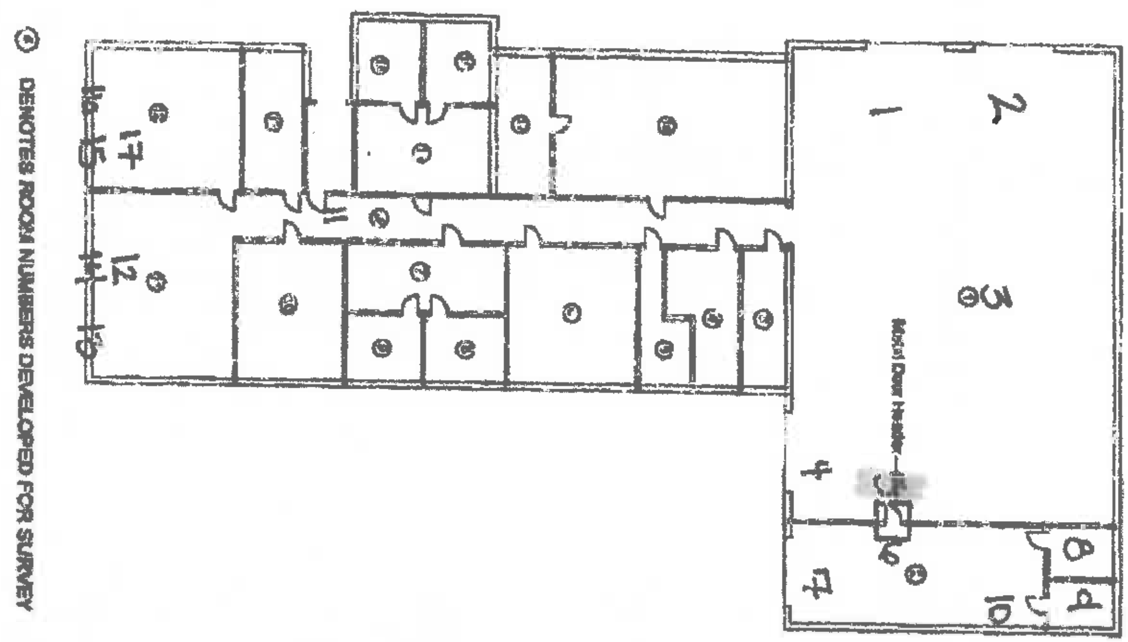
No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area Length x Width	Sample Matrix (see matrix codes below)	Analysis: Pb	Units (☑ ONE box only): PPM	Wt. %	mg / l	µg / ft²	µg / m²	mg / cm²
12	A13	Room 11 - SE Window Sill		7"x4"	C	X				X		
14	A14	Room 11 - SW Window Sill		↓	↓	↓				↓		
15	A15	Room 12 - SE Window Sill		↓	↓	↓				↓		
16	A16	Room 12 - SW Window Sill		↓	↓	↓				↓		
17	A17	Room 12 - S. Floor		1 Ft²	↓	↓				↓		
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 73103-8517 • Mark Package "Hold for Saturday Pickup"

Q#229623



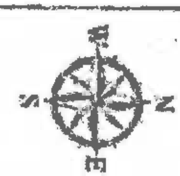
Former National Guard Armory
13 Sahoma Lake Road
Sapulpa, Oklahoma 74067

LEGEND

Doors

Door Frames

Doors & Door Frames



GMR & Associates, Inc.
Engineering and Environmental Consultants

FIGURE 1: Door Components with Lead-Based Paint

GLOVEBAGS ON ASBESTOS INSULATION

ABATED PIPE INSULATION

ABATED PIPE INSULATION

NEW INSULATION ON PIPING

NEW INSULATION ON PIPING

FLOOR TILE REMOVAL

MASTIC REMOVAL

LOOSE AND PEELING PAINT - OVERHEAD DOOR

DRILL FLOOR DECONTAMINATION

GENERAL DUST CLEANING - DRILL FLOOR AREA

BOLLARDS - LOOSE AND PEELING
PAINT REMOVED AND SEALED

OVERHEAD DOOR - LOOSE
AND PEELINGPAINT REMOVED
AND RE-SEALED

DOOR FRAME - LOOSE AND PEELING PAINT REMOVED AND RE-SEALED

MAIN ENTRANCE - LOOSE AND PEELING PAINT REMOVED AND RE-SEALED

Do not staple!

