STEVEN A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

MARY FALLIN
Governor

Janice Cain
City of Marlow
P.O. Box 113
Marlow, OK 73055

Dear Ms. Cain:

The Department of Environmental Quality (DEQ) has completed cleanup of the former Marlow Armory. Enclosed are the reports detailing work performed by DEQ and our contractors at the former Marlow Armory. This project was completed in accordance with all DOL and DEQ rules and regulations. All associated work plans and results are included for your information. DEQ also has provided a Maintenance Plan to describe required inspection and maintenance of key areas, and a brochure on lead and asbestos.

Information included in this report:

- Executive Summary
- Deeds and Legal Documents
- Maintenance Plan
- Inspection Reports
- Scope of Work
- Final Abatement Reports
- Lead Confirmation Sampling

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

Sincerely,

Rebecca K. Marfurt
Environmental Programs Specialist
Site Cleanup Assistance Program
DEQ Land Protection Division

Enclosures

The Oklahoma Department of Environmental Quality (DEQ) is pleased to present the City of Marlow with the Final Remediation Report for the former Marlow 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 Marlow Armory and describes continuing operation and maintenance and land use restrictions. This completes the DEQ cleanup of the property. For more detail on the activities described below, see enclosed reports.

ASBESTOS REMEDIATION

DEQ and its contractors completed the following activities:

- Asbestos inspection, including:
  - Asbestos containing floor tile mastic
- Asbestos abatement, including:
  - Removal of floor tile mastic

TARGETED BROWNFIELD ASSESSMENT

In November 2010, DEQ provided a Phase I Targeted Brownfield Assessment to the City of Marlow. 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 downspouts, window lintels, window sills, floors, overhead door frames, door guards, walls, wood surrounding indoor firing range (IFR) vent fan, and handrails containing LBP
  - Removal and replacement of windows, and doors containing LBP
- Indoor firing range cleanup, including:
  - Lead dust cleanup: high efficiency particulate air (HEPA) vacuuming, wet washing, and sealing with appropriate sealant floors, walls, and ceiling
- 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\MarlowArmory. 6/2012.

Former National Guard Armory
Marlow, Oklahoma

Remediation Final Report

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

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

1 Deeds and Legal Documents

Maintenance Plan

3 Inspection Reports

4 Scope of Work

Final Abatement Reports

6 Confirmation Sampling

DEEDS AND LEGAL DOCUMENTS

85-5997 000061

NOTICE OF REMEDIATION AND EASEMENT
FORMER MARLOW ARMORY
MARLOW, 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 Sampling performed by DEQ contractors, conducted on October 2, 2009, indicated that there was asbestos, lead-based paint, and lead dust in the building.

AFFECTED PROPERTY: The Affected Property is the former Marlow Armory located at 702 West Main Street, Marlow, Stephens County, OK 73055.

The legal description is as follows:
Lots One, Two, and Three of Block Ninety Nine in the City of Marlow, County of Stephens, State of Oklahoma.

REMEDY: Remediation activities (Remedy) at the Affected Property included abatement of asbestos, lead-based paint and dust. The remedy was completed on January 6, 2011.

000062

For more detailed information please refer to *Former National Guard Armory Marlow, 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.

(B) Sealant: Following cleanup, sealant was applied to the Indoor Firing Range (IFR) and room floors where lead-based paint abatement was performed. Sealant should be inspected on a periodic basis and maintained as appropriate.

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

(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.

(B) The IFR should not be used as a child occupied facility. Child-occupied facilities include, but are not limited to, day-care centers, preschools, and kindergarten classrooms where a child 6 or under spends at least 6 hours per week.

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

3-12-12
Date

ACKNOWLEDGMENT

STATE OF OKLAHOMA
COUNTY OF OKLAHOMA

Before me, a Notary Public, in and for said County and State, on this 12 day of March, 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:

02/17, 2013

Linda Yarber
Notary Public

LINDA YARBER NOTARY # 08001329 EXP. 02/17/13 PUBLIC STATE OF OKLAHOMA

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MARLOW 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.

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

3-12-12
Date

STATE OF OKLAHOMA
STEPHENS COUNTY
RECORDED OR FILED
2012 APR 12 AM 10:46
BOOK 4335 PAGE 61
JO JOHNSON
COUNTY CLERK
BY _____ DEPUTY

ACKNOWLEDGMENT

STATE OF OKLAHOMA
COUNTY OF OKLAHOMA

Before me, a Notary Public, in and for said County and State, on this 12 day of March, 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:

02/17, 2013

Linda Yarber
Notary Public

LINDA YARBER
NOTARY
#09001329
EXP. 02/17/13
PUBLIC
STATE OF OKLAHOMA

5
2 copy
2 cert.

000001

79-8940

QUITCLAIM DEED

KNOW ALL MEN BY THESE PRESENTS:

THAT THE STATE OF OKLAHOMA, ACTING THROUGH THE OKLAHOMA MILITARY DEPARTMENT, by its Adjutant General, Major General Myles L. Deering, hereinafter referred to as the "Grantor," and in consideration of the sum of Ten and No/100 Dollars ($10.00) and other valuable consideration in hand paid, the receipt of which is hereby acknowledged, does hereby Quitclaim, Grant, Bargain, Sell and Convey unto the **OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY,** hereinafter referred to as the "Grantee," the following described Real Property, together with any and all improvements thereon and appurtenances thereunto belonging situated in Stephens County, State of Oklahoma.

Lots One, Two and Three in Block Ninety Nine in the City of Marlow,
County of Stephens, State of Oklahoma

Grantee to hold said land for the purposes of environmental characterization and remediation thereof as determined to be necessary by the Oklahoma Department of Environmental Quality, and upon the filing of a recordable Notice of Remediation in the land records of Stephens County, the described real property shall transfer to the City of Marlow, together with any and all improvements thereon and appurtenances thereunto belonging.

TO HAVE AND TO HOLD the Real Property unto the Grantee, free, clear and discharged of and from all former grants, charges and other encumbrances of whatsoever nature except for the interest specifically granted to the City of Marlow, Stephens County herein and any easements of record.

EXECUTED AND DELIVERED this 1 day of May 2009.

STATE OF OKLAHOMA

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

Heather Mallory, DEQ, P.O. Box 1677 OKC OK 73101

This Transaction Is Exempt from Document Stamps, 68 O.S. § 3202(11).

2009 JUN -4 PM 1:43
STATE OF OKLAHOMA
STEPHENS COUNTY
RECORDED OR FILED
JO JOHNSON
COUNTY CLERK
BK 387 PAGE 1
DEPUTY

STATE OF OKLAHOMA)
) SS:
COUNTY OF OKLAHOMA)

This instrument was acknowledged before me this 1 day of May, 2009, by Major General Myles L. Deering, as Adjutant General of the State of Oklahoma, on behalf of the State of Oklahoma.

LISA M. SMITH
NOTARY PUBLIC
OKLAHOMA

_____
Notary Public

Commission No. 01006933

My Commission Expires: 5 June 2009

STATE OF OKLAHOMA }
COUNTY OF STEPHENS } ss

I, Jo Johnson County Clerk in and for the County and State above named do hereby certify that the foregoing is a true and correct copy of a like instrument now on file in my office.

Dated this 4 day of June 2009

Jo Johnson
County Clerk

By Melissa Dyer
Deputy

MAINTENANCE PLAN

MAINTENANCE PLAN
FORMER MARLOW ARMORY
MARLOW, OKLAHOMA

The Armory located at 702 West Main Street, Marlow, 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 September 17, 2009, 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 January 6, 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. Firing Range – Walls, floor and ceiling of indoor firing range were cleaned and sealed with acrylic sealant to remediate surfaces below 40µg/SF for lead. These surfaces need to be resealed if acrylic sealant shows signs of deterioration, damage, or flaking.
2. All window lintels, window sills, overhead door frames, overhead door guards, and down spouts 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.
3. The floors of Room #12, the step in front of the entrance to Room #12, and the concrete stairs in the Drill Floor 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 Marlow 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.

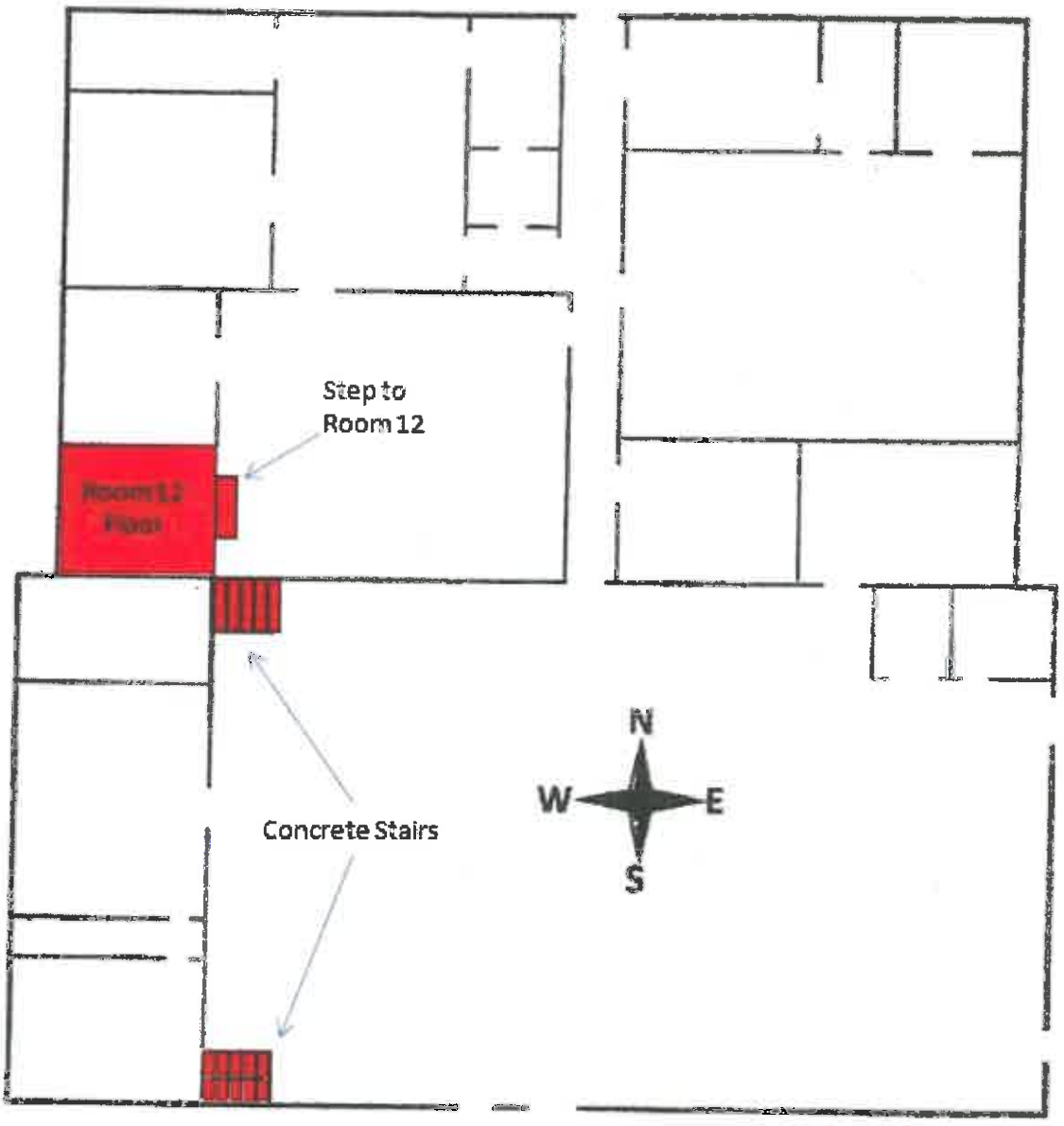
b. The indoor firing range should not be used as a child occupied facility. Child occupied facilities include, but are not limited to, day-care centers, preschools, and kindergarten classrooms where a child under 6 spends at least 6 hours per week.

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

ATTACHMENT 2

Floor Plan Map

Labeled areas represent floors and stairs with sealant.



ATTACHMENT 3

DEQ Approved Sealants and Encapsulants List

Acrylic Sealant approved by DEQ

KM-669 Acrylic

Lead-Based Paint Encapsulants approved by DEQ

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

INSPECTION REPORTS

Lead-Based Paint Inspection
And
Settled Dust Sampling

Marlow Armory
702 West Main Street
Marlow, OK 73055

Date of Inspection
September 17, 2009

DCS Contract NO.: ID009139-4

PROVIDED FOR
Oklahoma Department of Environmental Quality
Land Protection Division
707 North Robinson
Oklahoma City, OK 73102

PROVIDED BY
Marshall Environmental Management, Inc.
1601 Southwest 89th Street, Suite 100-A
Oklahoma City, OK 73159

Table of Contents

CERTIFICATION

This is to certify, that Marshall Environmental Management, Inc. was contracted by the State of Oklahoma, Department of Central Services to conduct a Lead-Based Paint Inspection and Settled Dust Sampling within the Marlow Armory, for the State of Oklahoma Department of Environmental Quality, Land Protection Division. The Marlow Armory Lead-Based Paint Inspection and Settled Dust Sampling was performed by an Oklahoma Department of Environmental Quality Certified, Lead-Based Paint Inspector/Risk Assessor, Jacob Jones of Marshall Environmental Management, Inc., under the direction of Dr. Charles L. Marshall, Certified Industrial Hygienist, President of Marshall Environmental Management, Inc. The analytical results associated with this Lead-Based Paint Inspection and Settled Dust Sampling are believed to accurately, reflect the locations and concentrations of paint and dust containing lead.

Current Owner Information

State of Oklahoma

Certified Lead Based Paint Risk Assessor/Inspector

11/2/2009

Jacob Jones, B.S., Industrial Hygiene Associate — Date

Oklahoma Department of Environmental Quality Certification Number: OKRASR13457

Certified Lead-Based Paint Firm

Marshall Environmental Management, Inc.
1601 SW 89th Street, Suite A-100
Oklahoma City, OK 73159
(405) 616-0401

Oklahoma Department of Environmental Quality Certification Number: OKFIRM11160

XRF Information

Niton XLp Spectrum Analyzer
Model #XLp 300A
Serial #12585
Source: 40 mCi

Information Reviewed & Approved By:

11/2/09

Dr. Charles L. Marshall, C.I.H., C.S.P. — Date

EXECUTIVE SUMMARY

Marshall Environmental Management, Inc. conducted a Lead-Based Paint Inspection in addition to collecting samples of settled of dust on September 17, 2009 within the Marlow Armory, located at 702 West Main Street in Marlow, Oklahoma. This sampling event was accomplished in order to evaluate the locations and condition of lead-based paint, in addition to identifying the concentrations of lead in lead-laden dust, which may be present, so that a strategy may be prepared for remediation and/or abatement purposes.

The analytical results associated with this Lead-Based Paint Inspection did identify lead-based paint on various windows, doors and doorjambs, in addition to other miscellaneous surfaces through the Marlow Armory. Additionally, the concentrations of lead associated with the majority of the dust wipe samples, which were collected from the common areas throughout the Armory did exceed an action level of 40-micrograms per square foot ($\mu g/ft.^2$). This action level was set forth by the United States Department of Housing and Urban Development (HUD) and the Environmental Protection Agency (EPA), for all surfaces excluding the Indoor Firing Range (IFR). Furthermore, the lead concentrations correlating with the 2-samples collected within the IFR exceeded the 200-$\mu g/ft.^2$ action level, which was set forth by the Departments of the Army National Guard (ARNG) and the Air Force National Guard (ANG) Bureau, for surfaces within an IFR.

Specific sampling locations and the analytical data correlating with this Inspection and Surface-Dust Sampling Event are listed in the Findings portion of this Report. The remainder of this Report includes the Sampling Methodology, the Findings, the Disclosure Statement and Owners Legal Obligation as well as information regarding lead-based paint.

SAMPLING METHODOLOGY

All painted surfaces within the Armory are representatively sampled and analyzed for lead content, excluding non-fixed and factory painted items. Various floor surfaces throughout the Armory are also sampled and analyzed for lead-laden dust. The sample collection and analysis are performed in accordance with HUD guidelines, "*HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*"; and EPA proposed regulations, 40 Code of Federal Regulations (CFR) part 745.

Lead-Based Paint

Painted surfaces within the Armory are sampled and analyzed for lead content by utilizing an X-Ray Fluorescence (XRF), direct reading, data logging instrument. Lead concentrations identified as greater than or equal to 1-milligram per square centimeter (mg/cm^2) are characterized as "Lead-Based Paint." per HUD guidelines and EPA proposed regulations. The street facing side of the Armory is identified as Side A and going in a clockwise direction the remaining sides are categorized as Side B, Side C and Side D respectively. Each door and window within the Armory is given a sequential number that corresponds with a floor plan included in the Appendix of this Report.

Lead-Laden Dust

Floor surfaces throughout the Armory are sampled and analyzed for lead-laden dust. According to HUD guidelines and EPA proposed regulations, analytical results with lead concentrations equal to or greater than 40-µg/ft.^{2} represent lead contamination; this action level applies to all surfaces within the Armory excluding the IFR. In accordance with the Departments of the ARNG and the ANG Bureau guidelines, "*Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges*", lead concentrations equal to or greater than 200-µg/ft.^{2} represent lead contamination within an IFR. Samples of settled dust are collected by placing a template of a known dimension firmly against a selected surface; next, the area within the template is wiped in a particular pattern utilizing a specified wipe; each sample is then given an identification number; lastly, the wipe is placed in an approved container for transportation purposes.

FINDINGS

The Marlow Armory is located at 702 West Main Street in Marlow, Oklahoma. The Armory was constructed in approximately 1936. The Armory is a single story structure, with a brick façade and a flat roof. The Armory was constructed on a traditional concrete slab foundation with a lower level area positioned under the stage; this lower level area served as an IFR.

The analytical results associated with this Lead-Based Paint Inspection and Settled Dust Sampling did discover lead-based paint and lead-laden dust on various surfaces throughout the Armory. The following tables lists and categorizes the surfaces that were coated with lead-based paint in addition to the surfaces that were contaminated with lead-laden dust. Please note that the following surfaces were not analyzed for lead content at the time this Lead-Based Paint Inspection was performed:

- Non-fixed Items on the property
- Factory Painted Substrates

Table I: Painted Windows

Window Number	Result	Dimensions (Width x Height)
1	**Positive**	12" x 51"
2	**Positive**	26" x 94"
3	**Positive**	38" x 94"
4	**Positive**	38" x 94"
5	**Positive**	26" x 94"
6	**Positive**	38" x 92"
7	**Positive**	38" x 92"
8	**Positive**	26" x 92"
9	**Positive**	38" x 76"
10	**Positive**	50" x 112"
11	**Positive**	50" x 112"
12	**Positive**	50" x 112"

Window Number	Result	Dimensions (Width x Height)
13	**Positive**	50" x 112"
14	**Positive**	38" x 76"
15	**Positive**	38" x 112"
16	**Positive**	38" x 112"
17	**Positive**	38" x 112"
18	**Positive**	38" x 112"
19	**Positive**	38" x 76"
20	**Positive**	38" x 76"
21	**Positive**	38" x 112"
22	**Positive**	38" x 112"
23	**Positive**	38" x 112"
24	**Positive**	38" x 112"
25	**Positive**	38" x 94"
26	**Positive**	26" x 27"
27	**Positive**	26" x 94"
28	**Positive**	38" x 92"
29	**Positive**	38" x 92"
30	**Positive**	26" x 92"
31	**Positive**	38" x 92"
32	**Positive**	38" x 92"
33	**Positive**	26" x 94"
34	**Positive**	12" x 51"

Table II: Painted Doors & Doorjambs

Door Number	Door Result	Doorjamb Result	Dimensions (Width x Height)	Notes
1	**Positive**	**Positive**	31" x 83"	N/A
2	**Positive**	**Positive**	38" x 83"	N/A
3	**Positive**	**Positive**	53" x 83"	N/A
4	**Positive**	**Positive**	41" x 83"	N/A
5	**Positive**	**Positive**	41" x 83"	N/A
6	**Positive**	**Positive**	76" x 83"	N/A
7	**Positive**	**Positive**	38" x 83"	N/A
8	N/A	N/A	N/A	No Paint
9	N/A	N/A	N/A	No Paint
10	Negative	**Positive**	35" x 83"	N/A
11	Negative	**Positive**	35" x 83"	N/A
12	Negative	**Positive**	35" x 83"	N/A
13	Negative	**Positive**	35" x 83"	N/A
14	Negative	Negative	N/A	IFR Door
15	**Positive**	**Positive**	41" x 83"	N/A
16	**Positive**	**Positive**	40" x 83"	N/A

Door Number	Door Result	Doorjamb Result	Dimensions (Width x Height)	Notes
17	Negative	Negative	N/A	N/A
18	Negative	Negative	N/A	N/A
19	**Positive**	**Positive**	38" x 83"	N/A
20	**Positive**	**Positive**	53" x 83"	N/A
21	**Positive**	Negative	38" x 78"	N/A
22	Negative	Negative	N/A	N/A
23	N/A	**Positive**	39" x 83"	No Door
24	**Positive**	**Positive**	33" x 83"	N/A
25	**Positive**	**Positive**	39" x 83"	N/A
26	**Positive**	**Positive**	37" x 83"	N/A
27	**Positive**	**Positive**	30" x 76"	N/A
28	N/A	N/A	N/A	No Paint
29	**Positive**	**Positive**	40" x 83"	N/A
30	N/A	Negative	31" x 83"	No Door
31	**Positive**	**Positive**	33" x 79"	N/A

Table III: Miscellaneous Surfaces Positive for Lead-Based Paint

Room Number/Name	Location	Description
Exterior	Side A2	Door Caulk
Exterior	Side B1	White Rain-Gutter Drain
Exterior	Side B2	White Rain-Gutter Drain
Exterior	Side C	Beige Rain-Gutter Drain
Exterior	Side D2	White Rain-Gutter Drain
Room 10	Floor	Gray Concrete Floor
Room 10	Floor	Yellow Concrete Floor
Room 10	Floor	Red Concrete Floor
Exterior	Side B2	Red Garage Door Protector
Exterior	Side B1	White Garage Door Frame
Exterior	Side B2	White Garage Door Frame
Room 10	Stairs	Beige Concrete Stairs
Room 15	Stair Rail	White Metal Stair Rail
Room 15	Stairs	Yellow Concrete Stairs
Room 15	Stairs	Green Concrete Stairs
Exterior	Side D1	White Wood Vent
Room 11	Side D	White Metal Window Guard
Room 22	Side A	White Metal Window Guard
Room 6	Side A	White Metal Window Guard

Table IV: Floor Surfaces

Laboratory Identification	Sample Location	Concentration	Action Level
1	Area 1	<21.33-µg/ft²	40-µg/ft²
2	Area 2	24.74-µg/ft²	40-µg/ft²
3	Area 3	**69.21-µg/ft²**	40-µg/ft²
4	Area 4	**161.31-µg/ft²**	40-µg/ft²
5	Area 5	**509.03-µg/ft²**	40-µg/ft²
6	Area 6	**81.67-µg/ft²**	40-µg/ft²
7	Area 7	<21.33-µg/ft²	40-µg/ft²
8	Area 8	39.19-µg/ft²	40-µg/ft²
9	Area 9	**221.12-µg/ft²**	40-µg/ft²
10	Area 10	**177.20-µg/ft²**	40-µg/ft²
11	Area 11	38.63-µg/ft²	40-µg/ft²
12	Area 12	**599.85-µg/ft²**	40-µg/ft²
13	Area 13	<21.33-µg/ft²	40-µg/ft²
14	Area 14	<21.33-µg/ft²	40-µg/ft²
15	Area 15-East	**76.20-µg/ft²**	40-µg/ft²
16	Area 15-West	<16.00-µg/ft²	40-µg/ft²
17	Area 15-Center	<16.00-µg/ft²	40-µg/ft²
18	Area 16	**214.14-µg/ft²**	40-µg/ft²
19	Area 17	37.00-µg/ft²	40-µg/ft²
20	Area 18	**138.35-µg/ft²**	40-µg/ft²
21	Area 19	**356.85-µg/ft²**	40-µg/ft²
22	Area 20	**143.67-µg/ft²**	40-µg/ft²
23	Area 21	**248.80-µg/ft²**	40-µg/ft²
24	Area 22	**235.70-µg/ft²**	40-µg/ft²
25	Area 23	**79,476.00-µg/ft²**	40-µg/ft²
26	Area 24	**39,062.50-µg/ft²**	200-µg/ft²
27	Area 25	**11,862.80-µg/ft²**	200-µg/ft²
28	Area 15	21.37-µg/ft²	40-µg/ft²

Specific sampling locations, chain of custody forms, the analytical data and the labeled floor plans related to this Lead-Based Paint Inspection and Surface-Dust Sampling Event are included in the Appendix of this Report.

