Former National Guard Armory
Madill, Oklahoma

Remediation Final Report

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

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

The Oklahoma Department of Environmental Quality (DEQ) is pleased to present the Marshall County Chamber of Commerce with the Final Remediation Report for the former Madill 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 Madill 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 Thermal System Insulation (TSI), mastic, and transite panels.
- Asbestos abatement, including:
  - Removal of TSI, mastic, and transite panels.

TARGETED BROWNFIELD ASSESSMENT

In August 2012, DEQ provided a Phase I Targeted Brownfield Assessment to the Marshall County Chamber of Commerce. 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 walls containing LBP
  - Removal of basketball goal and pass through window sill
  - Removal of LBP and applying sealant to room floors containing LBP
- Lead dust abatement, including:
  - HEPA vacuuming and wet washing of floors in the building
- Proper disposal of associated waste

Additional copies of this report can be found at http://www.deq.state.ok.us/lpdnew/scapIndex.htm and DEQ Central Records at 707 N Robinson Oklahoma City, Oklahoma 73101.

This publication is issued by the Oklahoma Department of Environmental Quality authorized by Steven A. Thompson, Executive Director. Copies have been prepared at a cost of $0.053 each. Copies have been deposited with the Publications Clearinghouse of the Oklahoma Department of Libraries. cmullins\LPD\Armories_SCAP\ArmoryReports\MadillArmory. 9/2012.

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

I-2012-3663

STATE OF OKLAHOMA
MARSHALL COUNTY S.S.
THIS INSTRUMENT AS FILED FOR RECORD
on the 3 day of Aug A.D., 2012
at 11:10 o'clock AM M. and Auto
recorded 994 on page 632
in Book
Ann Harlin, County Clerk
By GS Deputy

COUNTY CLERK OFFICIAL SEAL ORIGINAL IN RED MARSHALL COUNTY, OK

INDEXED & COMPARED

RECEIVED
AUG 24 2012
LAND PROTECTION DIVISION
DEPARTMENT OF ENVIRONMENTAL QUALITY

NOTICE OF REMEDIATION AND EASEMENT
FORMER MADILL ARMORY
MADILL, 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.

The owner of the Affected Property has the legal authority to create, and does hereby voluntarily create, an easement granted to the DEQ and its employees and agents, for ingress and egress through, across and onto the parking and other outside areas of the Affected Property as they exist from time to time to assure the ongoing protection of the Remedy, Engineering Controls and Land Use Restrictions. This easement touches and concerns the land and runs with the land, is legally binding on all current and future owners and tenants of the Affected Property, and shall only be removed or modified if and when the DEQ modifies or removes the Land Use Restrictions, Engineering Controls and Continuing Operation, Maintenance of said Engineering Controls.

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 November 28, 2011, indicated that there was asbestos, lead-based paint, and lead dust in the building.

AFFECTED PROPERTY: The Affected Property is the former Madill Armory located at 601 South 5th Avenue, Madill, Marshall County, Oklahoma 73446.

The legal description is as follows:

Tract 1: Beginning at the Southeast Corner, of Section 28, Township 5 South, Range 5 East, thence S.89°57'W. along the Section line, a distance of 278.2 feet, to the East right-of-way line of State Highway 199, thence N.13°35'E. along the East right of way line of State Highway 199, a distance of 154.0 feet, to the South line of McArthur Street, thence S.76°33'E. along the South line of McArthur Street, a distance of 246.8 feet, to the Section line, thence S.0°2'E. along the Section line, a distance of 90.4 feet, to the point of beginning. Containing 0.74 acre.

RECEIVED
SEP 06 2012
LAND PROTECTION DIVISION
DEPARTMENT OF ENVIRONMENTAL QUALITY

Tract 2: Beginning at the N.E. Corner of Section 33, Township 5 South, Range 5 East, thence S.89°57'W. along the Section line, a distance of 278.2 feet to the East right of way line, of State Highway 199, thence S.13°35'W. along the East right of way line of State Highway 199, a distance of 264.3 feet, thence N.89°57'E. a distance of 342 feet, to the East side of said Section 33, thence N.0°2'W. along the Section line, a distance of 260 feet, to the point of beginning. Containing 1.86 acres.

REMEDY: Remediation activities (Remedy) at the Affected Property included abatement of asbestos, lead-based paint and dust. The remedy was completed on August 8, 2012.

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

Oklahoma Department of Environmental Quality
Central Records

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

Physical Address
707 N Robinson
Oklahoma City, OK 73102

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

DISCLAIMER

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

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

CONTINUING OPERATION, MAINTENANCE AND MONITORING

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

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

a. 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 within one twenty four (24) hour period.

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.

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

9-4-12
Date

ACKNOWLEDGMENT

STATE OF OKLAHOMA
COUNTY OF OKLAHOMA

Before me, a Notary Public, in and for said County and State, on this 4th day of Sept, 2012, personally appeared Steven 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:
7-17, 2014
#02011624

Notary Public

MADILL ARMORY EASEMENT

I hereby certify that I have the legal right to, and do hereby, create an easement and encumber the real property as described in the foregoing Notice of Remediation. I hereby voluntarily grant an easement to the DEQ and its employees and agents, for ingress and egress through, across and onto the Affected Property to assure the ongoing placement, operation and protection of the remedy, engineering controls and land use restrictions described herein above.

President
Marshall County Chamber of Commerce

Date 8/22/12

Executive Director
Marshall County Chamber of Commerce

Date 8/22/12

ACKNOWLEDGMENT

STATE OF OKLAHOMA
COUNTY OF OKLAHOMA

Before me, a Notary Public, in and for said County and State, on this 22 day of August, 2012, personally appeared James Bosson 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:

7-15-13, 2013

Notary Public

JUDY K. PETERSON NOTARY PUBLIC COMMISSION NO 09005829 STATE OF OKLAHOMA MARSHALL COUNTY

I-2011-3771

STATE OF OKLAHOMA
MARSHALL COUNTY S.S.
THIS INSTRUMENT AS FILED FOR RECORD
on the 8 day of July A.D., 2011
at 2:05 o'clock P M. and duly
recorded
in Book 961 on page 107
Ann Hartin, County Clerk
By _____ Deputy

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 Marshall County Chamber of Commerce,** Grantee, the following described real property and premises lying and situated in the Marshall County, State of Oklahoma, as follows:

Tract 1.

Beginning at the Southeast Corner, of Section 28, Township 5 South, Range 5 East, thence S.89°57'W. along the Section line, a distance of 278.2 feet, to the East right-of-way line of State Highway 199, thence N.13°35'E. along the East right of way line of State Highway 199, a distance of 154.0 feet, to the South line of McArthur Street, thence S.76°33' E. along the South line of McArthur Street, a distance of 246.8 feet, to the Section line, thence S.0°2'E. along the Section line, a distance of 90.4 feet, to the point of beginning. Containing 0.74 acre.

Tract 2.

Beginning at the N.E. Corner of Section 33, Township 5 South , Range 5 East, thence S.89°57'W. along the Section line, a distance of 278.2 feet to the East right of way line, of State Highway 199, thence S.13°35'W. along the East right of way line of State Highway 199, a distance of 264.3 feet , thence N.89°57'E. a distance of 342 feet, to the East side of said Section 33, thence N.0°2'W. along the Section line, a distance of 260 feet, to the point of beginning. Containing 1.86 acres.

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 15 day of June 2011.

STATE OF OKLAHOMA

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

I the undersigned County Clerk in and for Marshall County State of Oklahoma, hereby certify that this is a true and correct copy of Quit Claim Deed as recorded in Book 961 Page 107, together with all the endorsements thereon.
Dated at Madill, Marshall County, Oklahoma this 8 day of July 20 11
Ann Hartin, County Clerk
By _____ Deputy

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

ACKNOWLEDGMENT

STATE OF OKLAHOMA)
) ss
COUNTY OF OKLAHOMA)

Before me, [signature] in and for this state, on this 15 day of June, 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.

[signature]
Notary Public

NOTARY PUBLIC IN AND FOR STATE OF OKLAHOMA

My Commission Expires:

____

My Commission Number:

04006685

MAINTENANCE PLAN

MAINTENANCE PLAN
FORMER MADILL ARMORY
MADILL, OKLAHOMA

The Armory located at 601 South 5th Avenue, Madill, 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 October 26, 2011, indicated that there was asbestos, lead-based paint, and lead dust in the building. Remediation activities at the Affected Property included abatement of asbestos, lead-based paint, and lead dust. The remedy was completed on August 10, 2012. 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 painted walls in Room 18 were scrapped 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 Madill Armory Floor Plan Map.

2. The floors of Room 6 and Room 11 had lead-based paint visibly removed, were cleaned and sealed to remediate surfaces below 40µg/SF for lead. These surfaces need to be resealed if sealant shows signs of deterioration, damage, or flaking. See Attachment 2 for Madill 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) 702-5115.

Sincerely,

Dustin Davidson

Dustin Davidson
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:

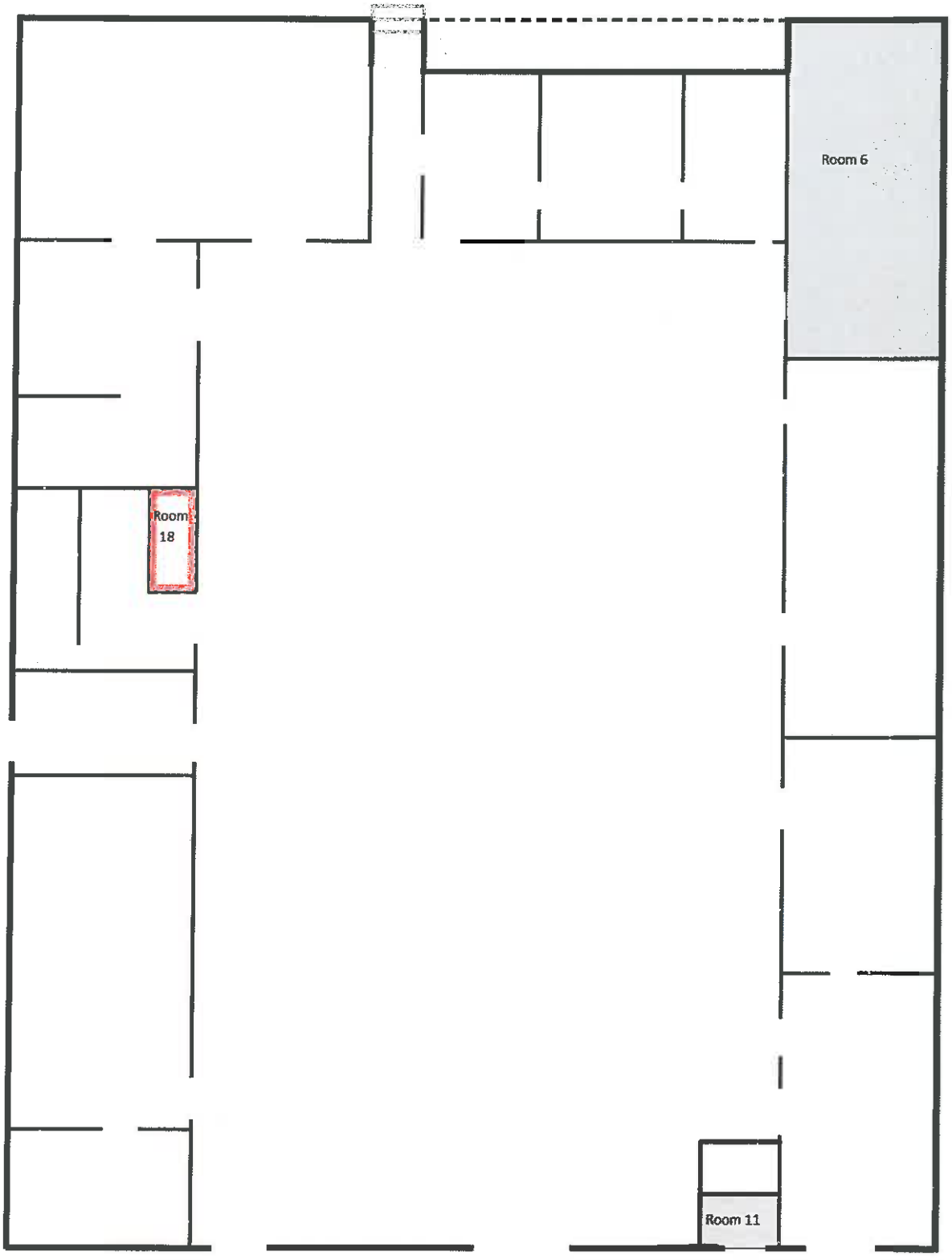
a. No residential use of the property by children age 6 or under. Residential use is defined as having a child present at the Affected Property for more than sixteen (16) hours within one twenty four (24) hour period.

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

ATTACHMENT 2

Madill Armory Floor Plan Map

Madill Armory



Not to scale
Floor plan approximate

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

ENERCON

Excellence—Every project. Every day.

ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY
601 SOUTH 5TH AVENUE
MADILL, OKLAHOMA 73651

Enercon Project Number – ENMISC2501

November 28, 2011

Prepared for:

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

Prepared By:
Enercon Services, Inc.
6525 North Meridian, Suite 400
Oklahoma City, Oklahoma 73116

Inspected By:

Richard D. Belcher
AHERA Asbestos Inspector OK-159310

Reviewed By:

Emmett W. Muenker
AHERA Asbestos Management Planner OK-MP130435

Table of Contents

ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY
601 SOUTH 5TH AVENUE
MADILL, OKLAHOMA 73651

Executive Summary

An asbestos survey of the Madill National Guard Armory, 601 South 5th Avenue, Madill, Oklahoma was conducted on October 26, 2011. The armory consisted of a single building with a large central drill room with offices and other rooms located around the perimeter of the drill room. During the survey, a total of 26 bulk samples were collected from 11 homogeneous areas. A summary of the asbestos-containing building materials (ACBMs) is provided below.

Summary of Asbestos-Containing Building Materials

MATERIAL CATEGORY	MATERIAL DESCRIPTION	TOTAL APPROXIMATE AMOUNT
FRIABLE	Gray/Tan Pipe Insulation	480 LF
CATEGORY I NON-FRIABLE	Black/Yellow Carpet Mastic	140 SF
CATEGORY II NON-FRIABLE	Transite Panels	240 SF

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

Recommended actions for planned renovation:

Prepare specifications/project design for abatement of friable and non-friable asbestos materials that would be disturbed during renovation activities; solicit bids; award contract and complete abatement.

Recommended actions prior to planned demolition:

Prepare specifications/project design for abatement of all friable asbestos materials; solicit bids; award contract and complete abatement.

Recommended actions for continued operation without removal of all asbestos in the building:

Prepare and implement an Asbestos Management Plan to manage the asbestos in place. This is to include Asbestos Awareness Training for maintenance and custodial personnel.

ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY
601 SOUTH 5TH AVENUE
MADILL, OKLAHOMA 73651

1.0 INTRODUCTION

An asbestos survey of the Madill National Guard Armory, 601 South 5th Avenue, Madill, Oklahoma was conducted on October 26, 2011. The armory consisted of a single building with a large central drill room with offices and other rooms located around the perimeter of the drill room. The inspection was performed by Richard Belcher, AHERA Inspector OK-159310. Appendix A contains a copy of his Inspector License.

The purpose of the asbestos survey was to locate, identify, and quantify asbestos containing building materials (ACBMs) present in the facility. The asbestos survey was requested by the Oklahoma Department of Environmental Quality.

2.0 SURVEY PROCEDURES

The survey consisted of visual examination of building components and insulating materials to identify those suspected to contain asbestos. Asbestos-containing materials are divided into three basic groups: Thermal System Insulation (TSI), Surfacing Materials (SM) and Miscellaneous Materials (MM). TSI consists of insulating materials, mastics or sealants used to reduce heat loss or gain on mechanical systems such as piping, ducts, air handlers, boilers, flues, heat exchangers, etc. SM includes materials applied to surfaces other than mechanical systems for purposes such as fireproofing, acoustical insulation and aesthetic finishes. MM are all other materials not included in the other two categories, and include materials such as floor tiles, adhesives, gaskets, caulking compounds and asbestos-cement piping/panels (Transite®).

Non-friable ACBM is categorized as either Category I or Category II non-friable material. Category I non-friable ACBM includes packings, gaskets, resilient floor coverings, and asphalt roofing products. Category II non-friable ACBM includes any other non-friable material.

The protocols outlined in the Asbestos Hazard Emergency Response Act (AHERA) were used for this survey. The survey included all building materials that were suspected to contain asbestos, with the exception of the roofing components. Samples were analyzed by QuanTEM Laboratories, an analytical laboratory accredited under the National Voluntary Laboratory Accreditation Program (NVLAP). The analytical method used was Polarized Light Microscopy (PLM) with dispersion staining, as prescribed by the AHERA regulation. It is a method for positive identification of asbestos fibers. Materials determined to contain more than one percent asbestos by laboratory analysis are considered asbestos-containing materials.

The numbering system used for sample identification consisted of three separate components, a facility identifier, a homogeneous area (materials appearing alike in their color, texture and function) number and a sample number.

Rooms in the building were not all identified with room numbers, therefore an arbitrary number was assigned to each room for referencing the locations of samples and asbestos-containing materials identified during the survey. These arbitrary room numbers are used throughout this report and the room locations are shown on the building layouts in Appendix B.

3.0 SURVEY RESULTS

A total of 26 bulk samples were collected from 11 homogeneous areas during the survey. Appendix B contains a site layout with sample and asbestos locations. Appendix C contains the laboratory reports of analyses/chains of custody. Appendix D contains the photographic record of sample locations.

A summary of asbestos containing building materials, including categorization and quantities, is presented in Table 1. Table 2 provides a summary of the bulk material samples collected, the general location of the materials sampled, the approximate quantity of asbestos-containing materials present in each homogeneous area and the laboratory analytical results.

Table 1
Summary of Asbestos Containing Building Materials

MATERIAL CATEGORY	MATERIAL DESCRIPTION	TOTAL APPROXIMATE AMOUNT
FRIABLE	Gray/Tan Pipe Insulation	480 LF
CATEGORY I NON-FRIABLE	Black/Yellow Carpet Mastic	140 SF
CATEGORY II NON-FRIABLE	Transite Panels	240 SF

SF=Square Feet; LF=Linear Feet

Table 2
Bulk Material Samples & Laboratory Analytical Results

SAMPLE ID	DESCRIPTION & LOCATION	APPROX. AMOUNT	ASBESTOS TYPE/ PERCENT
MA-1-01,02	**Transite Panels, Exterior Soffit**	**240 SF**	**20% Chrysotile**
MA-2-01,02	Gray Window Glazing	NQ	<1% Chrysotile
MA-3-01,02	Brown Floor Tile	NQ	None Detected
MA-3-01,02	Yellow Mastic	NQ	None Detected
MA-4-01,02	White Ceiling Tile	NQ	None Detected
MA-5-01,02	Brown Floor Tile	NQ	None Detected
MA-5-01,02	Yellow Mastic	NQ	None Detected
MA-5-01,02	Tan Mastic	NQ	None Detected
MA-5-01,02	White Leveling Compound	NQ	None Detected
MA-6-01,02	Cream Floor Tile	NQ	None Detected
MA-6-01,02	Yellow Mastic	NQ	None Detected
MA-7-01	**Black/Yellow Carpet Mastic**	**140 SF**	**2% Chrysotile**
MA-7-02	Yellow Carpet Mastic	NQ	None Detected
MA-8-01,02,03	**Gray/Tan Pipe Insulation**	**240 LF**	**25-30% Chrysotile**
MA-9-01,02,03	**Gray/Tan Pipe Insulation**	**240 LF**	**25-30% Chrysotile**
MA-10-01,02,03	Gray Fitting Insulation	NQ	None Detected
MA-11-01,02,03	Gray Fitting Insulation	NQ	None Detected

SF=Square Feet; LF=Linear Feet; EA = Each; NQ=Not Quantified; CS=Confirmation Sample

4.0 CONCLUSIONS & RECOMMENDATIONS

The asbestos-containing building materials present consisted of both friable and non-friable materials. The locations of these materials are shown on the layout in Appendix B.

Friable Asbestos-Containing Materials:

- Gray/Tan Pipe Insulation: Approximately 480 LF of piping insulation was present above ceilings and inside walls/chases, as well as openly exposed.

Non-friable Asbestos-Containing Materials:

- Black/Yellow Carpet Mastic: Approximately 140 SF of asbestos-containing black/yellow carpet mastic was present in Rooms 3-5.

- Transite® Soffit: The soffit at the entrance area on the north side of the armory building consists of approximately 240 SF of Transite® panels.

Recommendations for Friable Asbestos-containing Materials: The following recommendations are made for addressing friable materials. Disturbance of these materials is regulated by the Oklahoma Department of Labor.