WASTE MANAGEMENT

Manifest NO: ________
(For Generator Use)

Quarry Landfill
4041 N. 141st East Ave
Tulsa, OK 74116
FAX (918) 437-7805
Phone: (918) 439-7836

NESHAP ADMINISTRATOR
Air Quality Control (405) 702-1000
Oklahoma Dept of Environmental Quality
707 N. Robinson
Oklahoma City, OK 73101

Profile # QO-16998

NON- HAZARDOUS SPECIAL WASTE MANIFEST

Generator: State of OK Job Name: ~~Same~~ Sapulpa Armory

Address: 2401 N. Lincoln Blvd 4th Address: 13 Sahoma Rd
Oklahoma City, OK 73105 Sapulpa, OK.

Phone: (405) 522-0047 Phone:

QUANTITY AND DESCRIPTION

Proper Shipping Name: Asb. pipe ins. Quantity: 5 C.Y.
DOT Hazard Class: N/A
Identification Number: N/A
Reportable Quantity: N/A

DRUM ☐ BAG ☒ CARTON ☐ TRUCK ☐ TONS ☐ CUBIC YARDS ☐ OTHER ________

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 *(unless approved WM profile reflects free liquid)* or any applicable state law, is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Nancy Vacin Nancy Vacin 8/9/2013
Generator Authorized Agent Signature Shipment Date

Transporter: Abatement System Inc BA OK 74011

Address: Broken Arrow OK, 74011 Phone: 918 258-2046

Driver: Mark Walker Truck No: 16 Tag # /State: ________

[signature] 8-9-13 [signature] 8-9-13
Signature Shipment Date Driver Signature Delivery Date

I hereby certify that the above material was picked up from generator listed above

I hereby certify that the above named material was delivered without incident to the site listed below

Received at Quarry Landfill 4041 N. 141st East Ave. Tulsa, OK
I hereby certify that the above named material has been accepted and to the best of my knowledge, the above is correct

Signed: K Kincaid Ticket: 1458271

Date: 8913

WASTE SHIPMENT RECORD

GENERATOR

1. Work Site Name & Mailing Address (Generator)
Sapulpa Armory
2401 N. Lincoln Blvd, Oklahoma City OK

Owner's Name
STATE of OK

Owner's Telephone
(405) 522-0449

2. Remover's Name & Address
Abatement Systems, Inc., P. O. Box 773, Broken Arrow, OK 74013-0773

Remover's Telephone
(918) 251-2504

3. Waste Disposal Site (WDS)
Quarry Landfill 4941 N. 141st E. Ave Tulsa, OK 74116

WDS's Telephone
(918) 437-7773

4. Name & Address of EP Office local, state or regional
Tulsa City- County Health Dept 4616 E. 15th St Tulsa, OK 74112

5. Haz	Desc. Of Material	Hazard Class	ID Number	Packing Group #	6. Containers no.	Type	7. Total Quantity
					819		

8. Special Handling Instruction & 24 Hrs Emergency Response Telephone Number (provided by Generator)

9. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations. NOTE: Generator must retain a copy of this form

Print/Type Name & Title	Signature	Date
Nancy Vacin Office Manager	Nancy Vacin	8/09/2013

TRANSPORTER

10. Transporter 1 (Acknowledgement of Receipt of Materials) Note: Transporter must retain a copy of this form

Print/Type Name, Title, Address & Telephone Number	Signature/Date
Abatement Systems, Inc. **P. O. Box 773** **Broken Arrow, OK 74013-0773 (918) 251-2504**	

11. Transporter 2 (Acknowledgement of Receipt of Materials) Note: Transporter must retain a copy of this form

Print/Type Name, Title, Address & Telephone Number	Signature/Date

12. Problems with Containment or Packaging — Rejected Yes/No

DISPOSAL

13. WASTE DISPOSAL SITE OWNER OR OPERATOR:
Certification of receipt of asbestos materials covered by this manifest except as noted in Item 12. 458271

Print/Type Name & Title	Signature	Date
Quarry Landfill Scale Clerk	kkincaid	8-9-13