DISCLOSURE STATEMENT AND OWNERS LEGAL OBLIGATION

Federal law requires, to the extent this facility would be covered by HUD guidelines and EPA proposed regulations, that analytical results associated with Lead-Based Paint Inspections/Risk Assessments be disclosed to prospective renters, lessees or tenants entering into or renewing a lease, or to prospective purchasers prior to obligation under a sales contract if lead-based paint is found. If the inspection finds that lead-based paint is not present in certain multifamily dwelling units, which are to be leased, the dwelling unit(s) is exempt from disclosure requirements. However, for dwelling units, which are being sold, not leased the owner still has certain legal

responsibilities to fulfill under Federal law **even if no lead-based paint is identified.** Property owners and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that information is provided in order to protect children from lead-based paint hazards.

Information regarding the legal obligation to disclose results associated with lead-based paint inspections and/or risk assessments to tenants and/or purchasers can be obtained from the National Lead Information Center Clearinghouse (1-800-424-LEAD). This information is specified in 24 CFR, part 35 and 40 CFR, part 745 (published in the *Federal Register*, Volume 61, Number 45, April 6, 1996, beginning on p. 9064).

LEAD-BASED PAINT INFORMATION

You may contact the National Lead Information Center Clearinghouse (1-800-424-LEAD) to obtain HUD and EPA brochures, question and answer booklets, the regulations mentioned in this report and other information regarding lead-based paint disclosure.

APPENDIX

Surface Wipes
Chain of Custody
Analytical Data

XRF Data

Certificates

Labeled Floor Plans
Windows
Doors and Doorjambs
Miscellaneous Surfaces

Digital Photographs

1601 SW 89th St. Ste. A-100
Oklahoma City, OK 73159

Chain of Custody
Marshall Environmental Management, Inc.

176098
1 of 3

Phone: (405) 616-0401
Fax: (405) 681-6753
marshenv@swbell.net

PROJECT				INVOICE TO				REPORT TO			
Project Number	0112-LBP-091709-JJ			Client/ Company	MARSHALL ENV. MGMT, INC.			Client/ Company	SAME		
Project Name	MARLOW ARMORY			Attention				Attention			
Project Address				Address				Address			
Site Contact		Phone Number		Phone Number		Email		Phone Number		Email	

	Sample Collection Date	Sample Id # (field id.)	Sample Area (room #1, se bedroom, lobby 1st fl., etc.)	Location of Sample (w/in area) (north wall, ceiling, under carpet, etc.)	Sample Composition/Material (sheetrock, caulk, floor tile, etc.)	Sample Matrix (Air, Aqueous, etc.)	Sample Media (see legend)	Sample Time (start/stop or duration)	Calibrated Flow Rate	Total Volume/Area	Analysis/ Parameters
1	9/17/09	LW-01	Area 1			SURFACE/ DUST	WIPE	Start N/A	Pre N/A		
2		LW-02	Area 2					Stop N/A	Post N/A	108 cm²	LEAD
3		LW-03	Area 3					Start	Pre		
4		LW-04	Area 4					Stop	Post		
5		LW-05	Area 5					Start	Pre		
6		LW-06	Area 6					Stop	Post		
7		LW-07	Area 7					Start	Pre		
8		LW-08	Area 8					Stop	Post		
9		LW-09	Area 9					Start	Pre		
10		LW-10	Area 10					Stop	Post		
								Start	Pre		
								Stop	Post		

Samples Collected By	JACOB JONES	(print)	Date	9-17-09	Samples Relinquished By	JACOB JONES	(print)	Date	9-23-09	Method of Shipment	
		(signature)	Time	17:00			(signature)	Time	13:00		
Samples ~~Relinquished By~~ RECEIVED BY	QUANTEM	(print)	Date		Samples Relinquished By		(print)	Date		Sample Notes	
		(signature)	Time	9/23/09			(signature)	Time			
Samples Relinquished By		(print)	Date		Samples Relinquished By		(print)	Date		Condition Upon Receipt	
		(signature)	Time				(signature)	Time		Turn-Around-Time	

Page 1 of 3

Sample Media	
Micro-Vacuum	MV
Mold Plate	MP
Spore Trap	ST
Swab	SW
Tape-Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn-Around-Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

1601 SW 89th St. Ste. A-100
Oklahoma City, OK 73159

Chain of Custody
Marshall Environmental Management, Inc.

176098

Phone: (405) 616-0401
Fax: (405) 681-6753
marshenv@swbell.net

2 of 2

PROJECT		INVOICE TO		REPORT TO	
Project Number	0112 - LBP - 091709 - JJ	Client/ Company	Marshall Env	Client/ Company	Same
Project Name	Marion Armory	Attention		Attention	
Project Address		Address		Address	
Site Contact	Phone Number	Phone Number	Email	Phone Number	Email

	Sample Collection Date	Sample Id. # (field id.)	Sample Area (room #1, se bedroom, lobby 1st fl., etc.)	Location of Sample (w/in area) (north wall, ceiling, under carpet, etc.)	Sample Composition/Material (sheetrock, caulk, floor tile, etc.)	Sample Matrix (Air, Aqueous, etc.)	Sample Media (see legend)	Sample Time (start/stop or duration)	Calibrated Flow Rate	Total Volume/Area	Analysis/ Parameters
11	9/17/09	LW-11	Area 11			Surface Dust	Wipe	Start / Stop	Pre / Post	108 in²	PM
12		LW-12	Area 12					Start / Stop	Pre / Post		
13		LW-13	Area 13					Start / Stop	Pre / Post		
14		LW-14	Area 14					Start / Stop	Pre / Post		
15		LW-15E	Area 15 E					Start / Stop	Pre / Post	1 ft²	
16		LW-15W	Area 15 W					Start / Stop	Pre / Post		
17		LW-15C	Area 15-C					Start / Stop	Pre / Post		
18		LW-16	Area 16					Start / Stop	Pre / Post	108 in²	
19		LW-17	Area 17					Start / Stop	Pre / Post		
20		LW-18	Area 18					Start / Stop	Pre / Post		

Samples Collected By	James Jones (print)	Date	9-17-09	Samples Relinquished By	James Jones (print)	Date	9-22-09	Method of Shipment		Page 2 of 3
	J. Jones (signature)	Time	17:00		(signature)	Time	13:00			
Samples Relinquished By	S. Luftwick (print)	Date	9/23/09 9:5	Samples Relinquished By	(print)	Date		Sample Notes		
	(signature)	Time			(signature)	Time				
Samples Relinquished By	(print)	Date		Samples Relinquished By	(print)	Date		Condition Upon Receipt		
	(signature)	Time			(signature)	Time		Turn-Around-Time		

Received

Sample Media	
Micro-Vacuum	MV
Mold Plate	MP
Spore Trap	ST
Swab	SW
Tape-Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn-Around-Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

1601 SW 89th St. Ste. A-100
Oklahoma City, OK 73159

Chain of Custody
Marshall Environmental Management, Inc.

176098 3 of 3

Phone: (405) 616-0401
Fax: (405) 681-6753
marshenv@swbell.net

PROJECT		INVOICE TO		REPORT TO	
Project Number	CILL - LBP - 091709 - SS	Client/Company	Marshall Env.	Client/Company	Same
Project Name	Marlow Armory	Attention	↓	Attention	↓
Project Address		Address		Address	
Site Contact / Phone Number		Phone Number / Email		Phone Number / Email	

#	Sample Collection Date	Sample Id. # (field id.)	Sample Area (room #1, se bedroom, lobby 1st fl., etc.)	Location of Sample (w/in area) (north wall, ceiling, under carpet, etc.)	Sample Composition/Material (sheetrock, caulk, floor tile, etc.)	Sample Matrix (Air, Aqueous, etc.)	Sample Media (see legend)	Sample Time (start/stop or duration)	Calibrated Flow Rate	Total Volume/Area	Analysis/Parameters
21	9-11-09	LW-19	Area 19			Surface dust	Wipe	Start N/A / Stop	Pre N/A / Post	1ft²	Pb
22	↓	LW-20	Area 20			↓	↓	Start / Stop	Pre / Post	↓	↓
23		LW-21	Area 21					Start / Stop	Pre / Post		
24		LW-22	Area 22					Start / Stop	Pre / Post	↓	
25		LW 23	Area 23	Top of Stairwell				Start / Stop	Pre / Post	1ft²	
26		LW 24	Area 24	1FR South				Start / Stop	Pre / Post	↓	
27		LW-25	Area 25	1FR North				Start / Stop	Pre / Post	↓	
28		LW15	Area 15					Start / Stop	Pre / Post	108in²	
								Start / Stop	Pre / Post		
	↓					↓	↓	Start / Stop	Pre / Post		↓

Samples Collected By	Jacob Jones (print)	Date	9-17-09	Samples Relinquished By	Jacob Jones (print)	Date	9-22-09	Method of Shipment	
	(signature)	Time	17:00 pm		(signature)	Time	13:00		
Samples Relinquished By	S. Leftwich (print)	Date	9/23/09 9:50	Samples Relinquished By	(print)	Date		Sample Notes	
Reed	(signature)	Time			(signature)	Time		Condition Upon Receipt	
Samples Relinquished By	(print)	Date		Samples Relinquished By	(print)	Date			
	(signature)	Time			(signature)	Time		Turn-Around-Time	

Page 3 of 3

Sample Media	
Micro-Vacuum	MV
Mold Plate	MP
Spore Trap	ST
Swab	SW
Tape-Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn-Around-Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

* added sample LW-15 to COC. 9/23/09 SRL

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 176098
Date Received: 09/23/09
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: EC
Date of Report: 10/28/2009

AIHA ID: 101352

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

Acct. No.: A331

Project: Marlow Armory
Location: REVISED
Project No.: 0112-LBP-091709-JJ

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	LW-01	Wipe	Lead	<21.33	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
002	LW-02	Wipe	Lead	24.74	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
003	LW-03	Wipe	Lead	69.21	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
004	LW-04	Wipe	Lead	161.31	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
005	LW-05	Wipe	Lead	509.03	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
006	LW-06	Wipe	Lead	81.67	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
007	LW-07	Wipe	Lead	<21.33	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
008	LW-08	Wipe	Lead	39.19	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
009	LW-09	Wipe	Lead	221.12	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
010	LW-10	Wipe	Lead	177.20	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
011	LW-11	Wipe	Lead	38.63	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100

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.

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 176098
Date Received: 09/23/09
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: EC
Date of Report: 10/28/2009

AIHA ID: 101352

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

Acct. No.: A331

Project: Marlow Armory
Location: REVISED
Project No.: 0112-LBP-091709-JJ

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
012	LW-12	Wipe	Lead	599.85	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
013	LW-13	Wipe	Lead	<21.33	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
014	LW-14	Wipe	Lead	<21.33	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
015	LW-15E	Wipe	Lead	76.20	16.00	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
016	LW-15W	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
017	LW-15C	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
018	LW-16	Wipe	Lead	214.14	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
019	LW-17	Wipe	Lead	37.00	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
020	LW-18	Wipe	Lead	138.35	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
021	LW-19	Wipe	Lead	356.85	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
022	LW-20	Wipe	Lead	143.67	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100

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

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QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 176098
Date Received: 09/23/09
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Client: Marshall Environmental Management, Inc.
1601 SW 89th Street, Ste. A-100
Oklahoma City, OK 73159

Acct. No.: A331

Project: Marlow Armory
Location: REVISED
Project No.: 0112-LBP-091709-JJ

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
023	LW-21	Wipe	Lead	248.80	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
024	LW-22	Wipe	Lead	235.70	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
025	LW-23	Wipe	Lead	79476.00	16.00	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
026	LW-24	Wipe	Lead	39062.50	16.00	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
027	LW-25	Wipe	Lead	11862.80	16.00	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100
028	LW-15	Wipe	Lead	21.37	21.33	ug/sq. Ft.	09/28/09 16:20	EPA 3051 / NIOSH 9100

Authorized Signature: _____
Eric Caves, 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.

Supplemental Report
QAQC Results

QA ID: 7082
Test: Lead
Date: 9/28/2009
Matrix: Wipe
Lab Number: 176098
Approved By: Eric Caves
Date Approved: 9/28/2009

Notes:

Blank Data:

Type of Blank	Blank Value
Initial	0
Continuing	0
Final	0

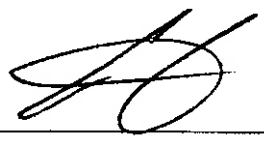
Standards Data:

Standard	Low Limit	Obtained	High Limit
FCV	225	262	275
CCV	225	259	275
ICV	22.5	25.3	27.5
RLVS	12.8	15.6	19.2

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MSW 3	0.000	5369.000	5298.000	98.7	5537.000	103.1	4.4
MSW 1	0.000	5369.000	5605.000	104.4	5254.000	97.9	6.5
MSW 2	0.000	5369.000	5304.000	98.8	5148.000	95.9	3.0

Authorized Signature: 

Eric Caves, Analyst

Marshall Environmental Management Inc.
1601 SW 89th Street, Suite A100
Oklahoma City, OK 73159

Index	Time	Duration	Units	Component	Substrate	Side	Color	Results	Action Level	PbC	PbL	PbK
1	2009-07-09 09:33	175.44	cps							2.76 ± 0.00	0.37 ± 0.00	0.01 ± 0.00
2	2009-07-09 09:34	3.28	mg / cm ^2			CALIBRATE		Positive	1.00	1.20 ± 0.20	1.20 ± 0.20	< LOD : 0.95
3	2009-07-09 09:35	4.28	mg / cm ^2			CALIBRATE		Positive	1.00	1.20 ± 0.10	1.20 ± 0.10	< LOD : 0.90
6	2009-07-09 09:36	6.29	mg / cm ^2			CALIBRATE		Positive	1.00	1.10 ± 0.10	1.10 ± 0.10	< LOD : 0.75
7	2009-07-09 09:38	4.14	mg / cm ^2	CEILING RAFTER	PLASTER		WHITE	Negative	1.00	< LOD : 0.90	0.20 ± 0.11	< LOD : 0.90
9	2009-07-09 09:40	3.14	mg / cm ^2	PILLER TRIM	PLASTER		WHITE	Negative	1.00	< LOD : 1.06	0.14 ± 0.08	< LOD : 1.06
10	2009-07-09 09:40	3.14	mg / cm ^2	UPPER TRIM	PLASTER		WHITE	Negative	1.00	< LOD : 0.95	0.13 ± 0.08	< LOD : 0.95
13	2009-07-09 09:42	3.14	mg / cm ^2	CEILING	PLASTER		WHITE	Negative	1.00	< LOD : 0.06	< LOD : 0.06	< LOD : 0.94
14	2009-07-09 09:43	8.03	mg / cm ^2	WALL	PLASTER	D	WHITE	Negative	1.00	< LOD : 0.75	0.40 ± 0.20	< LOD : 0.75
15	2009-07-09 09:43	4.30	mg / cm ^2	WALL	PLASTER	D	GREY	Negative	1.00	< LOD : 0.93	< LOD : 0.19	< LOD : 0.93
16	2009-07-09 09:50	1.00	mg / cm ^2	WEST HALL RAILS	METAL	D	BLACK	Negative	1.00	< LOD : 0.79	< LOD : 0.79	< LOD : 4.67
17	2009-07-09 09:53	6.71	mg / cm ^2			CALIBRATE		Positive	1.00	1.10 ± 0.10	1.10 ± 0.10	0.70 ± 0.40
19	2009-07-09 09:53	3.29	mg / cm ^2			CALIBRATE		Positive	1.00	1.20 ± 0.20	1.20 ± 0.20	< LOD : 1.05
23	2009-07-09 09:56	7.14	mg / cm ^2			CALIBRATE		Positive	1.00	1.10 ± 0.10	1.10 ± 0.10	< LOD : 0.60
26	2009-09-17 10:30	19.90	mg / cm ^2					Positive	1.00	1.00 ± 0.10	1.00 ± 0.10	0.90 ± 0.20
27	2009-09-17 10:31	5.05	mg / cm ^2					Negative	1.00	0.90 ± 0.10	0.90 ± 0.10	0.90 ± 0.50
28	2009-09-17 10:34	19.89	mg / cm ^2					Positive	1.00	1.00 ± 0.10	1.00 ± 0.10	0.90 ± 0.20
29	2009-09-17 10:44	1.04	mg / cm ^2	WINDOW BOARD	WOOD	A 1	WHITE	Negative	1.00	< LOD : 0.26	< LOD : 0.26	< LOD : 1.80
30	2009-09-17 10:47	2.85	mg / cm ^2	WINDOW SILL	CONCRETE	A 1	WHITE	Negative	1.00	< LOD : 0.21	< LOD : 0.21	< LOD : 2.09
31	2009-09-17 10:53	2.20	mg / cm ^2	WINDOW	METAL	A 2	WHITE	Positive	1.00	1.90 ± 0.90	1.90 ± 0.90	< LOD : 3.00
32	2009-09-17 10:57	2.99	mg / cm ^2	WINDOW	METAL	A 2 #3	WHITE	Positive	1.00	2.80 ± 1.80	3.80 ± 1.70	2.80 ± 1.80
33	2009-09-17 10:59	3.23	mg / cm ^2	WINDOW BASE	CONCRETE	A 2 #2	WHITE	Negative	1.00	< LOD : 0.10	< LOD : 0.10	< LOD : 1.29
34	2009-09-17 11:01	1.03	mg / cm ^2	DOOR	METAL	A 2	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 3.48
35	2009-09-17 11:01	1.03	mg / cm ^2	DOOR frame	METAL	A 2	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 3.34
36	2009-09-17 11:03	1.04	mg / cm ^2	DOOR caulk	PLASTER	A 2	RED	Positive	1.00	< LOD : 5.70	< LOD : 3.30	< LOD : 5.70
37	2009-09-17 11:08	1.17	mg / cm ^2	WINDOW	METAL	A 2 #6	WHITE	Positive	1.00	4.30 ± 2.60	4.30 ± 2.60	< LOD : 4.80
39	2009-09-17 11:09	1.29	mg / cm ^2	WINDOW	METAL	A 2 #6	WHITE	Positive	1.00	2.60 ± 1.60	2.60 ± 1.60	< LOD : 4.05
40	2009-09-17 11:13	0.52	mg / cm ^2	drain	METAL	B	WHITE	Positive	1.00	< LOD : 17.70	< LOD : 8.40	< LOD : 17.70
41	2009-09-17 11:15	1.03	mg / cm ^2	garage frame	METAL	B	WHITE	Positive	1.00	< LOD : 6.00	< LOD : 2.25	< LOD : 6.00
42	2009-09-17 11:19	2.59	mg / cm ^2	WINDOW	METAL	B#2	WHITE	Negative	1.00	< LOD : 0.60	< LOD : 0.60	< LOD : 1.95
45	2009-09-17 11:20	3.11	mg / cm ^2	WINDOW	METAL	B#2	WHITE	Positive	1.00	1.80 ± 0.60	1.80 ± 0.60	2.30 ± 1.10
46	2009-09-17 11:21	0.52	mg / cm ^2	drain	METAL	B #2	WHITE	Positive	1.00	< LOD : 17.25	< LOD : 2.70	< LOD : 17.25
47	2009-09-17 11:22	3.11	mg / cm ^2	window ledge	CONCRETE	B #2	WHITE	Negative	1.00	0.07 ± 0.04	0.07 ± 0.04	< LOD : 1.35
48	2009-09-17 11:24	1.04	mg / cm ^2	DOOR	METAL	B2	WHITE	Negative	1.00	< LOD : 0.16	< LOD : 0.16	< LOD : 3.24
49	2009-09-17 11:24	1.04	mg / cm ^2	DOOR frame	METAL	B2	WHITE	Negative	1.00	< LOD : 0.36	< LOD : 0.36	< LOD : 3.60
50	2009-09-17 11:26	3.11	mg / cm ^2	window ledge	CONCRETE	B2	WHITE	Negative	1.00	< LOD : 1.26	< LOD : 0.06	< LOD : 1.26
51	2009-09-17 11:27	1.04	mg / cm ^2	window cover	METAL	B2	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 3.47
53	2009-09-17 11:29	1.04	mg / cm ^2	garage frame	METAL	B2	WHITE	Positive	1.00	6.20 ± 4.10	< LOD : 2.10	6.20 ± 4.10
54	2009-09-17 11:33	0.65	mg / cm ^2	garage door guard	METAL	B2	RED	Positive	1.00	2.50 ± 1.40	2.50 ± 1.40	< LOD : 7.95
55	2009-09-17 11:40	1.04	mg / cm ^2	door	METAL	B2.#2	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 3.32