1. Planned renovation and maintenance activities that could disturb friable asbestos: Prepare specifications/project design for abatement of piping that would be disturbed during renovation activities; solicit bids; award contract and complete abatement.

2. Planned demolition: Prepare specifications/project design for abatement of all friable asbestos materials; solicit bids; award contract and complete abatement.

3. Continued operation without abatement of friable asbestos: Prepare and implement an Asbestos Management Plan to manage the asbestos in place. This is to include Asbestos Awareness Training for maintenance and custodial personnel.

Recommendations for Non-friable Asbestos-containing Materials: Non-friable asbestos present were the black/yellow carpet mastic located in Rooms 3-5 and the Transite® panels located on the exterior of the north side of the armory building. These materials containing asbestos are not regulated unless they are disturbed in a manner that renders them friable; however, if they are to be removed, removal must be done by workers who are properly trained to remove them. The following actions are recommended for addressing non-friable materials:

1. Planned renovation: Prepare specifications for abatement of non-friable asbestos materials that would be disturbed during renovation activities; solicit bids; award contract and complete abatement.

2. Planned demolition: Non-friable materials present may remain in place during demolition activities and may be disposed as ordinary demolition/construction waste.

3. Continued operation without abatement of remaining asbestos: Prepare and implement an Asbestos Management Plan to manage the asbestos in place. This is to include Asbestos Awareness Training for maintenance and custodial personnel.

APPENDIX A

FEE: $25.00

Oklahoma Department of Labor

Richard Belcher

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. **OK159310.**

Mark Costello

MARK COSTELLO
Commissioner of Labor

August 31, 2011

Date of Issuance

EXPIRES: August 31, 2012

FEE: $500.00

Oklahoma Department of Labor

Emmett Muenker

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 MANAGEMENT PLANNER

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-MP130435.

Mark Costello

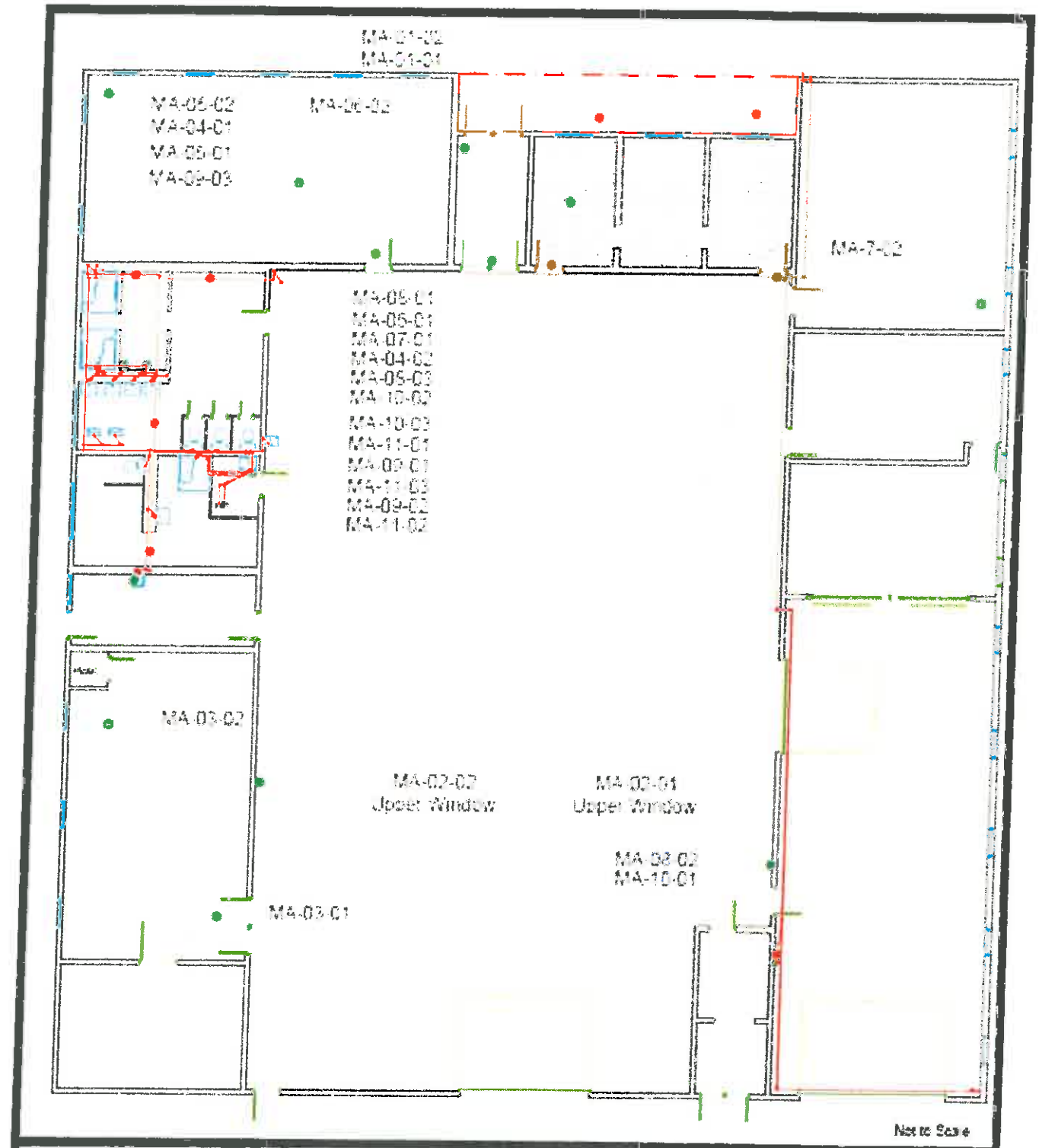
MARK COSTELLO
Commissioner of Labor

March 14, 2011

Date of Issuance

EXPIRES: March 04, 2012

APPENDIX B



Oklahoma Department of Environmental Quality
National Guard Armory
601 South 5th Avenue
Madill, OK

Legend:

- = Positive Sample Location
- = Negative Sample Location
- = Mastic under carpet @ 140 SF
- = Piping With ACM Insulation @ 480 LF
- = Transite Panels @ 240 SF

N

ENERCON

FIGURE 1
Asbestos Sample Locations

Project No: ENMISC2501

APPENDIX C

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. 201201
Account Number: A845
Date Received: 10/27/2011
Received By: Robin Naik
Date Analyzed: 10/27/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Project: Madill Armory
Project Location: Madill, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
001	MA-1-01	Homogeneous	Gray Transite	Asbestos Present Chrysotile 20	NA	CaCO3 Binder
002	MA-1-02	Homogeneous	Gray Transite	Asbestos Present Chrysotile 20	NA	CaCO3 Binder
003	MA-2-01	Homogeneous	Gray Window Glazing	Asbestos Present Chrysotile <1	NA	CaCO3 Binder
004	MA-2-02	Homogeneous	Gray Window Glazing	Asbestos Present Chrysotile <1	NA	CaCO3 Binder
005	MA-3-01	Layered	Brown Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
005a		Layered	Yellow Mastic	Asbestos Not Present	Cellulose 3	Glue
006	MA-3-02	Layered	Brown Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3

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. 201201
Account Number: A845

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Date Received: 10/27/2011
Received By: Robin Naik
Date Analyzed: 10/27/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

Project: Madill Armory
Project Location: Madill, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
006a		Layered	Yellow Mastic	Asbestos Not Present	Cellulose	2	Glue
007	MA-4-01	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose Glass Fiber	30 30	Paint Perlite
008	MA-4-02	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose Glass Fiber	30 30	Paint Perlite
009	MA-5-01	Layered	Yellow Mastic	Asbestos Not Present	Cellulose	<1	Glue
009a		Layered	Brown Floor Tile	Asbestos Not Present	NA		Vinyl CaCO3
009b		Layered	Tan Mastic	Asbestos Not Present	NA		Glue
009c		Layered	White Leveling Compound	Asbestos Not Present	Cellulose	2	CaCO3 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. 201201
Account Number: A845
Date Received: 10/27/2011
Received By: Robin Naik
Date Analyzed: 10/27/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Project: Madill Armory
Project Location: Madill, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
010	MA-5-02	Layered	Brown Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
010a		Layered	Tan Mastic	Asbestos Not Present	Cellulose 2	Glue
011	MA-6-01	Layered	Cream Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
011a		Layered	Yellow Mastic	Asbestos Not Present	Cellulose <1	Glue
012	MA-6-02	Layered	Cream Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
012a		Layered	Yellow Mastic	Asbestos Not Present	Cellulose 2	Glue
013	MA-7-01	Homogeneous	Black/Yellow Carpet Mastic	Asbestos Present Chrysotile 2	Cellulose 2	Glue Tar

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

QUANTEM LABORATORIES

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201201
Account Number: A845
Date Received: 10/27/2011
Received By: Robin Naik
Date Analyzed: 10/27/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Project: Madill Armory
Project Location: Madill, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
014	MA-7-02	Homogeneous	Yellow Carpet Mastic	Asbestos Not Present	Cellulose <1	Glue
015	MA-8-01	Layered	Gray/Tan Pipe Insulation	Asbestos Present Chrysotile 30	Cellulose 40	Binder
015a		Layered	Black Pipe Insulation	Asbestos Not Present	Cellulose 35	Tar
016	MA-8-02	Layered	Gray/Tan Pipe Insulation	Asbestos Present Chrysotile 25	Cellulose 45	Binder
016a		Layered	Black Pipe Insulation	Asbestos Not Present	Cellulose 35	Tar
017	MA-8-03	Layered	Gray/Tan Pipe Insulation	Asbestos Present Chrysotile 25	Cellulose 45	Binder
017a		Layered	Black Pipe Insulation	Asbestos Not Present	Cellulose 35	Tar

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

QUANTEM® LABORATORIES

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201201
Account Number: A845
Date Received: 10/27/2011
Received By: Robin Naik
Date Analyzed: 10/27/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Project: Madill Armory
Project Location: Madill, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
018	MA-9-01	Layered	Gray/Tan Pipe Insulation	Asbestos Present Chrysotile 25	Cellulose 45	Binder
018a		Layered	Black Pipe Insulation	Asbestos Not Present	Cellulose 40	Tar
019	MA-9-02	Layered	Gray Pipe Insulation	Asbestos Not Present	Glass Fiber 35	CaCO3 Binder
019a		Layered	Tan Pipe Insulation	Asbestos Present Chrysotile 30	Cellulose 30	Binder
019b		Layered	Black Pipe Insulation	Asbestos Not Present	Cellulose 30	Tar
020	MA-0-03	Layered	Tan Pipe Insulation	Asbestos Present Chrysotile 25	Cellulose 45	Binder
020a		Layered	Black Pipe Insulation	Asbestos Not Present	Cellulose 35	Tar

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. 201201
Account Number: A845
Date Received: 10/27/2011
Received By: Robin Naik
Date Analyzed: 10/27/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Project: Madill Armory
Project Location: Madill, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
021	MA-10-01	Homogeneous	Gray Pipe Insulation	Asbestos Not Present	Glass Fiber	30	CaCO3 Binder
022	MA-10-02	Homogeneous	Gray Pipe Insulation	Asbestos Not Present	Glass Fiber	30	CaCO3 Binder
023	MA-10-03	Homogeneous	Gray Pipe Insulation	Asbestos Not Present	Glass Fiber	30	CaCO3 Binder
024	MA-11-01	Homogeneous	Gray Pipe Insulation	Asbestos Not Present	Glass Fiber	30	CaCO3 Binder
025	MA-11-02	Homogeneous	Gray Pipe Insulation	Asbestos Not Present	Glass Fiber	30	CaCO3 Binder
026	MA-11-03	Homogeneous	Gray Pipe Insulation	Asbestos Not Present	Glass Fiber	35	CaCO3 Binder

Gayle Ooten, Analyst

10/28/2011
Date of Report

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

Asbestos Chain-of-Custody

QUANTEM LABORATORIES

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

Page 1 of 2

This Box for Lab Use Only
Lab No. 201201
Accept Reject

Company Name: Enercon Services
Acct.#: B
Project Location: Madill, OK
Project Name: Madill Armory
Project Number:

LEGAL DOCUMENT
Please Print Legibly

Sample Number	To Be Analyzed	Color / Description	Volume / Area (if applicable)	Comments
MA-1-01		Transite Panels		242 SF
02		"		
MA-2-01		Window Caulk Box windows		(33x45)x26
02		"		
MA-3-01		Red/Beige 1x1 FT		
02		"		
MA-4-01		2x2 Ceiling Tile		
02		"		
MA-5-01		Brown/tan 1x1 FT		
02		"		Under Carpet
MA-6-01		Floor tile 1x1 Yellow		
02		"		
MA-7-01		Yellow/Black Carpet Mastic		
02		"		
MA-8-01		Pipe Insulation		
02				Cold
03		"		"
MA-9-01		Pipe Insulation		
02				Hot
03		"		"

Relinquished By	Date / Time	VIA	Received By	Date / Time
[signature]	10/26/11 / 1300	H	Marshall Bauman	10-26-11 / 1600
Marshall Bauman	10-26-11 / 1928	DB	PBN	10/27/11 8AM

Date Sampled: 10/26/11
Sampled By: RB

PLM
- [X] Bulk Analysis
- [ ] 400 Point Count
- [ ] 1000 Point Count
- [ ] Gravimetric Preparation Fee
- [ ] Other

PCM
- [ ] NIOSH 7400
- [ ] Other

TEM
- [ ] Air - AHERA
- [ ] Air - NIOSH 7402
- [ ] Bulk - Qualitative [Yes / No] - EPA 600/R-93/116
- [ ] Bulk - Quantitative [weight %] - Chatfield
- [ ] Dust - Qualitative [Yes / No]
- [ ] Dust - Quantitative [fibers/sq cm] - ASTM D5755
- [ ] Drinking Water - EPA 100.0
- [ ] Waste Water - EPA 600/4-83-043
- [ ] Other

TURNAROUND TIME
- [ ] Rush
- [ ] Same Day
- [X] 24 Hour
- [ ] 3-Day
- [ ] 5-Day

CONTACT INFORMATION
Name: Rick
Phone: 209 9637
Report Results VIA (CHOOSE ONE):
- [ ] FAX
- [X] QuanTEM WebSite
- [ ] E-Mail

Saturday FedEx Shipping - CALL TO SCHEDULE
Use this address for Saturday FedEx only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517
Mark Package 'HOLD FOR SATURDAY PICKUP'

QUANTEM LABORATORIES

Asbestos Chain-of-Custody

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

Page 2 of 2

This Box for Lab Use Only
Lab No. 201201
Accept Reject

Company Name: Environ Services
Acct.#: B
Project Location: Madill, OK
Project Name: Madill Armory
Project Number:

Sample Number	To Be Analyzed	Color / Description	Volume/ Area (if applicable)	Comments
MA-10-01		White / fitting mud		Cold
02		"		"
03				
MA-11-01		White / fitting mud		Hot
02		"		"
03				

LEGAL DOCUMENT
Please Print Legibly

PLM
- [X] Bulk Analysis
- [ ] 400 Point Count
- [ ] 1000 Point Count
- [ ] Gravimetric Preparation Fee
- [ ] Other

PCM
- [ ] NIOSH 7400
- [ ] Other

TEM
- [ ] Air - AHERA
- [ ] Air - NIOSH 7402
- [ ] Bulk - Qualitative [Yes / No] - EPA 600/R-93/116
- [ ] Bulk - Quantitative [weight %] - Chatfield
- [ ] Dust - Qualitative [Yes / No]
- [ ] Dust - Quantitative [fibers/sq cm] - ASTM D5755
- [ ] Drinking Water - EPA 100.2
- [ ] Waste Water - EPA 600/4-83-043
- [ ] Other

TURNAROUND TIME
- [ ] Rush
- [ ] Same Day
- [X] 24 Hour
- [ ] 3-Day
- [ ] 5-Day

CONTACT INFORMATION
Name: Rich
Phone: 2099627
Report Results VIA (CHOOSE ONE):
- [ ] FAX
- [X] QuanTEM WebSite
- [ ] E-Mail

Relinquished By	Date/Time	VIA	Received By	Date/Time
RB	10/26/11 1500	M	M Branan	10-26-11 / 1500
M Branan	10-26-11/1928	DB	MBW	10/27/11 8AM

Date Sampled: 10/26/11
Sampled By: RB

Saturday FedEx Shipping - CALL TO SCHEDULE
Use this address for Saturday FedEx only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517
Mark Package 'HOLD FOR SATURDAY PICKUP'

APPENDIX D

PHOTOGRAPHIC RECORD
MADILL ARMORY, MADILL OKLAHOMA

HA #1: Transite Panels

HA # 2: Window Caulking

HA #3: 1x1 Floor Tile (Red/Beige)

HA #4: 2x4 Ceiling Tile

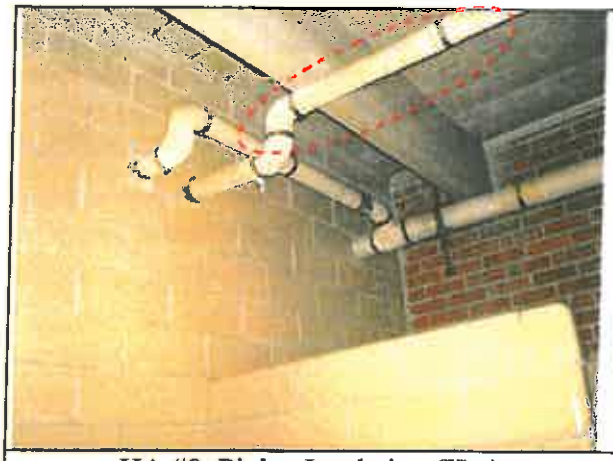
HA #5: 1x1 Floor Tile (Tan/Brown)

HA #6: 1x1 Floor Tile (Yellow)

HA #7: Carpet Mastic (Yellow/Black)

HA #8: Pipe Insulation (Cold)

PHOTOGRAPHIC RECORD
MADILL ARMORY, MADILL OKLAHOMA



HA #9: Piping Insulation (Hot)

HA # 10: Pipe Fitting (Cold)

HA #11: Pipe Fitting (Hot)

Madill Armory looking SE.

SURVEY AND ASSESSMENT FOR LEAD IN PAINT AND SETTLED DUST

NATIONAL GUARD ARMORY
601 SOUTH 5th AVENUE
MADILL, OKLAHOMA 73651

ENERCON Project Number ENMISC2501
December 12, 2011

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

ENERCON
Excellence - Every project. Every day.
Enercon Services, Inc.
6525 North Meridian Avenue, Suite 400
Oklahoma City, Oklahoma 73116
Phone: (405) 722-7693
Fax: (405) 722-7694

Prepared By :

Marshall L. Branscum
Environmental Scientist
LBP Inspector, OKINSR13415

Reviewed By :

Emmett W. Muenker
Senior Project Manager
LBP Risk Assessor, OKRASR11260

TABLE OF CONTENTS

SECTION **PAGE**

APPENDICES

EXECUTIVE SUMMARY

Enercon Services, Inc. (ENERCON) has completed a Survey and Assessment for Lead in Paint and Settled Dust (Survey) at the Madill National Guard Armory, 601 South 5th Avenue, Madill, Oklahoma. The survey was conducted on October 26, 2011 by Mr. Marshall Branscum and Mr. Richard Belcher, both of ENERCON.

The Survey and Assessment included non-destructive sampling of representative paint surfaces in the armory using an X-ray Fluorescence (XRF) Analyzer and dust wipe samples. Dust wipe samples were collected from the floor in each room using EPA/HUD wipe sampling protocols.

The results of XRF sampling indicated the following:

- Interior: The basketball hoop in Room 1, a small area of the concrete floor in Room 6, the concrete floor in Room 11, the pass through windowsill in Room 14 and the painted lower portion of the brick walls in Room 18 were coated with LBP.

- Exterior: No LBP was found on the exterior of the building.

The results of wipe samples collected from the floors revealed:

- Lead contamination above 40 $\mu g/ft^2$ was present in nine rooms: Rooms 1, 8, 9, 10, 11, 12, 13, 14 and 18.

1.0 INTRODUCTION

Enercon Services, Inc. (ENERCON) has completed a Survey and Assessment for Lead in Paint and Settled Dust (Survey) at the Madill National Guard Armory, 601 South 5th Avenue, Madill, Oklahoma. The inspection was conducted on October 26, 2011 by Mr. Marshall Branscum and Mr. Richard Belcher, both of ENERCON.

The Madill National Guard Armory was constructed on a concrete slab-on-grade foundation with flat roofs covered with tar and gravel. The exterior walls were constructed of brick. The interior walls consisted of brick, concrete block and drywall. Floors were bare concrete, painted concrete or covered with vinyl tiles and carpeting in some areas. The ceilings consisted of lay-in ceilings or the underside of the roof deck. The building contained a large central drill room with offices and other rooms located around the perimeter drill room. Layouts are included in Appendix A.