Note: The Waste Disposal Site must retain a completed copy of this form and send a completed copy to the Remover listed in Item #2

CONFIRMATION SAMPLING

SAPULPA ARMORY

13 SAHOMA LAKE ROAD
SAPULPA, OKLAHOMA 74067

OCTOBER 1, 2013 — *LEAD-CONFIRMATION SAMPLING*

CERTIFIED INDUSTRIAL HYGIENE SERVICES PROVIDED FOR:

Oklahoma Department of Environmental Quality
Land Protection Division
Care Of: Dustin Davidson, Environmental Programs Specialist
P.O. Box 1677
Oklahoma City, Oklahoma 73102
405.702.5115
dustin.davidson@deq.ok.gov

CERTIFIED INDUSTRIAL HYGIENE SERVICES PROVIDED BY:

Marshall Environmental Management, Incorporated
Attention: Jamie Marshall, Senior Industrial Hygiene Associate
1601 Southwest 89th Street, Suite A-100
Oklahoma City, Oklahoma 73159
405.616.0401
marshenv@swbell.net

TABLE OF CONTENTS

SAPULPA ARMORY
LEAD-CONFIRMATION SAMPLING

CERTIFICATION

This is to certify that, Marshall Environmental Management, Incorporated (MEM) was contracted by the State of Oklahoma Construction and Properties Division, on behalf of the Oklahoma Department of Environmental Quality (ODEQ) Land Protection Division (LPD), to conduct Lead Confirmation Sampling at the Sapulpa Armory (13 Sahoma Lake Road – Sapulpa, Oklahoma 74067). The confirmation sampling was performed by an ODEQ Lead-Based Paint (LBP) Inspector/Risk Assessor under the direction of Dr. Charles L. Marshall Certified Industrial Hygienist (CIH) and President of MEM. The analytical data resulting from this sampling event is believed accurately, reflect the concentrations of lead in surface at the time sampling was accomplished. The remainder of this report includes the Executive Summary, the Analytical Summary and the Sampling Methodology and Clearance Requirements.

OWNER INFORMATION

State of Oklahoma

CERTIFIED LEAD-BASED PAINT INSPECTOR/RISK ASSESSOR

October 1, 2013

Rachel Woods, B.S., Industrial Hygiene Associate — ***Report Date***

ODEQ Certification Lead-Based Paint Inspector/Risk Assessor — *OKRASR13701*

CERTIFIED LEAD-BASED PAINT FIRM

Marshall Environmental Management, Incorporated
1601 Southwest 89th Street, Suite A-100
Oklahoma City, Oklahoma 73159
405.616.0401
marshenv@swbell.net
ODEQ Lead-Based Paint Firm Certification: OKFIRM11160

X-RAY FLUORESCE ANALYZER

Analyzer Make: *Niton XLp Spectrum Analyzer*
Analyzer Model: *#XLp 300A*
Analyzer Serial Number: *12585*
Source Date: *March 15, 2011*

EXECUTIVE SUMMARY

As part of the ODEQ LPD Site Cleanup Assistance Program and Armory Cleanup Program and for the purpose of verifying that adequate abatement (i.e. removal) measures occurred, MEM and ODEQ representatives performed the Lead-Confirmation Sampling at the Sapulpa Armory. Following lead-abatement activities, performed by Abatement Systems, 17-samples were collected on August 17, 2013, by an MEM representative, from various floor and windowsill surfaces preselected by the ODEQ. Of the 17-surface samples, the sample collected from the east floor surface in room one (sample A5) exceeded the Environmental Protection Agency (EPA) post-abatement clearance level, with regard to floor surfaces, of 40-micrograms or less of lead per-square-foot (≤40-µg/ft2). Refer to the table below for a summarization of the specific sampling locations and corresponding lead concentrations and clearance levels. The ***bolded data*** represents lead concentrations that exceeded the applicable clearance level. A floor plan diagram, illustrating the sampling locations, is attached with this report.