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56	2009-09-17 11:42	3.50	mg / cm ^2	window ledge	CONCRETE	c #1	WHITE	Negative	1.00	< LOD : 1.15	< LOD : 0.20	< LOD : 1.15
57	2009-09-17 11:43	1.03	mg / cm ^2	window cover	METAL	c #1	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 3.57
59	2009-09-17 11:44	0.64	mg / cm ^2	DRAIN	METAL	c #1	BEIGE	Positive	1.00	< LOD : 12.60	< LOD : 12.30	< LOD : 12.60
60	2009-09-17 11:46	1.04	mg / cm ^2	DOOR C #1	METAL	c #1	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 3.14
61	2009-09-17 11:47	1.04	mg / cm ^2	DOOR FRAME	METAL	c #1	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 3.48
62	2009-09-17 11:48	3.11	mg / cm ^2	DOOR FRAME	METAL	c #1	WHITE	Negative	1.00	< LOD : 1.13	< LOD : 0.10	< LOD : 1.13
68	2009-09-17 13:17	19.88	mg / cm ^2					Positive	1.00	1.00 ± 0.10	1.00 ± 0.10	0.80 ± 0.20
69	2009-09-17 13:26	1.04	mg / cm ^2	electrical conduit	METAL	C	BEIGE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 3.90
70	2009-09-17 13:26	1.04	mg / cm ^2	electrical conduit	METAL	C	BEIGE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 3.64
71	2009-09-17 13:29	1.17	mg / cm ^2	vent	WOOD	D 1	WHITE	Negative	1.00	< LOD : 0.68	< LOD : 0.68	< LOD : 1.65
72	2009-09-17 13:29	3.13	mg / cm ^2	IFR vent frame	WOOD	D 1	WHITE	Positive	1.00	1.80 ± 0.60	0.50 ± 0.20	1.80 ± 0.60
73	2009-09-17 13:31	3.12	mg / cm ^2	old pipe	METAL	D 1	WHITE	Negative	1.00	< LOD : 1.37	< LOD : 1.50	< LOD : 1.37
74	2009-09-17 13:35	5.43	mg / cm ^2	WINDOW	METAL	D 2	BEIGE	Positive	1.00	1.80 ± 0.80	2.00 ± 0.50	1.80 ± 0.80
75	2009-09-17 13:36	1.03	mg / cm ^2	WINDOW paint	glass	D 2	BEIGE	Negative	1.00	< LOD : 2.57	< LOD : 0.20	< LOD : 2.57
76	2009-09-17 13:37	1.04	mg / cm ^2	drain	METAL	D 2	WHITE	Positive	1.00	6.30 ± 3.90	< LOD : 4.20	6.30 ± 3.90
77	2009-09-17 13:38	2.72	mg / cm ^2	WINDOW ledge	CONCRETE	D 2	WHITE	Negative	1.00	< LOD : 0.15	< LOD : 0.15	< LOD : 2.28
79	2009-09-17 13:49	3.12	mg / cm ^2	WALL	PLASTER	ROOM 1 d	GREEN	Negative	1.00	< LOD : 1.18	< LOD : 0.14	< LOD : 1.18
81	2009-09-17 13:50	3.63	mg / cm ^2	WALL	PLASTER	ROOM 1 d	GREEN	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.02
83	2009-09-17 13:53	2.73	mg / cm ^2	WALL	PLASTER	room 1 c	WHITE	Negative	1.00	< LOD : 0.27	< LOD : 0.27	< LOD : 1.88
84	2009-09-17 13:56	5.59	mg / cm ^2	WALL	PLASTER	room 1 b	WHITE	Negative	1.00	< LOD : 0.90	0.21 ± 0.09	< LOD : 0.90
85	2009-09-17 13:58	1.04	mg / cm ^2	WALL	PLASTER	room 1 b	BLUE	Negative	1.00	< LOD : 0.13	< LOD : 0.13	< LOD : 3.03
87	2009-09-17 13:59	1.17	mg / cm ^2	WALL	PLASTER	room 1 b	GREEN	Negative	1.00	< LOD : 0.23	< LOD : 0.23	< LOD : 2.87
88	2009-09-17 14:01	1.29	mg / cm ^2	WALL	PLASTER	room 2 d	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.95
89	2009-09-17 14:03	1.04	mg / cm ^2	WALL	PLASTER	room 2 a	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.94
90	2009-09-17 14:03	1.29	mg / cm ^2	WALL	PLASTER	room 2 b	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.65
91	2009-09-17 14:04	1.04	mg / cm ^2	WALL	PLASTER	room 2 c	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.79
92	2009-09-17 14:06	1.16	mg / cm ^2	WALL	PLASTER	room 13 d	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.93
93	2009-09-17 14:06	1.29	mg / cm ^2	WALL	PLASTER	room 13 b	WHITE	Negative	1.00	< LOD : 0.05	< LOD : 0.05	< LOD : 1.83
94	2009-09-17 14:11	2.07	mg / cm ^2	WALL	PLASTER	room 3c	WHITE	Negative	1.00	< LOD : 0.06	< LOD : 0.06	< LOD : 2.22
96	2009-09-17 14:15	2.59	mg / cm ^2	WALL	PLASTER	room 3 d	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.05
97	2009-09-17 14:16	2.46	mg / cm ^2	WALL	PLASTER	room 3 d	silver	Negative	1.00	< LOD : 0.10	< LOD : 0.10	< LOD : 2.14
98	2009-09-17 14:17	1.94	mg / cm ^2	WALL	PLASTER	room 3 a	silver	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.31
99	2009-09-17 14:17	1.42	mg / cm ^2	WALL	PLASTER	room 3 a	GREEN	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 3.05
100	2009-09-17 14:19	2.33	mg / cm ^2	WALL	PLASTER	room 3 a	BEIGE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.03
101	2009-09-17 14:20	1.81	mg / cm ^2	WALL	PLASTER	room 3 b	GREEN	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.60
102	2009-09-17 14:21	2.20	mg / cm ^2	WALL	PLASTER	room 3 b	WHITE	Negative	1.00	< LOD : 0.17	< LOD : 0.17	< LOD : 2.34
103	2009-09-17 14:24	3.11	mg / cm ^2	WALL	PLASTER	room 4 a	WHITE	Negative	1.00	< LOD : 0.11	< LOD : 0.11	< LOD : 1.35
104	2009-09-17 14:25	1.94	mg / cm ^2	WALL	PLASTER	room 4 b	WHITE	Negative	1.00	< LOD : 0.05	< LOD : 0.05	< LOD : 2.29
105	2009-09-17 14:27	1.96	mg / cm ^2	WALL	PLASTER	room 4 c	WHITE	Negative	1.00	< LOD : 0.13	< LOD : 0.13	< LOD : 1.95
106	2009-09-17 14:27	2.33	mg / cm ^2	WALL	PLASTER	room 4 d	WHITE	Negative	1.00	< LOD : 0.05	< LOD : 0.05	< LOD : 2.23

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107	2009-09-17 14:29	5.32	mg / cm ^2	FLOOR	CONCRETE	room 4	GREEN	Negative	1.00	< LOD : 1.00	0.30 ± 0.18	< LOD : 1.00
109	2009-09-17 14:30	3.11	mg / cm ^2	FLOOR	CONCRETE	room 4	WHITE	Negative	1.00	0.29 ± 0.12	0.29 ± 0.12	< LOD : 1.35
110	2009-09-17 14:30	3.11	mg / cm ^2	FLOOR	PLASTER	room 4	GREEN	Negative	1.00	< LOD : 0.87	< LOD : 0.41	< LOD : 0.87
111	2009-09-17 14:36	2.32	mg / cm ^2	FLOOR	CONCRETE	room 5 a	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.95
112	2009-09-17 14:37	1.69	mg / cm ^2	WALL	CONCRETE	room 5 a	GREEN	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.28
113	2009-09-17 14:38	1.55	mg / cm ^2	WALL	CONCRETE	room 5 a	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.80
114	2009-09-17 14:38	1.93	mg / cm ^2	WALL	CONCRETE	room 5 b	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.48
115	2009-09-17 14:39	1.94	mg / cm ^2	WALL	CONCRETE	room 5 c	WHITE	Negative	1.00	< LOD : 0.04	< LOD : 0.04	< LOD : 2.57
116	2009-09-17 14:40	1.68	mg / cm ^2	WALL	CONCRETE	room 5 d	WHITE	Negative	1.00	< LOD : 0.05	< LOD : 0.05	< LOD : 2.60
118	2009-09-17 14:41	3.12	mg / cm ^2	FLOOR	CONCRETE	room 5	RED	Negative	1.00	0.29 ± 0.07	0.29 ± 0.07	< LOD : 1.35
119	2009-09-17 14:42	2.08	mg / cm ^2	FLOOR	CONCRETE	room 5	RED	Negative	1.00	0.28 ± 0.13	0.28 ± 0.13	< LOD : 2.52
120	2009-09-17 14:47	1.03	mg / cm ^2	shelf	WOOD	room 4b	BEIGE	Negative	1.00	< LOD : 0.18	< LOD : 0.18	< LOD : 1.76
121	2009-09-17 14:49	1.04	mg / cm ^2	shelf	WOOD	room 4d	silver	Negative	1.00	< LOD : 0.05	< LOD : 0.05	< LOD : 2.36
123	2009-09-17 14:50	2.20	mg / cm ^2	WALL	WOOD	room 15 a	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.27
125	2009-09-17 14:51	2.59	mg / cm ^2	WALL	WOOD	room 15 b	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.01
127	2009-09-17 14:52	2.34	mg / cm ^2	WALL	WOOD	room 15 c	WHITE	Negative	1.00	< LOD : 0.04	< LOD : 0.04	< LOD : 2.40
128	2009-09-17 14:52	1.94	mg / cm ^2	WALL	WOOD	room 15 d	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.52
129	2009-09-17 14:53	3.10	mg / cm ^2	WALL	WOOD	room 15 d	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.04
130	2009-09-17 14:54	1.04	mg / cm ^2	stair rail	WOOD	room 15 d	WHITE	Negative	1.00	< LOD : 0.25	< LOD : 0.25	< LOD : 3.67
131	**2009-09-17 14:55**	**0.39**	**mg / cm ^2**	**stair rail**	**METAL**	**room 15 d**	**WHITE**	**Positive**	**1.00**	**< LOD : 5.10**	**< LOD : 5.10**	**< LOD : 13.35**
133	**2009-09-17 14:55**	**0.52**	**mg / cm ^2**	**stair rail dup**	**METAL**	**room 15 d**	**WHITE**	**Positive**	**1.00**	**< LOD : 3.45**	**< LOD : 3.45**	**< LOD : 10.05**
134	**2009-09-17 14:56**	**0.52**	**mg / cm ^2**	**stair rail dup**	**METAL**	**room 15 d**	**WHITE**	**Positive**	**1.00**	**4.00 ± 2.60**	**4.00 ± 2.60**	**< LOD : 11.25**
135	2009-09-17 14:59	1.04	mg / cm ^2	pipe	METAL	room 15 c	WHITE	Negative	1.00	< LOD : 0.05	< LOD : 0.05	< LOD : 2.98
136	2009-09-17 15:01	1.29	mg / cm ^2	WALL	DRYWALL	room 17b	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.81
137	2009-09-17 15:02	1.16	mg / cm ^2	WALL	DRYWALL	room 17C	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.98
138	2009-09-17 15:03	1.17	mg / cm ^2	WALL	DRYWALL	room 17C	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.95
139	2009-09-17 15:04	1.16	mg / cm ^2	WALL	DRYWALL	room 17A	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.80
140	2009-09-17 15:04	1.03	mg / cm ^2	WALL	DRYWALL	room 17D	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.17
141	2009-09-17 15:06	3.12	mg / cm ^2	WALL	CONCRETE	B	WHITE	Negative	1.00	< LOD : 0.04	< LOD : 0.04	< LOD : 1.06
142	2009-09-17 15:07	3.11	mg / cm ^2	WALL	CONCRETE	room 18 a	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 0.97
145	2009-09-17 15:08	2.32	mg / cm ^2	WALL	CONCRETE	room 18 d	WHITE	Negative	1.00	< LOD : 0.04	< LOD : 0.04	< LOD : 2.04
147	2009-09-17 15:09	1.69	mg / cm ^2	WALL	CONCRETE	room 18 c	WHITE	Negative	1.00	< LOD : 0.11	< LOD : 0.11	< LOD : 2.67
148	2009-09-17 15:11	1.04	mg / cm ^2	shelf	WOOD	room 18 b	WHITE	Negative	1.00	< LOD : 0.04	< LOD : 0.04	< LOD : 2.15
150	2009-09-17 15:12	1.04	mg / cm ^2	hVAC COVER	WOOD	room 18	GREEN	Negative	1.00	< LOD : 0.08	< LOD : 0.08	< LOD : 2.42
152	2009-09-17 15:13	1.04	mg / cm ^2	hVAC COVER	WOOD	room 18	WHITE	Negative	1.00	< LOD : 0.06	< LOD : 0.06	< LOD : 2.17
153	2009-09-17 15:14	2.07	mg / cm ^2	WALL	CONCRETE	room 19 a	WHITE	Negative	1.00	< LOD : 0.08	< LOD : 0.08	< LOD : 2.51
154	2009-09-17 15:14	2.34	mg / cm ^2	WALL	CONCRETE	room 19 b	WHITE	Negative	1.00	< LOD : 0.05	< LOD : 0.05	< LOD : 2.02
155	2009-09-17 15:15	8.18	mg / cm ^2	WALL	CONCRETE	room 19 c	WHITE	Negative	1.00	< LOD : 0.60	< LOD : 0.03	< LOD : 0.60
156	2009-09-17 15:16	1.56	mg / cm ^2	WALL	CONCRETE	room 19 d	WHITE	Negative	1.00	< LOD : 0.07	< LOD : 0.07	< LOD : 2.72
158	2009-09-17 15:20	2.21	mg / cm ^2	WALL	CONCRETE	room 10 a	BEIGE	Negative	1.00	< LOD : 0.08	< LOD : 0.08	< LOD : 2.10

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159	2009-09-17 15:21	1.82	mg / cm ^2	WALL	CONCRETE	room 10 b	BEIGE	Negative	1.00	< LOD : 0.04	< LOD : 0.04	< LOD : 2.36
161	2009-09-17 15:22	2.59	mg / cm ^2	WALL	CONCRETE	room 10 c	BEIGE	Negative	1.00	< LOD : 0.04	< LOD : 0.04	< LOD : 2.04
162	2009-09-17 15:23	2.46	mg / cm ^2	WALL	CONCRETE	room 10 D	BEIGE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.95
163	2009-09-17 15:25	2.20	mg / cm ^2	WALL	CONCRETE	room 11 a	WHITE	Negative	1.00	< LOD : 0.11	< LOD : 0.11	< LOD : 2.31
166	2009-09-17 15:26	1.69	mg / cm ^2	WALL	CONCRETE	room 11 c	WHITE	Negative	1.00	< LOD : 0.10	< LOD : 0.10	< LOD : 2.75
167	2009-09-17 15:26	2.08	mg / cm ^2	WALL	CONCRETE	room 11 d	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.47
168	**2009-09-17 15:27**	**1.04**	**mg / cm ^2**	**window guard**	**METAL**	**room 11 d**	**WHITE**	**Positive**	**1.00**	**2.40 ± 1.20**	**2.40 ± 1.20**	**< LOD : 4.65**
169	2009-09-17 15:31	1.17	mg / cm ^2	window guard	glass	room 11 d	WHITE	Negative	1.00	< LOD : 0.06	< LOD : 0.06	< LOD : 2.22
170	2009-09-17 15:33	2.87	mg / cm ^2	window guard	glass	room 12 a	WHITE	Negative	1.00	< LOD : 0.07	< LOD : 0.07	< LOD : 2.03
171	2009-09-17 15:34	1.69	mg / cm ^2	window guard	CONCRETE	room 12 b	WHITE	Negative	1.00	< LOD : 0.23	< LOD : 0.23	< LOD : 2.73
172	2009-09-17 15:34	3.12	mg / cm ^2	window guard	CONCRETE	room 12 c	WHITE	Negative	1.00	0.15 ± 0.08	0.15 ± 0.08	< LOD : 1.35
173	2009-09-17 15:35	2.86	mg / cm ^2	window guard	CONCRETE	room 12 d	WHITE	Negative	1.00	< LOD : 0.08	< LOD : 0.08	< LOD : 2.09
174	2009-09-17 15:36	2.34	mg / cm ^2	FLOOR	CONCRETE	room 12	WHITE	Negative	1.00	0.23 ± 0.15	0.23 ± 0.15	< LOD : 2.27
175	2009-09-17 15:36	2.72	mg / cm ^2	FLOOR	CONCRETE	room 12	gray	Negative	1.00	0.23 ± 0.13	0.23 ± 0.13	< LOD : 2.19
176	**2009-09-17 15:37**	**3.37**	**mg / cm ^2**	**FLOOR**	**CONCRETE**	**room 10**	**gray**	**Positive**	**1.00**	**1.20 ± 0.20**	**1.20 ± 0.20**	**1.40 ± 0.90**
177	**2009-09-17 15:38**	**0.39**	**mg / cm ^2**	**FLOOR**	**CONCRETE**	**room 10**	**YELLOW**	**Positive**	**1.00**	**2.80 ± 1.70**	**2.80 ± 1.70**	**< LOD : 10.65**
178	2009-09-17 15:41	1.04	mg / cm ^2	pipe	CONCRETE	room 10 c	BEIGE	Negative	1.00	< LOD : 0.72	< LOD : 0.72	< LOD : 3.85
180	**2009-09-17 15:42**	**0.39**	**mg / cm ^2**	**FLOOR**	**CONCRETE**	**room 10 c**	**RED**	**Positive**	**1.00**	**4.10 ± 2.60**	**4.10 ± 2.60**	**< LOD : 11.70**
181	**2009-09-17 15:42**	**0.39**	**mg / cm ^2**	**stair**	**CONCRETE**	**room 10 d**	**BEIGE**	**Positive**	**1.00**	**2.70 ± 1.60**	**2.70 ± 1.60**	**< LOD : 11.10**
182	2009-09-17 15:45	1.56	mg / cm ^2	bar	WOOD	room 10	GREEN	Negative	1.00	0.50 ± 0.30	0.50 ± 0.30	< LOD : 1.62
183	2009-09-17 15:46	2.33	mg / cm ^2	bar	WOOD	room 10	BEIGE	Negative	1.00	0.70 ± 0.30	0.70 ± 0.30	< LOD : 1.39
184	2009-09-17 15:50	2.07	mg / cm ^2	bar	WOOD	rm 20 a	gray	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.46
185	2009-09-17 15:50	1.03	mg / cm ^2	bar	WOOD	rm 20 c	gray	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.58
186	2009-09-17 15:51	0.91	mg / cm ^2	bar	WOOD	rm 20 b	gray	Negative	1.00	< LOD : 0.08	< LOD : 0.08	< LOD : 2.15
188	2009-09-17 15:52	1.03	mg / cm ^2	bar	WOOD	rm 20 b	gray	Negative	1.00	< LOD : 0.04	< LOD : 0.04	< LOD : 1.76
190	2009-09-17 15:53	1.04	mg / cm ^2	WALL	WOOD	rm 21 c	gray	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.56
193	2009-09-17 15:54	1.04	mg / cm ^2	WALL	WOOD	rm 21 d	gray	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.54
194	2009-09-17 15:55	2.08	mg / cm ^2	WALL	CONCRETE	A	gray	Negative	1.00	< LOD : 0.14	< LOD : 0.14	< LOD : 2.43
195	2009-09-17 15:56	1.42	mg / cm ^2	WALL	CONCRETE	rm 21 b	gray	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.93
198	2009-09-17 15:58	1.81	mg / cm ^2	WALL	CONCRETE	rm 22 a	white	Negative	1.00	< LOD : 0.11	< LOD : 0.11	< LOD : 2.66
199	**2009-09-17 15:58**	**0.78**	**mg / cm ^2**	**window guard**	**METAL**	**rm 22 a**	**white**	**Positive**	**1.00**	**< LOD : 3.75**	**< LOD : 3.75**	**< LOD : 8.25**
202	2009-09-17 16:02	1.56	mg / cm ^2	WALL	CONCRETE	rm 22 b	white	Negative	1.00	< LOD : 0.12	< LOD : 0.12	< LOD : 2.72
203	2009-09-17 16:03	2.45	mg / cm ^2	WALL	CONCRETE	rm 22 c.	white	Negative	1.00	< LOD : 0.10	< LOD : 0.10	< LOD : 2.20
204	2009-09-17 16:05	1.42	mg / cm ^2	WALL	DRYWALL	rm 14	white	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.75
206	2009-09-17 16:06	1.04	mg / cm ^2	WALL	DRYWALL	rm 6	white	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 1.84
208	2009-09-17 16:07	8.18	mg / cm ^2	stall	METAL	rm 6	white	Negative	1.00	0.80 ± 0.20	0.80 ± 0.20	0.90 ± 0.50
209	**2009-09-17 16:08**	**1.04**	**mg / cm ^2**	**window guard**	**METAL**	**rm 6 a**	**white**	**Positive**	**1.00**	**3.20 ± 1.70**	**3.20 ± 1.70**	**< LOD : 5.40**
210	**2009-09-17 16:12**	**0.64**	**mg / cm ^2**	**DOOR jam**	**CONCRETE**	**rm 14 entrance**	**white**	**Positive**	**1.00**	**< LOD : 4.80**	**< LOD : 4.80**	**< LOD : 10.20**
211	2009-09-17 16:16	2.47	mg / cm ^2	WALL	CONCRETE	rm 7 a	white	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.05
213	2009-09-17 16:17	2.33	mg / cm ^2	WALL	CONCRETE	rm 7 b	white	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.13

Marshall Environmental Management Inc.
1601 SW 89th Street, Suite A100
Oklahoma City, OK 73159