The survey was performed to identify the locations, condition and estimated quantities of Lead-Based Paint (LBP) and lead-laden settled dust in the Armory.

2.0 METHODOLOGY

The survey included visual observations, photographic documentation (Appendix B), dust wipe samples (Appendix C), and x-ray fluorescence (XRF) measurements of suspect Lead-Based Paint (LBP) (Appendix D). A visual inspection was performed in all rooms and the exterior of the building. The purpose of the visual inspection was to identify similarly painted surfaces so that representative XRF measurements could be made. These surfaces were determined by differentiating them by color, component and room. XRF measurements were then obtained for each building component type in each room and on each side of the building exterior. The criterion used for determination of the presence of LBP on painted surfaces was the EPA threshold for XRF readings as equal to or greater than 1.0 milligram per square centimeter (mg/cm^2).

One dust wipe sample was obtained in each room except for the drill room, where three samples were obtained. The criterion used for evaluating settled dust was based upon sampling according to the EPA/HUD protocols and laboratory analysis where the lead concentration is equal to or greater than 40.0 micrograms per square foot ($\mu g/ft^2$).

The presence of LBP was determined using a Niton Model XLp-703A XRF (X-Ray Fluorescence) Analyzer, Serial Number 24295. At power-up, the unit performed routine internal calibration and operational checks. It was then checked for reading accuracy using a 1.0 mg/cm^2 standard paint chip supplied by the manufacturer by a series of three measurements of the standard paint chip. This calibration was done immediately prior to use, at least every four hours of operation and prior to shut down each day of use. The Performance Characteristic Sheet for the XLp-703A is provided in Appendix E of this report. The location, component, substrate, color and other relevant information

regarding the sample was entered into the XRF using the touchpad on the instrument as each measurement was made. Upon completion of the measurements, the data was downloaded into an Excel spreadsheet using software provided by the analyzer manufacturer. The Excel spreadsheet is provided in Appendix D of this report. Some corrections of the downloaded data were made due to obvious keypad entry errors. Due to the sensitivity of the proximity sensor on the XRF, a few null readings resulted, particularly when attempting to sample rough or uneven painted surfaces. These readings were not deleted from the spreadsheet in order to maintain the continuity of the sample numbers.

Each room was given an arbitrary number on a building floor plan. The sides of the rooms and the building exterior were designated by letters with street address side labeled as "Side A," and the remaining sides denoted as B, C and D following a clockwise pattern.

The actual number of XRF measurements completed was dependent upon the different painted components and colors of paint present. The XRF instrument measures all layers of paint present at the sampling location. Therefore, the XRF instrument returns a positive reading even through layers of non-lead paint that have been applied when a layer of LBP exists on the component.

The condition of painted surfaces was recorded during the survey and is discussed in the Results Section below.

3.0 RESULTS

3.1 Lead-Based Paint

A total of 182 XRF samples were collected, including calibration and null readings. Figure 1 in Appendix A shows the location of the components with LBP. Tables 1, 2, and 3 provide a summary of building components with LBP as identified by XRF sampling along with their locations and sizes. The painted surfaces sampled during the survey ranged from intact to poor condition. Representative photographs were taken of components where positive readings (1.0 mg/cm^2 or greater) were obtained and are provided in Appendix B.

The results of XRF sampling indicated the following building components were coated with LBP:

Interior Components:

- Basketball goal hoop, Room 1
- Concrete floor, Room 6 (small area) and Room11
- Pass through window sill, Room 14
- Lower portion of brick walls, Room 18

Exterior Components:

- No LBP was present on the exterior of the building.

Table 1 –Lead-Based Paint Locations (XRF)
Doors and Door Frames

Identified Lead-Based Paint (Color/Description)	Lead Content (mg/cm^2)	Location	Size of Door/Frame
No doors or door frames were coated with LBP.			

Table 2 –Lead-Based Paint Locations (XRF)
Window Frames

Identified Lead-Based Paint (Color/Description)	Lead Content (mg/cm^2)	Location	Size and Number of Windows
Black/Pass Through Window Sill	1.2	Room 14, Side B	36" x 42" (1)

Table 3 –Lead-Based Paint (XRF)
Other Surfaces/Components

Identified Lead-Based Paint (Color)	Lead Content (mg/cm^2)	Location	Surface/Components
Orange	1.4	Room 1, Side B	Basketball Goal Hoop (Metal)
Green	3.0	Room 6	Floor (Concrete)
Red/Gray and Yellow	2.4 & 1.6	Room 11	Floor (Concrete)
Green	0.7*	Room 18, Side A	Wall (Brick)
Green	1.2	Room 18, Side B	Wall (Brick)
Green	1.5	Room 18, Side C	Wall (Brick)
Green	1.9	Room 18, Side D	Wall (Brick)

* Note: Wall A in Room 18 was sampled and was below the 1.0 mg/cm^2 threshold. However, based on this reading and the fact that walls A, B, and C were painted the same color and were all above the threshold, the paint on wall A should be treated as LBP.

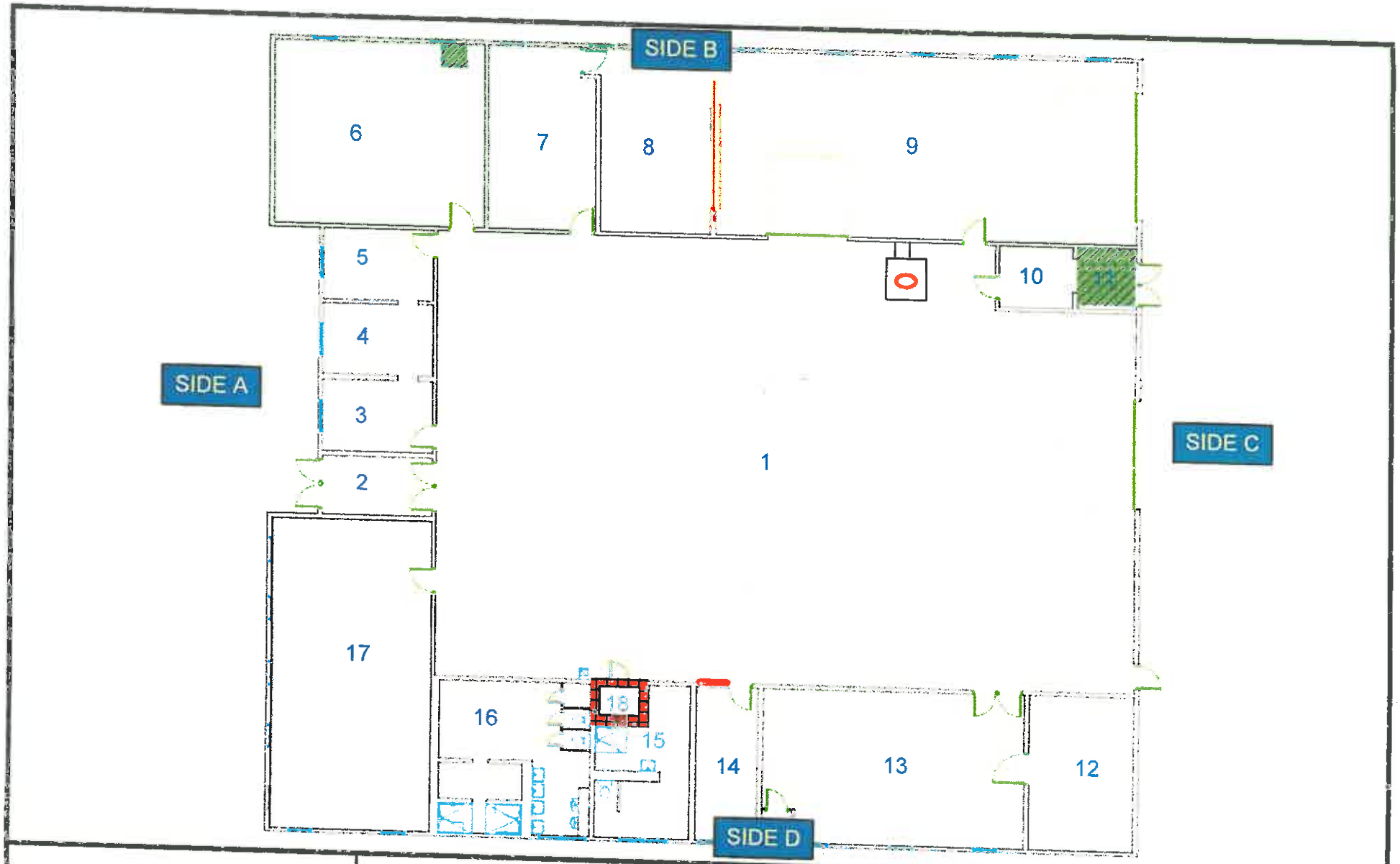
3.2 Dust Wipe Samples

Dust wipe samples were obtained following the EPA/HUD protocols. A template measuring one square foot was used to provide a known sampling area. Concentrations of 40.0 $\mu g/ft^2$ or greater were considered contaminated, in accordance with HUD/EPA guidelines. One dust wipe sample was obtained in each room except for the drill room, where three samples were collected, with a total of 20 wipe samples collected in the armory. Laboratory results from the dust wipe samples are presented in Appendix C. Nine rooms had lead dust contamination above the threshold. The locations determined by laboratory analysis to be contaminated with lead dust are listed in Table 4 and on Figure 2 in Appendix A.

Table 4 – Positive Dust Wipe Locations

Sample Number	Lead Content (µg/ft2)	Location	Square Footage of Positive Location
MA-01A	81.2	Room 1	3,535
MA-08	120	Room 8	322
MA-09	54.2	Room 9	1,290
MA-10	426	Room 10	75
MA-11	855	Room 11	65
MA-12	105	Room 12	280
MA-13	61.9	Room 13	780
MA-14	42.6	Room 14	180
MA-18	322	Room 18	40

APPENDIX A



Oklahoma Department of Environmental Quality
MADILL ARMORY
601 South 5th Avenue
Madill, OK

Legend:

- Floor - LBP
- Walls - LBP
- Basketball Hoop - LBP
- Pass Through Window Sill - LBP

N

ENERCON

Figure 1
LEAD-BASED PAINT LOCATIONS

Project No: ENMISC2501

Oklahoma Department of Environmental Quality
MADILL ARMORY
601 South 5th Avenue
Madill, OK

Legend:

- Dust Wipe Sample Location, Positive, > 40 ug / ft²
- Dust Wipe Sample Location, Negative, < 40 ug / ft²

N

ENERCON

Figure 2
LEAD DUST WIPE SAMPLE LOCATIONS

Project No: ENMISC2501

APPENDIX B

APPENDIX B - PHOTOGRAPHIC RECORD

Project No: ENMISC2501

Project Name: Madill National Guard Armory

Photo #1: Madill National Guard Armory.

Photo #2: View of orange painted basketball hoop in Room 1 - LBP.

Photo #3: View of green painted concrete floor in Room 6 - LBP.

Photo # 4: Yellow, red, and gray painted concrete floor in Room 11 – LBP.

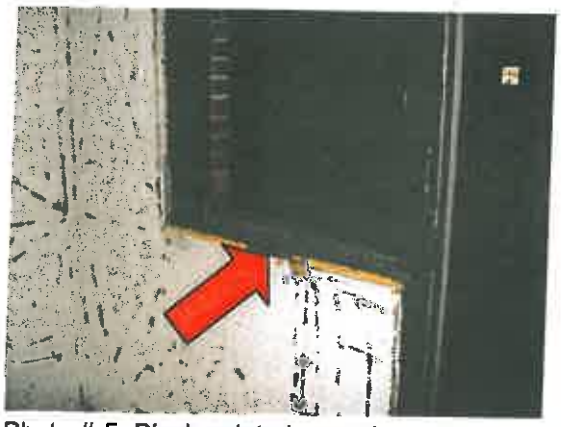


Photo # 5: Black painted pass through window sill in Room 14 – LBP.

Photo # 6: Green painted brick wall in Room 18 - LBP.

APPENDIX C

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 201202
Date Received: 10/27/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 10/28/2011

AIHA ID: 101352

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Acct. No.: A845

Project: Madill Armory
Location: 601 South 5th Ave, Madill, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	MA-01A	Wipe	Lead	81.2	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
002	MA-01B	Wipe	Lead	36.9	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
003	MA-01C	Wipe	Lead	21.0	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
004	MA-02	Wipe	Lead	19.0	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
005	MA-03	Wipe	Lead	<16.0	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
006	MA-04	Wipe	Lead	<16.0	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
007	MA-05	Wipe	Lead	<16.0	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
008	MA-06	Wipe	Lead	<16.0	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
009	MA-07	Wipe	Lead	21.0	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
010	MA-08	Wipe	Lead	120	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
011	MA-09	Wipe	Lead	54.2	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
012	MA-10	Wipe	Lead	426	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
013	MA-11	Wipe	Lead	855	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
014	MA-12	Wipe	Lead	105	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
015	MA-13	Wipe	Lead	61.9	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
016	MA-14	Wipe	Lead	42.6	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
017	MA-15	Wipe	Lead	21.1	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)

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

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

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

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

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

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 201202
Date Received: 10/27/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 10/28/2011

AIHA ID: 101352

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Acct. No.: A845

Project: Madill Armory
Location: 601 South 5th Ave, Madill, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	MA-16	Wipe	Lead	33.7	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
019	MA-17	Wipe	Lead	17.3	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)
020	MA-18	Wipe	Lead	322	16	ug/sq. Ft.	10/28/11 15:30	W EPA 7420 (1)

Authorized Signature: Rebecca Sparks
Rebecca Sparks, Analyst

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

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

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

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

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

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

Supplemental Report
QAQC Results

QA ID: 9326
Test: Lead

Date: 10/28/2011
Matrix: Wipe

Lab Number: 201202
Approved By: Rebecca Sparks
Date Approved: 10/28/2011

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
FCV	4.5	4.8	5.5
CCV	4.5	5.2	5.5
ICV	0.8	1.1	1.2
RLVS	0.256	0.383	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	5.470	5.991	109.5	5.700	104.2	5.0
MS-W1	0.000	5.579	5.529	99.1	5.519	98.9	0.2

Authorized Signature: Rebecca Sparks

Rebecca Sparks, Analyst

QUANTEM LABORATORIES

Lead Chain-of-Custody

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

This Box for Lab Use Only
Lab No. 201202
Accept (circled) Reject

Company Name: Enercon Services, Inc
Acct.#: ______
Project Name: Madill Armory
Project Location: 601 South 5th Ave, Madill, OK
Project Number: ______

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	PPM	Wt %	mg / kg	mg / l	µg / l	µg / sq. ft.	µg / cu. M.	µg / cm²
1.	MA-01A	Floor	144 in²	C	X						X		
2.	-01B	↓	↓		↓						↓		
3.	-01C												
4.	-02												
5.	-03												
6.	-04												
7.	-05												
8.	-06												
9.	-07												
10.	-08												
11.	-09												
12.	-10												
13.	-11												
14.	-12												
15.	↓ 13	↓	↓		↓						↓		

Sample Matrix Codes

- A - Soil
- B - Paint Chips
- C - Surface / Dust Wipes
- D - Bulk Miscellaneous
- E - Air Cassette
- F - Other (SPECIFY)

LEGAL DOCUMENT
Please Print Legibly

TURNAROUND TIME

- [ ] Same Day
- [X] 24 Hour
- [ ] 3-Day
- [ ] 5-day

CONTACT INFORMATION

Name: Marshall Branscum
Phone: 722-7693
Report Results VIA (CHOOSE ONE):
- [ ] FAX:
- [X] QuanTEM WebSite
- [ ] E-Mail:

Relinquished by	Date/Time	Via	Received by	Date/Time	Date Sampled	Sampled by
Marshall M. Branscum	10-26-11/1925	DB	S. Luftwick	10/27/11 8:00	10-26	MLB/RB

Saturday FedEx Shipping - CALL TO SCHEDULE
Use this address for Saturday FedEx only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517
Mark Package "HOLD FOR SATURDAY PICKUP"

QUANTEM LABORATORIES

Lead Chain-of-Custody

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

This Box for Lab Use Only
Lab No. 201202 (Accept) Reject

Company Name: Emerian Services, Inc. Acct #: ______ Project Name: Madill Armory
Project Location: 601 South 5th Ave, Madill, OK Project Number: ______

	Sample Number	Sample Description	Volume or Area	Sample Matrix	Analysis: Pb	PPM	wt %	mg / kg	mg / l	µg / sq. ft.	µg / cu. m	mg / cm²
16.	MA-14	Floor	144in²	C	X					X		
17.	-15	↓	↓	↓	↓					↓		
18.	-16	↓	↓	↓	↓					↓		
19.	-17	↓	↓	↓	↓					↓		
20.	↓ -18	↓	↓	↓	↓					↓		

Sample Matrix Codes:
A - Soil
B - Paint Chips
C - Surface / Dust Wipes
D - Bulk Miscellaneous
E - Air Cassette
F - Other (SPECIFY)

LEGAL DOCUMENT
Please Print Legibly

TURNAROUND TIME
- Same Day
- X 24 Hour
- 3-Day
- 5-day

CONTACT INFORMATION
Name: Marshall Branscum
Phone: 722-7693
Report Results VIA (CHOOSE ONE):
- FAX:
- X QuanTEM WebSite
- E-Mail:

Relinquished by: Marshall M. Branscum 10-26-11 / 1925 DB
Received by: S Leftwich 10/27/11 8:00
Date Sampled: 10-26
Sampled by: MLB/RB

Saturday FedEx Shipping - CALL TO SCHEDULE
Use this address for Saturday FedEx only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517
Mark Package "HOLD FOR SATURDAY PICKUP"

APPENDIX D

National Guard Armory
601 S. 5th Avenue
Madill, OK

Lead-Based Paint Inspection

Inspector: Marshall L. Branscum
Date: October 26, 2011

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Room	Results	PbC	PbL	PbK
										2.49	0.44	0
1	10/26/2011 12:20						CALIBRATE		Null	1	1	< LOD
2	10/26/2011 12:33						CALIBRATE		Positive	1	1	1
3	10/26/2011 12:34						CALIBRATE		Negative	0.9	0.9	1.1
4	10/26/2011 12:35						CALIBRATE		Negative	0.9	0.9	1.1
5	10/26/2011 12:36						MADILL ARMORY	EXTERIOR	Negative	0.25	0.25	< LOD
6	10/26/2011 12:52	DOOR LINTEL	METAL	A	POOR	GRAY	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
7	10/26/2011 12:52	DOOR LINTEL	METAL	A	POOR	GRAY	MADILL ARMORY	EXTERIOR	Negative	0.1	0.1	< LOD
8	10/26/2011 12:53	WINDOW SILL	CONCRETE	A	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
9	10/26/2011 12:53	WINDOW SILL	CONCRETE	A	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
10	10/26/2011 12:53	WINDOW SILL	CONCRETE	A	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
11	10/26/2011 12:54	WINDOW SILL	CONCRETE	A	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	0.06	0.06	< LOD
12	10/26/2011 12:55	WINDOW SILL	CONCRETE	A	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	0.05	0.05	< LOD
13	10/26/2011 12:55	GUTTER	METAL	A	INTACT	BROWN	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
14	10/26/2011 12:56	GUTTER DOWNSPOUT	METAL	A	INTACT	BROWN	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
15	10/26/2011 12:57	OVERHANG	TRANSITE	A	POOR	WHITE	MADILL ARMORY	EXTERIOR	Null	< LOD	< LOD	< LOD
16	10/26/2011 12:57	OVERHANG	TRANSITE	A	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	0.06	< LOD
17	10/26/2011 12:57	OVERHANG TRIM BOARD	WOOD	A	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
18	10/26/2011 12:58	FASCIA	WOOD	A	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
19	10/26/2011 12:59	FASCIA	WOOD	A	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
20	10/26/2011 13:00	WINDOW LINTEL	METAL	A	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
21	10/26/2011 13:01	WINDOW LINTEL	METAL	A	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
22	10/26/2011 13:01	WINDOW LINTEL	METAL	A	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
23	10/26/2011 13:02	WINDOW LINTEL	METAL	B	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
24	10/26/2011 13:03	WINDOW LINTEL	METAL	B	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
25	10/26/2011 13:03	WINDOW LINTEL	METAL	B	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
26	10/26/2011 13:04	WINDOW SILL	CONCRETE	B	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	0.07	0.07	< LOD
27	10/26/2011 13:05	WINDOW SILL	CONCRETE	B	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	0.08	0.08	< LOD
28	10/26/2011 13:05	WINDOW SILL	CONCRETE	B	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	0.09	0.09	< LOD
29	10/26/2011 13:14	DOOR	METAL	C	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
30	10/26/2011 13:14	DOOR FRAME	METAL	C	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
31	10/26/2011 13:14	DOOR LINTEL	METAL	C	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
32	10/26/2011 13:15	DOOR LINTEL	METAL	C	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
33	10/26/2011 13:15	DOOR	METAL	C	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
34	10/26/2011 13:16	DOOR FRAME	METAL	C	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
35	10/26/2011 13:17	ROLL_UP DOOR	METAL	C	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
36	10/26/2011 13:17	ROLL_UP DOOR FRAME	WOOD	C	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	0.17	0.17	< LOD
37	10/26/2011 13:18	ROLL_UP DOOR FRAME	WOOD	C	POOR	WHITE	MADILL ARMORY	EXTERIOR	Null	< LOD	< LOD	< LOD
38	10/26/2011 13:18	ROLL_UP DOOR FRAME	WOOD	C	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
39	10/26/2011 13:18	ROLL_UP DOOR	WOOD	C	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
40	10/26/2011 13:19	EDGE PROTECTOR	METAL	C	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
41	10/26/2011 13:19	EDGE PROTECTOR	METAL	C	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
42	10/26/2011 13:21	ROLL_UP DOOR LINTEL	METAL	C	FAIR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
43	10/26/2011 13:22	ROLL_UP DOOR LINTEL	METAL	C	FAIR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
44	10/26/2011 13:23	ROLL_UP DOOR	WOOD	C	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
45	10/26/2011 13:27	DOOR	METAL	D	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD

National Guard Armory
601 S. 5th Avenue
Madill, OK

Lead-Based Paint Inspection

Inspector: Marshall L. Branscum
Date: October 26, 2011

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Room	Results	PbC	PbL	PbK
46	10/26/2011 13:28	DOOR FRAME	METAL	D	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
47	10/26/2011 13:28	DOOR LINTEL	METAL	D	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
48	10/26/2011 13:29	WINDOW LINTEL	METAL	D	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
49	10/26/2011 13:29	WINDOW LINTEL	METAL	D	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
50	10/26/2011 13:29	WINDOW SILL	CONCRETE	D	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
51	10/26/2011 13:30	WINDOW SILL	CONCRETE	D	POOR	WHITE	MADILL ARMORY	EXTERIOR	Negative	0.13	0.13	< LOD
52	10/26/2011 14:03	HIGH BAY WINDOW FRAME	METAL	B	POOR	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	0.12	< LOD
53	10/26/2011 14:05	HIGH BAY WINDOW FRAME	METAL	B	POOR	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
54	10/26/2011 14:05	HIGH BAY WINDOW FRAME	METAL	B	POOR	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
55	10/26/2011 14:06	HIGH BAY WINDOW FRAME	METAL	B	POOR	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
56	10/26/2011 14:07	HIGH BAY WINDOW LINTEL	METAL	B	POOR	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
57	10/26/2011 14:07	HIGH BAY WINDOW LINTEL	METAL	B	POOR	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
58	10/26/2011 14:08	BAR JOIST	METAL	B	FAIR	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
59	10/26/2011 14:08	BAR JOIST	METAL	B	FAIR	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
60	10/26/2011 14:09	HIGH BAY WINDOW LINTEL	METAL	B	POOR	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
61	10/26/2011 14:11	HIGH BAY WINDOW LINTEL	METAL	D	POOR	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
62	10/26/2011 14:12	HIGH BAY WINDOW LINTEL	METAL	D	POOR	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
63	10/26/2011 14:12	HIGH BAY WINDOW FRAME	METAL	D	POOR	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
64	10/26/2011 14:13	HIGH BAY WINDOW FRAME	METAL	D	POOR	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
65	10/26/2011 14:15	CEILING WOOD TRIM	WOOD	B	INTACT	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
66	10/26/2011 14:16	CEILING DECKING	WOOD	B	FAIR	GRAY	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
67	10/26/2011 14:18	BACKBOARD	METAL	B	FAIR	WHITE	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
68	10/26/2011 14:19	B_BALL GOAL HOOP	METAL	B	FAIR	ORANGE	MADILL ARMORY	ROOM 1	Positive	1.4	1.4	< LOD
69	10/26/2011 14:20	B_BALL GOAL HOOP	METAL	B	FAIR	ORANGE	MADILL ARMORY	ROOM 1	Positive	1.7	1	1.7
70	10/26/2011 14:22	B_BALL GOAL MOUNT	WOOD	B	FAIR	SILVER	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
71	10/26/2011 14:22	B_BALL GOAL MOUNT	METAL	B	POOR	SILVER	MADILL ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
72	10/26/2011 14:24	WALL	BRICK	A	INTACT	BROWN	MADILL ARMORY	ROOM 1	Negative	0.3	0.3	< LOD
73	10/26/2011 14:34	WINDOW FRAME	WOOD	B	INTACT	RED	MADILL ARMORY	ROOM 2	Negative	< LOD	< LOD	< LOD
74	10/26/2011 14:35	DOOR	METAL	C	FAIR	BEIGE	MADILL ARMORY	ROOM 2	Negative	< LOD	< LOD	< LOD
75	10/26/2011 14:35	DOOR FRAME	METAL	C	FAIR	RED	MADILL ARMORY	ROOM 2	Negative	< LOD	< LOD	< LOD
76	10/26/2011 14:35	DOOR LINTEL	METAL	C	INTACT	RED	MADILL ARMORY	ROOM 2	Negative	< LOD	< LOD	< LOD
77	10/26/2011 14:42	DOOR LINTEL	METAL	C	INTACT	RED	MADILL ARMORY	ROOM 3	Negative	< LOD	< LOD	< LOD
78	10/26/2011 14:42	DOOR FRAME	METAL	C	FAIR	RED	MADILL ARMORY	ROOM 3	Negative	< LOD	< LOD	< LOD
79	10/26/2011 14:43	DOOR	METAL	C	POOR	BEIGE	MADILL ARMORY	ROOM 3	Negative	< LOD	< LOD	< LOD
80	10/26/2011 14:43	DOOR FRAME	METAL	B	POOR	RED	MADILL ARMORY	ROOM 3	Negative	< LOD	< LOD	< LOD
81	10/26/2011 14:44	DOOR FRAME	METAL	B	INTACT	RED	MADILL ARMORY	ROOM 4	Negative	< LOD	< LOD	< LOD
82	10/26/2011 14:44	DOOR FRAME	METAL	C	FAIR	RED	MADILL ARMORY	ROOM 5	Negative	< LOD	< LOD	< LOD
83	10/26/2011 14:45	DOOR LINTEL	METAL	C	FAIR	RED	MADILL ARMORY	ROOM 5	Negative	< LOD	< LOD	< LOD
84	10/26/2011 14:46	DOOR	METAL	C	FAIR	BEIGE	MADILL ARMORY	ROOM 5	Negative	< LOD	< LOD	< LOD
85	10/26/2011 14:47	DOOR	METAL	D	POOR	BEIGE	MADILL ARMORY	ROOM 6	Negative	< LOD	< LOD	< LOD
86	10/26/2011 14:47	DOOR FRAME	METAL	D	FAIR	RED	MADILL ARMORY	ROOM 6	Negative	< LOD	< LOD	< LOD
87	10/26/2011 14:48	DOOR LINTEL	METAL	D	INTACT	RED	MADILL ARMORY	ROOM 6	Negative	< LOD	< LOD	< LOD
88	10/26/2011 14:48	DOOR LINTEL	METAL	D	INTACT	RED	MADILL ARMORY	ROOM 7	Negative	< LOD	< LOD	< LOD
89	10/26/2011 14:48	DOOR FRAME	METAL	D	INTACT	RED	MADILL ARMORY	ROOM 7	Negative	< LOD	< LOD	< LOD
90	10/26/2011 14:49	DOOR	METAL	D	FAIR	BEIGE	MADILL ARMORY	ROOM 7	Negative	0.2	0.2	< LOD

National Guard Armory
601 S. 5th Avenue
Madill, OK

Lead-Based Paint Inspection

Inspector: Marshall L. Branscum
Date: October 26, 2011

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Room	Results	PbC	PbL	PbK
91	10/26/2011 14:54	DOOR FRAME	WOOD	C	POOR	GRAY	MADILL ARMORY	ROOM 8	Negative	< LOD	< LOD	< LOD
92	10/26/2011 14:55	DOOR LINTEL	WOOD	C	POOR	GRAY	MADILL ARMORY	ROOM 8	Negative	< LOD	< LOD	< LOD
93	10/26/2011 14:55	WALL	WOOD	A	FAIR	BEIGE	MADILL ARMORY	ROOM 8	Negative	< LOD	< LOD	< LOD
94	10/26/2011 14:56	WALL	BRICK	B	INTACT	BEIGE	MADILL ARMORY	ROOM 8	Negative	< LOD	< LOD	< LOD
95	10/26/2011 14:57	WALL	WOOD	A	POOR	GRAY	MADILL ARMORY	ROOM 8	Negative	< LOD	< LOD	< LOD
96	10/26/2011 14:58	CEILING	WOOD	A	POOR	GRAY	MADILL ARMORY	ROOM 8	Negative	< LOD	< LOD	< LOD
97	10/26/2011 14:59	WINDOW BARS	METAL	B	POOR	BLACK	MADILL ARMORY	ROOM 8	Negative	< LOD	< LOD	< LOD
98	10/26/2011 15:00	DOOR	WOOD	A	POOR	GRAY	MADILL ARMORY	ROOM 8	Negative	< LOD	< LOD	< LOD
99	10/26/2011 15:01	ROLL_UP DOOR	WOOD	D	FAIR	GRAY	MADILL ARMORY	ROOM 9	Negative	< LOD	< LOD	< LOD
100	10/26/2011 15:02	ROLL_UP DOOR FRAME	WOOD	D	FAIR	GRAY	MADILL ARMORY	ROOM 9	Negative	< LOD	< LOD	< LOD
101	10/26/2011 15:02	WALL	BRICK	D	INTACT	RED	MADILL ARMORY	ROOM 9	Negative	< LOD	< LOD	< LOD
102	10/26/2011 15:03	DOOR	METAL	D	FAIR	BEIGE	MADILL ARMORY	ROOM 9	Negative	0.06	0.06	< LOD
103	10/26/2011 15:03	DOOR FRAME	METAL	D	FAIR	RED	MADILL ARMORY	ROOM 9	Negative	< LOD	< LOD	< LOD
104	10/26/2011 15:03	DOOR LINTEL	METAL	D	FAIR	RED	MADILL ARMORY	ROOM 9	Negative	< LOD	< LOD	< LOD
105	10/26/2011 15:05	WALL	WOOD	C	FAIR	WHITE	MADILL ARMORY	ROOM 10	Negative	< LOD	< LOD	< LOD
106	10/26/2011 15:06	WALL	BRICK	B	INTACT	RED	MADILL ARMORY	ROOM 11	Negative	< LOD	< LOD	< LOD
107	10/26/2011 15:06	WALL	BRICK	C	INTACT	RED	MADILL ARMORY	ROOM 11	Null	< LOD	< LOD	< LOD
108	10/26/2011 15:07	WALL	BRICK	C	INTACT	RED	MADILL ARMORY	ROOM 11	Negative	< LOD	< LOD	< LOD
109	10/26/2011 15:07	WALL	WOOD	A	INTACT	RED	MADILL ARMORY	ROOM 11	Negative	< LOD	< LOD	< LOD
110	10/26/2011 15:07	WALL	WOOD	D	INTACT	RED	MADILL ARMORY	ROOM 11	Negative	< LOD	< LOD	< LOD
111	10/26/2011 15:08	DOOR LINTEL	METAL	C	INTACT	WHITE	MADILL ARMORY	ROOM 11	Negative	< LOD	< LOD	< LOD
112	10/26/2011 15:09	FLOOR	CONCRETE		POOR	RED_GRAY	MADILL ARMORY	ROOM 11	Positive	2.4	2.4	< LOD
113	10/26/2011 15:09	FLOOR	CONCRETE		POOR	YELLOW	MADILL ARMORY	ROOM 11	Positive	1.6	1.6	< LOD
114	10/26/2011 15:15	DOOR	METAL	C	INTACT	BLACK	MADILL ARMORY	ROOM 12	Negative	< LOD	< LOD	< LOD
115	10/26/2011 15:15	DOOR FRAME	METAL	C	INTACT	BLACK	MADILL ARMORY	ROOM 12	Negative	< LOD	< LOD	< LOD
116	10/26/2011 15:16	CEILING	CONCRETE	C	INTACT	BEIGE	MADILL ARMORY	ROOM 12	Negative	< LOD	< LOD	< LOD
117	10/26/2011 15:16	WALL	BRICK	A	INTACT	BEIGE	MADILL ARMORY	ROOM 12	Negative	< LOD	< LOD	< LOD
118	10/26/2011 15:17	WALL	BRICK	B	INTACT	BEIGE	MADILL ARMORY	ROOM 12	Negative	< LOD	< LOD	< LOD
119	10/26/2011 15:17	WALL	BRICK	C	INTACT	BEIGE	MADILL ARMORY	ROOM 12	Negative	< LOD	< LOD	< LOD
120	10/26/2011 15:18	WALL	BRICK	D	INTACT	BEIGE	MADILL ARMORY	ROOM 12	Null	< LOD	< LOD	< LOD
121	10/26/2011 15:18	WALL	BRICK	D	INTACT	BEIGE	MADILL ARMORY	ROOM 12	Negative	< LOD	< LOD	< LOD
122	10/26/2011 15:19	WALL	BRICK	C	INTACT	BEIGE	MADILL ARMORY	ROOM 13	Negative	< LOD	< LOD	< LOD
123	10/26/2011 15:19	WALL	BRICK	D	INTACT	BEIGE	MADILL ARMORY	ROOM 13	Negative	< LOD	< LOD	< LOD
124	10/26/2011 15:20	WALL	BRICK	A	INTACT	BEIGE	MADILL ARMORY	ROOM 13	Negative	0.09	0.09	< LOD
125	10/26/2011 15:20	WALL	BRICK	B	INTACT	BEIGE	MADILL ARMORY	ROOM 13	Negative	< LOD	< LOD	< LOD
126	10/26/2011 15:21	FLOOR	CONCRETE	B	POOR	RED_GRAY	MADILL ARMORY	ROOM 13	Null	0.05	0.05	< LOD
127	10/26/2011 15:21	FLOOR	CONCRETE	B	POOR	RED_GRAY	MADILL ARMORY	ROOM 13	Negative	0.11	0.11	< LOD
128	10/26/2011 15:22	FLOOR	CONCRETE	B	POOR	RED_GRAY	MADILL ARMORY	ROOM 13	Negative	0.06	0.06	< LOD
129	10/26/2011 15:22	FLOOR	CONCRETE	B	POOR	RED_GRAY	MADILL ARMORY	ROOM 13	Negative	0.04	0.04	< LOD
130	10/26/2011 15:23	DOOR	METAL	B	FAIR	BEIGE	MADILL ARMORY	ROOM 13	Negative	< LOD	< LOD	< LOD
131	10/26/2011 15:23	DOOR FRAME	METAL	B	FAIR	RED	MADILL ARMORY	ROOM 13	Negative	< LOD	< LOD	< LOD
132	10/26/2011 15:24	DOOR LINTEL	METAL	B	FAIR	RED	MADILL ARMORY	ROOM 13	Negative	< LOD	< LOD	< LOD
133	10/26/2011 15:25	DOOR LINTEL	METAL	B	FAIR	RED	MADILL ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD
134	10/26/2011 15:25	DOOR FRAME	METAL	B	FAIR	RED	MADILL ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD
135	10/26/2011 15:25	DOOR	METAL	B	FAIR	BEIGE	MADILL ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD

National Guard Armory
601 S. 5th Avenue
Madill, OK

Lead-Based Paint Inspection

Inspector: Marshall L. Branscum
Date: October 26, 2011

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Room	Results	PbC	PbL	PbK
136	10/26/2011 15:26	WINDOW PASS THROUGH SILL	WOOD	B	POOR	BLACK	MADILL ARMORY	ROOM 14	Negative	0.4	0.4	< LOD
137	10/26/2011 15:27	WINDOW PASS THROUGH SILL	WOOD	B	POOR	BLACK	MADILL ARMORY	ROOM 14	Positive	1.2	1.2	1.6
138	10/26/2011 15:27	WINDOW PASS THROUGH FRAME	METAL	B	FAIR	BLACK	MADILL ARMORY	ROOM 14	Negative	0.6	0.6	< LOD
139	10/26/2011 15:28	WINDOW PASS THROUGH	WOOD	B	FAIR	BLACK	MADILL ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD
140	10/26/2011 15:29	WINDOW PASS THROUGH SILL	WOOD	B	FAIR	RED	MADILL ARMORY	ROOM 14	Negative	0.6	0.6	< LOD
141	10/26/2011 15:29	WINDOW PASS THROUGH SILL	WOOD	B	FAIR	RED	MADILL ARMORY	ROOM 14	Negative	0.5	0.5	< LOD
142	10/26/2011 15:31	WALL	BRICK	A	INTACT	GREEN	MADILL ARMORY	ROOM 14	Negative	0.4	0.4	< LOD
143	10/26/2011 15:32	WALL	BRICK	B	INTACT	GREEN	MADILL ARMORY	ROOM 14	Null	0.3	0.3	< LOD
144	10/26/2011 15:33	WALL	BRICK	B	INTACT	GREEN	MADILL ARMORY	ROOM 14	Negative	0.9	0.9	1.3
145	10/26/2011 15:33	WALL	BRICK	C	INTACT	GREEN	MADILL ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD
146	10/26/2011 15:34	WALL	BRICK	D	INTACT	GREEN	MADILL ARMORY	ROOM 14	Negative	0.5	0.5	1
147	10/26/2011 15:34	DOOR	METAL	D	POOR	GRAY	MADILL ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD
148	10/26/2011 15:35	DOOR FRAME	METAL	D	POOR	GRAY	MADILL ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD
149	10/26/2011 15:36	CEILING	WOOD	D	FAIR	GREEN	MADILL ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD
150	10/26/2011 15:37	CEILING SUPPORT	WOOD	D	FAIR	GREEN	MADILL ARMORY	ROOM 14	Negative	0.26	0.26	< LOD
151	10/26/2011 15:38	DOOR	METAL	B	FAIR	BEIGE	MADILL ARMORY	ROOM 15	Negative	< LOD	< LOD	< LOD
152	10/26/2011 15:38	DOOR FRAME	METAL	B	FAIR	RED	MADILL ARMORY	ROOM 15	Negative	< LOD	< LOD	< LOD
153	10/26/2011 15:39	DOOR LINTEL	METAL	B	FAIR	RED	MADILL ARMORY	ROOM 15	Negative	< LOD	< LOD	< LOD
154	10/26/2011 15:47	STALL WALL	METAL	A	INTACT	BROWN	MADILL ARMORY	ROOM 15	Negative	< LOD	< LOD	< LOD
155	10/26/2011 15:48	STALL WALL	METAL	A	INTACT	BLACK	MADILL ARMORY	ROOM 16	Negative	< LOD	< LOD	< LOD
156	10/26/2011 15:49	STALL WALL	METAL	C	INTACT	BLACK	MADILL ARMORY	ROOM 16	Negative	< LOD	< LOD	< LOD
157	10/26/2011 15:49	DOOR	METAL	B	FAIR	BEIGE	MADILL ARMORY	ROOM 16	Negative	< LOD	< LOD	< LOD
158	10/26/2011 15:49	DOOR FRAME	METAL	B	FAIR	RED	MADILL ARMORY	ROOM 16	Negative	< LOD	< LOD	< LOD
159	10/26/2011 15:50	DOOR LINTEL	METAL	B	FAIR	RED	MADILL ARMORY	ROOM 16	Negative	< LOD	< LOD	< LOD
160	10/26/2011 15:51	DOOR FRAME	METAL	A	FAIR	GRAY	MADILL ARMORY	ROOM 16	Negative	0.18	0.18	< LOD
161	10/26/2011 15:51	DOOR	METAL	A	POOR	GRAY	MADILL ARMORY	ROOM 16	Negative	< LOD	< LOD	< LOD
162	10/26/2011 15:52	DOOR	METAL	A	FAIR	BEIGE	MADILL ARMORY	ROOM 17	Null	< LOD	< LOD	< LOD
163	10/26/2011 15:52	DOOR	METAL	A	FAIR	BEIGE	MADILL ARMORY	ROOM 17	Negative	0.5	0.5	< LOD
164	10/26/2011 15:52	DOOR FRAME	METAL	C	FAIR	RED	MADILL ARMORY	ROOM 17	Negative	0.3	0.3	< LOD
165	10/26/2011 15:52	DOOR LINTEL	METAL	C	FAIR	RED	MADILL ARMORY	ROOM 17	Negative	< LOD	< LOD	< LOD
166	10/26/2011 15:53	DOOR LINTEL	METAL	B	FAIR	RED	MADILL ARMORY	ROOM 18	Negative	< LOD	< LOD	< LOD
167	10/26/2011 15:54	DOOR FRAME	METAL	B	FAIR	RED	MADILL ARMORY	ROOM 18	Negative	< LOD	< LOD	< LOD
168	10/26/2011 15:54	DOOR	METAL	B	FAIR	BEIGE	MADILL ARMORY	ROOM 18	Negative	< LOD	< LOD	< LOD
169	10/26/2011 15:55	WALL	BRICK	A	POOR	GREEN	MADILL ARMORY	ROOM 18	Negative	0.7	0.7	1.1
170	10/26/2011 15:55	WALL	BRICK	B	POOR	GREEN	MADILL ARMORY	ROOM 18	Positive	1.2	1.2	1.8
171	10/26/2011 15:56	WALL	BRICK	C	POOR	GREEN	MADILL ARMORY	ROOM 18	Positive	1.5	1.5	< LOD
172	10/26/2011 15:56	WALL	BRICK	D	POOR	GREEN	MADILL ARMORY	ROOM 18	Null	0.8	0.8	1.3
173	10/26/2011 15:57	WALL	BRICK	D	POOR	GREEN	MADILL ARMORY	ROOM 18	Positive	1.9	1.1	1.9
174	10/26/2011 15:59	FLOOR	CONCRETE	B	POOR	GREEN	MADILL ARMORY	ROOM 6	Positive	3	3	< LOD
175	10/26/2011 16:03	WALL	BRICK	D	INTACT	BROWN	MADILL ARMORY	ROOM 1	Negative	0.4	0.4	1.1
176	10/26/2011 16:04	WALL	BRICK	D	INTACT	BROWN	MADILL ARMORY	ROOM 1	Null	0.7	0.7	< LOD
177	10/26/2011 16:05	WALL	BRICK	D	INTACT	BROWN	MADILL ARMORY	ROOM 1	Negative	0.3	0.3	1
178	10/26/2011 16:08	WALL					CALIBRATE		Null	1	1	< LOD
179	10/26/2011 16:10	WALL					CALIBRATE		Negative	0.9	0.9	1.2
180	10/26/2011 16:10	WALL					CALIBRATE		Negative	0.9	0.9	1.3