TABLE I: 08-17-13 – LEAD-CONFIRMATION SAMPLING

LAB ID	SAMPLE IDENTIFICATION	ANALYTICAL RESULT	CLEARANCE LEVEL
01	A1 – ROOM 1 – SW FLOOR	16.5-µg/ft.^{2}	40-µg/ft.^{2}
02	A2 – ROOM 1 – NW FLOOR	33.3-µg/ft.^{2}	40-µg/ft.^{2}
03	A3 – ROOM 7 – CENTER FLOOR	17.1-µg/ft.^{2}	40-µg/ft.^{2}
04	A4 – ROOM 1 – SE FLOOR	36.5-µg/ft.^{2}	40-µg/ft.^{2}
05	**A5 – ROOM 1 – E FLOOR**	**67.1-µg/ft.^{2}**	40-µg/ft.^{2}
06	A6 – ROOM 2 – W FLOOR	10.1-µg/ft.^{2}	40-µg/ft.^{2}
07	A7 – ROOM 2 - FLOOR	9.00-µg/ft.^{2}	40-µg/ft.^{2}
08	A8 – ROOM 2 – NW FLOOR	<9.00-µg/ft.^{2}	40-µg/ft.^{2}
09	A9 – ROOM 2 – NE FLOOR	24.0-µg/ft.^{2}	40-µg/ft.^{2}
10	A10 – ROOM 2 – EAST FLOOR	17.2-µg/ft.^{2}	40-µg/ft.^{2}
11	A11 – ROOM 19 – S FLOOR	24.1-µg/ft.^{2}	40-µg/ft.^{2}
12	A12 – ROOM 11 – S FLOOR	9.62-µg/ft.^{2}	40-µg/ft.^{2}
13	A13 – ROOM 11 – SW WINDOWSILL	4.52-µg/ft.^{2}	250-µg/ft.^{2}
14	A14 – SW WINDOWSILL	7.09-µg/ft.^{2}	250-µg/ft.^{2}
15	A15 – ROOM 12 – SE WINDOWSILL	34.7-µg/ft.^{2}	250-µg/ft.^{2}
16	A16 – ROOM 12 – SW WINDOWSILL	42.2-µg/ft.^{2}	250-µg/ft.^{2}
17	A17 – ROOM 12 – S FLOOR	13.9-µg/ft.^{2}	40-µg/ft.^{2}

Following additional abatement activities a supplemental sample was collected on August 26, 2013, by an ODEQ representative, from the east floor surface in room one. Subsequently, the analytical data was in accordance with the EPA post-abatement clearance level, with regard to floor surfaces, of ≤40-µg/ft2. See the table below for a summarization of the sampling location, analytical result and clearance level. The correlating floor plan diagram is attached with this report.

TABLE II: 08-26-13 – LEAD-CONFIRMATION SAMPLING

LAB ID	SAMPLE IDENTIFICATION	ANALYTICAL RESULT	CLEARANCE LEVEL
01	1 – ROOM 1 – E FLOOR	9.00-µg/ft.^{2}	40-µg/ft.^{2}

SAMPLING METHODOLOGY & CLEARANCE REQUIREMENTS

The sampling collection process took place in accordance with the regulations proposed by the EPA in 40 Code of Federal Regulations (CFR) part 745. Samples of settled dust were collected by selecting a specific surface area and then by placing a template of a known dimension firmly against the surface to be sampled. Next, the area within the template was wiped in a certain pattern utilizing a particular wipe. The wipe was then placed in an approved container for transportation. All sample containers and sample locations were labeled and plotted on the associated Chain of Custody and floor plan, respectively. Lastly, the samples were submitted for analysis to an accredited laboratory.

As such, the EPA[1] states that lead concentrations in dust of $\leq$40-$\mu g/ft^2$ with regard to common floor surfaces and collected following remediation activities and prior to the application of a sealant are acceptable. In addition to this, the EPA advises that lead concentrations in dust of $\leq$250-ug/ft^2 with regard to windowsills and collected post-abatement/pre-sealant are acceptable. To conclude, the Naval Facilities Engineering Command (NAVFAC)[2] states that dust collected post abatement/pre-sealant from any horizontal surface relative to an indoor-firing-range (IFR) with lead concentrations $\leq$200-$\mu g/ft^2$ are acceptable.