Index	Time	Duration	Units	Component	Substrate	Side	Color	Results	Action Level	PbC	PbL	PbK
214	2009-09-17 16:17	1.68	mg / cm ^2	WALL	CONCRETE	rm 7 c	white	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.81
215	2009-09-17 16:18	3.11	mg / cm ^2	WALL	CONCRETE	rm 8a	white	Negative	1.00	< LOD : 0.04	< LOD : 0.04	< LOD : 1.20
217	2009-09-17 16:19	1.68	mg / cm ^2	WALL	CONCRETE	rm 8d	white	Negative	1.00	< LOD : 0.07	< LOD : 0.07	< LOD : 2.42
219	2009-09-17 16:20	2.33	mg / cm ^2	WALL	CONCRETE	rm 9d	white	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.21
220	2009-09-17 16:21	2.59	mg / cm ^2	WALL	CONCRETE	rm 9c	white	Negative	1.00	< LOD : 0.07	< LOD : 0.07	< LOD : 2.08
221	2009-09-17 16:26	0.78	mg / cm ^2	DOCR	WOOD	1	black	Positive	1.00	< LOD : 8.85	< LOD : 3.00	< LOD : 8.85
222	2009-09-17 16:28	1.04	mg / cm ^2	DOOR jam	WOOD	1	WHITE	Positive	1.00	< LOD : 5.55	1.20 ± 0.70	< LOD : 5.55
223	2009-09-17 16:29	0.52	mg / cm ^2	DOOR jam	WOOD	2	WHITE	Positive	1.00	< LOD : 6.90	< LOD : 6.90	< LOD : 11.85
224	2009-09-17 16:29	0.78	mg / cm ^2	DOOR	WOOD	2	WHITE	Positive	1.00	< LOD : 8.10	< LOD : 10.65	< LOD : 8.10
225	2009-09-17 16:31	0.52	mg / cm ^2	DOOR	WOOD	3	black	Positive	1.00	< LOD : 3.45	< LOD : 3.45	< LOD : 12.90
226	2009-09-17 16:32	1.03	mg / cm ^2	DOOR jam	WOOD	3	WHITE	Positive	1.00	< LOD : 4.65	< LOD : 4.65	< LOD : 5.70
227	2009-09-17 16:33	0.65	mg / cm ^2	DOOR	WOOD	4	WHITE	Positive	1.00	< LOD : 11.10	< LOD : 13.05	< LOD : 11.10
228	2009-09-17 16:34	0.91	mg / cm ^2	DOOR jam	METAL	4	WHITE	Positive	1.00	< LOD : 7.80	< LOD : 7.80	< LOD : 8.25
229	2009-09-17 16:36	1.03	mg / cm ^2	door jam	WOOD	5	WHITE	Positive	1.00	6.30 ± 4.00	< LOD : 5.70	6.30 ± 4.00
230	2009-09-17 16:37	0.39	mg / cm ^2	door	WOOD	5	black	Positive	1.00	< LOD : 4.80	< LOD : 4.80	< LOD : 13.20
231	2009-09-17 16:38	0.65	mg / cm ^2	door	WOOD	6	black	Positive	1.00	< LOD : 4.95	< LOD : 4.95	< LOD : 7.50
232	2009-09-17 16:39	1.03	mg / cm ^2	door jam	WOOD	6	WHITE	Positive	1.00	< LOD : 5.85	< LOD : 3.00	< LOD : 5.85
233	2009-09-17 16:40	1.03	mg / cm ^2	door jam	METAL	7	WHITE	Positive	1.00	< LOD : 6.00	< LOD : 10.80	< LOD : 6.00
234	2009-09-17 16:41	1.04	mg / cm ^2	door	WOOD	7	black	Positive	1.00	< LOD : 3.75	< LOD : 3.45	< LOD : 3.75
235	2009-09-17 16:43	1.04	mg / cm ^2	door jam	METAL	10	WHITE	Negative	1.00	< LOD : 0.05	< LOD : 0.05	< LOD : 3.24
236	2009-09-17 16:43	1.16	mg / cm ^2	door jam	METAL	10	WHITE	Positive	1.00	< LOD : 5.25	< LOD : 3.60	< LOD : 5.25
237	2009-09-17 16:44	1.03	mg / cm ^2	door	METAL	10	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 3.18
238	2009-09-17 16:45	1.04	mg / cm ^2	door jam	METAL	11	WHITE	Positive	1.00	< LOD : 5.85	< LOD : 4.50	< LOD : 5.85
239	2009-09-17 16:46	1.04	mg / cm ^2	door	METAL	11	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 3.90
240	2009-09-17 16:46	1.03	mg / cm ^2	door	METAL	12	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.94
241	2009-09-17 16:47	1.04	mg / cm ^2	door JAM	METAL	12	WHITE	Positive	1.00	6.30 ± 4.10	< LOD : 2.70	6.30 ± 4.10
242	2009-09-17 16:48	1.04	mg / cm ^2	door JAM	METAL	13	WHITE	Positive	1.00	6.60 ± 4.00	< LOD : 5.40	6.60 ± 4.00
243	2009-09-17 16:48	1.03	mg / cm ^2	door	METAL	13	WHITE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 3.75
244	2009-09-17 16:50	1.03	mg / cm ^2	door	WOOD	14	WHITE	Negative	1.00	< LOD : 0.42	< LOD : 0.42	< LOD : 1.80
245	2009-09-17 16:51	1.04	mg / cm ^2	door jam	WOOD	14	WHITE	Negative	1.00	< LOD : 0.04	< LOD : 0.04	< LOD : 1.62
246	2009-09-17 16:51	0.39	mg / cm ^2	stairs	CONCRETE	rm 15 fr stairs	YELLOW	Positive	1.00	< LOD : 30.90	< LOD : 27.90	< LOD : 30.90
247	2009-09-17 16:53	0.26	mg / cm ^2	stairs dup	CONCRETE	rm 15 fr stairs	YELLOW	Positive	1.00	< LOD : 41.25	< LOD : 22.35	< LOD : 41.25
248	2009-09-17 16:55	1.81	mg / cm ^2	stairs	CONCRETE	rm 15 d	GREEN	Positive	1.00	1.50 ± 0.50	1.50 ± 0.50	< LOD : 3.15
250	2009-09-17 16:59	1.04	mg / cm ^2	DOOR	WOOD	15	BEIGE	Positive	1.00	< LOD : 3.90	< LOD : 4.35	< LOD : 3.90
251	2009-09-17 17:00	1.03	mg / cm ^2	DOOR	WOOD	15	BEIGE	Positive	1.00	< LOD : 4.65	< LOD : 4.65	< LOD : 5.55
252	2009-09-17 17:01	1.04	mg / cm ^2	DOOR	METAL	16	WHITE	Negative	1.00	< LOD : 0.06	< LOD : 0.06	< LOD : 2.92
253	2009-09-17 17:01	1.03	mg / cm ^2	DOOR	METAL	16	WHITE	Negative	1.00	< LOD : 0.27	< LOD : 0.27	< LOD : 3.28
254	2009-09-17 17:03	0.52	mg / cm ^2	DOOR	WOOD	16	WHITE	Positive	1.00	< LOD : 6.45	< LOD : 6.45	< LOD : 10.05
255	2009-09-17 17:04	0.65	mg / cm ^2	DOOR jam	METAL	16	WHITE	Positive	1.00	< LOD : 8.40	< LOD : 8.40	< LOD : 10.50
256	2009-09-17 17:05	1.04	mg / cm ^2	DOOR jam	METAL	18	WHITE	Negative	1.00	< LOD : 0.07	< LOD : 0.07	< LOD : 3.63

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Index	Time	Duration	Units	Component	Substrate	Side	Color	Results	Action Level	PbC	PbL	PbK
257	2009-09-17 17:05	1.04	mg / cm ^2	DOOR .	METAL	18	WHITE	Negative	1.00	< LOD : 0.48	< LOD : 0.48	< LOD : 2.75
259	2009-09-17 17:07	1.17	mg / cm ^2	DOOR .	METAL	19	black	Positive	1.00	3.70 ± 2.40	3.70 ± 2.40	< LOD : 3.30
260	2009-09-17 17:08	1.04	mg / cm ^2	DOOR jam	METAL	19	black	Positive	1.00	< LOD : 6.00	< LOD : 4.80	< LOD : 6.00
261	2009-09-17 17:09	1.68	mg / cm ^2	floor	CONCRETE	nn 15 d	BEIGE	Negative	1.00	< LOD : 0.08	< LOD : 0.08	< LOD : 2.70
262	2009-09-17 17:10	1.04	mg / cm ^2	DOOR	WOOD	20	black	Positive	1.00	6.90 ± 4.20	2.00 ± 1.00	6.90 ± 4.20
263	2009-09-17 17:12	0.39	mg / cm ^2	DOOR	METAL	20	RED	Positive	1.00	2.80 ± 1.80	2.80 ± 1.80	< LOD : 16.35
264	2009-09-17 17:13	1.04	mg / cm ^2	DOOR	METAL	21	BEIGE	Positive	1.00	2.30 ± 1.20	2.30 ± 1.20	6.30 ± 4.10
266	2009-09-17 17:15	3.24	mg / cm ^2	DOOR jam	METAL	21	GREEN	Negative	1.00	0.80 ± 0.20	0.80 ± 0.20	< LOD : 1.35
267	2009-09-17 17:16	1.03	mg / cm ^2	DOOR jam	METAL	22	BEIGE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 3.41
268	2009-09-17 17:16	1.04	mg / cm ^2	DOOR	METAL	22	BEIGE	Negative	1.00	< LOD : 0.03	< LOD : 0.03	< LOD : 2.99
269	2009-09-17 17:18	0.52	mg / cm ^2	DOOR	WOOD	26	RED	Positive	1.00	2.80 ± 1.80	2.80 ± 1.80	< LOD : 11.85
270	2009-09-17 17:19	0.52	mg / cm ^2	DOOR jam	WOOD	26	RED	Positive	1.00	< LOD : 4.05	< LOD : 4.05	< LOD : 12.15
271	2009-09-17 17:20	1.03	mg / cm ^2	DOOR jam	WOOD	25	WHITE	Positive	1.00	2.70 ± 1.40	2.70 ± 1.40	< LOD : 5.10
272	2009-09-17 17:21	1.03	mg / cm ^2	DOOR jam	WOOD	25	RED	Positive	1.00	< LOD : 3.90	< LOD : 2.10	< LOD : 3.90
273	2009-09-17 17:22	0.64	mg / cm ^2	DOOR	WOOD	25	black	Positive	1.00	< LOD : 4.05	< LOD : 4.05	< LOD : 7.35
274	2009-09-17 17:25	1.04	mg / cm ^2	DOOR	WOOD	24	RED	Positive	1.00	2.10 ± 1.00	2.10 ± 1.00	< LOD : 4.50
275	2009-09-17 17:26	0.91	mg / cm ^2	DOOR JAM	WOOD	24	WHITE	Positive	1.00	< LOD : 6.45	< LOD : 6.45	< LOD : 9.00
276	2009-09-17 17:27	2.33	mg / cm ^2	DOOR JAM	METAL	30	WHITE	Negative	1.00	0.70 ± 0.30	0.70 ± 0.30	< LOD : 2.40
277	2009-09-17 17:29	1.04	mg / cm ^2	DOOR JAM	METAL	29	WHITE	Positive	1.00	3.60 ± 2.20	3.60 ± 2.20	< LOD : 5.85
278	2009-09-17 17:30	0.91	mg / cm ^2	DOOR	WOOD	29	WHITE	Positive	1.00	< LOD : 7.05	< LOD : 9.90	< LOD : 7.05
279	2009-09-17 17:31	3.24	mg / cm ^2	DOOR	METAL	31	RED	Positive	1.00	1.20 ± 0.20	1.20 ± 0.20	< LOD : 1.35
280	2009-09-17 17:32	1.03	mg / cm ^2	DOOR jam	METAL	31	WHITE	Negative	1.00	< LOD : 0.55	< LOD : 0.55	< LOD : 3.54
285	2009-09-17 18:04	6.33	mg / cm ^2	DOOR jam	METAL	31	WHITE	Negative	1.00	0.90 ± 0.10	0.90 ± 0.10	1.00 ± 0.40
286	2009-09-17 18:06	19.89	mg / cm ^2	DOOR jam	METAL	31	WHITE	Positive	1.00	1.00 ± 0.10	1.00 ± 0.10	1.10 ± 0.20
287	2009-09-17 18:07	8.28	mg / cm ^2	DOOR jam	METAL	31	WHITE	Positive	1.00	1.10 ± 0.10	1.10 ± 0.10	1.00 ± 0.40

Department of Environmental Quality

This is to Certify That

MARSHALL ENVIRONMENTAL MANAGEMENT

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

FIRM

Certification # OKFIRM11160

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

Issued on: 4/1/2009 Expires on 3/31/2010

Division Director
Air Quality Division

DEQ

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

CHARLES MARSHALL

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

INSPECTOR/RISK ASSESSOR

Certification # OKRASR13418

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

Issued on: 4/1/2009 Expires on 3/31/2010

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

JACOB JONES

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

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR13457

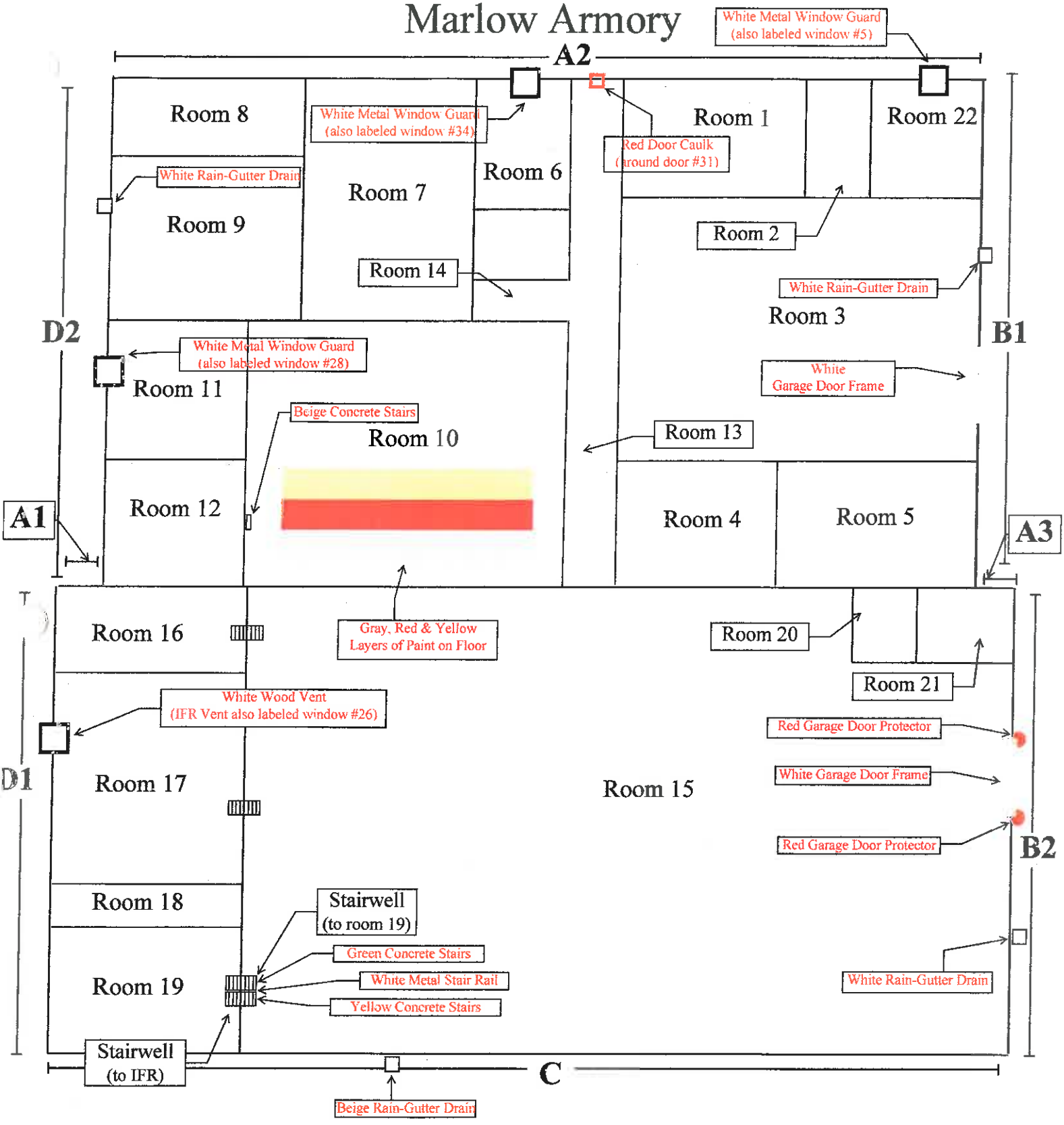
This certificate is valid from the date of issuance and renewed as prescribed by law.

Issued on: 6/4/2009 Expires on: 3/31/2010

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

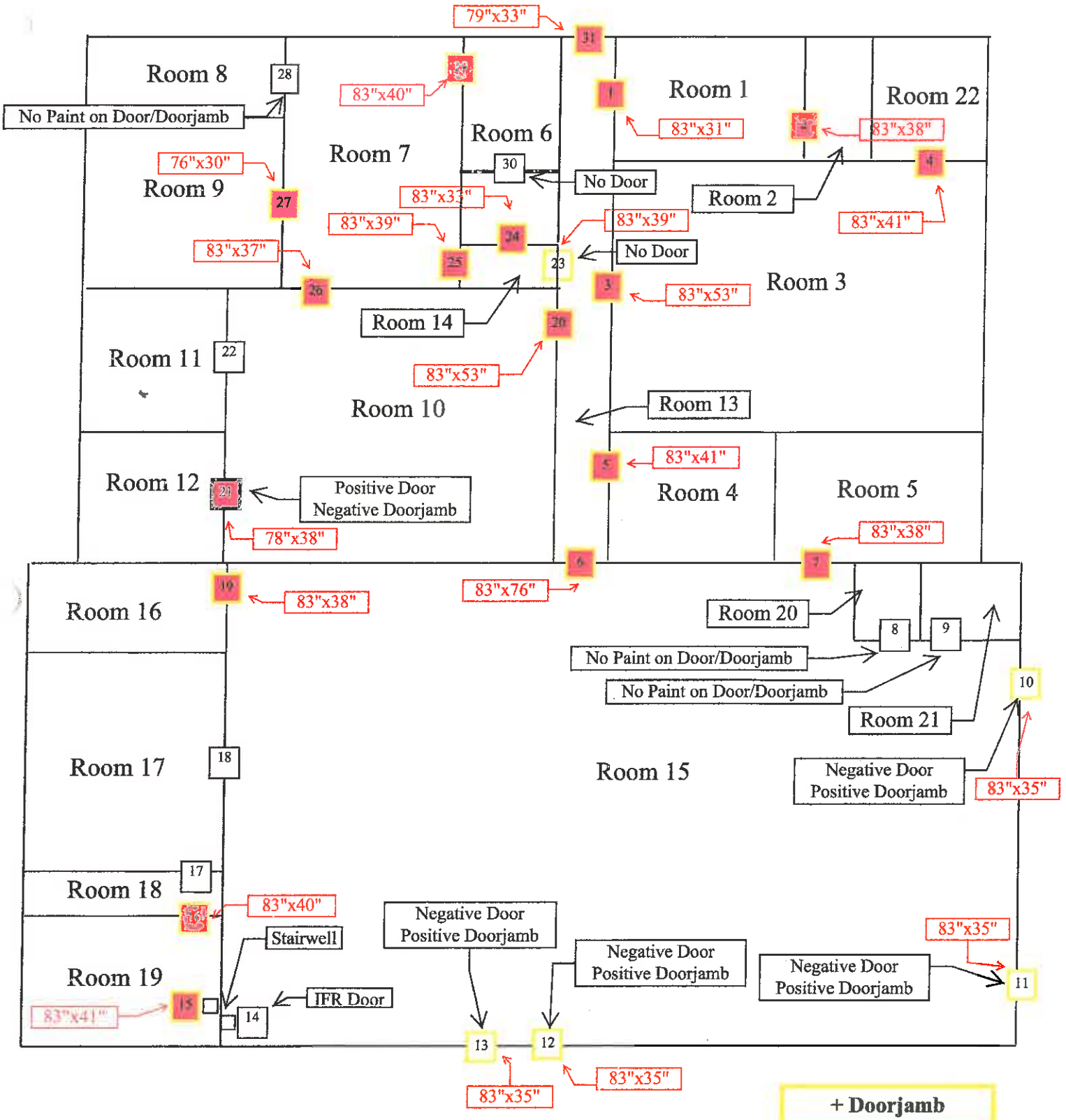
Marlow Armory



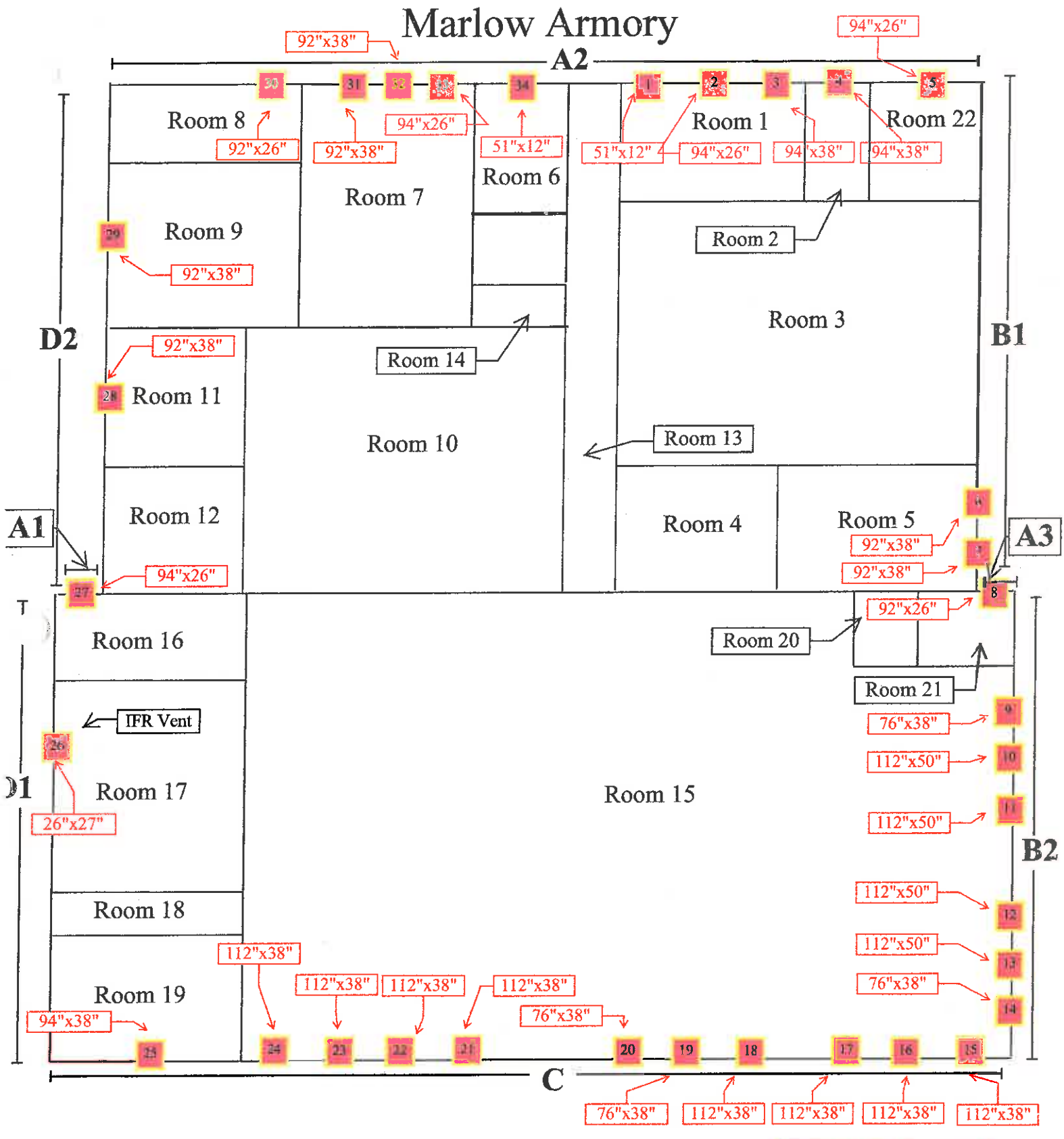
Miscellaneous Surfaces
Positive for Lead-Based Paint

North

Marlow Armory



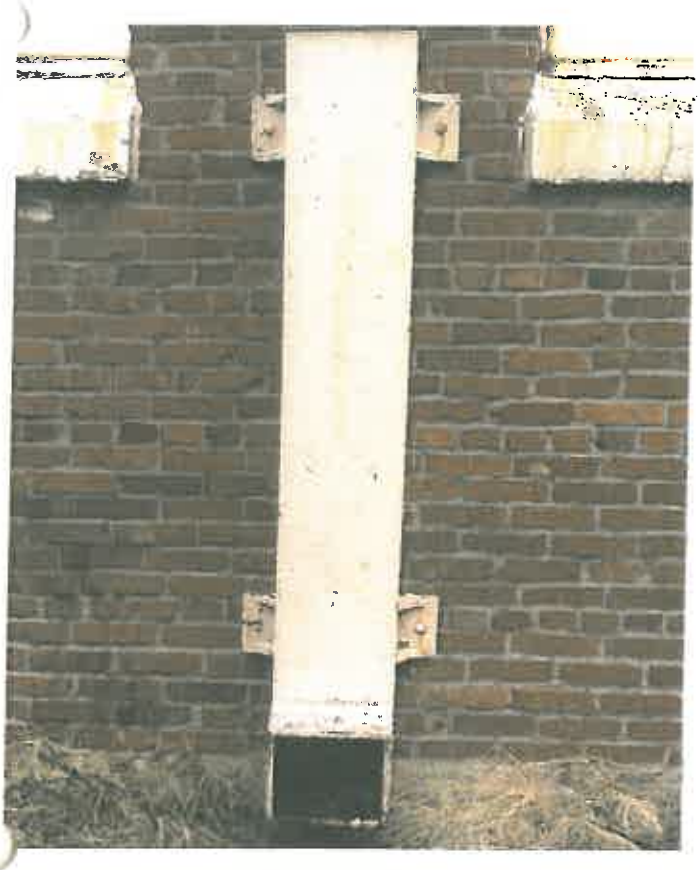
Lead-Based Paint
Doors and Doorjambs



Lead-Based Paint
Windows

Windows A2

Drain B# 1 side B1



Drain C #1

Exterior Red Door Caulk

Exterior D1 IFR Vent

Garage Frame side B1

Garage Frame Side B2

IFR Stairs

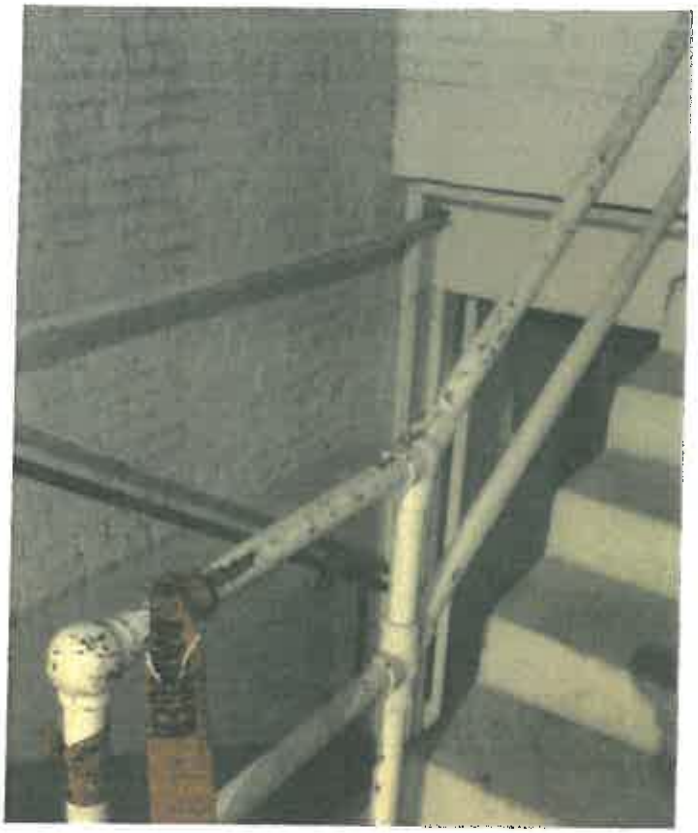
Room 6 A2 Window Guard

Room 19 concrete Staircase

Room 10 stair side D

Room 14 entrance Concrete Door Jam

Room 22 window guard (side A)



Stair Rail By IFR (white, Metal)

window guard 11d

Asbestos Inspection

Marlow Armory
702 West Main Street
Marlow, Oklahoma 73055

Date of Inspection
September 17, 2009

DCS Contract No.: ID009139-4

PREPARED FOR:
Oklahoma Department of Environmental Quality
Land Protection Division
707 North Robinson
Oklahoma City, OK 73102

PREPARED BY:
Marshall Environmental Management, Inc.
1601 Southwest 89th Street, Suite A-100
Oklahoma City, Oklahoma 73159

Table of Contents

CERTIFICATION

This is to certify, that Marshall Environmental Management, Inc. was contracted by the State of Oklahoma, Department of Central Services to conduct an Asbestos Inspection of the Marlow Armory, for the State of Oklahoma, Department of Environmental Quality, Land Protection Division. This Marlow Armory Asbestos Inspection was performed by an Oklahoma Department of Labor Licensed, Asbestos Hazard Emergency Response Act Inspector, Jamie Marshall, of Marshall Environmental Management, Inc, under the direction of Oklahoma Department Of Labor Licensed, Asbestos Hazard Emergency Response Act Management Planner, Dr. Charles L. Marshall, Certified Industrial Hygienist, President of Marshall Environmental Management, Inc. The findings and recommendations included in this report are believed to accurately, depict the conditions observed on the date this Asbestos Inspection was performed.