National Guard Armory
601 S. 5th Avenue
Madill, OK

Lead-Based Paint Inspection

Inspector: Marshall L. Branscum
Date: October 26, 2011

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Room	Results	PbC	PbL	PbK
181	10/26/2011 16:10	WALL					CALIBRATE		Null	1	1	< LOD
182	10/26/2011 16:11	WALL					CALIBRATE		Negative	0.9	0.9	1.1

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

Department of Environmental Quality

This is to Certify That

ENERCON SVC INC

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

FIRM

Certification #: OKFIRM11152

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

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

Division Director
Air Quality Division

DEQ OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

MARSHALL BRANSCUM

INSPECTOR

Certification #: OKINSR13415

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

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

EMMETT MUENKER

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

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR11260

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

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

Division Director
Air Quality Division

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Environmental Programs Manager
Air Quality Division

SCOPES OF WORK

STATEMENT OF WORK
For
Remediation of Lead and Asbestos Contamination at Madill 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 Madill, Oklahoma. This statement of work (SOW) describes the cleanup of lead contaminated dust, abatement of lead-based paint, 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 Madill Armory is attached for review (**Attachment 1**).

The building is located at 601 South 5th Avenue, Madill, Oklahoma 73651. The building **does not** have available water and electricity to use during remediation.

SPECIAL PROVISIONS:

1. Work Schedule: The Contractor shall schedule all work to be complete within ninety (90) 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. The contractor shall perform this work in such a manner as to cause a minimum of interruption to normal work being performed in the contract area.
    c. 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.
    d. Coordination of work areas shall be scheduled with DEQ.
    e. 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 or have a licensed sub-contractor 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, indoor firing range remediation, 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 and lead-based paint abatement shall be completed.

2. Second – Enercon Services Inc. shall be contacted to confirm all asbestos has been appropriately removed and DEQ shall be contacted to confirm all lead-based paint abatement has been appropriately performed.

3. Third – All floors of the entire building shall be cleaned;

4. Fourth – DEQ shall be contacted to perform third party confirmation sampling to confirm all floors have been appropriately remediated.

ASBESTOS ABATEMENT INSTRUCTIONS

(See **Attachment 2** - Asbestos Survey Report for locations of asbestos)

- Below is a list of non-friable and/or non-regulated ACM along with instruction to remove or leave in place:
    - **Remove** 140 SF of black/yellow adhesive mastic beneath carpet in offices.
    - **Remove** 240 SF of transite panels on soffit at main entrance to building. Transite panels shall be replaced with like material (white fiber cement panel siding) and shall be painted with white exterior paint once installed. Installation of new panels shall meet or exceed the quality of the existing panels. All joints must be flush and sealed with exterior caulk.

- Friable and regulated ACM shall be removed as described in the attached Asbestos Abatement Project Design (**Attachment 2**).
    - All asbestos containing pipe wrap that is removed shall be replaced.

- For more details see the attached Madill Armory Asbestos Inspection Report with floor plan map showing locations of ACM (**Attachment 2**).

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

LEAD-BASED PAINT ABATEMENT INSTRUCTIONS

See Survey and Assessment for Lead in Paint and Settled Dust 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 painted walls in Room 18
   - The wood surrounding the pass through window in room 14 shall be removed, wrapped in 6 mil poly sheeting and properly disposed.
   - The basketball goal hoop shall be removed, wrapped in 6 mil poly sheeting, and properly disposed.
   - Deteriorated paint removed from building surface will be properly disposed.

2. **Friction and Impact Surfaces**

   A. Floors

   - The floors in Room 6 and Room 11 shall have all paint visibly removed from floors. Once paint is visibly removed, floors shall be HEPA vacuumed, wet washed and sealed with KM669 Acrylic Sealant.

3. **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 hazardous waste.
   - If Contractor uses a paint stripper that exhibits a characteristic of hazardous waste, or contains hazardous waste constituents, it is the Contractor's responsibility to characterize this waste under 40 CFR 262.11 and if they are determined to be hazardous waste, disposing of them as such. The Final Report shall contain all relevant information regarding the waste determination.
   - A completed and signed waste manifest, Land Disposal Notification Form, and Certificate of Disposal demonstrating that the paint chips were properly disposed at a hazardous waste facility must be included in the Final Report.

LEAD DUST REMEDIATION INSTRUCTIONS

See Survey and Assessment for Lead in Paint and 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.

- 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).
    - Contact Enercon Services 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.
    - Wash Water Disposal
        - All wash water from the building shall be filtered through a 1 micron filter and stored on site in containers;
        - The wash water will be sampled for total lead and total phosphorus; Total lead shall be run by ICP and total phosphorus shall be run by EPA Method 365.3;
        - Sample results shall be submitted to DEQ to determine if wash water can be disposed at the local Waste Water Treatment Facility;
        - Wash water shall be disposed appropriately.

2. Disposal of Materials

Hazardous Waste

- Lead contaminated dust from the cleaning of the building shall be disposed as hazardous waste;
- Wash water filters shall be disposed as hazardous waste;

Other

- Poly Sheeting shall be disposed as appropriate. If contractor plans to dispose as non-hazardous waste, best management practices such as vacuuming, washing, wiping down, or cleaning poly sheeting prior to disposal shall be implemented.
- Personal protective equipment (gloves, tyvec, face masks, etc.) shall be disposed as appropriate.
- Mop heads, towels, brushes, wipes, and other cleaning supplies shall be disposed as appropriate. If contractor plans to dispose as non-hazardous waste, best management practices such as vacuuming, washing, wiping down, or cleaning prior to disposal shall be implemented.

3. Confirmation and Clearance Sampling

- Contractor may use his own lab to check progress of remediation, however all DEQ decisions shall be based on analytical data from samples taken by Enercon Services Inc.
- Department of Environmental Quality (DEQ) will be responsible for taking all post remediation samples.
- DEQ shall be notified five (5) days prior to each sampling event.
- Contact Information: Department of Environmental Quality
  Contact: Dustin Davidson
  Phone: (405) 702-5115
  Email: Dustin.Davidson@deq.ok.gov
- <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 are complete.

FINAL REPORT

- Write final report and submit to DEQ;
  - Final report shall include asbestos and lead-based paint abatement;
- Final report shall include:
  - A detailed summary of work including any warranties and data;
  - sample results;
  - waste manifests; and
  - photo documentation of work;
    - Photo documentation of work will have color digital photos with captions describing photo;
    - Photos will show before and after photos of work completed.
- Final report will be submitted in hard copy and electronically on disc.

OWNER REPRESTATIVE

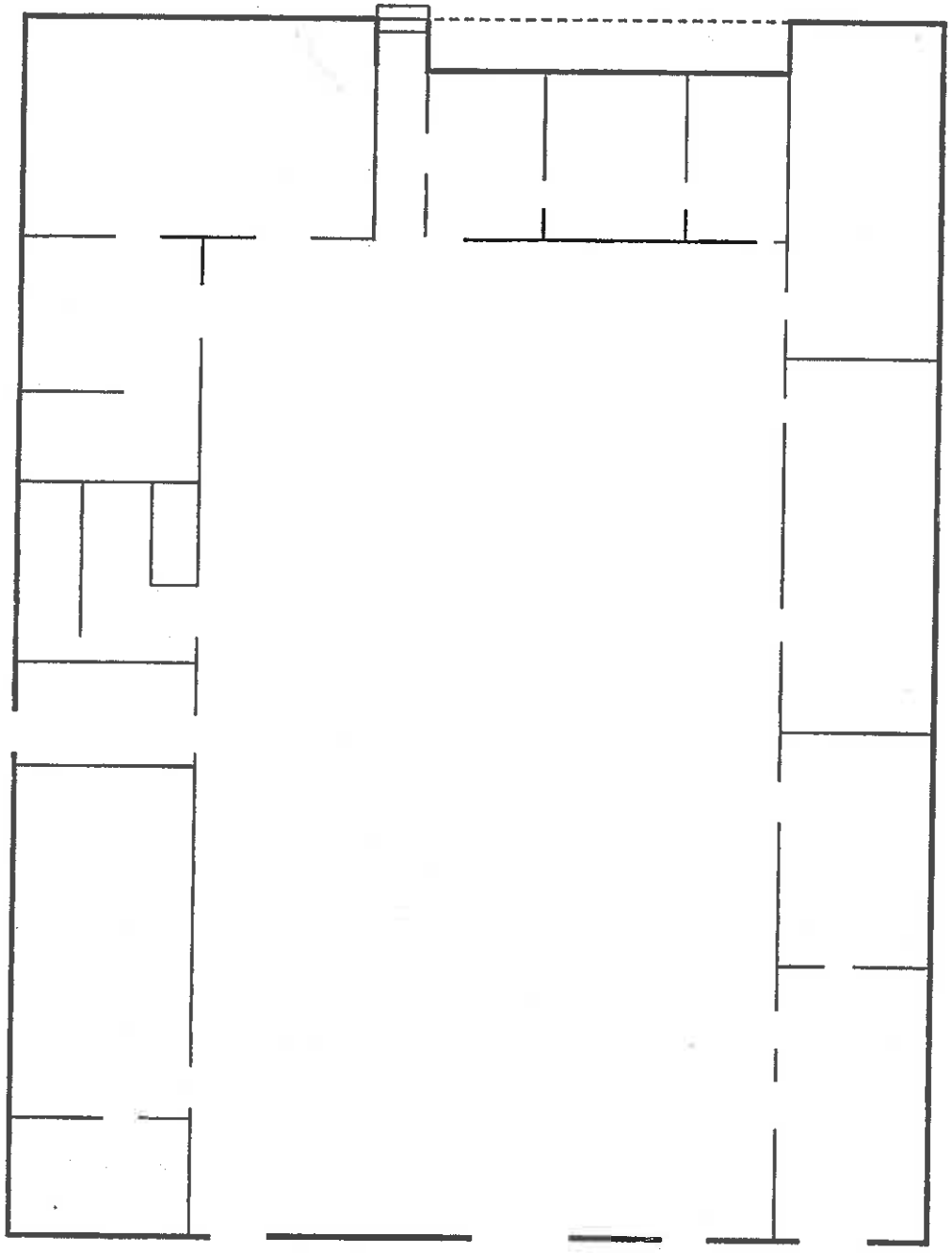
Owner's Representative:

Dustin Davidson
Oklahoma Department of Environmental Quality
Land Protection Division
707 N. Robinson
Oklahoma City, OK 73102
(405) 702-5115 (Office)
(405) 702-5101 (Fax)
E-Mail: Dustin.Davidson@deq.ok.gov

ATTACHMENT 1

Madill Armory Floor Plan Map

Madill Armory



Not to scale
Floor plan approximate

ATTACHMENT 2

Madill Armory Asbestos Project Design

Madill Armory Asbestos Inspection Report

ASBESTOS ABATEMENT PROJECT DESIGN
MADILL ARMORY
MADILL, OKLAHOMA

A. INTRODUCTION: This Project Design was prepared by Enercon Services, Inc., in order to provide a prudent course of action for handling of asbestos abatement of piping insulation in the Madill Armory. Protocols to be used are to protect abatement workers from exposure to airborne asbestos fibers during the work being performed. The building is unoccupied and will remain so until completion of the project.

B. PROJECT INFORMATION:

1. Project Name: Asbestos Abatement, Madill Armory
2. Description of Work/Occupancy: The work addressed herein involves glove-bagging of line and fitting insulation on piping in the Madill Armory.
3. Project Type: Renovation.
4. Abatement Contractor: To be determined by bid.
5. Industrial Hygiene/Air Monitoring Firm: To be determined by abatement contractor.
6. Analytical Laboratory: To be provided by abatement contractor.

C. REGULATORY COMPLIANCE (1): The specific governing regulations affecting this work include, but are not limited to, 29 CFR 1926.1101 (OSHA Construction Industry Asbestos Standard), 29 CFR 1910.134 (OSHA Respiratory Protection), 40 CFR 61, Subpart M (Asbestos NESHAP) and OAC 380:50 (Oklahoma Rules for Abatement of Friable Asbestos). Waste transport and disposal is to be performed by an Oklahoma-licensed asbestos waste transporter with a waste disposal manifest/chain of custody signed by the receiving landfill. DOT Class 9 placards are to be displayed during transportation of asbestos waste.

D. WORK SEQUENCING/SCHEDULING (2): The work in the Madill Armory is to be done in one task. The work is to be scheduled by the abatement contractor in coordination with Enercon Services and the Department of Environmental Quality. The work is expected to be planned for 10-hour work shifts on weekdays during normal work hours.

E. EGRESS AND FIRE PROTECTION (3): In the event emergency evacuation is necessary, the primary exit will be to exit the work area through the decon to the outside of the building. There are multiple exits available for secondary exits. Workers will be briefed on the available exit paths, emergency procedures and the assembly point at the beginning of the work shift. No special fire protection measures are required. One 10#ABC fire extinguisher will be placed inside the work area and one set at the decon. The work area extinguisher will be kept in the vicinity of the work crew.

F. MATERIALS TO BE ABATED (4):

1. Description: The material to be abated is line and fitting insulation on piping throughout the building.

2. Amount, Location and Type of Asbestos-Containing Materials (ACM): There is approximately 480 linear feet of piping insulation with fittings to be abated. The piping and fitting insulation contains from 25-30% Chrysotile. The laboratory report is attached.

G. ASBESTOS ABATEMENT METHODS (5):

Line and fitting insulation will be removed within critical barriers using glove-bag procedures with an attached decon and load-out. Removal of ceiling tiles for piping access may be necessary in some areas prior to prep and hanging of glove-bags. Demolition of portions of the restroom chase wall and walls with piping inside will be necessary for access to piping serving fixtures in the restrooms. Demolition will be done during prep with care taken not to disturb the piping. Poly drop cloths will be placed on the floor beneath the piping during installation of glove-bags. The decon and loadout will be will be erected at the doors into the drill room. Refer to the attached layout for the locations. A 600-1,200 CFM air filtration device (AFD) will be attached to the decon and exhausted outside. Bagged waste may be stored temporarily on a drop cloth in a convenient location inside of the work area awaiting loadout into a waste container. At the end of the work shift or when sufficient waste has accumulated for loadout, the waste will be removed from the storage area and loaded into a poly-lined disposal trailer/van.

H. ASBESTOS AIR MONITORING/RESPIRATORY PROTECTION (6-8): All prep work may be done unprotected. Full-body protective clothing and full-face APR with HEPA-cartridges will be worn during abatement. Full-body protective clothing and half-face APR may be worn during handling and loadout of the double-bagged waste. Personal air samples will be collected on a minimum of two workers or 25%, whichever is greater, during work requiring respiratory protection. One inside area air monitor will be placed inside the work area while abatement is in progress and moved as work progresses. One area monitor will be set outside the decon clean room during abatement and one will be placed along the load-out path during load-out. The decon AFD will be exhausted outside and will be monitored. Piping from which insulation was removed will be locked down using a tinted lockdown encapsulant or spray paint.

Five 1,200 liter PCM clearance samples will be collected in the work area following the visual inspection; approximate locations are noted on attached layout.

I. LABORATORY CERTIFICATIONS: The laboratory to be used for analysis of personal and area asbestos air samples will determined by the abatement contractor. All air samples will be collected by an experienced Asbestos Air Monitoring Technician qualified to collect and analyze air samples in Oklahoma.

J. CONTAINMENT METHODS (9):

Critical barriers and a drop cloth beneath the piping during glove-bagging will be used. Rolling scaffolding or ladders will be used as necessary to access the piping. Workers will be briefed by

the supervisor regarding relevant safety issues associated with the work at the beginning of each work shift. Asbestos barrier tape will be used as necessary to demarcate the regulated area. All electrical circuits within arm's reach of the glove-bags will be shut off and locked out/tagged out. Power for the decon shower, any temporary work lighting, HEPA-vacuums, and AFD for the decon will be supplied through a GFCI-board or pigtails. Power for abatement activities will be obtained from building sources.

K. **DECONTAMINATION SYSTEM (10):** An attached three-chambered decon will be used. An AFD will be connected to provide air flow through the decon located at the door to the room south of the restrooms. When arriving at the decon, workers are to enter the dirty room, remove their suits, enter the shower with only their respirator on, remove their respirator and shower with soap and water. After rinsing their body and respirator, they are to proceed into the clean room to dry off, put on their street clothes, clean their respirator and store it for subsequent use. The clean room is to be kept tidy. Water for the decontamination shower will be obtained from nearby sources in the building. Filtered shower effluent will be discharged into the sanitary sewer system serving the building. Procedures set forth in OAC 380:50-15-7, 8 and 12 are to be followed.

L. **SOIL CONTAMINATION (11):** No contaminated soils are to be abated in this project.

M. **DAMAGE PROTECTION (12):** The contractor will endeavor to protect the building from damage other than that which is necessary for access to the asbestos during abatement activities. Demolition of sections of the restroom chase wall and other walls concealing piping will be required for access to piping inside. Removal of the ceiling tiles will be required where piping is located above a lay-in ceiling. The contractor is to remove the ceiling tiles intact and work through the grid, protecting the grid from damage. He is to stack the tiles in the room from which they were removed for re-installation by others. The contractor is to protect the floor, walls, ceiling and other items in the building during lockdown of the piping to keep them free of encapsulant/paint, except where it may be necessary at wall penetrations.