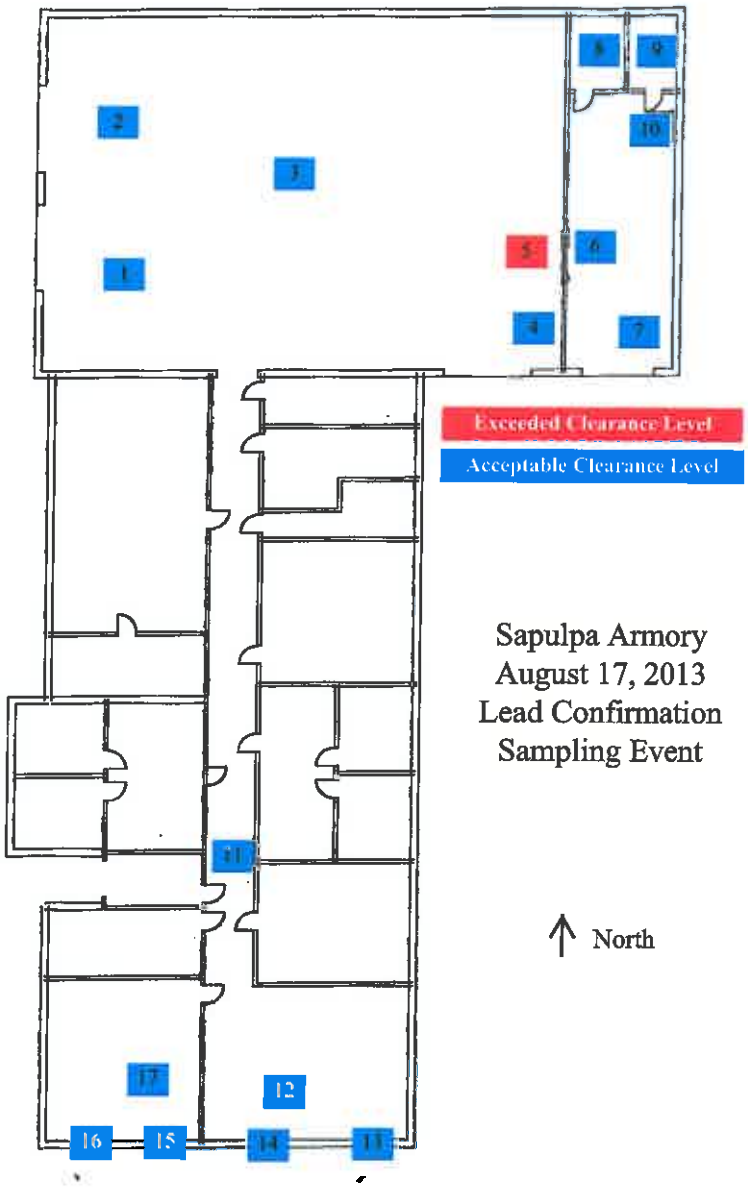
[1] *Requirements for Lead-based Paint Activities in Target Housing and Child-occupied Facilities* (40 Code of Federal Regulations [CFR] Part 745)
[2] *NAVFAC Message R 160647 Z APR 98*

APPENDIX

CHAIN OF CUSTODY FORMS & ANALYTICAL DATA

FLOOR PLAN DIAGRAM

CERTIFICATES/LICENSURE


Exceeded Clearance Level
Acceptable Clearance Level
Sapulpa Armory
August 17, 2013
Lead Confirmation
Sampling Event
North

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 225623
Date Received: 08/19/13
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 8/19/2013

AIHA ID: 101352

Client: Marshall Environmental Management, Inc.
1601 SW 89th Street, Ste. A-100
Oklahoma City, OK 73159

Acct. No.: A331

Project: Sapulpa Armory
Location: Sapulpa. OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	A1	Wipe	Lead	16.5	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
002	A2	Wipe	Lead	33.3	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
003	A3	Wipe	Lead	17.1	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
004	A4	Wipe	Lead	36.5	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
005	A5	Wipe	Lead	67.1	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
006	A6	Wipe	Lead	10.1	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
007	A7	Wipe	Lead	<9.00	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
008	A8	Wipe	Lead	<9.00	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
009	A9	Wipe	Lead	24.0	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
010	A10	Wipe	Lead	17.2	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
011	A11	Wipe	Lead	24.1	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
012	A12	Wipe	Lead	9.62	9	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
013	A13	Wipe	Lead	4.52	4.52	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
014	A14	Wipe	Lead	7.09	4.52	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
015	A15	Wipe	Lead	34.7	4.52	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
016	A16	Wipe	Lead	42.2	4.52	ug/sq. Ft.	08/19/13 15:45	W NIOSH 9100
017	A17	Wipe	Lead	13.9	9	ug/sq. Ft.	08/19/13 15:45	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: 225623
Date Received: 08/19/13
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 8/19/2013