Dr. Charles L. Marshall, CIH, CSP — Date: 11/2/09

Certified Industrial Hygienist - Comprehensive Practice Certification	#4489
Certified Safety Professional - Comprehensive Practice Certification	#9941
Registered Professional Environmental Specialist - State Department of Health	#710
Certified Hazardous Materials Manager, Master Level Certification	#1909
Certified Healthcare Safety Professional, Master Level Certification	#521

EPA AHERA Certifications

#400517 Inspector
#500396 Management Planner
#2415 Project Designer

ODOL License

#OKMP-0028 Project Designer
#OKMP-0246 Management Planner
#OK-150343 Inspector

Jamie Marshall, B.S., Industrial Hygiene Associate — Date: 11/2/09

Oklahoma Department of Labor License #OK-158090 Inspector

Laboratory Analysis Performed by

Marshall Environmental Management, Inc. (AIHA/NIOSH PAT Lab ID #102334)
1601 SW 89th Street, A-100
Oklahoma City, OK 73159

EXECUTIVE SUMMARY

Marshall Environmental Management, Inc. (MEM) performed an Asbestos Inspection on September 17, 2009 of the Marlow Armory, located at 702 West Main Street in Marlow, Oklahoma, so that a strategy may be prepared for the abatement of Asbestos Containing Materials (ACM), which may be present, as required by Environmental Protection Agency (EPA) regulations for pre-1980 construction.

The analytical results correlating with the samples that were collected as part of this Asbestos Inspection identified the presence of "Non-Friable" asbestos containing mastic, which was located on the floor, under floor tile in rooms-2, 7, 8, 9, 13, 14, 17, 18 and 19. Chrysotile was the type of asbestos that was identified in the mastic and the concentrations in which the asbestos was detected were greater than 1-percent (>1%); this classifies the mastic as an ACM. However due to the mastic being non-friable, this material is considered "Non-Regulated."

Although, non-friable asbestos containing mastic is considered non-regulated, recommendations will include that the abatement activities be accomplished by an Oklahoma Department Of Labor (ODOL) Licensed, Asbestos Abatement Contractor to ensure that Occupational Safety and Health Administration (OSHA) and EPA compliant methods are utilized. Because the mastic is non-regulated, EPA regulations do not require that a National Emission Standard for Hazardous Air Pollutants (NESHAP) notification be submitted. Moreover, due to the mastic being non-friable, which classifies the material "Category I Non-Regulated", the ODOL does not require that a Project Design be submitted prior to the abatement of this material.

The remainder of this Report includes the Sampling Strategy, the Findings, Conclusions and Recommendations, Limitations of the Survey, the Regulatory Review and the Appendix to this Report.

SAMPLING STRATEGY

Each accessible area throughout the Armory was systematically inspected in order to collect samples of building materials suspected of containing asbestos. The sample collection process includes, identifying the type of material suspected of containing asbestos, the location of the material, the condition and the quantity. Suspect ACM that are uniform in color and texture and are believed to be applied during the same period, are described as "Homogenous". An adequate number of samples are collected from "Homogenous" materials, and if laboratory analysis determines that the material contains asbestos, the entire homogenous material is considered an ACM. These procedures are thoroughly documented for the purpose of assisting, if necessary, with the development of appropriate response actions. The following are examples of the types of building materials that were visually inspected and sampled during this Asbestos Inspection.

Surfacing Materials

- Examples include blown on or troweled on material, typically observed on ceilings, structural steel, concrete ceilings or metal pan decks.

Thermal System Insulation

- Examples include piping, hot and cold water lines, Heating Ventilation and Air Conditioning (HVAC) equipment and components, boilers, steam lines or heated thermal processes.

Miscellaneous Materials

- Examples include floor tiles, mastics, ceiling tiles, vinyl sheet flooring, sheetrock, sheetrock-tape, sheetrock-mud or joint compounds.

Each sample collected was submitted for analysis in accordance with the EPA authorized Method: 600 49 Code of Federal Regulations (CFR) Part 61 Subpart M, Asbestos NESHAP Rules. "Asbestos Containing Materials" are any materials, which consist of >1% asbestos, as defined by the EPA Approved Analytical Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix C, referred to as: "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

FINDINGS

The Marlow Armory is located at 702 West Main Street in Marlow Oklahoma. The Armory was constructed in approximately 1936. The Armory is a single-story structure with a lower level area that was utilized as an Indoor Firing Range (IFR). The Armory was constructed on a concrete slab with a brick exterior and a flat roof.

The analytical results correlating with the samples that were collected as part of this Asbestos Inspection identified the presence of non-friable asbestos containing mastic, which was located on the floor, under floor tile in rooms-2, 7, 8, 9, 13, 14, 17, 18 and 19. Chrysotile was the type of asbestos that was identified in the mastic and the concentrations in which the asbestos was detected were greater than >1%; this classifies the mastic as an ACM. However due to the mastic being non-friable, this material is considered non-regulated. The table below summarizes the locations, the concentrations and the type of asbestos that was identified during this Asbestos Inspection.

Table I: Analytical Results

Sample Identification	Sample Location	Sample Description	Percent Asbestos	Type of Asbestos	Type of Material
PLM-11	Room 2	Floor Tile Mastic	10%	Chrysotile	Miscellaneous
PLM-13	Room 13	Floor Tile Mastic	03%	Chrysotile	Miscellaneous
PLM-15	Room 14	Floor Tile Mastic	04%	Chrysotile	Miscellaneous
PLM-17	Room 7	Floor Tile Mastic	03%	Chrysotile	Miscellaneous
PLM-19	Room 8	Floor Tile Mastic	05%	Chrysotile	Miscellaneous
PLM-21	Room 9	Floor Tile Mastic	05%	Chrysotile	Miscellaneous
PLM-32	Room 17	Floor Tile Mastic	03%	Chrysotile	Miscellaneous

Table II: Homogenous Asbestos Containing Materials

Sample Identification	Homogenous Location	Sample Description	Quantities
PLM-11	Room 2	Floor Tile Mastic	40-ft^2
PLM-13	Room 13	Floor Tile Mastic	440-ft^2
PLM-15	Room 14	Floor Tile Mastic	33-ft^2
PLM-17	Room 7	Floor Tile Mastic	375-ft^2
PLM-19	Room 8	Floor Tile Mastic	143-ft^2
PLM-21	Room 9	Floor Tile Mastic	195-ft^2
PLM-32	Room 17 18 19	Floor Tile Mastic	858-ft^2
		Total Quantities	2,084-ft^2

The Conclusions and Recommendations are provided in the subsequent portion of this Report, and the chain of custody forms, specific sampling locations and associated analytical results are provided in the Appendix of this Report.

Historical Overview of Asbestos Activities

Historical records were not provided for review nor was there evidence or information that would suggest that a prior asbestos inspection occurred.

CONCLUSIONS AND RECOMMENDATIONS

Although, non-friable asbestos containing mastic is considered non-regulated, recommendations will include that the abatement activities be accomplished by an ODOL Licensed, Asbestos Abatement Contractor to ensure that OSHA and EPA compliant methods are utilized. Because the mastic is non-regulated, EPA regulations do not require that a NESHAP notification be submitted. Moreover, due to the mastic being non-friable, which classifies the material "Category I Non-Regulated", the ODOL does not require that a Project Design be submitted prior to the abatement of this material.

LIMITATIONS OF SURVEY

This Asbestos Inspection was limited to certain aspects of the building construction; these limitations may have restricted or prevented the complete inspection of hidden or inaccessible building materials and substrates. Inaccessible building materials and/or substrates were not inspected. Locations presenting a hazard to bystanders or the Inspector were not assessed.

The findings within this Report are valid as of the date this Asbestos Inspection was performed; however, changes in the conditions of a property may certainly occur with the passage of time, whether due to natural processes or the works of man. Furthermore, changes in applicable or appropriate standards may also occur, possibly resulting from legislation or the expansion of knowledge.

Our Investigation was performed using a degree of care and skill ordinarily exercised under similar circumstances by professional consultants practicing in this or similar localities.

Professional services have been performed; results associated with this Asbestos Inspection were obtained and reported in accordance with generally accepted principles and practices. No other representations either expressed or implied are made; thus, Marshall Environmental Management, Inc. is not responsible for independent conclusions, opinions, or recommendations made by others. It should also be noted that as-built plans were not available for review or use in the planning of this asbestos inspection.

REGULATORY REVIEW

Prior to 1980 asbestos was commonly found in various building materials and utilized during construction. In 1994, OSHA required employers to identify ACM in pre-1980 construction as part of its Standard for Occupational Exposure to Asbestos in Construction (29 CFR 1926.1101). This OSHA standard covers maintenance, repair and removal functions involving ACM or Presumed ACM (PACM). Without Asbestos Inspections, owners and/or operators must treat suspected ACM as asbestos. The ODOL defines an ACM as any material that contains 1% or greater of asbestos, whereas the EPA definition is any material that contains >1% asbestos.

The ODOL regulates the Hazard Communication requirements for public employees as part of the ODOL Public Employees Occupational Safety and Health (PEOSH) Program. The State of Oklahoma Hazard Communication Standard (HAZCOM), revised as of August 2006, is provided in the Oklahoma Asbestos Control Act (OAC) 380 Chapter 45.
http://www.ok.gov/odol/documents/Asbestos_law_rules.pdf

Specific provisions of the Standard (OAC: 45-15-1) address an Asbestos Notice and Labeling requirement. The Labeling requirements specify that pipe insulation and various equipment insulation containing asbestos, as well as, room locations where asbestos is present, be provided with an Asbestos Warning Label. These labels are to be readily visible and include the following warning:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID BREATHING DUST
CANCER AND LUNG DISEASE HAZARD

Section 380:45-15-2 requires a notice to employees when ACM are used in acoustical materials on ceilings and walls; this type of ACM is referred to as a Surfacing Material.

The EPA requires inspections in school buildings in grades K through 12, as part of the Asbestos Hazard Emergency Response Act (AHERA), which is authorized in 40 CFR 763.6. These AHERA requirements would only be applicable to the Marlow Armory in an instance where the future intentions for the structure would include school activities grades K through 12. The structure would then necessitate an Asbestos Management Plan, required by the Local Educational Authority (LEA). The AHERA inspection protocol requires a thorough sampling of all forms of friable and non-friable asbestos. The types of ACM to be assessed as part of an AHERA Inspection include:

Surfacing Materials

- Examples include blown on or troweled on material, typically observed on ceilings, structural steel, concrete ceilings or metal pan decks.

Thermal System Insulation

- Examples include piping, hot and cold water lines, Heating Ventilation and Air Conditioning (HVAC) equipment and components, boilers, steam lines or heated thermal processes.

Miscellaneous Materials

- Examples include floor tiles, mastics, ceiling tiles, vinyl sheet flooring, sheetrock, sheetrock-tape, sheetrock-mud or joint compounds.

The AHERA sampling protocol addresses the systematic sampling of each type of ACM and the identification of friable ACM, that which can be rendered to a powder by hand pressure, Category I non-friable ACM, such as floor tiles and mastic, and Category II non-friable ACM, such as cement asbestos tiles. The AHERA Inspection must also evaluate the condition and potential for the disturbance of the ACM. The condition of the ACM, good, damaged or significantly damaged, must also be determined.

In addition to AHERA, the EPA also regulates asbestos abatement during renovation and/or demolition activities. Land disposal requirements are also regulated by the EPA through State Landfill Permits. These efforts are now administered by the Oklahoma Department of Environmental Quality (ODEQ) Air Quality and Land Protection regulations. The ODEQ requires the filing of advance notices for any demolition or renovation activities. These notices are referred to as a NESHAP Notification. Both historical and future asbestos abatement response actions track asbestos removal to an ODEQ approved landfill on a project-by-project basis as part of this NESHAP notification process.

A NESHAP Notice is required for renovation and/or demolition whenever the quantities of ACM are greater than 160 square feet, 260 linear feet or 35 cubic feet. All required NESHAP Notifications must be submitted to the DEQ 10-business days prior to any renovation or demolition activities where asbestos is present. Instruction of how to file and comply with DEQ and NESHAP notification requirements are provided on the DEQ web site at:
http://www.deq.state.ok.us/aqdnew/asbestos/index.htm

The ODOL regulates Asbestos Abatement. The ODOL Asbestos Division implements the ODOL Rules governing the abatement for friable asbestos. Under the ODOL asbestos rule, OAC 380:50, only Licensed Contractors can perform asbestos abatement, develop management plans and project designs. All abatement supervisors, abatement workers and asbestos inspectors must also be licensed by the ODOL. It should be noted that the ODOL Asbestos Rules are currently undergoing a review for pending rule change. The ODOL Rules are available on the ODOL web site at:
http://www.ok.gov/odol/

APPENDIX

Bulk Asbestos

Chain of Custody

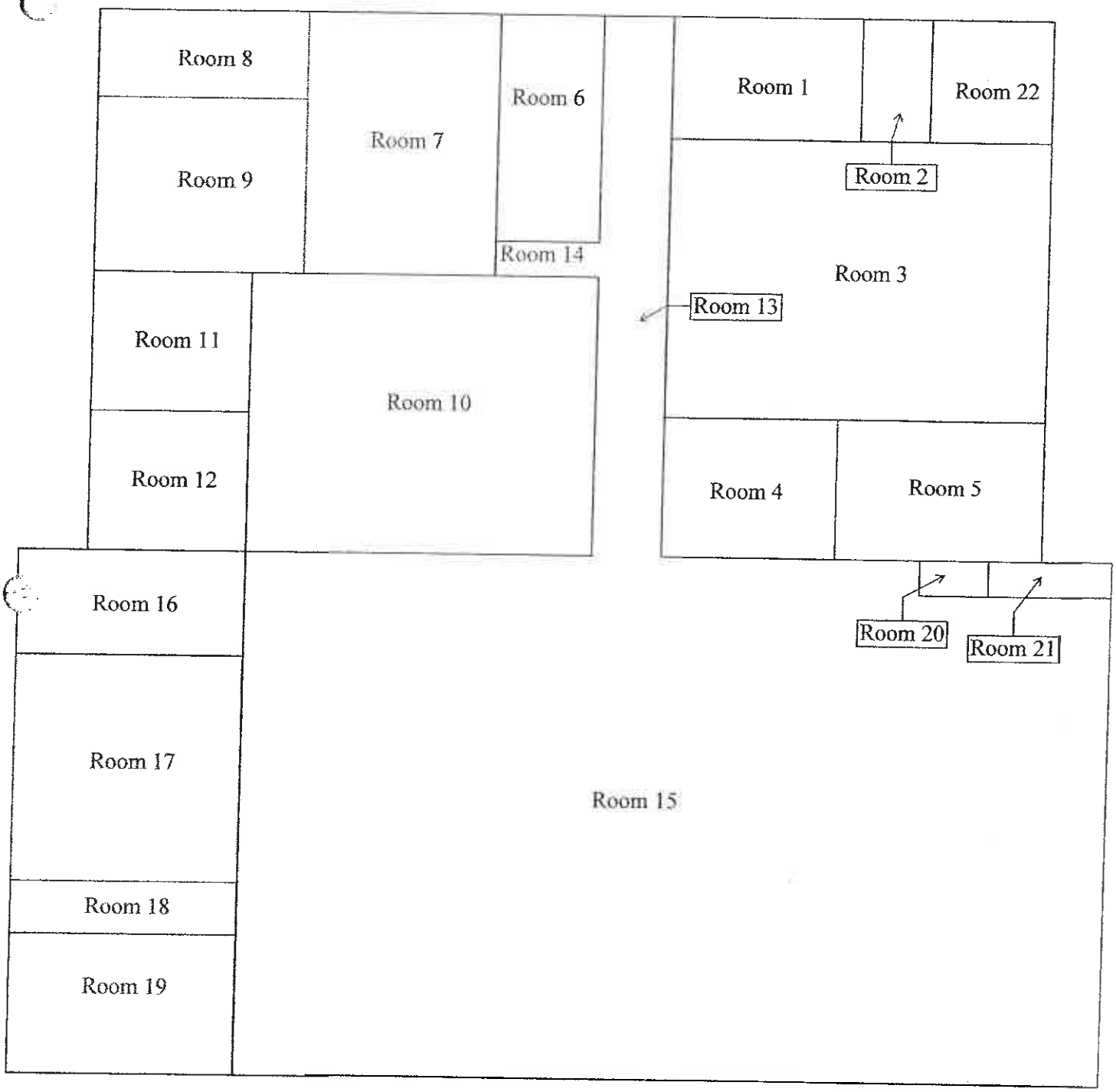
Analytical Results

Homogenous-Labeled Floor Plan

Digital Photographs

Licenses

Marlow Armory



North

Mastic
(under floor tile)

Asbestos Containing Materials Homogenous Areas

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Chain of Custody
Marshall Environmental Management, Inc.