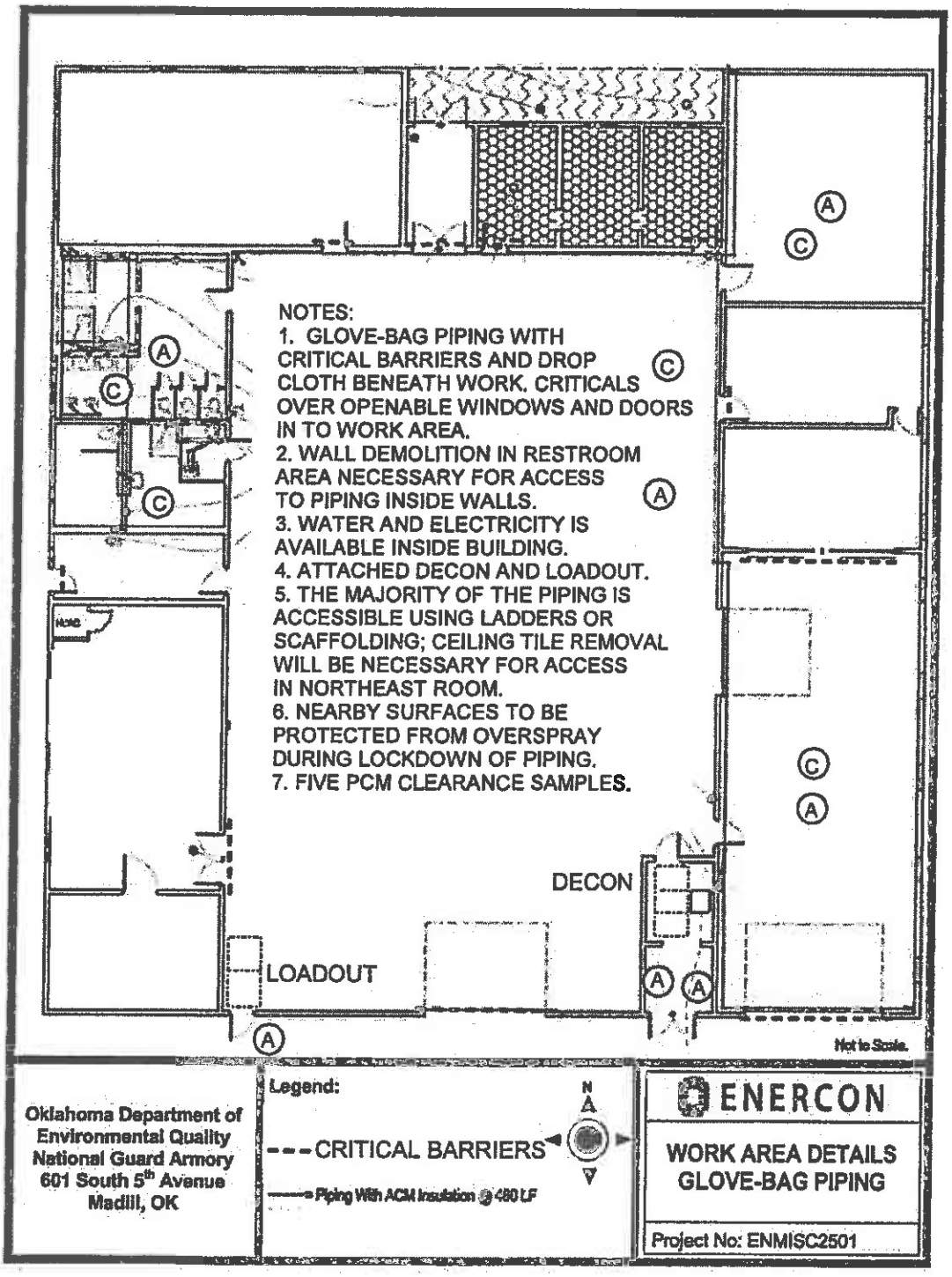
N. **VARIANCES REQUESTED (13):** None.

O. **INSPECTIONS:** ODOL is expected to conduct routine prep, in-progress, visual and final inspections for this project.

P. **CERTIFICATION:** This design was prepared by the undersigned for compliance with applicable federal and State regulations and approved variances.

2/8/2012 .

Bill Muenker Date
Asbestos Project Designer, OKPD-140007


NOTES:
1. GLOVE-BAG PIPING WITH CRITICAL BARRIERS AND DROP CLOTH BENEATH WORK. CRITICALS OVER OPENABLE WINDOWS AND DOORS IN TO WORK AREA.
2. WALL DEMOLITION IN RESTROOM AREA NECESSARY FOR ACCESS TO PIPING INSIDE WALLS.
3. WATER AND ELECTRICITY IS AVAILABLE INSIDE BUILDING.
4. ATTACHED DECON AND LOADOUT.
5. THE MAJORITY OF THE PIPING IS ACCESSIBLE USING LADDERS OR SCAFFOLDING; CEILING TILE REMOVAL WILL BE NECESSARY FOR ACCESS IN NORTHEAST ROOM.
6. NEARBY SURFACES TO BE PROTECTED FROM OVERSPRAY DURING LOCKDOWN OF PIPING.
7. FIVE PCM CLEARANCE SAMPLES.
DECON
LOADOUT
A
C
Not to Scale.
Oklahoma Department of Environmental Quality
National Guard Armory
601 South 5th Avenue
Madill, OK
Legend:
CRITICAL BARRIERS
Piping With ACM Insulation @ 480 LF
N
ENERCON
WORK AREA DETAILS
GLOVE-BAG PIPING
Project No: ENMISC2501

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. 201201
Account Number: A845

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Date Received: 10/27/2011
Received By: Robin Naik
Date Analyzed: 10/27/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

Project: Madill Armory
Project Location: Madill, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
014	MA-7-02	Homogeneous	Yellow Carpet Mastic	Asbestos Not Present	Cellulose <1	Glue
015	MA-8-01	Layered	Gray/Tan Pipe Insulation	Asbestos Present Chrysotile 30	Cellulose 40	Binder
015a		Layered	Black Pipe Insulation	Asbestos Not Present	Cellulose 35	Tar
016	MA-8-02	Layered	Gray/Tan Pipe Insulation	Asbestos Present Chrysotile 25	Cellulose 45	Binder
016a		Layered	Black Pipe Insulation	Asbestos Not Present	Cellulose 35	Tar
017	MA-8-03	Layered	Gray/Tan Pipe Insulation	Asbestos Present Chrysotile 25	Cellulose 45	Binder
017a		Layered	Black Pipe Insulation	Asbestos Not Present	Cellulose 35	Tar

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

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Project Location: Madill, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
018	MA-9-01	Layered	Gray/Tan Pipe Insulation	Asbestos Present Chrysotile 25	Cellulose 45	Binder
018a		Layered	Black Pipe Insulation	Asbestos Not Present	Cellulose 40	Tar
019	MA-9-02	Layered	Gray Pipe Insulation	Asbestos Not Present	Glass Fiber 35	CaCO3 Binder
019a		Layered	Tan Pipe Insulation	Asbestos Present Chrysotile 30	Cellulose 30	Binder
019b		Layered	Black Pipe Insulation	Asbestos Not Present	Cellulose 30	Tar
020	MA-0-03	Layered	Tan Pipe Insulation	Asbestos Present Chrysotile 25	Cellulose 45	Binder
020a		Layered	Black Pipe Insulation	Asbestos Not Present	Cellulose 35	Tar

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

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.*

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

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

KELLY-MOORE PAINTS

INDUSTRIAL COATINGS

HIGH PERFORMANCE SYSTEMS

KM-669

Acrylic Sealer

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

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

Performance Features

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

Product Specifications

Resin Type	Acrylic
Color Range	Clear
Finish	High Gloss
Drying Time	8 hours to recoat
Practical Coverage	250-450 Sq. Ft. / Gallon
Recommended Dry Film Thickness	1.2 - 2.2 mils per coat
Solids By Volume	35%
Sizes	Five gallon pails
V.O.C.	560 Grams per liter
Clean Up	KM-S-74 or KM-SA-60

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

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

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

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

Dry Times: 8 hours

See Precautions and Limited Warranty next page

KM-669 (cont.)

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

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

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

SEE MATERIAL SAFETY DATA SHEETS FOR FULL SAFETY PRECAUTIONS.

KM-669 IS FOR PROFESSIONAL USE ONLY

KM-669 IS FOR INDUSTRIAL USE ONLY

KEEP AWAY FROM CHILDREN

MATERIAL SAFETY DATA SHEET

For Coatings, Resins & Related Materials

Section I

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

Prep Date: 07/28/06

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

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

Information Phone: 1-888-677-2468

Section II - HAZARDOUS INGREDIENTS

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

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

Section III - PHYSICAL DATA

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

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

Section IV - FIRE & EXPLOSION HAZARD DATA

Flash Point (Deg. F): 80*

Lower Explosive Limit: 1.0

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

OSHA Flammability Classification: Flammable Liquid IC

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

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

KM-669 CLEAR

Section V - HEALTH HAZARD DATA

THIS PRODUCT IS FLAMMABLE

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

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

In all cases, consult a physician for best treatment.

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

Section VI - REACTIVITY DATA

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

Section VII - SPILL OR LEAK PROCEDURES

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

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

Section VIII - SPECIAL PROTECTION INFORMATION

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

Section IX - SPECIAL PRECAUTIONS

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

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

ATTACHMENT 5

Lead-Based Paint Inspection and Settled Dust Sampling Report For Madill Armory

FINAL ABATEMENT REPORTS

FINAL REPORT

FOR

REMEDIATION OF LEAD AND ASBESTOS CONTAMINATION
MADILL ARMORY
601 SOUTH 5TH AVENUE
MADILL, OKLAHOMA 73651

BY

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

TABLE OF CONTENTS

SUMMARY OF WORK – MADILL ARMORY

Prepared abatement area and began asbestos abatement in accordance with contract and amendment. Thermal systems insulation was abated to wall penetrations which were then sealed. TSI piping was then "locked down" before being reinsulated with non-asbestos containing insulation. Floor tile, carpeting and mastic were abated and flooring HEPA vacuumed and sealed. Asbestos containing soffit was removed and replaced with non-asbestos containing material.

Lead-painted walls and floors were abated and then HEPA vacuumed and sealed.

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 210553

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.

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 210553
Date Received: 07/20/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 7/23/2012

AIHA ID: 101352

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

Project: Madill Armory
Location: Madill, Oklahoma
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	1	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
002	2	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
003	3	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
004	4	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
005	5	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
006	6	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
007	7	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
008	8	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
009	9	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
010	10	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
011	11	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
012	12	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
013	13	Wipe	Lead	20.2	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
014	14	Wipe	Lead	202	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
015	15	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
016	16	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
017	17	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	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.

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

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 210553
Date Received: 07/20/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 7/23/2012

AIHA ID: 101352

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

Project: Madill Armory
Location: Madill, Oklahoma
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	18	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
019	19	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
020	20	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
021	21	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
022	22	Wipe	Lead	82.4	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
023	23	Wipe	Lead	26.6	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
024	24	Wipe	Lead	31.2	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
025	25	Wipe	Lead	59.3	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100

Authorized Signature: _____

Benton Miller, Analyst

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

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

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: 10183 **Date:** 7/23/2012 **Lab Number:** 210553
Test: Lead **Matrix:** Wipe **Approved By:** Benton Miller
Date Approved: 7/23/2012

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	5.2	5.5
FCV	4.5	5.1	5.5
ICV	0.9	1.1	1.1
RLVS	0.256	0.34	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	5.188	5.442	104.9	5.571	107.4	2.3
MS-W1	0.000	5.209	5.639	108.2	5.720	109.8	1.4

Authorized Signature: _____

Benton Miller, Analyst

LEAD CHAIN OF CUSTODY

QUANTEM LABORATORIES
www.QuanTEM.com
2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT -- PLEASE PRINT LEGIBLY

For Lab Use Only	
Lab No.	210553
	(Accept) Reject

Contact Information		Project Information		Report Results (☑ one box)	
Company:	DEQ	Phone:	405-702-5115	Project Name:	Medill Armory	☐	QuanTEM Website
Contact:	Dustin Davidson	Cell Phone:	405-317-9292	Project Location:	Medill, Oklahoma	☐	Other _____
Account #:		E-mail:	dustin.davidson@deq.ok.gov	Project ID:			

Sampled By: Name: Dustin Davidson Date: 7/12/12

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Dust. Davidson	7/16/12 1207	Drop off	[signature]	7-2012

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

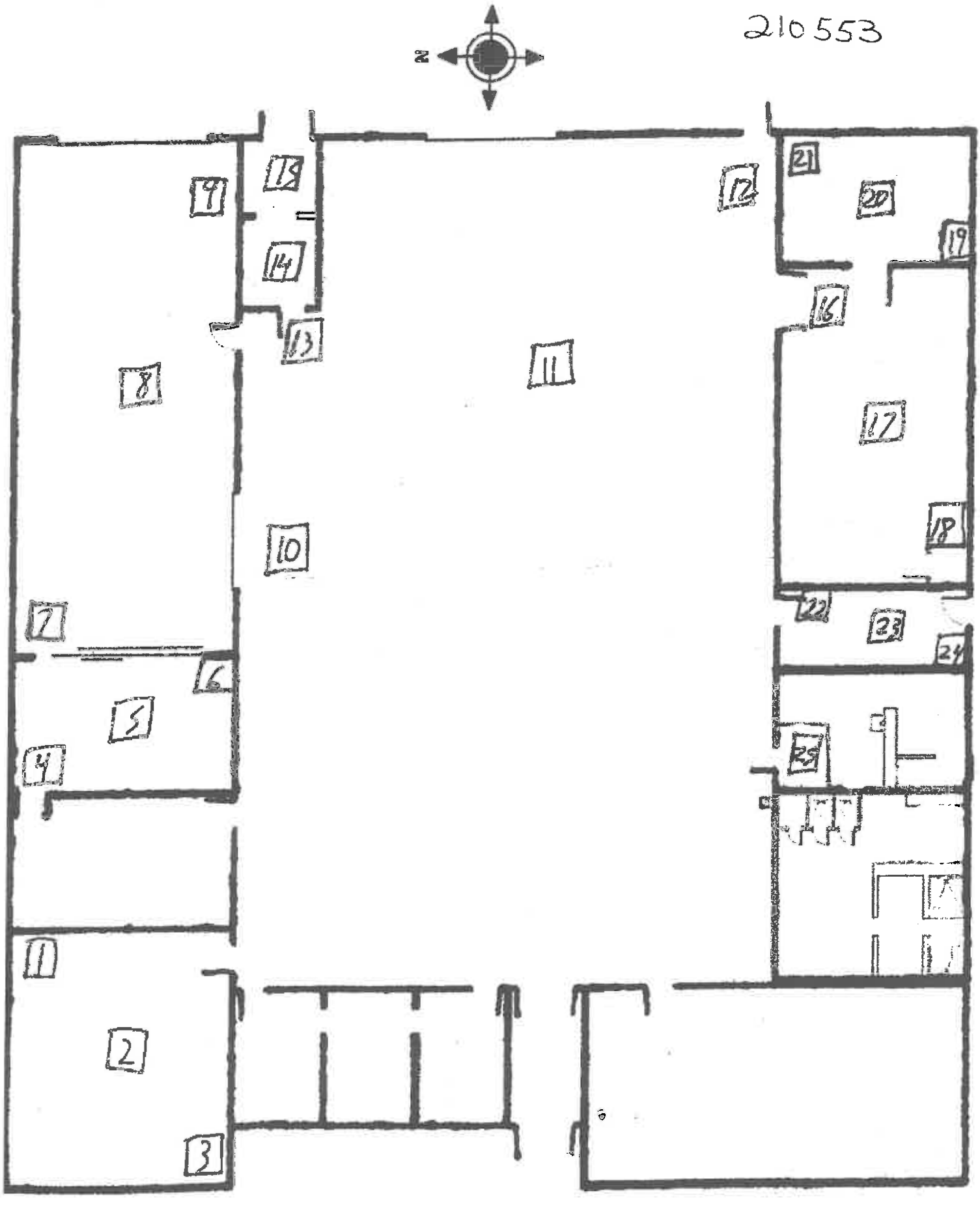
No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix codes box)	Analysis: Pb			Units (☑ ONE box only): PPM	Wt %	mg / l	µg /ft²	µg / m³	mg / cm²
1	1-25			12" X 12"	C	X						X		
2														
3														
4														
5														
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"

210553



QUANTEM LABORATORIES

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

Construction & Abatement Services, Inc.
610 NW Dunlap Drive
Lees Summit, MO 64063

Re: QuanTEM ID 210908

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.

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 210908
Date Received: 07/30/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 7/31/2012

AIHA ID: 101352

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

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

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	1	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/31/12 13:15	W NIOSH 9100
002	2	Wipe	Lead	18.0	16	ug/sq. Ft.	07/31/12 13:15	W NIOSH 9100
003	3	Wipe	Lead	104	16	ug/sq. Ft.	07/31/12 13:15	W NIOSH 9100

Authorized Signature: Bonnie Allen, Analyst

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

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

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

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

EPA Method 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: 10211
Test: Lead

Date: 7/31/2012
Matrix: Wipe

Lab Number: 210908
Approved By: Bonnie Allen
Date Approved: 7/31/2012

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	5.1	5.5
FCV	4.5	5.1	5.5
ICV	0.9	1	1.1
RLVS	0.256	0.343	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	5.157	5.774	112.0	5.920	114.8	2.5
MS-W1	0.000	5.147	5.889	114.4	5.802	112.7	1.5

Authorized Signature: Bonnie Allen

Bonnie Allen, Analyst

LEAD CHAIN OF CUSTODY

QUANTEM LABORATORIES
2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058
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For Lab Use Only
Lab No. 210908
Accept Reject

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

Contact Information		Project Information	
Company: DEQ	Phone: 402-5112	Project Name: Madill Armory	
Contact: Rebecca Marfurt	Cell Phone: 213-4058	Project Location: Madill, OK	
Account #:	E-mail: Rebecca.marfurt@deq.ok.gov	Project ID:	

Sampled By: Name: Rebecca Marfurt Date: 7/30/12

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Rebecca Marfurt	7/30/12 1:25	Drop off	S. Luftwich	7/30/12 1:30

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 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	2			↓	↓	↓					↓	
3	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
☒	24 - Hour
☐	3 - Day
☐	5 - Day

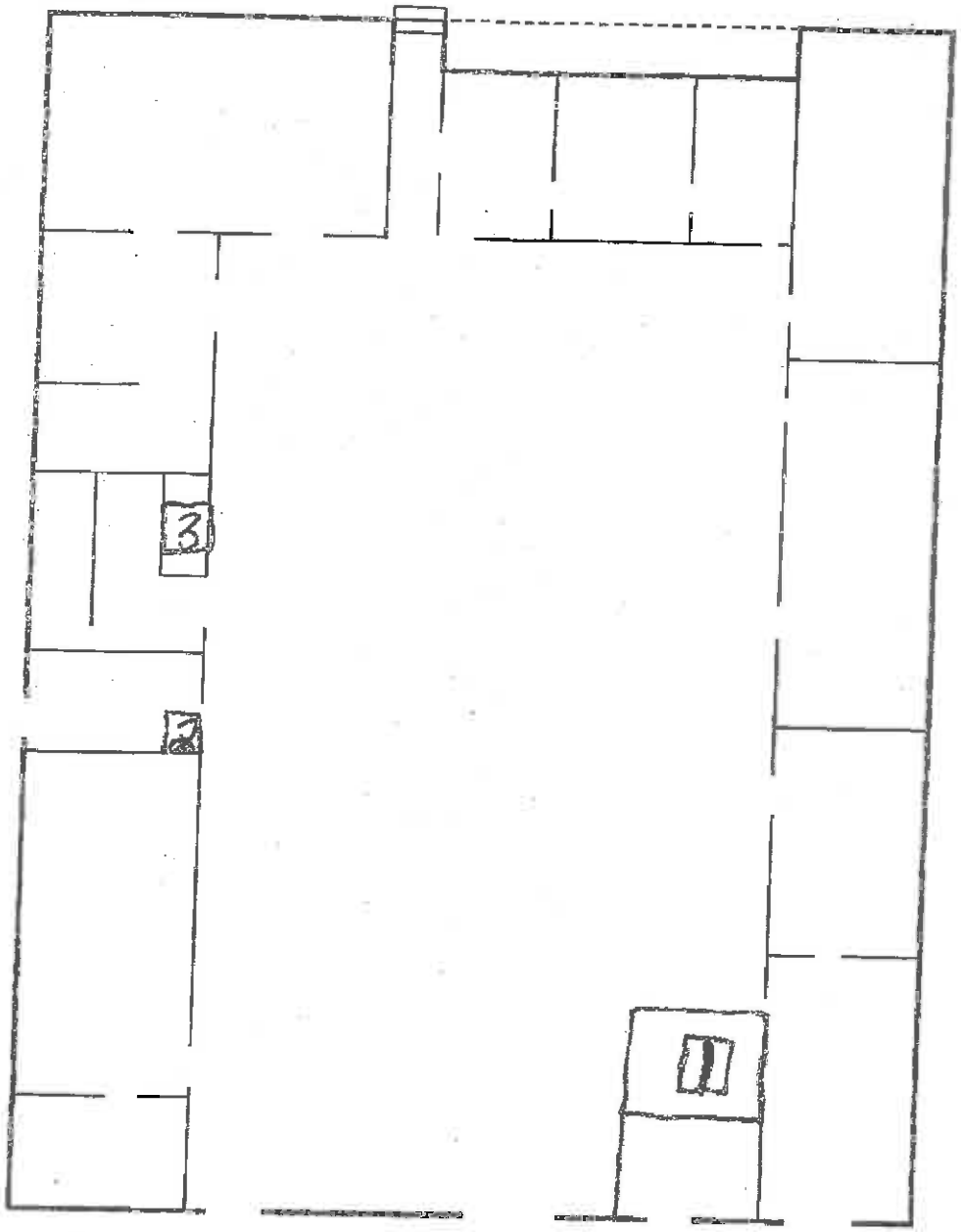
SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

3/1/2011

210908
2 of 2

7/27/12
RM & DD

Madill Armory



Not to scale
Floor plan approximate

From: Abatement2 <Abatement2@aol.com>
To: jamesk5952 <jamesk5952@aol.com>
Subject: Fwd: Madill and OKC 44th Street
Date: Tue, Aug 14, 2012 9:44 am

From: Dustin.Davidson@deq.ok.gov
To: Abatement2@aol.com
Sent: 8/14/2012 9:44:05 A.M. Central Daylight Time
Subj: Madill and OKC 44th Street

The final samples at Madill and OKC 44th Street both passed. All I need are the final reports and we are done with those armories.