AIHA ID: 101352

Client: Marshall Environmental Management, Inc.
1601 SW 89th Street, Ste. A-100
Oklahoma City, OK 73159

Acct. No.: A331

Project: Sapulpa Armory
Location: Sapulpa, OK
Project No.: N/A

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

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.

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

Supplemental Report
QAQC Results

QA ID: 11308 **Date:** 8/19/2013 **Lab Number:** 225623
Test: Lead **Matrix:** Wipe **Approved By:** Benton Miller
Date Approved: 8/19/2013

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	5.3	5.5
ICV	0.9	1.1	1.1
RLVS	0.144	0.174	0.216

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W5	0.000	5.444	5.146	94.5	5.333	98.0	3.6
MS-W4	0.000	5.444	5.057	92.9	5.199	95.5	2.8
MS-W3	0.000	5.455	5.597	102.6	5.288	96.9	5.7
MS-W2	0.000	5.433	5.334	98.2	5.293	97.4	0.8
MS-W1	0.000	5.444	5.335	98.0	5.402	99.2	1.2

Authorized Signature: _____

Benton Miller, 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. 225623
(Accep) Reject

Contact Information

Company: Marshall Environmental
Contact: Jamie Marshall
Account #:
Phone: 666-0401
Cell Phone:
E-mail: marshenv@swbell.net

Project Information

Project Name: Sapulpa Armory
Project Location: Sapulpa, OK
Project ID:

Report Results (☑ one box)
QuanTEM Website
X Other
dustin.davidson@deq.ok.gov
brian.stanila@deq.ok.gov

Sampled By: Name: Rachel Woods Date: 8/17/13

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
[signature]	8-19-13/12:00		S. Luftwick	8/19/13 9:40

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 / m³	mg / cm²
1	A1	Room 7- SW Floor		1ft²	C	X				X		
2	A2	Room 7- NW Floor										
3	A3	Room 7- Center Floor										
4	A4	Room 1- SE Floor										
5	A5	Room 7- E. Floor										
6	A6	Room 2- W. Floor										
7	A7	Room 2- S. Floor										
8	A8	Room 2- NW. Floor										
9	A9	Room 2- NE. Floor										
10	A10	Room 2- E. Floor										
11	A11	Room 19- S. Floor										
12	A12	Room 11- S. Floor										

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

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Lab No. 225623
Accept Reject

Project Information

Company: Marshall Environmental Project Name: Sapulpa Armory Project Location: Sapulpa, OK