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PROJECT		INVOICE TO		REPORT TO	
Project Number		Client/ Company		Client/ Company	
Project Name	Marlow Armory AB Inspection	Attention		Attention	
Project Address		Address		Address	
Site Contact	Phone Number	Phone Number	Email	Phone Number	Email

Sample Collection Date	Sample Id. # (field id.)	Sample Area (room #1, se bedroom, lobby 1st fl., etc.)	Location of Sample (w/in area) (north wall, ceiling, under carpet, etc.)	Sample Composition/Material (sheetrock, caulk, floor tile, etc.)	Sample Matrix (Air, Aqueous, etc.)	Sample Media (see legend)	Sample Time (start/stop or duration)		Calibrated Flow Rate		Total Volume/Area	Analysis/ Parameters
9/17/09	B1	Room 2	Threshold Floor	Floor Tile	Bulk	N/A	Start	N/A	Pre	N/A	N/A	PLM Asbestos
							Stop		Post			
	B2		SE Corner	Drywall			Start		Pre			
							Stop		Post			
	B3			Bed Mud			Start		Pre			
							Stop		Post			
	B4			Drop Ceiling Tile			Start		Pre			
							Stop		Post			
	B5	Room 1	NW Corner	Drop Ceiling Tile			Start		Pre			
							Stop		Post			
	B6			Plaster Wall Behind Drywall above drop ceiling			Start		Pre			
							Stop		Post			
	B7	Room 13	NW Corner	Drop Ceiling Tile			Start		Pre			
							Stop		Post			
	B8			Drywall			Start		Pre			
							Stop		Post			
	B9			Bed Mud			Start		Pre			
							Stop		Post			
	B10			Bed Tape			Start		Pre			
							Stop		Post			

Samples Collected By	Jamie Marshall (print)	Date	9/17/09	Samples Relinquished By	(print)	Date		Method of Shipment	
	(signature)	Time	1300		(signature)	Time			
Samples Relinquished By	(print)	Date		Samples Relinquished By	(print)	Date		Sample Notes	
	(signature)	Time			(signature)	Time			
Samples Relinquished By	(print)	Date		Samples Relinquished By	(print)	Date		Condition Upon Receipt	
	(signature)	Time			(signature)	Time		Turn-Around-Time	

Page 1 of 4

Sample Media	
Micro-Vacuum	MV
Mold Plate	MP
Spore Trap	ST
Swab	SW
Tape-Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn-Around-Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

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PROJECT				INVOICE TO				REPORT TO			
Project Number				Client/ Company				Client/ Company			
Project Name				Attention				Attention			
Project Address				Address				Address			
Site Contact		Phone Number		Phone Number		Email		Phone Number		Email	

Sample Collection Date	Sample Id. # (field id.)	Sample Area (room #1, se bedroom, lobby 1st fl., etc.)	Location of Sample (w/in area) (north wall, ceiling, under carpet, etc.)	Sample Composition/Material (sheetrock, caulk, floor tile, etc.)	Sample Matrix (Air, Aqueous, etc.)	Sample Media (see legend)	Sample Time (start/stop or duration)		Calibrated Flow Rate		Total Volume/Area	Analysis/ Parameters
9/17/09	B11	Room 2	NW Floor	Black Mastic	Bulk	N/A	Start	~~N/A~~	Pre	~~N/A~~	N/A	PLM Asbestos
							Stop		Post			
	B12	Room 13	Room 10/13 Threshold	Beige 12x12 tile			Start		Pre			
							Stop		Post			
	B13	↓	↓	Black Mastic			Start		Pre			
							Stop		Post			
	B14	Room 14	Room 7/14 Threshold	Beige 12x12 tile			Start		Pre			
							Stop		Post			
	B15	↓	↓	Black Mastic			Start		Pre			
							Stop		Post			
	B16	Room 7	Room 7/8 Threshold	Beige 12x12 tile			Start		Pre			
							Stop		Post			
	B17	Room 7	Room 7/8 Threshold	~~12x12 tile~~ Black Mastic			Start		Pre			
							Stop		Post			
	B18	Room 8	Room 7/8 Threshold	~~Black~~ Red 12x12 tile			Start		Pre			
							Stop		Post			
	B19	↓	↓	Black Mastic			Start		Pre			
							Stop		Post			
↓	B20	Room 9	Room 7/9 Threshold	Beige 12x12 tile	↓	↓	Start		Pre		↓	↓
							Stop		Post			

Samples Collected By	Jamie Marshall (print)	Date	9/17/09	Samples Relinquished By	(print)	Date		Method of Shipment		Page 2 of 4
	(signature)	Time	1300		(signature)	Time				
Samples Relinquished By	(print)	Date		Samples Relinquished By	(print)	Date		Sample Notes		
	(signature)	Time			(signature)	Time				
Samples Relinquished By	(print)	Date		Samples Relinquished By	(print)	Date		Condition Upon Receipt		
	(signature)	Time			(signature)	Time		Turn-Around-Time		

Sample Media	
Micro-Vacuum	MV
Mold Plate	MP
Spore Trap	ST
Swab	SW
Tape-Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn-Around-Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

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Chain of Custody
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PROJECT		INVOICE TO		REPORT TO	
Project Number		Client/ Company		Client/ Company	
Project Name		Attention		Attention	
Project Address		Address		Address	
Site Contact	Phone Number	Phone Number	Email	Phone Number	Email

Sample Collection Date	Sample Id. # (field id.)	Sample Area (room #1, se bedroom, lobby 1st fl., etc.)	Location of Sample (w/in area) (north wall, ceiling, under carpet, etc.)	Sample Composition/Material (sheetrock, caulk, floor tile, etc.)	Sample Matrix (Air, Aqueous, etc.)	Sample Media (see legend)	Sample Time (start/stop or duration)		Calibrated Flow Rate		Total Volume/Area	Analysis/ Parameters
9/17/09	B21	Room 9	Room 7/9 Threshold	Black Mastic	Bulk	N/A	Start	N/A	Pre	N/A	N/A	PLM Asbestos
							Stop		Post			
	B22	Room 10	Counter Top	12x12 tile			Start		Pre			
							Stop		Post			
	B23	↓	↓	Yellow Mastic			Start		Pre			
							Stop		Post			
	B24	Room 17	center Room	Duct insulation			Start		Pre			
							Stop		Post			
	B25	↓	↓	ceiling tile			Start		Pre			
							Stop		Post			
	B26	Rm 16	Threshold	12x12 tile			Start		Pre			
							Stop		Post			
	B27		↓	Brown Mastic			Start		Pre			
							Stop		Post			
	B28		SW Ceiling	1x1 Ceiling tile			Start		Pre			
							Stop		Post			
	B29		SE Ceiling				Start		Pre			
							Stop		Post			
↓	B30	↓	NW Ceiling	↓	↓	↓	Start	↓	Pre	↓	↓	↓
							Stop		Post			

Samples Collected By	Jamie Marshall (print)	Date	9/17/09	Samples Relinquished By	(print)	Date		Method of Shipment	
	(signature)	Time	1302		(signature)	Time			
Samples Relinquished By	(print)	Date		Samples Relinquished By	(print)	Date		Sample Notes	
	(signature)	Time			(signature)	Time			
Samples Relinquished By	(print)	Date		Samples Relinquished By	(print)	Date		Condition Upon Receipt	
	(signature)	Time			(signature)	Time		Turn-Around-Time	

Page 3 of 4

Sample Media	
Micro-Vacuum	MV
Mold Plate	MP
Spore Trap	ST
Swab	SW
Tape-Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn-Around-Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

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PROJECT		INVOICE TO		REPORT TO	
Project Number		Client/ Company		Client/ Company	
Project Name		Attention		Attention	
Project Address		Address		Address	
Site Contact	Phone Number	Phone Number	Email	Phone Number	Email

Sample Collection Date	Sample Id. # (field id.)	Sample Area (room #1, se bedroom, lobby 1st fl., etc.)	Location of Sample (w/in area) (north wall, ceiling, under carpet, etc.)	Sample Composition/Material (sheetrock, caulk, floor tile, etc.)	Sample Matrix (Air, Aqueous, etc.)	Sample Media (see legend)	Sample Time (start/stop or duration)		Calibrated Flow Rate		Total Volume/Area	Analysis/ Parameters
9/17/09	B31	Rm 17	Threshold	Beige/Grey 12x12 tile	Bulk	N/A	Start / Stop	N/A	Pre / Post	N/A	N/A	PLM Asbestos
↓	B32	↓	↓	Black Mastic	↓	↓	Start / Stop	↓	Pre / Post	↓	↓	↓
							Start / Stop		Pre / Post			
							Start / Stop		Pre / Post			
							Start / Stop		Pre / Post			
							Start / Stop		Pre / Post			
							Start / Stop		Pre / Post			
							Start / Stop		Pre / Post			
							Start / Stop		Pre / Post			
							Start / Stop		Pre / Post			

Samples Collected By	Jamie Marshall	(print)	Date	9/17/09	Samples Relinquished By	(print)	Date		Method of Shipment	
	[signature]	(signature)	Time	1300		(signature)	Time			
Samples Relinquished By		(print)	Date		Samples Relinquished By	(print)	Date		Sample Notes	
		(signature)	Time			(signature)	Time			
Samples Relinquished By		(print)	Date		Samples Relinquished By	(print)	Date		Condition Upon Receipt	
		(signature)	Time			(signature)	Time		Turn-Around-Time	

Sample Media	
Micro-Vacuum	MV
Mold Plate	MP
Spore Trap	ST
Swab	SW
Tape-Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn-Around-Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

Marshall Environmental Management, Inc.
Polarized Light Microscopy Asbestos Analysis

Project Location		Invoice To		Report To	
Project Id.	0111-AB-091709-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project Name/Type	Marlow Armory Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	702 West Main Street Marlow, OK 73055	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Site Contact		Phone #	405-522-4805	Phone #	405-702-5115
Phone #		Fax #	405-522-0051	Fax #	
Cell #		Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected			
0115-091709-CJM-PLM-01	September 17, 2009	Room 2	Color	Beige			<1%	Cellulose
		Floor Tile	Condition	Damaged			99%	Vinyl Aggregate
		At Threshold	Type	Miscellaneous				
			Note					

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected			
0115-091709-CJM-PLM-02	September 17, 2009	Room 2	Color	White			95%	Calcareous Material
		Sheetrock Wall	Condition	Good			5%	Cellulose
		At Southeast Corner	Type	Miscellaneous				
			Note					

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected			
0115-091709-CJM-PLM-03	September 17, 2009	Room 2	Color	White			99%	Calcareous Material
		Bedding-Mud	Condition	Good			<1%	Cellulose
		Wall At Southeast Corner	Type	Surfacing				
			Note					

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected			
0115-091709-CJM-PLM-04	September 17, 2009	Room 2	Color	Brown			40%	Cellulose
		Ceiling Tile	Condition	Good			40%	Fibrous Glass
		Drop Ceiling At Southeast Corner	Type	Miscellaneous			20%	Glass Beads
			Note					

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected			
0115-091709-CJM-PLM-05	September 17, 2009	Room 1	Color	White			100%	Foam
		Ceiling Tile	Condition	Good				
		Drop Ceiling At Northwest Corner	Type	Miscellaneous				
			Note					

Jamie Marshall	Jamie Marshall, B.S., Industrial Hygiene Associate	September 24, 2009
Analyst Name (Print)	Analyst Signature	Date Analyzed

Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

Marshall Environmental Management, Inc.
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Oklahoma City, Oklahoma 73159
Phone (405) 616-0401 Fax (405) 681-6753
marshenv@swbell.net

Marshall Environmental Management, Inc.
Polarized Light Microscopy Asbestos Analysis

Project Location		Invoice To		Report To	
Project Id.	0111-AB-091709-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project Name/Type	Marlow Armory Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	702 West Main Street Marlow, OK 73055	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Site Contact		Phone #	405-522-4805	Phone #	405-702-5115
Phone #		Fax #	405-522-0051	Fax #	
Cell #		Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected	
0115-091709-CJM-PLM-06	September 17, 2009	Room 1	Color	Beige	100%	Calcareous Material
		Plaster Wall	Condition	Significantly Damaged		
		At Northwest Corner Behind Sheetrock	Type	Surfacing		
		Above Drop Ceiling	Note			

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected	
0115-091709-CJM-PLM-07	September 17, 2009	Room 13	Color	Beige	40%	Cellulose
		Ceiling Tile	Condition	Good	40%	Fibrous Glass
		Drop Ceiling At Northwest Corner	Type	Miscellaneous	20%	Glass Beads
			Note			

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected	
0115-091709-CJM-PLM-08	September 17, 2009	Room 13	Color	Beige	95%	Calcareous Material
		Sheetrock Wall	Condition	Good	5%	Cellulose
		At Northwest Corner	Type	Miscellaneous		
			Note			

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected	
0115-091709-CJM-PLM-09	September 17, 2009	Room 13	Color	White	100%	Calcareous Material
		Bedding-Mud	Condition	Good		
		On Wall At Northwest Corner	Type	Surfacing		
			Note			

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected	
0115-091709-CJM-PLM-10	September 17, 2009	Room 13	Color	White	25%	Adhesive
		Bedding-Tape	Condition	Good	75%	Fibrous Glass
		On Wall At Northwest Corner	Type	Miscellaneous		
			Note			

Jamie Marshall	Jamie Marshall, B.S., Industrial Hygiene Associate	September 24, 2009
Analyst Name (Print)	Analyst Signature	Date Analyzed

Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

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Marshall Environmental Management, Inc.
Polarized Light Microscopy Asbestos Analysis

Project Location		Invoice To		Report To	
Project Id.	0111-AB-091709-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project Name/Type	Marlow Armory Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	702 West Main Street Marlow, OK 73055	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Site Contact		Phone #	405-522-4805	Phone #	405-702-5115
Phone #		Fax #	405-522-0051	Fax #	
Cell #		Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Lab Log Number	Date of Sampling	Sample Location	Sample Description		10% Asbestos Detected			
0115-091709-CJM-PLM-11	September 17, 2009	Room 2	Color	Black	10%	Chrysotile	90%	Tar
		Mastic	Condition	Good				
		Floor In Northwest Area	Type	Miscellaneous				
			Note					

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected			
0115-091709-CJM-PLM-12	September 17, 2009	Room 10/13	Color	Beige			100%	Vinyl Aggregate
		12"x12" Floor Tile	Condition	Good				
		At Threshold	Type	Miscellaneous				
			Note					

Lab Log Number	Date of Sampling	Sample Location	Sample Description		3% Asbestos Detected			
0115-091709-CJM-PLM-13	September 17, 2009	Room 10/13	Color	Black	3%	Chrysotile	97%	Tar
		Mastic	Condition	Good				
		At Threshold	Type	Miscellaneous				
			Note					

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected			
0115-091709-CJM-PLM-14	September 17, 2009	Room 7/14	Color	Beige			100%	Vinyl Aggregate
		12"x12" Floor Tile	Condition	Good				
		At Threshold	Type	Miscellaneous				
			Note					

Lab Log Number	Date of Sampling	Sample Location	Sample Description		4% Asbestos Detected			
0115-091709-CJM-PLM-15	September 17, 2009	Room 7/14	Color	Black	4%	Chrysotile	96%	Tar
		Mastic	Condition	Good				
		At Threshold	Type	Miscellaneous				
			Note					

Jamie Marshall	Jamie Marshall, B.S., Industrial Hygiene Associate	September 24, 2009
Analyst Name (Print)	Analyst Signature	Date Analyzed

Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation: AIHA PAT ID# 102334

Marshall Environmental Management, Inc.
1601 Southwest 89th Street, Suite A-100
Oklahoma City, Oklahoma 73159
Phone (405) 616-0401 Fax (405) 681-6753
marshenv@swbell.net

Marshall Environmental Management, Inc.
Polarized Light Microscopy Asbestos Analysis

Project Location		Invoice To		Report To	
Project Id.	0111-AB-091709-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project Name/Type	Marlow Armory Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	702 West Main Street Marlow, OK 73055	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Site Contact		Phone #	405-522-4805	Phone #	405-702-5115
Phone #		Fax #	405-522-0051	Fax #	
Cell #		Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected		
0115-091709-CJM-PLM-16	September 17, 2009	Room 7/8 12"x12" Floor Tile At Threshold	Color	Beige		100%	Vinyl Aggregate
			Condition	Good			
			Type	Miscellaneous			
			Note				

Lab Log Number	Date of Sampling	Sample Location	Sample Description		3% Asbestos Detected			
0115-091709-CJM-PLM-17	September 17, 2009	Room 7/8 Mastic At Threshold	Color	Black	3%	Chrysotile	97%	Tar
			Condition	Good				
			Type	Miscellaneous				
			Note					

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected		
0115-091709-CJM-PLM-18	September 17, 2009	Room 7/8 12"x12" Floor Tile At Threshold	Color	Red		100%	Vinyl Aggregate
			Condition	Good			
			Type	Miscellaneous			
			Note				

Lab Log Number	Date of Sampling	Sample Location	Sample Description		5% Asbestos Detected			
0115-091709-CJM-PLM-19	September 17, 2009	Room 7/8 Mastic At Threshold	Color	Black	5%	Chrysotile	95%	Tar
			Condition	Good				
			Type	Miscellaneous				
			Note					

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected		
0115-091709-CJM-PLM-20	September 17, 2009	Room 7/9 12"x12" Floor Tile At Threshold	Color	Beige		100%	Vinyl Aggregate
			Condition				
			Type				
			Note				

Jamie Marshall	Jamie Marshall, B.S., Industrial Hygiene Associate	September 24, 2009
Analyst Name (Print)	Analyst Signature	Date Analyzed

Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

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Polarized Light Microscopy Asbestos Analysis

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Site Contact		Phone #	405-522-4805	Phone #	405-702-5115
Phone #		Fax #	405-522-0051	Fax #	
Cell #		Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Lab Log Number	Date of Sampling	Sample Location	Sample Description		5% Asbestos Detected			
0115-091709-CJM-PLM-21	September 17, 2009	Room 7/9	Color	Black	5%	Chrysotile	95%	Tar
		Mastic	Condition	Good				
		At Threshold	Type	Miscellaneous				
			Note					

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected			
0115-091709-CJM-PLM-22	September 17, 2009	Room 10	Color	Beige			100%	Vinyl Aggregate
		12"x12" Tile	Condition	Good				
		On Countertop	Type	Miscellaneous				
			Note					

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected			
0115-091709-CJM-PLM-23	September 17, 2009	Room 10	Color	Yellow			100%	Adhesive
		Mastic	Condition	Good				
		On Countertop	Type	Miscellaneous				
			Note					

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected			
0115-091709-CJM-PLM-24	September 17, 2009	Room 17	Color	Pink			100%	Fibrous Glass
		Duct Insulation	Condition	Good				
		Center of Room	Type	Thermal System Insulation				
			Note					

Lab Log Number	Date of Sampling	Sample Location	Sample Description		No Asbestos Detected			
0115-091709-CJM-PLM-25	September 17, 2009	Room 17	Color	Gray			40%	Cellulose
		Ceiling Tile	Condition	Good			40%	Fibrous Glass
		Center of Room	Type	Miscellaneous			20%	Glass Beads
			Note					

Jamie Marshall	Jamie Marshall, B.S., Industrial Hygiene Associate	September 24, 2009
Analyst Name (Print)	Analyst Signature	Date Analyzed

Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

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marshenv@swbell.net

Marshall Environmental Management, Inc.
Polarized Light Microscopy Asbestos Analysis

Project Location		Invoice To		Report To	
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Project Name/Type	Marlow Armory Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	702 West Main Street Marlow, OK 73055	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
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Phone #		Fax #	405-522-0051	Fax #	
Cell #		Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Lab Log Number	0115-091709-CJM-PLM-26	Date of Sampling	September 17, 2009
Sample Location		**Sample Description**	
Room 16		Color	Beige
12"x12" Floor Tile		Condition	Good
At Threshold		Type	Miscellaneous
		Note	
No Asbestos Detected			
		100%	Vinyl Aggregate

Lab Log Number	0115-091709-CJM-PLM-27	Date of Sampling	September 17, 2009
Sample Location		**Sample Description**	
Room 16		Color	Brown
Mastic		Condition	Good
At Threshold		Type	Miscellaneous
		Note	
No Asbestos Detected			
		100%	Adhesive

Lab Log Number	0115-091709-CJM-PLM-28	Date of Sampling	September 17, 2009
Sample Location		**Sample Description**	
Room 16		Color	White/Brown
1"x1" Ceiling Tile		Condition	Good
Ceiling In Southwest Area		Type	Miscellaneous
		Note	
No Asbestos Detected			
		100%	Cellulose

Lab Log Number	0115-091709-CJM-PLM-29	Date of Sampling	September 17, 2009
Sample Location		**Sample Description**	
Room 16		Color	White/Brown
1"x1" Ceiling Tile		Condition	Good
Ceiling In Southeast Area		Type	Miscellaneous
		Note	
No Asbestos Detected			
		100%	Cellulose

Lab Log Number	0115-091709-CJM-PLM-30	Date of Sampling	September 17, 2009
Sample Location		**Sample Description**	
Room 16		Color	White/Brown
1"x1" Ceiling Tile		Condition	Good
Ceiling in Northwest Area		Type	Miscellaneous
		Note	
No Asbestos Detected			
		100%	Cellulose

Jamie Marshall	Jamie Marshall, B.S., Industrial Hygiene Associate	September 24, 2009
Analyst Name (Print)	Analyst Signature	Date Analyzed

Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

Marshall Environmental Management, Inc.
1601 Southwest 89th Street, Suite A-106
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marshenv@swbell.net

Marshall Environmental Management, Inc.
Polarized Light Microscopy Asbestos Analysis

Project Location		Invoice To		Report To	
Project Id.	0111-AB-091709-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
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Site Contact		Phone #	405-522-4805	Phone #	405-702-5115
Phone #		Fax #	405-522-0051	Fax #	
Cell #		Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Lab Log Number	0115-091709-CIM-PLM-31	Date of Sampling	September 17, 2009

Sample Location	Sample Description		No Asbestos Detected			
Room 17	Color	Beige/Gray			100%	Vinyl Aggregate
12"x12" Floor Tile	Condition	Good				
At Threshold	Type	Miscellaneous				
	Note					

Lab Log Number	0115-091709-CIM-PLM-32	Date of Sampling	September 17, 2009

Sample Location	Sample Description		3% Asbestos Detected			
Room 17	Color	Black	3%	Chrysotile	97%	Tar
Mastic	Condition	Good				
At Threshold	Type	Miscellaneous				
	Note					

Lab Log Number		Date of Sampling	September 17, 2009

Sample Location	Sample Description	
	Color	
	Condition	
	Type	
	Note	

Lab Log Number		Date of Sampling	September 17, 2009

Sample Location	Sample Description	
	Color	
	Condition	
	Type	
	Note	

Lab Log Number		Date of Sampling	September 17, 2009

Sample Location	Sample Description	
	Color	
	Condition	
	Type	
	Note	

Jamie Marshall	Jamie Marshall, B.S., Industrial Hygiene Associate	September 24, 2009
Analyst Name (Print)	Analyst Signature	Date Analyzed

Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

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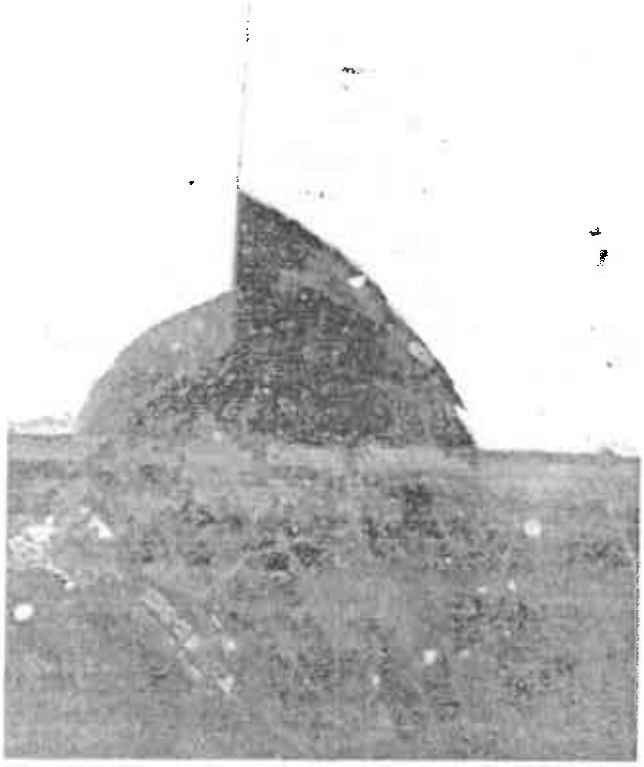
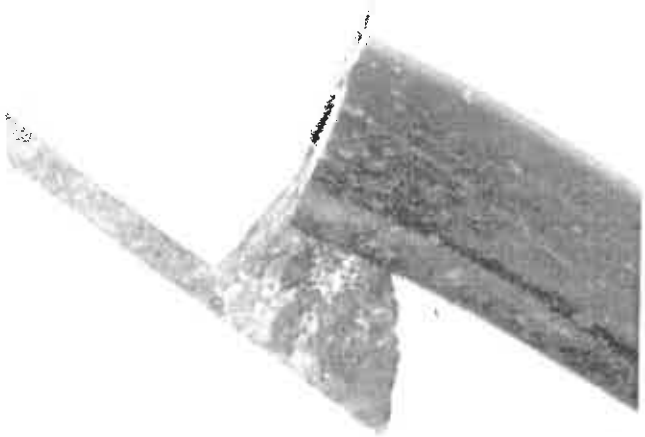
Mastic On Floor In Room #2



Mastic On Floor Under Tile In Room #13



Mastic On Floor Under Tile In Room #14

Mastic On Floor Under Tile In Room #7

Mastic On Floor Under Tile In Rm #7 & #8

Oklahoma Department of Labor

FEE: $25.00

Jamie Marshall

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. **OK158090.**

Lloyd L. Fields

LLOYD L. FIELDS
Commissioner of Labor

June 05, 2009
Date of Issuance

EXPIRES: June 03, 2010

FEE: $500.00

Oklahoma Department of Labor

Charles Marshall

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-MP130246.**

Lloyd L Fields

LLOYD L. FIELDS
Commissioner of Labor

July 08, 2009
Date of Issuance

EXPIRES: July 01, 2010

SCOPES OF WORK

Scope of Work
For
Abatement of Non-Friable Asbestos at
The Former Marlow National Guard Armory

The Oklahoma Department of Environmental Quality (DEQ) is requesting bids from licensed asbestos abatement contractors for asbestos remediation services at the former Marlow National Guard Armory. Qualified bidder shall follow all appropriate OSHA requirements. This scope of work (SOW) describes the non-friable and/or non-regulated asbestos containing materials (ACM) that will be removed. Attached to this Scope of Work is the Marlow Armory Asbestos Inspection Report (Attachment 1). The ACM and other miscellaneous items to be removed shall be included in your bid.