Dustin Davidson

Environmental Programs Specialist

Department of Environmental Quality

(405)-702-5115

dustin.davidson@deq.ok.gov

Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116
Phone: 405-722-7693
Fax: 405-722-7694
www.enercon.com

ENERCON
Excellence—Every Project, Every Day

Project: MADILL ARMORY

Cass. Dia = 25 mm | PF = 100 | Field of View = 0.00785 | Pg. 1 OF 1

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
-	1	7/2/12 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
-	2	7/2/12 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
535	3	7/2/12 -	10:33 AM 6:30 PM	- -	MARK WALKER FF APR 279558 GLOVEBAG	P	<0.01	2.00	1.80	1.90	8.0	100	477	906.3	10.191	0.004	0.004	0.003	0.004
662	4	7/2/12 -	10:33 AM 6:30 PM	- -	JORGE PEREYRA FF APR 400543 GLOVEBAG	P	<0.01	2.00	2.00	2.00	9.5	100	477	954.0	12.102	0.005	0.004	0.003	0.004
470	5	7/2/12 -	10:33 AM 6:30 PM	- -	INSIDE AREA GLOVEBAG	A		2.00	2.00	2.00	6.0	100	477	954.0	7.643	BDL	0.004	0.002	0.004
374	6	7/2/12 -	10:33:00 18:30:00	- -	NEG AIR GLOVEBAG	A		2.00	2.00	2.00	2.0	100	477	954.0	2.548	BDL	0.004	0.001	0.004
382	7	7/2/12 -	10:33 AM 6:30 PM	- -	OUTSIDE AREA GLOVEBAG	A		2.00	1.90	1.95	4.0	100	477	930.2	5.096	BDL	0.004	0.001	0.004
538	8	7/2/12 -	10:33 AM 6:30 PM	- -	CLEAN ROOM GLOVEBAG	A		2.00	2.00	2.00	1.0	100	477	954.0	1.274	BDL	0.004	0.000	0.004
389	9	7/2/12 -	10:33 AM 6:30 PM	- -	LOADOUT GLOVEBAG	A		2.00	2.00	2.00	1.5	100	477	954.0	1.911	BDL	0.004	0.000	0.004

ANALYST PARTICIPATING IN LAB AIHA-151368 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: HF-4
Calibration Date: 6/22/12

I hereby certify that the above samples were collected and analyzed in compliance with applicable standards and regulations.

AM Technician: Susan Thompson
Location: Madill Armory, 601 S 5th St., Madill, OK
Contractor: ASI (Supervisor Matt Gibson)
Project Number: ASBTS1087

Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116
Phone: 405-722-7693
Fax: 405-722-7694
www.enercon.com

ENERCON
Excellence—Every project. Every day.

Project: MADILL ARMORY

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	T Y P	Cass. Dia = 25 mm Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	PF = 100 Fiber Count	Field Count	Field of View = 0.00785 Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Pg. 1 OF 1 Fibers Per CC	Det. Limit	LCL	UCL
-		7/2/12	-	-	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
	10	7/3/12	-	-															
-		7/2/12	-	-	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
	11	7/3/12	-	-															
538		7/2/12	7:15 PM	-	MA-CL-1	A		2.20	2.10	2.15	3.0	100	695	1494.3	3.822	BDL	0.002	0.001	0.002
	12	7/3/12	6:50 AM	-	CLEARANCE														
470		7/2/12	7:15 PM	-	MA-CL-2	A		2.20	2.00	2.10	1.5	100	695	1459.5	1.911	BDL	0.002	0.000	0.002
	13	7/3/12	6:50 AM	-	CLEARANCE														
535		7/2/12	7:15 PM	-	MA-CL-3	A		2.20	2.20	2.20	3.0	100	695	1529.0	3.822	BDL	0.002	0.001	0.002
	14	7/3/12	6:50 AM	-	CLEARANCE														
662		7/2/12	7:15 PM	-	MA-CL-4	A		2.20	2.10	2.15	2.0	100	695	1494.3	2.548	BDL	0.002	0.000	0.002
	15	7/3/12	6:50 AM	-	CLEARANCE														
387		7/2/12	7:15 PM	-	MA-CL-5	A		2.20	2.10	2.15	1.5	100	695	1494.3	1.911	BDL	0.002	0.000	0.002
	16	7/3/12	6:50 AM	-	CLEARANCE														

I hereby certify that the above samples were collected and analyzed in compliance with applicable standards and regulations.

ANALYST PARTICIPATING IN LAB AIHA-151368 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: HF-4
Calibration Date: 6/22/12

AM Technician: Susan Thompson
Location: Madill Armory, 601 S 5th St., Madill, OK
Contractor: ASI (Supervisor Matt Gibson)
Project Number: ASBTS1087

Oklahoma Department of Labor

Mark Costello, Commissioner

Asbestos Division

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

440 South Houston, Suite 300
Tulsa, OK 74127
(918-581-2400) FAX (918-581-2431)

Visual/Final Inspection Form

DOL Project #:		07	23	2012	1100
Facility:	Medill Armory	**Month**	**Day**	**Year**	**Time**
Contractor #:		**County #:**		**FY #:**	12
Address/Location:	601 S. 5th Ave.	**Address City:**	Medill		
Owner/Occupant:	State of OK - DCS	**Contractor:**	Abatement Systems Inc.		
Contact Name:		**Contractor's Rep.:**	Matt Gibson		
Facility Phone #:		**Contractor's Phone #:**			

1. Description of Area: TSI Removal - glove bags.

2. Areas requiring further cleaning: None.

3. Air Counts (PCM/TEM) On-Site?: 5 PCM clearance samples. Accepted.

4. DOL Recommendations: Remove ALL poly & dispose of as ACM.

5. Will a FINAL Inspection be required?: This is final

6. Notes: Visual inspection accepted.
Final will be accepted when all poly is removed.

7. Note any violations cited: 380:50-

8. Contractor's Comments:

Inspector's Signature

Contractor's Signature

Revised 1/2011

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

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

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

Tulsa
440 South Houston, Suite 300
Tulsa, OK. 74127
918-581-2400
Fax 918-581-2431

Abatement Preparation Inspection Form

Abatement Project: Madill Armory
Date: 6 - 29 - 1[illegible] Time: ___ : ___
Project No.: ___
Phase: Glovebag
Project Address/Location: 601 S 5th
City: Madill Zip: ___
Contractor: AST
Contact Person: Matt
Project Phone No.: (915)774-2023
Contractor's Home/Office Phone No.: [illegible]
Project Owner: City
Owner's Rep.: Matt G[illegible]

A = Acceptable.
D = Denied; must be correct and re-inspected before asbestos removal is begun.
N/A = Not applicable to this project.
X = Deficiencies which must be corrected before asbestos removal begins. If the only deficiencies are the "X" type, after correction, asbestos abatement may begin.
** Beginning asbestos removal before the deficiencies are correct shall constitute a Serious Violation. **

Item	A	D	N/A	X
(1) Work site barriers and warning signs	☑	☐	☐	☐
(2) Toilet facilities provided	☑	☐	☐	☐
(3) Worker licenses	☑	☐	☐	☐
(4) Emergency telephone #'s	☑	☐	☐	☐
(5) OSHA forms, poster (min. wage, workers comp, equal opportunity)	☑	☐	☐	☐
(6) Air mon., results from prior phases, if applicable	☐	☐	☑	☐
(7) Respirator program and project design on-site	☐	☐	☑	☐
(8) Respirator, air system and equipment manuals	☐	☐	☑	☐
(9) Compressor does not discharge oil	☐	☐	☑	☐
(10) CO monitor, high temp and low pressure alarm tested on-site	☐	☐	☑	☐
(11) Cascade system secure and certificate of air quality	☐	☐	☑	☐
(12) Automatic back-up air of proper quantity in full containers	☐	☐	☑	☐
(13) Bull hoses and respirators free of oil residue	☐	☐	☑	☐
(14) In-line pressure gauge at manifold	☐	☐	☑	☐
(15) NIOSH approved respirators, clean, parts in working order	☑	☐	☐	☐
(16) Electrical panel outside work area	☑	☐	☐	☐
(17) Temporary wiring installed by licensed electrician LIC #: 51346	☑	☐	☐	☐
(18) Temporary panel boards properly grounded	☑	☐	☐	☐
(19) Ground fault interruption provided from outside work area	☑	☐	☐	☐
(20) Live electrical requirement met	☑	☐	☐	☐
(21) Extension cords in acceptable condition	☑	☐	☐	☐
(22) Equipment properly grounded	☑	☐	☐	☐
(23) Tension relief on electric cords	☑	☐	☐	☐
(24) De-con firmly constructed, opaque, with triple flaps	☑	☐	☐	☐
(25) De-con trailers properly grounded	☐	☐	☑	☐
(26) Storage lockers for workers and ODOL inspectors' street clothes (Boxes)	☑	☐	☐	☐
(27) Shower with hot water supply, stable nonskid surface, lights	☑	☐	☐	☐
(28) Shower drains, filter, proper water disposal	☑	☐	☐	☐
(29) Soap from dispenser, and towels provided	☑	☐	☐	☐
(30) Hearing protection provided if required	☑	☐	☐	☐
(31) Hard hats provided, if required	☑	☐	☐	☐
(32) Appropriate footwear/safety shoes provided, if required	☑	☐	☐	☐
(33) Electrical system in abatement area locked out / tagged out	☑	☐	☐	☐
(34) Ventilation serving or passing through the abatement area deactivated	☐	☐	☑	☐
(35) Critical barriers in place	☑	☐	☐	☐
(36) Neg. air quantity and pressure drop, confirmed on-site with recording manometer	☐	☐	☑	☐
(37) Neg. air machine(s) have properly installed filters, clean pre-filters	☑	☐	☐	☐
(38) Prep. work secure with negative air on	☑	☐	☐	☐
(39) Make-up air sources provide adequate circulation and air cleaning	☐	☐	☐	☐
(40) Access controlled	☐	☐	☐	☐
(41) Scaffolding over 10' high has 42" siderails and 4" toeboards	☐	☐	☐	☐
(42) Scaffolding from 4' to10' high, but less than 42" wide, has side rails	☐	☐	☐	☐
(43) Scaffolding with people working under has mesh or solid barrier on platform	☐	☐	☐	☐
(44) Scaffolding floorboards in good condition and secured	☐	☐	☐	☐
(45) Aerial lifts have full-body harness with shock lanyards	☐	☐	☐	☐
(46) Ladders are non-conducting and stable	☐	☐	☐	☐
(47) Heat stress monitors in place	☐	☐	☐	☐
(48) HEPA vacuum is clean with filters properly installed	☐	☐	☐	☐
(49) Temporary lighting is adequate and and properly wired and grounded	☐	☐	☐	☐
(50) 10 # ABC fire extinguishers inspected	☐	☐	☐	☐
(51) Adequate escape routes are properly marked and illuminated with emergency lighting and battery back-up	☐	☐	☐	☐
(52) Acceptable amended water sprayers and chemicals provided	☐	☐	☐	☐
(53) Load-out sealed unless needed for make-up air	☐	☐	☐	☐
(54) Disposal bags and/or barrels provided and properly labeled	☐	☐	☐	☐
(55) Disposal vehicle properly lined	☐	☐	☐	☐
(56) Disposal vehicle properly tagged and marked	☐	☐	☐	☐
(57) Area monitoring locations identified	☐	☐	☐	☐

67 **# OF GLOVEBAGS** ☐ **# OF FULL CONTAINMENTS** ☐ **# OF MINI CONTAINMENTS**

Recommendation & Remarks: Prep on 67 Glovebags

Accepted

Orders:

[signature]
Inspector's Signature

[signature]
Contractor's or Representative's Signature

Do not staple!

WASTE MANAGEMENT

Manifest NO: _____
(For Generator Use)

Quarry Landfill
13720 E 46th STREET NORTH
Tulsa, OK 74116
FAX: (918) 437-7805
Phone: (918) 439-7835

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 DCSC or DEQ **Job Name:** ~~Same~~ Madill Armory

Address: 2401 N. Lincoln Blvd Oklahoma City, OK **Address:** 601 S. 5th Ave Madill, OK

Phone: (405) 522-0047 **Phone:** N/A

QUANTITY AND DESCRIPTION

Proper Shipping Name: Asbestos **Quantity:** 60 Cubic yards

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 — 7-19-12
Generator Authorized Agent — **Signature** — **Shipment Date**

Transporter: Abatement Systems

Address: PO Box 773 Broken Arrow, OK 74013-0773 **Phone:** 918-251-2504

Driver: Joe Stevenson **Truck No:** 46 **Tag # /State:** 7-19-12

Signature — 7-19-12
Signature — **Shipment Date**
I hereby certify that the above material was picked up from generator listed above

Driver Signature — 7-19-12
Driver Signature — **Delivery Date**
I hereby certify that the above named material was delivered without incident to the site listed below

Received at Quarry Landfill 13720 E 46th STREET NORTH. Tulsa, OK 74116
I hereby certify that the above named material has been accepted and to the best of my knowledge, the above is correct.

Signed: _____ **Ticket:** 137308

Date: 7/19/18

WASTE SHIPMENT RECORD

GENERATOR

1. Work Site Name & Mailing Address (Generator)	Owner's Name	Owner's Telephone
Madill Armory 2401 N. Lincoln Blvd, Oklahoma City, OK	State of OK DCS for DEQ	(405) 522-0047

2. Remover's Name & Address	Remover's Telephone
Abatement Systems, Inc., P. O. Box 773, Broken Arrow, OK 74013-0773	(918) 251-2504

3. Waste Disposal Site (WDS)	WDS's Telephone
Quarry Landfill 4041 N. 141st E. Ave Tulsa, OK 74116	(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. HM	Desc. Of Material	Hazard Class	ID Number	Packing Group #	6. Containers No. Type	7. Total Quantity
					Bags	6 Cubic yards

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 government regulations. NOTE: Generator must retain a copy of this form

Print/Type Name & Title	Signature	Date
Nancy Vacin Office Manager	Nancy Vacin	7-19-12

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	7-19-12

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

DISPOSAL

12. Problems with Containment or Packaging	Rejected Yes/No

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

Print/Type Name & Title	Signature	Date
Quarry Landfill Scale Clerk		7/19/12

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

LEAD BASED PAINT, LEAD DUST, FILTERS, ETC. WERE DISPOSED OF WITH THE LEAD WASTE FROM THE 44TH STREET ARMORY PROJECT.

MADILL - BEFORE

PHOTOGRAPHIC RECORD
MADILL ARMORY, MADILL OKLAHOMA

HA #1: Transite Panels

HA # 2: Window Caulking

HA #3: 1x1 Floor Tile (Red/Beige)

HA #4: 2x4 Ceiling Tile

HA #5: 1x1 Floor Tile (Tan/Brown)

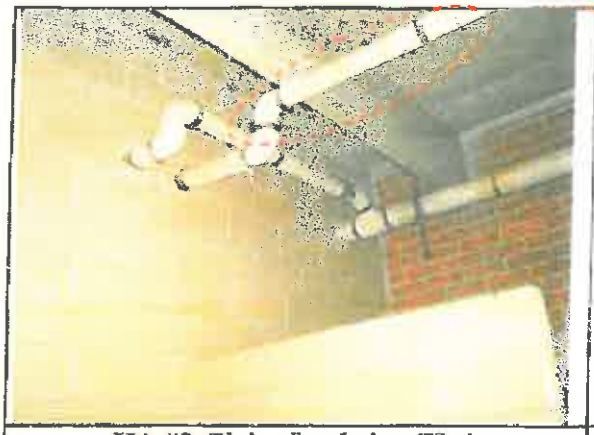
HA #6: 1x1 Floor Tile (Yellow)

HA #7: Carpet Mastic (Yellow/Black)

HA #8: Pipe Insulation (Cold)

MADILL - BEFORE

PHOTOGRAPHIC RECORD
MADILL ARMORY, MADILL OKLAHOMA



HA #9: Piping Insulation (Hot)

HA # 10: Pipe Fitting (Cold)

HA #11: Pipe Fitting (Hot)

Madill Armory looking SE.

APPENDIX B - PHOTOGRAPHIC RECORD

Project No: ENMISC2501

Project Name: Madill National Guard Armory

Photo #1: Madill National Guard Armory.

Photo #2: View of orange painted basketball hoop in Room 1 - LBP.

Photo #3: View of green painted concrete floor in Room 6 - LBP.

Photo # 4: Yellow, red, and gray painted concrete floor in Room 11 – LBP.

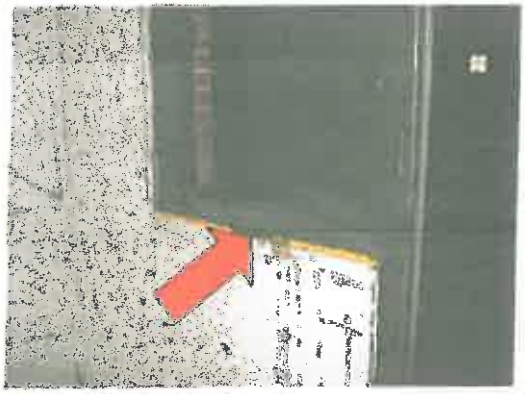


Photo # 5: Black painted pass through window sill in Room 14 – LBP.

Photo # 6: Green painted brick wall in Room 18 - LBP.

MADILL - AFTER

HA #1: ABATING TRANSITE PANELS

HA #1: TRANSITE PANELS ABATED

MADILL - AFTER

HA #1: NEW NON-ACM SOFFIT PANELS REPLACED AND PAINTED

HA #8 & #9: PIPE INSULATION ABATED AND PIPE "LOCKED DOWN"

HA #8 & #9: PIPE INSULATION ABATED AND PIPE "LOCKED DOWN'

HA #8 & #9: PIPE INSULATION ABATED AND PIPE "LOCKED DOWN"

MADILL - AFTER

HA #8 & #9: PIPE INSULATION ABATED AND PIPE "LOCKED DOWN"

HA #8 & #9: PIPE INSULATION ABATED AND PIPE "LOCKED DOWN"

HA #8 & #9: PIPE INSULATION ABATED, PIPE "LOCKED DOWN' AND WALL PENETRATIONS SEALED

HA #8 & #9: PIPE INSULATION ABATED, PIPE "LOCKED DOWN' AND WALL PENETRATIONS SEALED

MADILL - AFTER

HA #8 & #9: PIPE INSULATION ABATED, PIPE "LOCKED DOWN' AND WALL PENETRATIONS SEALED

HA #8 & #9: PIPE INSULATION ABATED, PIPE "LOCKED DOWN' AND WALL PENETRATIONS SEALED. NON-ACM INSULATION REPLACEMENT INITIATED.