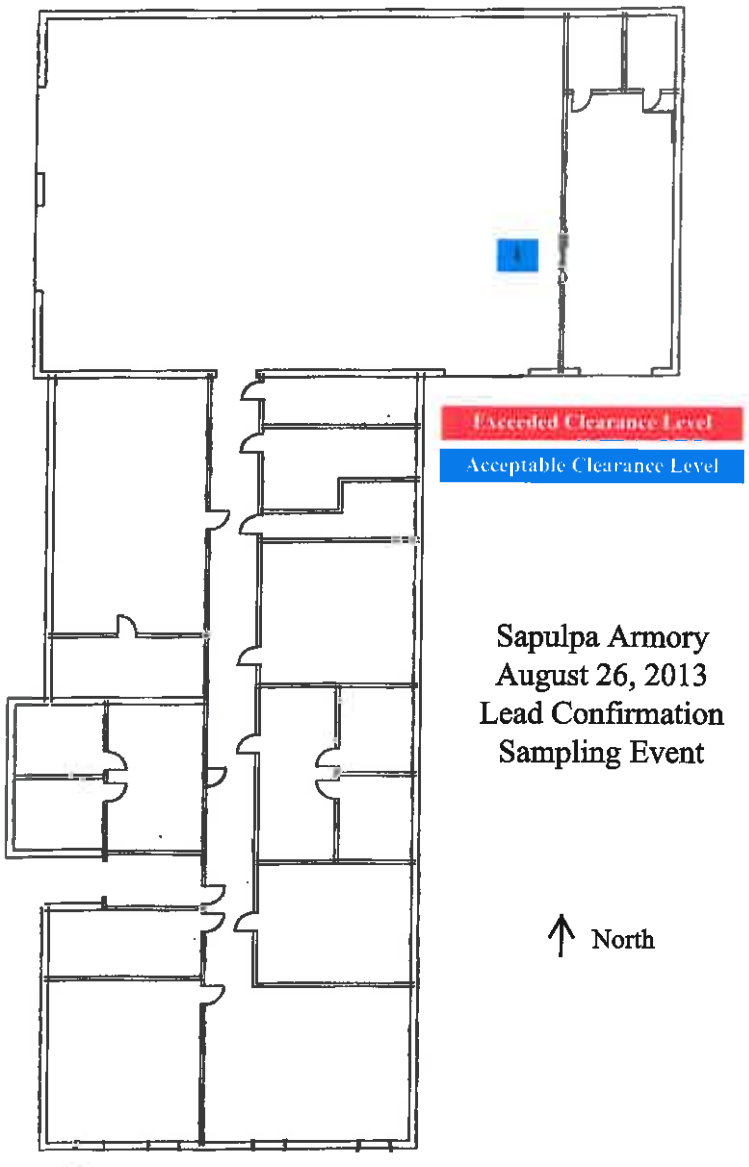
REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis: Pb	Units (☑ ONE box only): PPM	Wt %	mg / l	µg / ft²	µg / m³	mg / cm²
13	A13	Room 11 - SE Window Sill		"7x4"	C	X				X		
14	A14	Room 11 - SW Window Sill		↓	↓	↓				↓		
15	A15	Room 12 - SE. Window Sill		↓	↓	↓				↓		
16	A16	Room 12 - SW. Window Sill		↓	↓	↓				↓		
17	A17	Room 12 - S. Floor		1ft2	↓	↓				↓		
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"



Sapulpa Armory
August 26, 2013
Lead Confirmation
Sampling Event

North

QUANTEM LABORATORIES

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

State of Oklahoma
DEQ Land Protection
Attn: Dustin Davidson
707 N. Robinson
Oklahoma City, OK 73102

Re: QuanTEM ID 226025

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 226025
Date Received: 08/27/13
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 8/27/2013

AIHA ID: 101352

Client: State of Oklahoma
DEQ Land Protection
Attn: Dustin Davidson
707 N. Robinson
Oklahoma City, OK 73102
Acct. No.: B486

Project: Sapulpa Armory
Location: Sapulpa, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	1	Wipe	Lead	<9.00	9	ug/sq. Ft.	08/27/13 13:45	W NIOSH 9100

Authorized Signature: _____
Benton Miller, Analyst

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

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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: 11332 **Date:** 8/27/2013 **Lab Number:** 226025
Test: Lead **Matrix:** Wipe **Approved By:** Benton Miller
Date Approved: 8/27/2013

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	5.1	5.5
ICV	0.9	1	1.1
RLVS	0.144	0.186	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	5.020	5.020	100.0	5.207	103.7	3.7
MS-W1	0.000	5.000	4.988	99.8	4.855	97.1	2.7

Authorized Signature: _____

Benton Miller, Analyst

LEAD CHAIN OF CUSTODY

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(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

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Page 1 of 1

For Lab Use Only
Lab No. 226025
Accept Reject

Report Results (☑ one box)
- ☐ QuanTEM Website
- ☐ Other _____

Contact Information		Project Information	
Company: DEQ	Phone: 405-317-4292	Project Name: Sapulpa Armory	
Contact: Dustin Davidson	Cell Phone: 405-317-4292	Project Location: Sapulpa, OK	
Account #:	E-mail: dustin.davidson@deq.ok.gov	Project ID:	

Sampled By: Name: Dustin Davidson Date: 8/26/13

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Dustin Davidson	8/27/13 10:[illegible]	drop off	[signature]	8/27/13 10:20

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 (☑ ONE box only): PPM	Wt %	mg / l	µg /ft²	µg / m³	mg / cm²
1	1			12" X12"	C	X				X		
2												
3												
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
X	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"