Marshall Environmental will be performing oversight on this project. Once asbestos has been removed, contractor shall contact Marshall Environmental to perform the final inspection. Marshall Environmental will determine if all asbestos has been appropriately removed or if additional work needs to be performed.

The building is located at 702 West Main Street, Marlow, Oklahoma 73055. The building does have available electricity but **does not** have available water to use during remediation.

SPECIAL PROVISIONS:

1. The contractor shall schedule all work to be complete within thirty (30) days of the date contract is awarded. Coordination of work shall be scheduled with DEQ.
    a. A pre-construction meeting shall be held at the site after contract is awarded to review the 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. All work shall be performed in accordance with all applicable State and Federal regulations.
    a. Disposal of Removed Materials: All materials removed by the Contractor under this contract shall be disposed of in accordance with State and Federal regulations.

Below is a summary of the non-friable and/or non-regulated asbestos containing materials (ACM) that shall be removed from the Marlow Armory.

- **Remove** mastic from floor in room number 2 (40-ft^2);
- **Remove** floor tile and mastic in room numbers 7, 8, and 9 (713-ft^2);
- **Remove** floor tile and mastic in room numbers 13 and 14 (473-ft^2);
- **Remove** carpet, floor tile, and mastic in room number 17 (458-ft^2);
- **Remove** two wooden shelves, floor tile, and mastic from room numbers 18 and 19 (400-ft^2);

- **A Total of 2,084 ft^2 of Mastic Shall Be Removed.**

ATTACHMENT 1

MARLOW ARMORY

ASBESTOS INSPECTION REPORT

STATEMENT OF WORK
For
Remediation of Lead-Based Paint Contamination at Marlow 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 Marlow, Oklahoma. This statement of work (SOW) describes the cleanup of lead-based paint located on surfaces throughout the building. 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 Marlow Armory is attached for review (**Attachment 1**).

The building is located at **702 West Main Street, Marlow, OK 73055**. The building **does** have available electricity but **does not** have available water to use during remediation.

SPECIAL PROVISIONS:

1. Work Schedule: The Contractor shall schedule all work to be complete within one hundred and twenty days (120) 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 and 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. Coordination of work areas shall be scheduled with DEQ.
    d. Disposal of Removed Materials: All materials removed by the Contractor under this contract shall be disposed of in accordance with State and Federal regulations. DEQ will sign as generator, if necessary.

CONTRACTOR SHALL:

- Attend mandatory pre-bid meeting and site walk through;
- Posses a current lead-based paint license and have a certified lead-based paint supervisor in order to perform lead-based paint abatement;
- 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 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;

LEAD-BASED PAINT ABATEMENT INSTRUCTIONS

1. LEAD-BASED PAINT ABATEMENT

Non-Friction and Non-Impact Surfaces

- All down spouts, all window lintels, and all overhead door frames and door guards 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 3**). Encapsulant shall be a minimum of 20 mils thick. Floor plan map is attached (**Attachment 1**);
- The drill floor hand rails shall have all paint removed and then be painted with a neutral colored primer;
- Deteriorated paint removed from building surface will be properly disposed.
- All wood from the indoor firing range vent area contains lead-based paint. The wood shall be removed and properly disposed. The area shall be cleaned and the vent hole shall be sealed with pressure treated wood.

Friction and Impact Surfaces

Floors

- The floor in the vault (Room #12), the painted step in front of the entrance to Room 12, and all painted concrete stairs in the drill floor (Room #15) contains lead-based paint. All paint shall be visibly removed from the concrete floor. Once visibly removed, the floor shall be HEPA vacuumed, wet washed, and sealed with KM-669 Acrylic Sealer or equivalent;

Windows

- A Window-Scope of Work with map, window measurements, specifications for window replacement, and specific details on abatement requirements for each window is attached (**Attachment 4**);
- Windows installed must meet all attached specifications;
- Window installation and oversight of window removal shall be performed by a third party professional window installation company that is certified and recommended by the window manufacturer of the windows being installed;
  - Window installer shall have no less than five (5) years installation experience;
- Window installer shall have experience with removal of steel casement windows;
- All interior and exterior window sills shall be HEPA vacuumed and wet washed after windows have been removed and replaced;
  - Once window sills have been cleaned, contractor shall encapsulate with DEQ approved lead-based paint encapsulant.

Doors and Frames

- A Door-Scope of Work with map, door measurements, and specific details on abatement requirements for each door is attached (**Attachment 5**);
- Doors will be replaced with pre-hung Steelcraft Commercial Replacement Door Units (Specifications Attached) or equivalent;
- Doors will be replaced with UL listed 90 minute standard metal doors;
- Doors will be replaced with Steelcraft L18 and L16 – Series Honeycomb Doors (Specifications Attached) or equivalent;
- Contractor must submit product data for approval if different from doors or door frames in bid package;
- Replacement doors and frames must meet all compliance and fire rating requirements in the attached specifications;

Exterior Doors

- Exterior doors will be replaced with galvannealed, 16 gage, honeycomb core insulated doors;
- Hinges: As manufactured by Hagar or approved equal – Plain Bearing - Standard Weight 1279 NRP, 4 ½ X 4 ½ (Specifications Attached);
- Threshold: As manufactured by National Guard Products or approved equal – 426E (Specifications Attached);
- Weather Strip: As manufactured by National Guard Products or approved equal – 160VA (Specifications Attached);
- Lever: As manufactured by Schlage or approved equal – D Series "Rhodes", 626 finish, function ND60PD (Specification Attached);
- Keying: All doors to be keyed alike;
- Provide sealant per 07920 specification attached.

Interior Doors

- Interior doors will be replaced with non-galvannealed, 18 gage, honeycomb core insulated doors;
- Hinges: As manufactured by Hagar or approved equal – Plain Bearing – Standard Weight 1279, 4 ½ X 4 ½ (Specification Attached);
- Knob: As manufactured by Schlage or approved equal – A Series "Orbit", 626 finish, function A10S (Specification Attached);
- Provide sealant (caulking) per 07920 specification attached.

Clearance Inspection

- Once lead-based paint has been removed from surfaces, DEQ will perform a visual inspection to confirm lead-based paint has been removed appropriately before surfaces are painted or sealed.
- Once lead-based paint abatement is complete, contractor shall HEPA vacuum and wet wash surrounding areas where abatement has been performed. DEQ will perform a visual inspection to make sure abatement area has been cleaned appropriately.

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.

2. FINAL REPORT

- Write final report and submit to DEQ;
- 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.state.ok.us

Lead Remediation in Marlow Armory

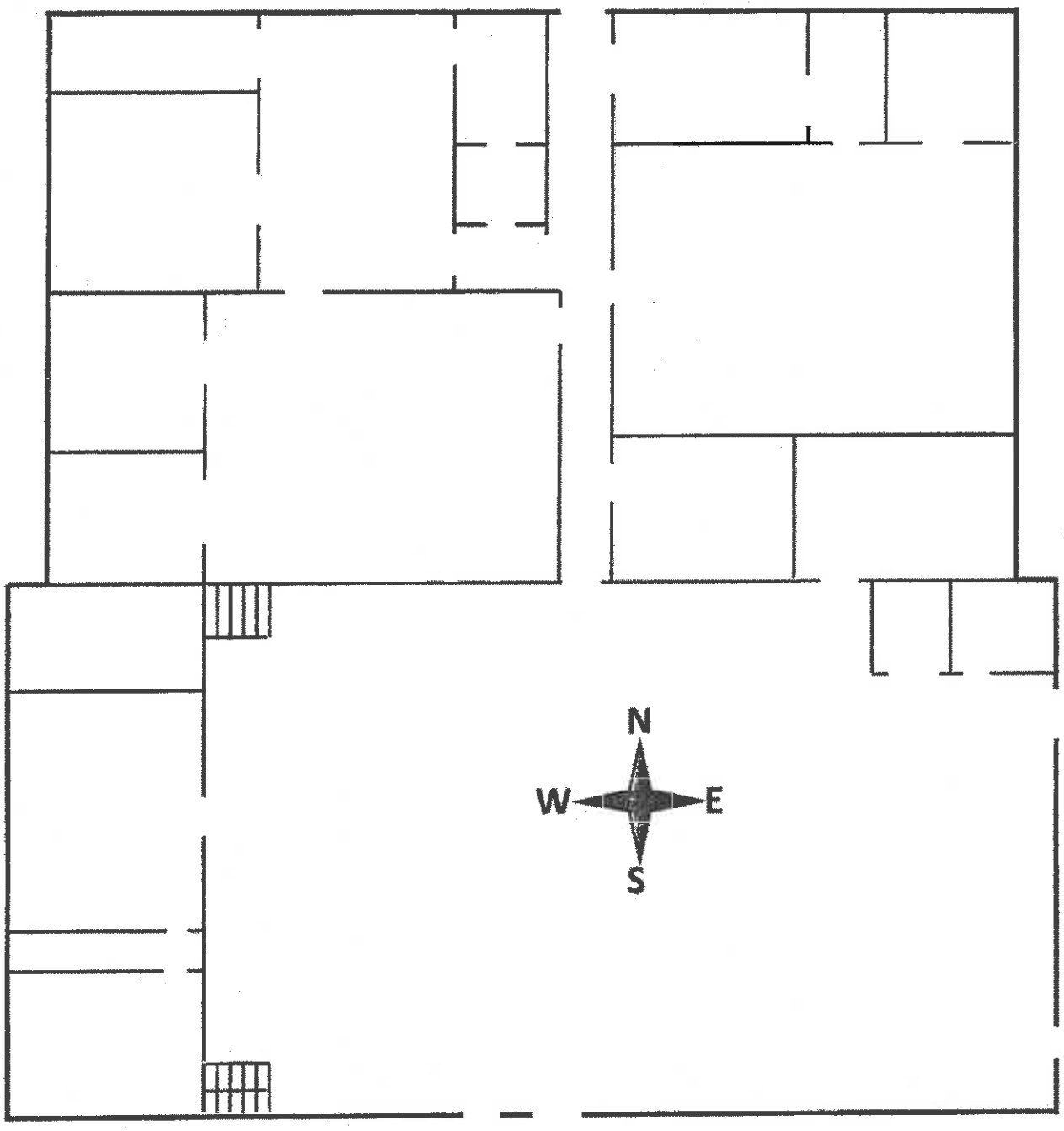
Additions –

1. All interior and exterior window sills shall be HEPA vacuumed, wet washed, and all loose and peeling paint shall be removed. Once this is complete, a lead-based paint encapsulant shall be placed over these surfaces.

ATTACHMENT 1

Floor Plan Map

Marlow Armory



Not to scale
Floor plan approximate

ATTACHMENT 2

Health & Safety Aspects to Consider

Health & Safety Aspects to Consider

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

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

Health and Medical Aspects

Health Effects

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

Medical Surveillance for occupational Exposure to Lead

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

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

Personal Protective Equipment

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

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

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

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

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

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

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

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

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

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

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

Education, Maintenance, Cleaning and Conversion

Worker Education

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

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

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

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

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

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

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

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

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

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

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

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

REFERENCES

Section 1 Required Publications

There are no entries in this section

Section II Related Publications

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

AR 11-34
The Respiratory Protection Program

AR 40-5
Preventive Medicine

DODI 6055.5
Industrial Hygiene and Occupational Health

DOD 6055.5-M
Occupational Medical Surveillance Manual

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

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

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

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

NGR 420-10
Construction and Facilities Management Office Operations

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

ATTACHMENT 3

DEQ Approved Lead-Based Paint Encapsulants List

KM-669 Acrylic Sealant Specifications

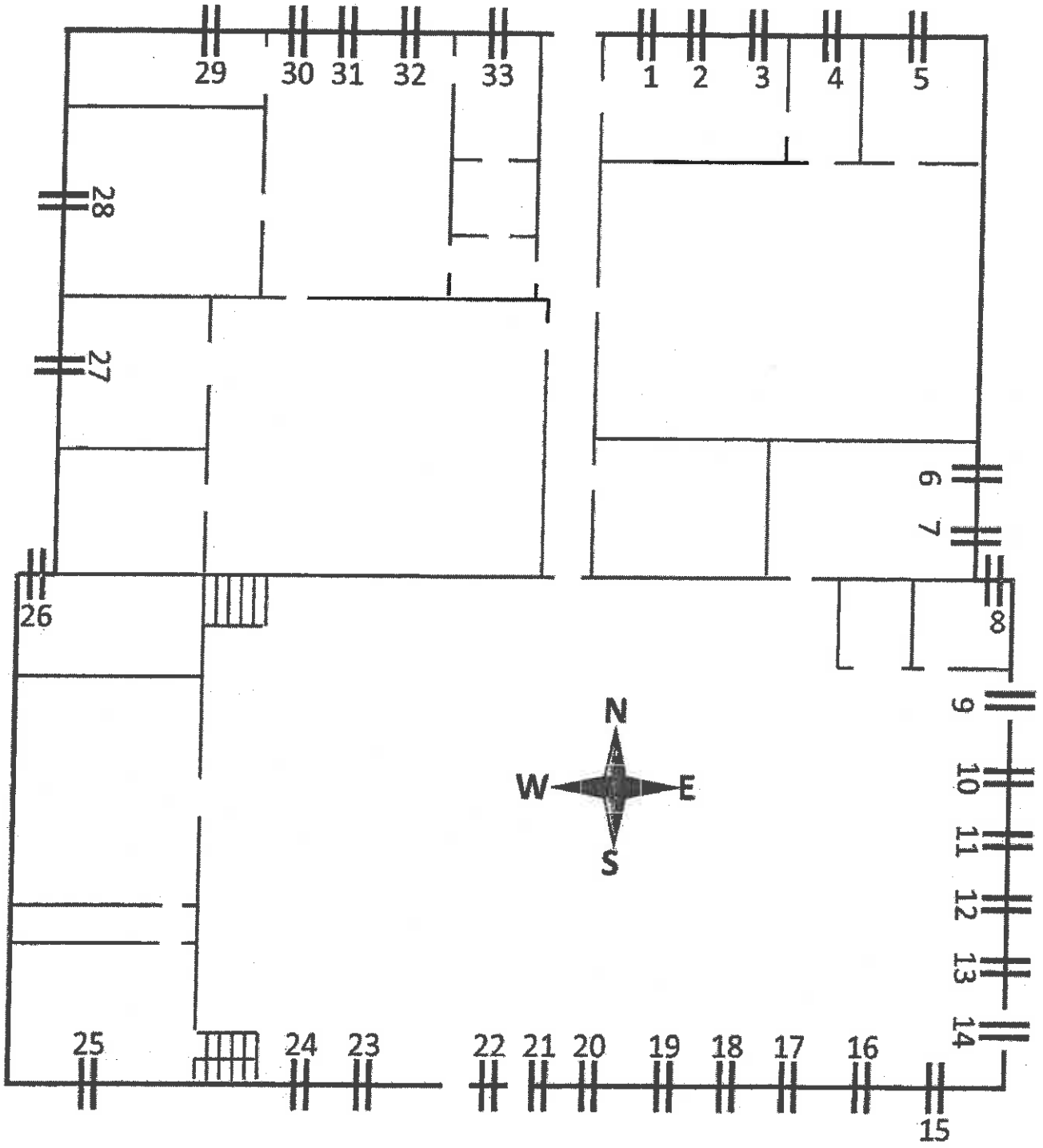
Lead-Based Paint Encapsulants approved by DEQ

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

ATTACHMENT 4

Window Scope of Work Including Measurements and Specifications

Marlow Armory: Windows



Not to scale
Floor plan approximate

Marlow Armory Window Measurements
And
Scope of Work

- **Window measurements are listed as approximate Width X Height; Contractor to field verify.**
- **All window bars shall be removed and properly disposed.**
- **Caulking shall be removed from outside edges of window and properly disposed prior to window removal.**
- **All removed windows shall be properly disposed.**
- **Window lintels and any remaining metal with lead-based paint shall be wet scraped and sealed with a DEQ approved encapsulant (See Attachment 3).**
- **Interior and Exterior window sills shall be HEPA vacuumed and wet washed to remove remaining lead dust. Once loose paint and lead dust is removed, window sills shall be sealed with a DEQ approved encapsulant (See Attachment 3).**
- **Attached is a Marlow Armory Floor Plan with designated window numbers that correspond with the numbers on this Scope of Work.**
- **Specifications for replacement windows are attached.**

1. 1' X 4'3" – Replacement window will be non-opening window.

2. 2'2" X 7'10" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

3. 3'2" X 7'10" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

4. 3'2" X 7'10" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

5. 2'2" X 7'10" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

6. 3'2" X 7'8" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

7. 3'2" X 7'8" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

8. 2'2" X 7'8" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

9. 3'2" X 6'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

10. 4'2" X 9'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

11. 4'2" X 9'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

12. 4'2" X 9'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

13. 4'2" X 9'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

14. 3'2" X 6'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

15. 3'2" X 9'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

16. 3'2" X 9'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

17. 3'2" X 9'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

18. 3'2" X 9'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

19. 3'2" X 6'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

20. 3'2" X 6'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

21. 3'2" X 9'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

22. 3'2" X 9'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

23. 3'2" X 9'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

24. 3'2" X 9'4" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

25. 3'2" X 7'10" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

26. 2'2" X 7'10" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

27. 3'2" X 7'8" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

28. 3'2" X 7'8" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

29. 2'2" X 7'8" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

30. 3'2" X 7'8" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

31. 3'2" X 7'8" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

32. 2'2" X 7'10" - Lower portion of window to be 4ft single hung opening window with top remainder to be fixed mapes panel all within one frame unit.

33. 1' X 4'3" – Replacement window will be non-opening window.

SECTION 08520 – ALUMINUM WINDOWS

PART 1 – GENERAL

1.1 SECTION REQUIRMENTS

A. Submit Product Data and Shop Drawings.
B. Product Substitution: Substitutions include products differing from those required by this specification.
   1. Submit two (2) copies of each request for product substitution. Identify product to be replaced and provide complete documentation showing compliance of proposed substitution with applicable requirements. Include a full comparison with the specified product, and a list of changes to other Work required to accommodate the substitution.
   2. Submit requests for product substitution in accordance with the time allotted to do so by the Scope of Work included within the Bid Solicitation.
   3. State of Oklahoma, Department of Environmental Quality will review the proposed substitution and notify bidder of its acceptance or rejection within the time allotted to do so by the Scope of Work included within the Bid Solicitation.
C. Structural Performance: Provide systems, including anchorage, capable of withstanding loads indicated for project location.
   1. Main Frame-Member Deflection: Limited to 1/175 of clear span for spans up to 13 feet 6 inches and to 1/240 of clear span plus ¼ inch for spans greater than 13 feet 6 inches or an amount that restricts edge deflection of individual glazing lites to ¾ inch, whichever is less.
   2. Structural-Testing: Systems tested according to ASTM E 330 at 150 percent of inward and outward wind-load design pressures do not evidence material failures, structural distress, deflection failures, or permanent deformation of main framing members exceeding 0.2 percent of clear span.
D. Air Infiltration: Limited to 0.06 cfm/sq. ft. (0.3 L/s per sq. m) of system surface area when tested according to ASTM E 283 at a static-air-pressure difference of 6.24 ibf./sq. ft.
E. Water Penetration: Systems do not evidence water leakage when tested according to ASTM E 331 at minimum differential pressure of 20 percent of inward acting wind load design pressure but not less than 10 ibf./sq/ ft.
F. Condensation Resistance Factor (CRF): The unit(s) shall be tested in accordance with AAMA 1502 and shall have a condensation resistance factor of no less than 48.
G. Average U-Value: Not more than 0.69 btu./sq. ft. x h x degree F when tested according to AAMA 1503.
H. Sound Transmission: Provide aluminum-framed systems with fixed glazing and framing areas having minimum STC 32 according to ATM E 413 and an OTIC 26 according to ASTM E 1332, as determined by testing according to ASTM E 90.
I. Installer Qualifications: Installer must be a third party professional window installation company that is certified and recommended by the window manufacturer of the windows being installed.
   a) Installer must have no less than five (5) years of installation experience.
   b) Installer must have experience with the removal of steel casement windows.
J. Warranty Requirements: Submit written warranties from window manufacturer for the following:
   1. Windows: Warrant against malfunctions due to defects in thermal breaks, hardware, materials and workmanship for a period of (10) ten years.
   2. Glazing: Glass shall be warranted as follows:
      a) Insulating glass units to remain sealed for (10) ten years,
      b) Laminated glass units to remain laminated for (5) five years,
      c) Polycarbonate to remain clear and ultraviolet light stabilized for (5) five years,
      d) Insulating plastic to not have more than (6) six percent decrease in light transmission and be ultraviolet light stabilized for (10) years.
   3. Finish: Warrant against chipping, peeling, cracking, and blistering for (10) ten years.
   4. Spandrel Panels: Warrant against malfunctions due to defect in finish, materials and workmanship for a period of (5) years.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that are considered acceptable and may be incorporated into the Work included, but not limited to, the following:
   1. Peerless
   2. Quaker
   3. Wojan
   4. Thermal Windows, Inc.

2.2 ALUMINUM WINDOWS

A. Single hung: Series 4000-4 Model 4140/4158 or approved equal.
   1. Thermal brake
   2. Screen cloth insect screens
   3. Color: Dark Bronze
B. Fixed: Series 4000-4 model 4170, or approved equal.
   1. Thermal brake
   2. Screen cloth insect screens
   3. Color: Dark Bronze
C. Glazing:
   1. All glass I.G. units shall be constructed to an overall minimum thickness of 1" with two lites of 3/16" glass specified. Exterior lite AFG 3/16" TI-AC 40 on #2 surface 5/8" Air Space / Interior lite 3/16" clear.
   2. All insulated glass units shall be tested, certified and carry the respective CBA level certification on the glass spacer.

2.3 SPANDREL PANELS

A. Spandrel Panel shall be Mapes 1" insulated panel of 5-ply, 2ld density polystyrene core.
   1. Finish: Polyester baked enamel on embossed aluminum, both sides.
   2. Color: Dark Bronze.

2.4 FINISH

A. Organic coating tested and certified by window manufacturer to comply with the AAMA 2605. Application must be by the window manufacturer.