MADILL - AFTER

HA #8 & #9: PIPE INSULATION REPLACEMENT

HA #8 & #9: PIPE INSULATION REPLACEMENT

MADILL - AFTER

HA #8 & #9: PIPE INSULATION REPLACEMENT

HA #8 & #9: PIPE INSULATION REPLACEMENT

ROOM #6: FLOOR ABATED

FLOOR ABATED

FLOOR BEING ABATED

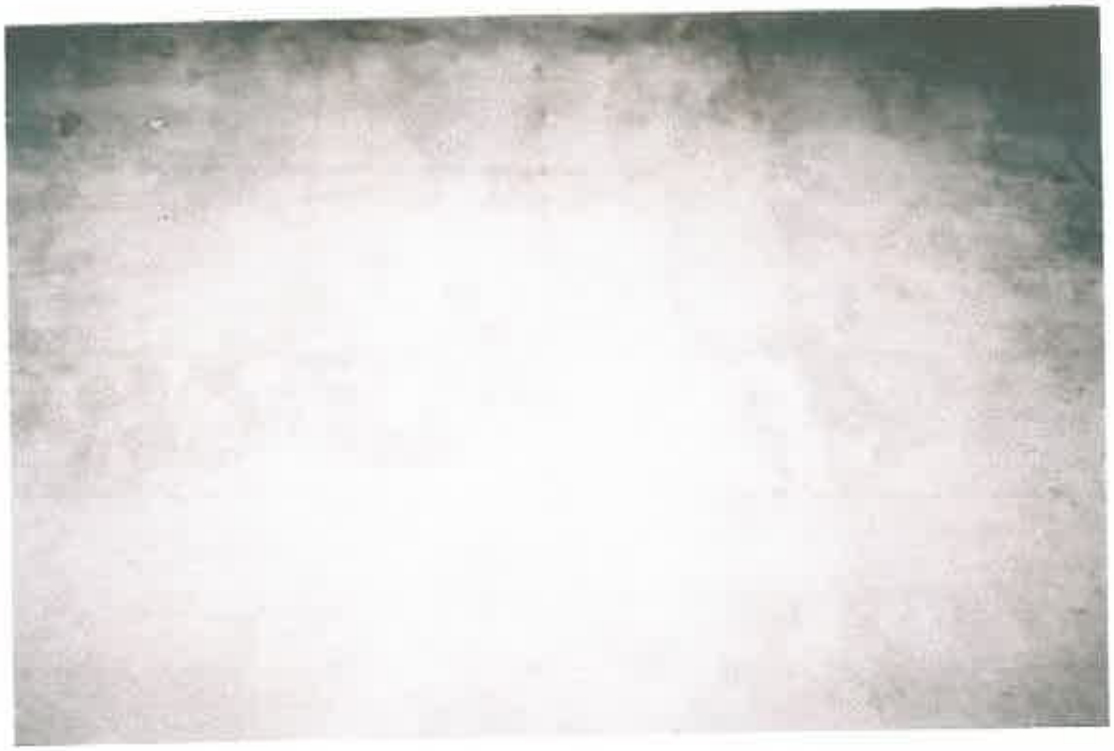
PHOTO #5 BLACK PAINTED PASS THROUGH WINDOW SILL IN ROOM 14 - LBP - ABATED

ROOMS 3, 4, 5: MASTIC ABATED

HA #3: 1 x 1 FLOOR TILE

HA #3: FLOOR TILE AND MASTIC ABATED

Photo #3: LBP ABATED



FLOOR TILE AND MASTIC ABATED

MADILL - AFTER

Room #1: FLOOR ABATED

Room #1: FLOOR ABATED

CONFIRMATION SAMPLING

CONFIRMATION SAMPLING RESULTS

On July 18, 2012, Department of Environmental Quality (DEQ) personnel sampled the Madill Armory for lead dust to confirm room floors were below the Housing and Urban Development (HUD) standard of 40 micrograms per square foot ($\mu g/ft^2$) for child occupied facilities. Below is a summary of the results. Sample results are attached **(Attachment 1).**

- Three samples were above 40 $\mu g/ft^2$.
  - Sample #14 Result = 202 $\mu g/ft^2$
  - Sample #22 Result = 82.4 $\mu g/ft^2$
  - Sample #25 Result = 59.3 $\mu g/ft^2$

On July 30, 2012, DEQ personnel sampled the three locations where the previous samples had failed. Below is a summary of the results. Sample results are attached **(Attachment 2).**

- Two samples were below 40 $\mu g/ft^2$
- One sample was above 40 $\mu g/ft^2$
  - Sample #3 (Same location as Sample #25) Result = 104 $\mu g/ft^2$

On August 9, 2012, DEQ personnel sampled the location where the previous sample had failed. Below is a summary of the results. Sample results are attached **(Attachment 3).**

- The sample was below 40 $\mu g/ft^2$

ATTACHMENT 1

JULY 18, 2012 SAMPLE RESULTS

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 210553
Date Received: 07/20/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 7/23/2012

AIHA ID: 101352

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

Project: Madill Armory
Location: Madill, Oklahoma
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	1	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
002	2	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
003	3	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
004	4	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
005	5	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
006	6	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
007	7	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
008	8	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
009	9	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
010	10	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
011	11	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
012	12	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
013	13	Wipe	Lead	20.2	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
014	14	Wipe	Lead	202	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
015	15	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
016	16	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
017	17	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	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.

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: 210553
Date Received: 07/20/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 7/23/2012

AIHA ID: 101352

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

Project: Madill Armory
Location: Madill, Oklahoma
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	18	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
019	19	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
020	20	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
021	21	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
022	22	Wipe	Lead	82.4	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
023	23	Wipe	Lead	26.6	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
024	24	Wipe	Lead	31.2	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100
025	25	Wipe	Lead	59.3	16	ug/sq. Ft.	07/23/12 9:00	W NIOSH 9100

Authorized Signature: _____
Benton Miller, Analyst

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

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

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: 10183
Test: Lead
Date: 7/23/2012
Matrix: Wipe
Lab Number: 210553
Approved By: Benton Miller
Date Approved: 7/23/2012

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	5.2	5.5
FCV	4.5	5.1	5.5
ICV	0.9	1.1	1.1
RLVS	0.256	0.34	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	5.188	5.442	104.9	5.571	107.4	2.3
MS-W1	0.000	5.209	5.639	108.2	5.720	109.8	1.4

Authorized Signature: _____

Benton Miller, Analyst

LEAD CHAIN OF CUSTODY

QUANTEM LABORATORIES
www.QuanTEM.com
2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 210553
Accept Reject

Contact Information		Project Information	Report Results (☑ one box)
Company: DEQ	Phone: 405-702-5115	Project Name: Madill Armory	☐ QuanTEM Website
Contact: Dustin Davidson	Cell Phone: 405-317-4292	Project Location: Madill, Oklahoma	☐ Other _____
Account #:	E-mail: dustin.davidson@deq.ok.gov	Project ID:	

Sampled By: Name: Dustin Davidson Date: 7/18/12

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Dustin Davidson	7/20/12 12:07	Drop off	[illegible]	7-20-12

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

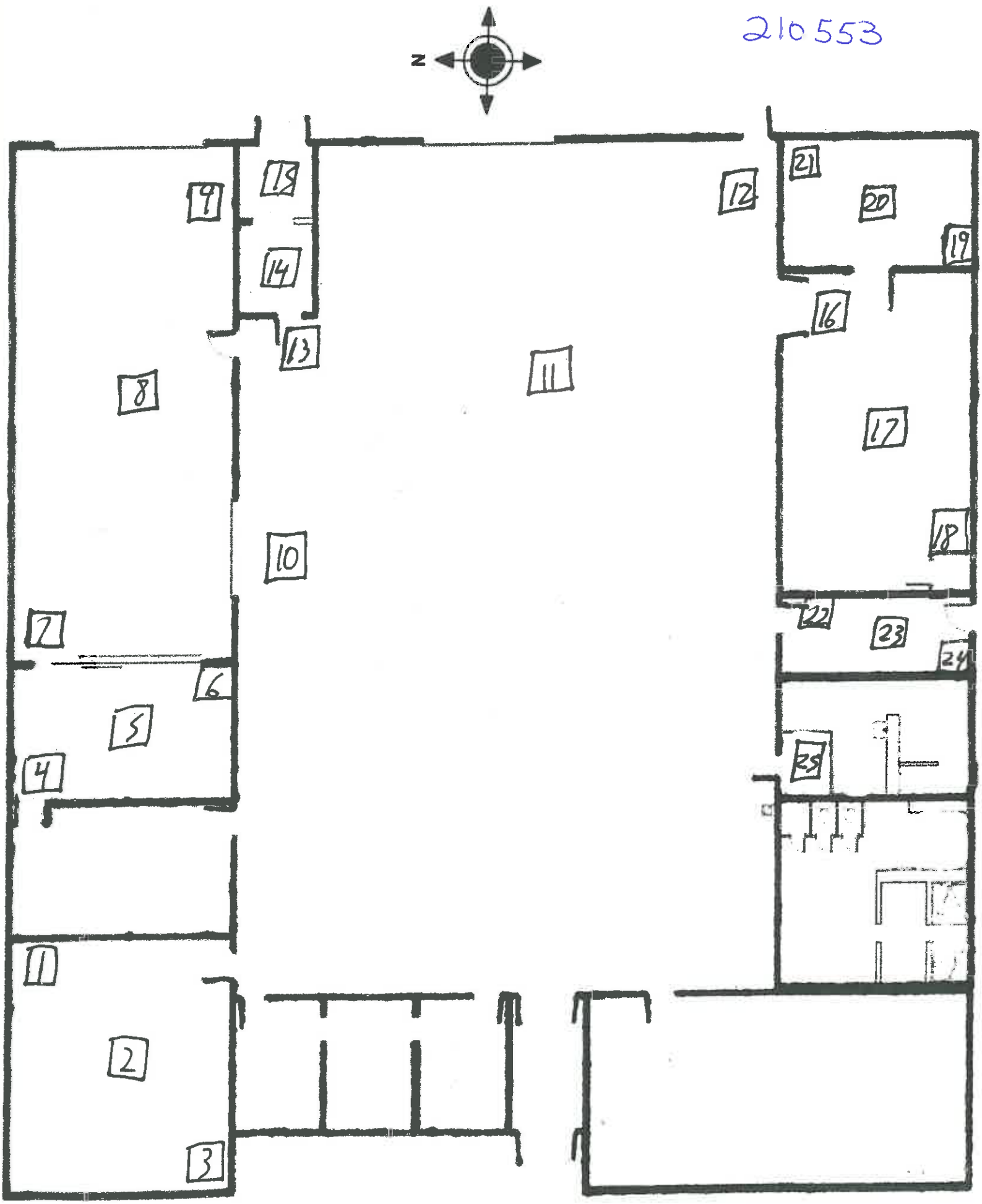
No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis			Units (☑ ONE box only)					
						Pb			PPM	Wt %	mg / l	µg /ft²	µg / m³	mg / cm²
1	1-25			12" X 12"	C	X						X		
2														
3														
4														
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"

210553



ATTACHMENT 2

JULY 30, 2012 SAMPLE RESULTS

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 210908
Date Received: 07/30/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 7/31/2012

AIHA ID: 101352

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

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

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	1	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/31/12 13:15	W NIOSH 9100
002	2	Wipe	Lead	18.0	16	ug/sq. Ft.	07/31/12 13:15	W NIOSH 9100
003	3	Wipe	Lead	104	16	ug/sq. Ft.	07/31/12 13:15	W NIOSH 9100

Authorized Signature: Bonnie Allen, Analyst

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

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

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

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

EPA Method 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: 10211
Test: Lead
Date: 7/31/2012
Matrix: Wipe
Lab Number: 210908
Approved By: Bonnie Allen
Date Approved: 7/31/2012

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	5.1	5.5
FCV	4.5	5.1	5.5
ICV	0.9	1	1.1
RLVS	0.256	0.343	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	5.157	5.774	112.0	5.920	114.8	2.5
MS-W1	0.000	5.147	5.889	114.4	5.802	112.7	1.5

Authorized Signature: Bonnie Allen

Bonnie Allen, Analyst

LEAD CHAIN OF CUSTODY

QUANTEM LABORATORIES
www.QuanTEM.com
2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

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For Lab Use Only	
Lab No.	210908
	Accept / Reject

Report Results (☑ one box)	
	QuanTEM Website
	Other _____

Contact Information		Project Information	
Company: DEQ	Phone: 702-5112	Project Name: Madill Armory	
Contact: Rebecca Marfurt	Cell Phone: 213-4058	Project Location: Madill, OK	
Account #:	E-mail: rebecca.marfurt@deq.ok.gov	Project ID:	

Sampled By: Name: Rebecca Marfurt Date: 7/30/12

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Rebecca Marfurt	7/30/12 1:25	Drop off	S. Ruftwich	7/30/12 1:30

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	2			↓	↓	↓					↓	
3	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

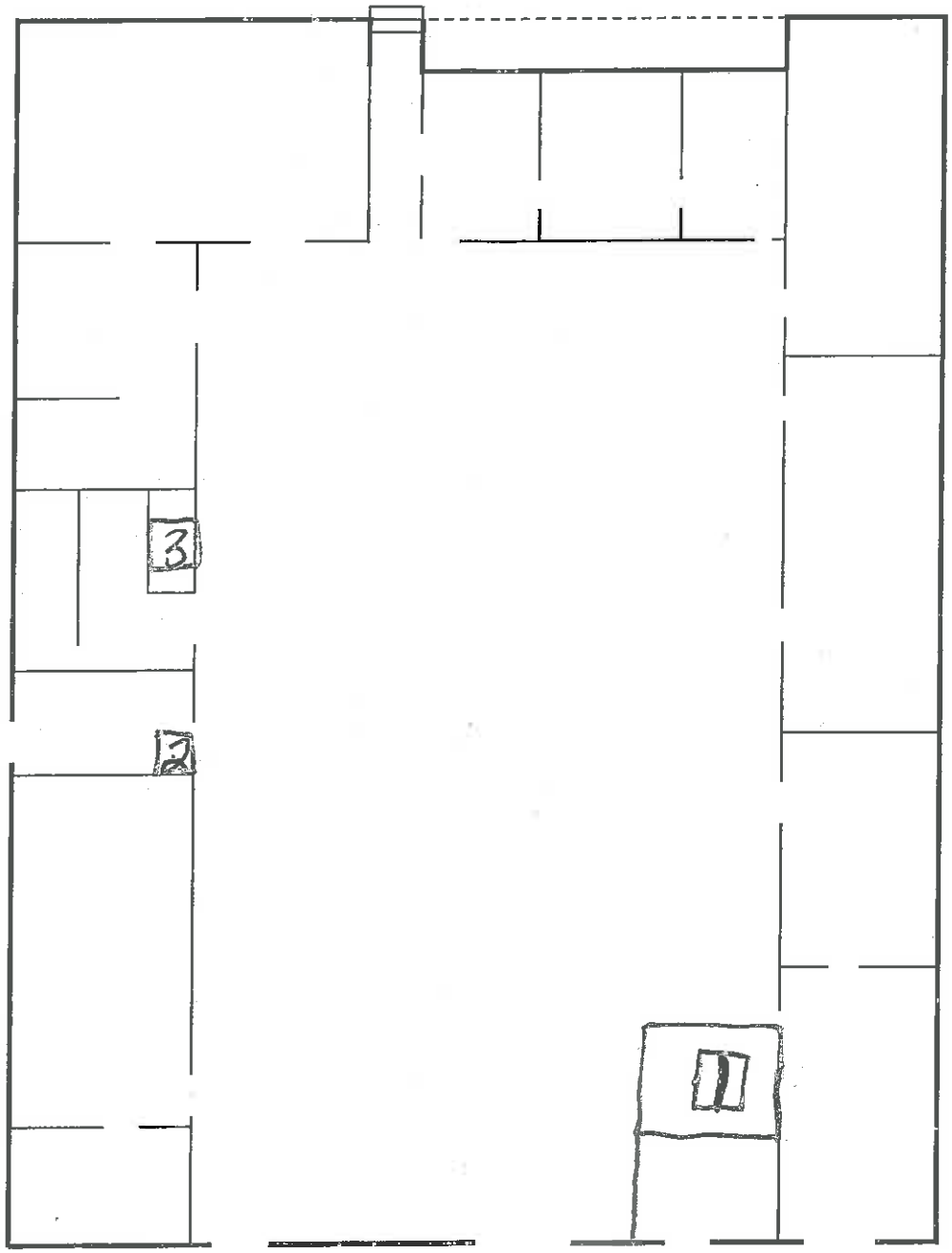
TURNAROUND TIME	
	Same Day
X	24 - Hour
	3 - Day
	5 - Day

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"

210908
2 of 2

7/27/12
RM & DD

Madill Armory



Not to scale
Floor plan approximate

ATTACHMENT 3

AUGUST 9, 2012 SAMPLE RESULTS

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 211313
Date Received: 08/10/12
Received By: Barbara Holder
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 8/10/2012

AIHA ID: 101352

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

Project: Medill Armory
Location: Madill, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	1	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/10/12 13:30	W NIOSH 9100
002	2	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/10/12 13:30	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: 10230
Test: Lead
Date: 8/10/2012
Matrix: Wipe
Lab Number: 211313
Approved By: Benton Miller
Date Approved: 8/10/2012

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	5.1	5.5
FCV	4.5	5	5.5
ICV	0.9	0.9	1.1
RLVS	0.256	0.351	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W1	0.000	5.178	5.663	109.4	5.426	104.8	4.3

Authorized Signature: _____

Benton Miller, Analyst

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Page 1 of 1

For Lab Use Only	
Lab No.	211313
	Accept Reject

Report Results (☑ one box)	
	QuanTEM Website
☑	Other email

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

Sampled By: Name: Dustin Davidson Date: ~~8/9/12~~ 8/9/12

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Dustin Davidson	8/9/12 4:58			8/9/12 4:58

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

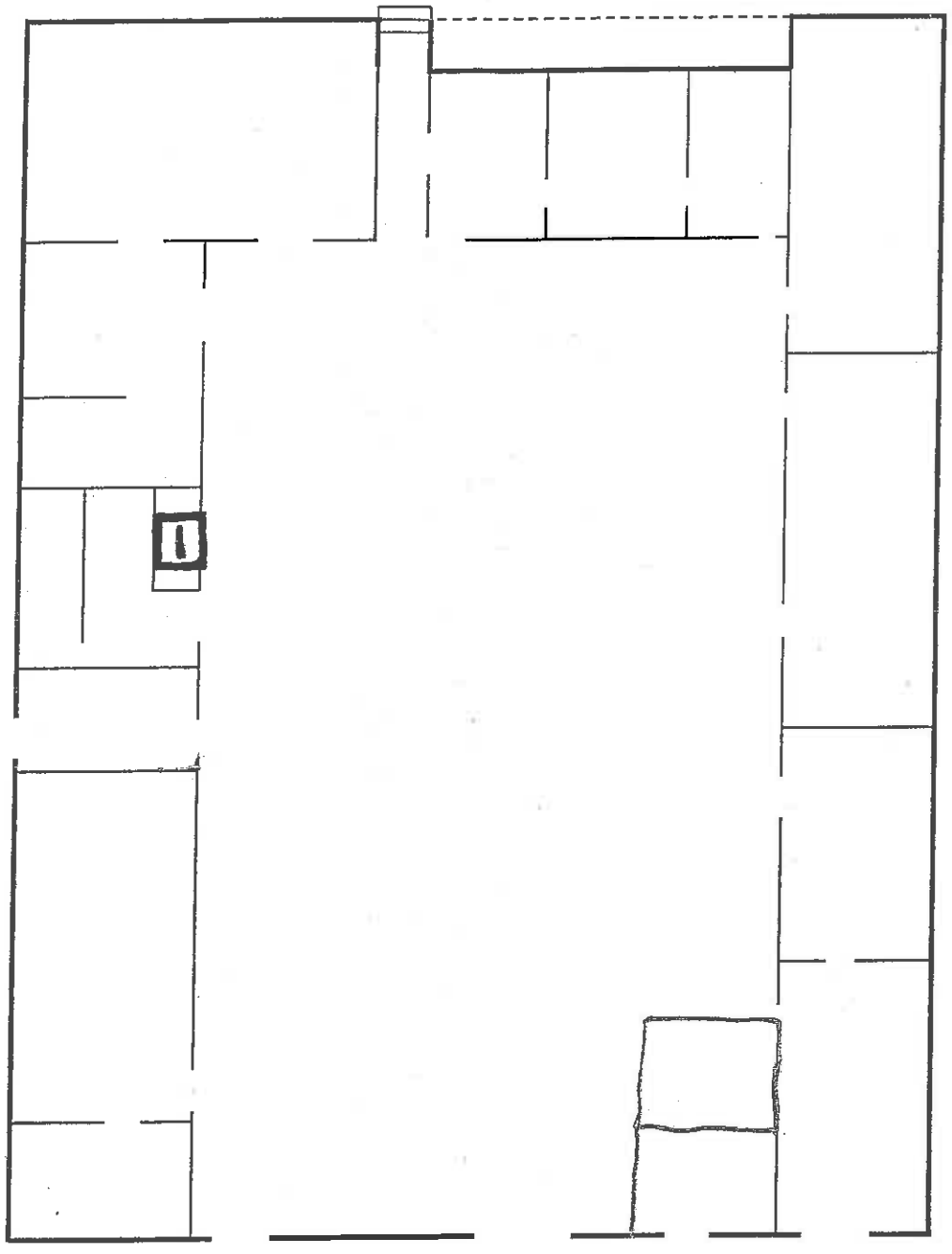
No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis			Units (☑ ONE box only)					
						Pb			PPM	Wt %	mg / l	µg /ft²	µg / m³	mg / cm²
1	1-2			12" X12"	C	X						X		
2														
3														
4														
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	
X	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"

Madill Armory



Not to scale
Floor plan approximate