PART 3 – EXECUTION

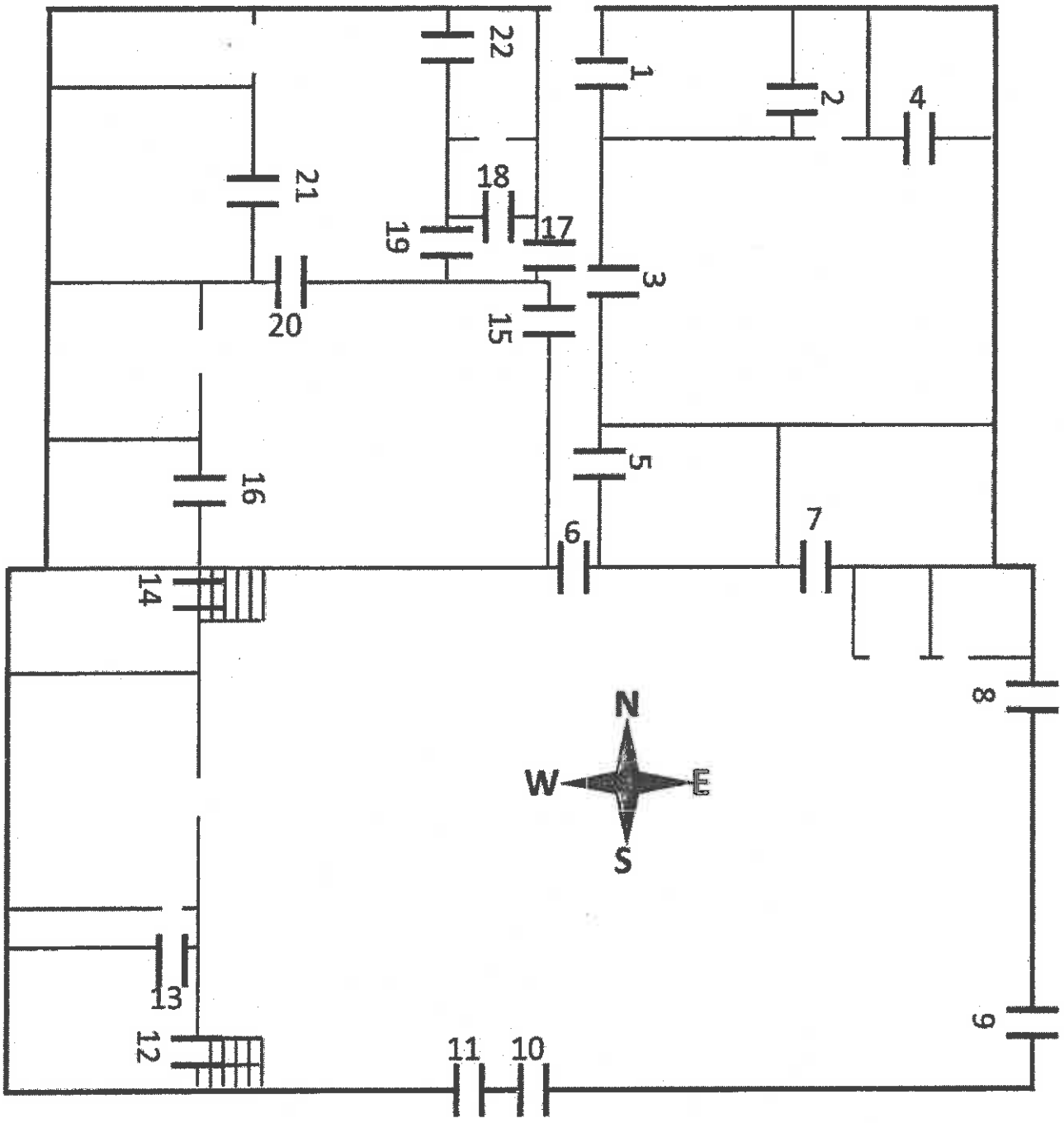
3.1 INSTALLATION

A. Provide all hardware, operators, anchors, clips, limit devices, and other components necessary for a complete and weather tight installation per window manufacturer's specification and recommendations for installation.
B. Clean all surfaces with manufacturer approved cleaner. Remove any glazing or sealant compounds, dirt and other substances.

ATTACHMENT 5

Door Scope of Work Including Measurements and Specifications

Marlow Armory: Doors



Not to scale
Floor plan approximate

Marlow Armory Door Measurements
And
Scope of Work

- **Door measurements are listed as approximate Width X Height; Contractor to field verify.**
- **All removed doors will be properly disposed.**
- **All removed lead-based paint will be properly disposed.**
- **Attached is a Marlow Armory Floor Plan with designated door numbers that correspond with the numbers on this Scope of Work.**
- **Specifications for replacement doors are attached.**

1. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
   Door Measurements – 3' X 7'

2. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
   Door Measurements – 2'4" X 7'

3. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
   Door Measurements – 4' X 7'

4. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
   Door Measurements – 3' X 7'

5. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
   Door Measurements – 3' X 7'

6. Remove double doors. Remove all paint from door frame. Replace double doors with pre-hung door unit. Original frame will be painted with a neutral colored primer.
   Double Door Measurements – 6' X 7'

7. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
   Door Measurements – 3' X 7'

8. Remove all paint from original outer door frame. Once paint is removed, paint frame with neutral colored primer.

9. Remove all paint from original outer door frame. Once paint is removed, paint frame with neutral colored primer.

10. Remove all paint from original outer door frame. Once paint is removed, paint frame with neutral colored primer.

11. Remove all paint from original outer door frame. Once paint is removed, paint frame with neutral colored primer.

12. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'

13. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'

14. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'

15. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 4' X 7'

16. Remove all paint from vault door and door frame. Once paint is removed, paint door and frame with neutral colored primer.

17. Remove all paint from frame. Once paint is removed, paint frame with neutral colored primer.

18. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 2'6" X 6'8"

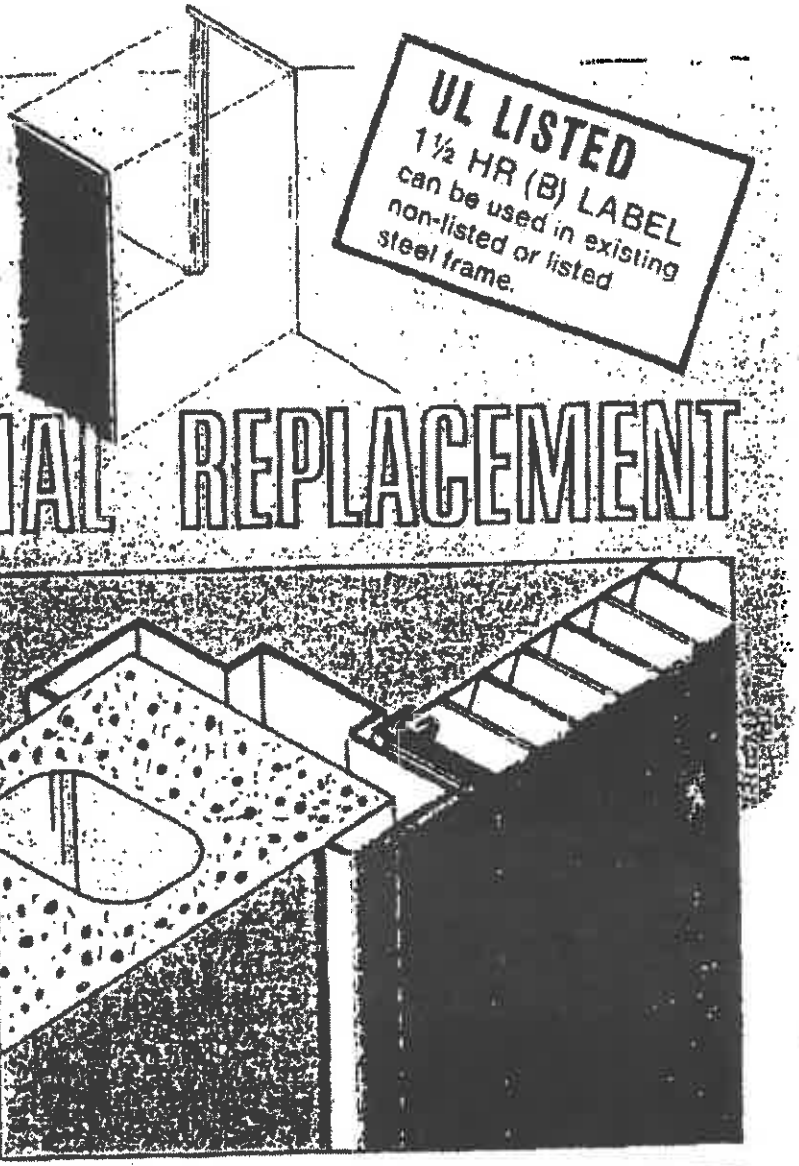
19. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'

20. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 3' X 7'

21. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
Door Measurements – 2'6" X 6'6"

22. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
    Door Measurements – 3' X 7'

23. Remove door. Remove all paint from door frame. Replace door with pre-hung door unit. Original frame will be painted with a neutral colored primer.
    Door Measurements – 3' X 6'8"
    Remove all paint from original outer door frame. Once paint is removed, paint frame with neutral colored primer.



UL LISTED
1½ HR (B) LABEL
can be used in existing non-listed or listed steel frame.

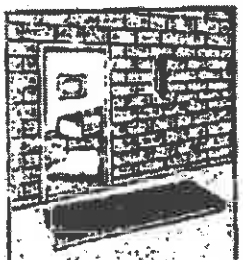
Install a pre-hung
Steelcraft

COMMERCIAL REPLACEMENT DOOR UNIT

New beauty and security for worn out doors.

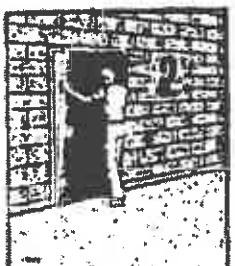
The Steelcraft Commercial Replacement Unit is the only product of its kind specifically designed for the rehab market. Fits these nominal sizes: 2868, 3068, 3668, 3868, 4068, 2870, 3070, 3670, 3870, 4070 single, and 5468, 5068, 5470 and 6070 double doors.

- Does not require removal of existing frame.
- Fits an "out-of-square" opening.
- Works with grouted or non-grouted frames.
- Installs quickly and easily.
- Includes rugged steel adapter frame.
- Permits door swing to be changed without major rework.
- Fills opening without re-mortising and filling hardware cutouts.
- Can be installed in existing steel or wood frame.
- Provides additional security.



QUICK

1. Remove old door, hardware, sill and any other item(s) projecting into opening.



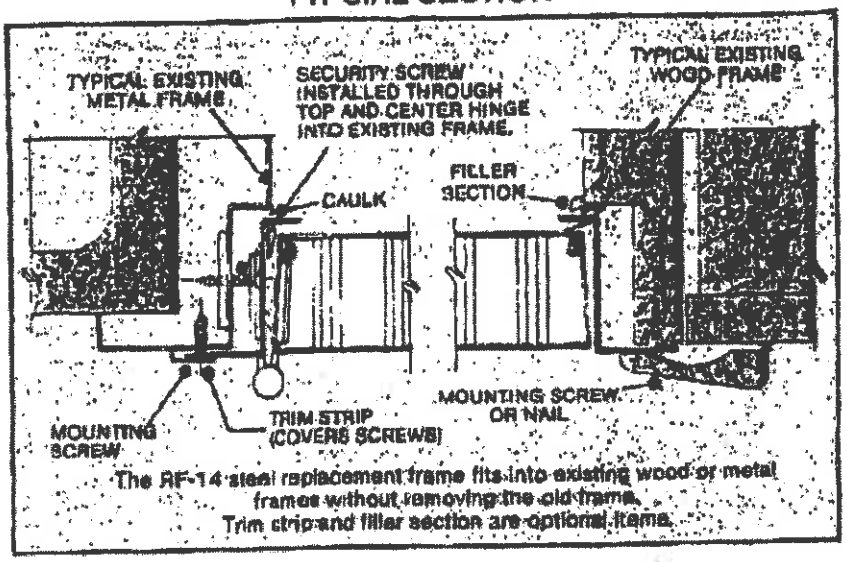
'N EASY

2. Set pre-hung unit into frame opening. Install mounting screws through face, cut banding and install security screws.

INSTALLATION

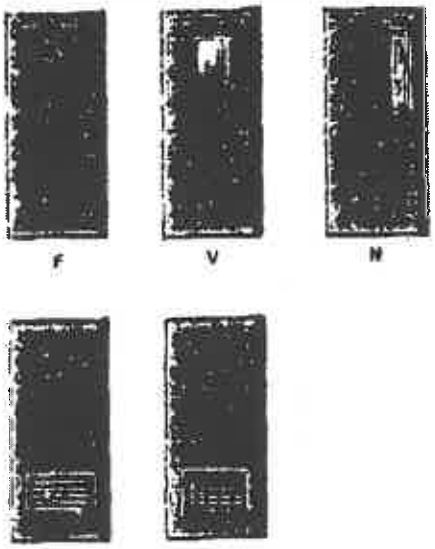
3. Mount hardware as required. Paint.

TYPCIAL SECTION



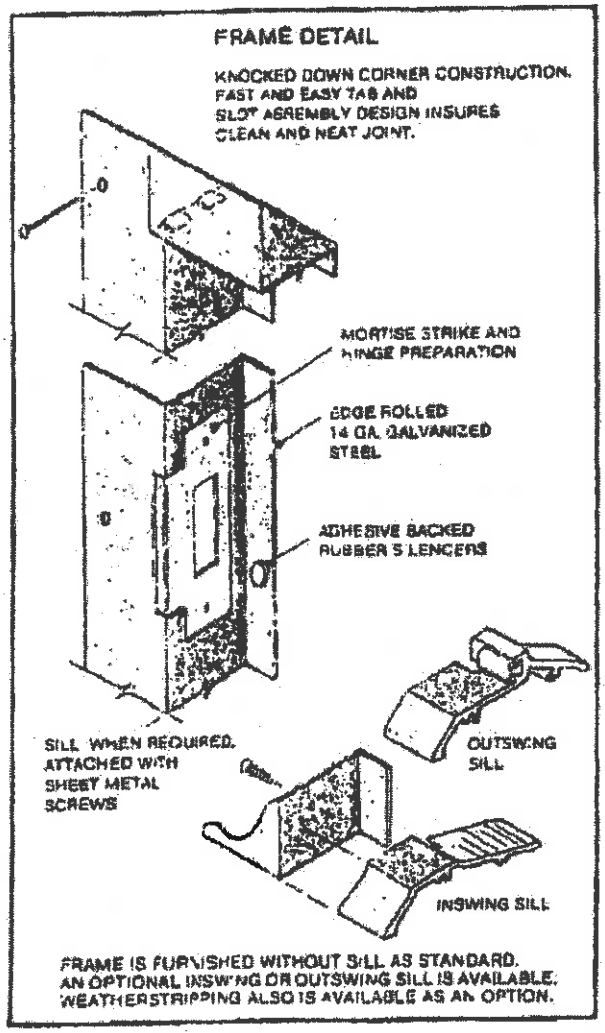
The RF-14 steel replacement frame fits into existing wood or metal frames without removing the old frame. Trim strip and filler section are optional items.

DESIGNS AND FINISHES AVA



LOUVERS

FRAME DETAIL



FRAME IS FURNISHED WITHOUT SILL AS STANDARD. AN OPTIONAL INSWING OR OUTSWING SILL IS AVAILABLE. WEATHERSTRIPPING ALSO IS AVAILABLE AS AN OPTION.

SPECIFICATIONS

Commercial Replacement Unit shall be supplied as a complete unit, consisting of 18 ga. door (RL-18) and 14 ga. frame (RF-14).

*Single openings shall be pre-hung, ready for quick and easy installation. Double openings shall be supplied as separate units (frame and two door leaves) not pre-hung.

Doors shall conform to the following:

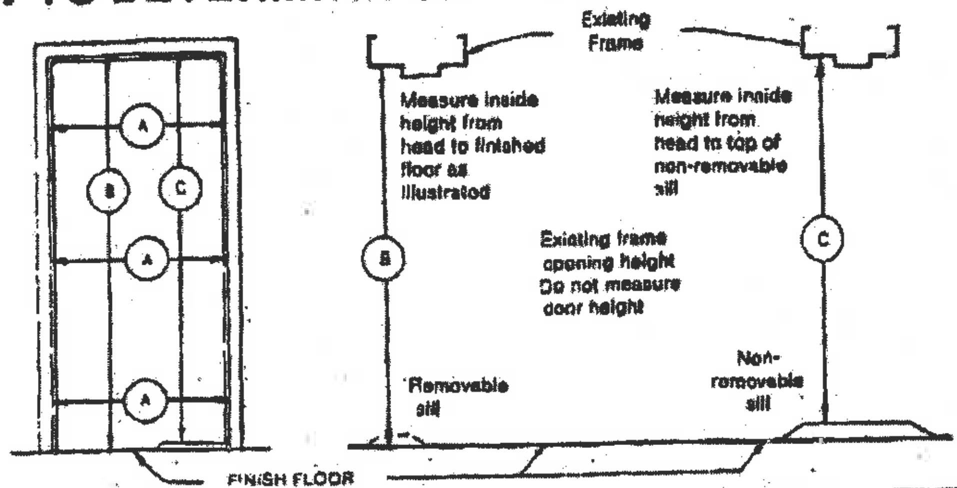
- Doors shall be as manufactured by Steelcraft, Cincinnati, Ohio, and designated as RL-18 (1¾" 18 ga. steel).
- Doors shall be fabricated from cold rolled steel.
- Doors shall have ⅛" bevel in 2" on hinge and lock edges.
- Doors shall have vertical mechanical interlocking seams on hinge and lock edges with visible edge seam.
- Doors shall be provided with top and bottom inverted steel channels spotwelded within the door.
- Doors shall be reinforced, stiffened and sound deadened with impregnated kraft honeycomb core completely filling the inside of the door and laminated to the inside faces of panels.
- Doors shall be mortised and adequately reinforced for all hardware.
- Doors shall be phosphatized and receive one coat of baked-on prime paint.

Frames shall conform to the following:

- Frames shall be as manufactured by Steelcraft, Cincinnati, Ohio, and designated as RF-14 (14 ga.).
- Frames shall be accurately formed from galvanized steel.
- Frames shall be furnished knocked down (KD). Corners shall have tabs for secure and easy interlocking of jambs to head at each corner.
- Frames shall be adequately reinforced for all hardware.
- Frames shall be supplied with adhesive backed rubber bumpers: three per strike jamb, two per double door frame head.
- Frames shall be phosphatized and receive one coat of baked-on prime paint.

*Single openings are designed to be pre-hung and installed. Units are supplied KD for pre-hanging at job site or by distributor.

HOW TO DETERMINE SIZE OF EXISTING FRAME



FRAME WIDTH

Measure in 3 places. Use narrowest dimension for ordering

NOTE: ORDER UNITS BY NOMINAL SIZES. DO NOT ORDER BY ACTUAL DIMENSIONS.

SIZE (Nominal)	FITS THESE EXISTING OPENINGS			
	A WIDTHS		B C HEIGHTS	
	MIN.	MAX.	MIN.	MAX.
2'8" x 6'8"	31¼"	32⅜"	79⅛"	80⅛"
3'0" x 6'8"	35½"	36⅜"	79⅛"	80⅛"
3'6" x 6'8"	41½"	42⅜"	79⅛"	80⅛"
3'8" x 6'8"	43½"	44⅜"	79⅛"	80⅛"
4'0" x 6'8"	47½"	48⅜"	79½"	80⅛"
2'8" x 7'0"	31½"	32⅜"	83⅛"	84⅛"
3'0" x 7'0"	35½"	36⅜"	83⅛"	84⅛"
3'6" x 7'0"	41½"	42⅜"	83⅛"	84⅛"
3'8" x 7'0"	43½"	44⅜"	83⅛"	84⅛"
4'0" x 7'0"	47½"	48⅜"	83⅛"	84⅛"
5'4" x 6'8"	63½"	64⅜"	79⅛"	80⅛"
6'0" x 6'8"	71½"	72⅜"	79½"	80⅛"
5'4" x 7'0"	63½"	64⅜"	83½"	84⅛"
6'0" x 7'0"	71½"	72⅜"	83⅛"	84⅛"

*MAX. OPENING HEIGHT MAY BE EXCEEDED BY BLOCKING DOWN EXISTING OPENING.

TO HAND A DOOR — FACE IT FROM THE OUTSIDE OR KEYSIDE

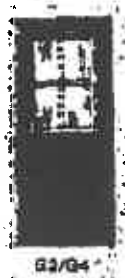
LEFT HAND Hinges on Left Opens Inward 	RIGHT HAND Hinges on Right Opens Inward 	LEFT HAND REVERSE Hinges on Left Opens Outward 	RIGHT HAND REVERSE Hinges on Right Opens Outward 
LEFT HAND Hinges on Left Opens Inward 	RIGHT HAND Hinges on Right Opens Inward 	LEFT HAND REVERSE Hinges on Left Opens Outward 	RIGHT HAND REVERSE Hinges on Right Opens Outward 

Steelcraft®
9017 Blue Ash Road Cincinnati, Ohio 45242 513/745-6400

E

LNL

G



G2/G4

FINISH PAINTED AND WOOD GRAIN FINISHES

HARDWARE

Replacement Units shall be prepared for the following hardware:

Hinges:
1-1/2 pair of 4-1/2 X 4-1/2 x .134 template hinges

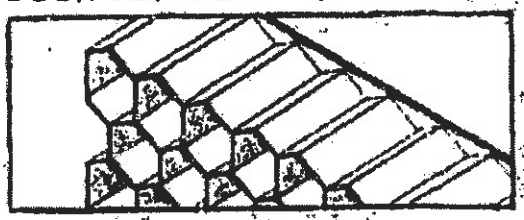
Lock and Strike:
Government 164 (ANSI-A115.2) cylindrical or Government 86 (ANSI-A115.1) mortise lock with an ANSI-A115.1 or .2 strike.

Consult distributor for other hardware preparations.

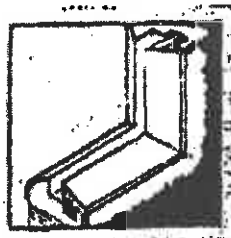
	NOMINAL SIZE	FRAME SIZE (FINISHED OPENING) WIDTH	FRAME SIZE (FINISHED OPENING) HEIGHT	NET DOOR SIZE* WIDTH	NET DOOR SIZE* HEIGHT
SINGLE	2868	31"	79¾"	30-13/16"	78¾"
	3068	35"		34-13/16"	
	3868	41"		40-13/16"	
	3868	43"		42-13/16"	
	4068	47"		46-13/16"	
	2870	31"	83¾"	30-13/16"	82¾"
	3070	35"		34-13/16"	
	3870	41"		40-13/16"	
	3870	43"		42-13/16"	
	4070	47"		46-13/16"	
PAIR	5468	63"	79¾"	30-13/16" & 31-13/16"	78¾"
	6068	71"		34-13/16" & 35-13/16"	
	5470	63"	83¾"	30-13/16" & 31-13/16"	82¾"
	6070	71"		34-13/16" & 35-13/16"	

*FOR PAIRS OF DOORS INACTIVE LEAF IS 1" WIDER THAN ACTIVE LEAF
CONSULT DISTRIBUTOR FOR OTHER SIZES.

DOOR DETAILS

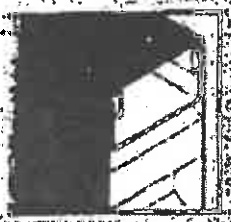


Full honeycomb core of phenolic resin-impregnated kraft paper reinforces the door every 1-inch, providing superior resistance to impact and assuring a flat surface.

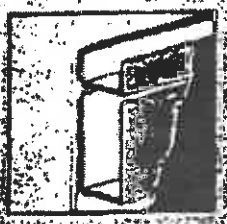


Aluminum glass trim (snap-in).

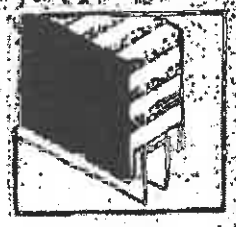
8-gage thick hinge reinforcement.



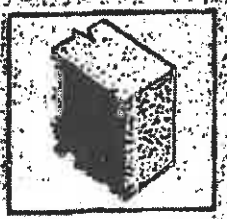
Snap-in steel top caps for exterior openings.



Steel top and bottom reinforcing channels, 14-gage closer rein-forcement when required.



Door bottom with double sweep when required.



Insulated doors: one pound polystyrene core, 1½ pound polyurethane core when required.

PAIRS OF DOORS

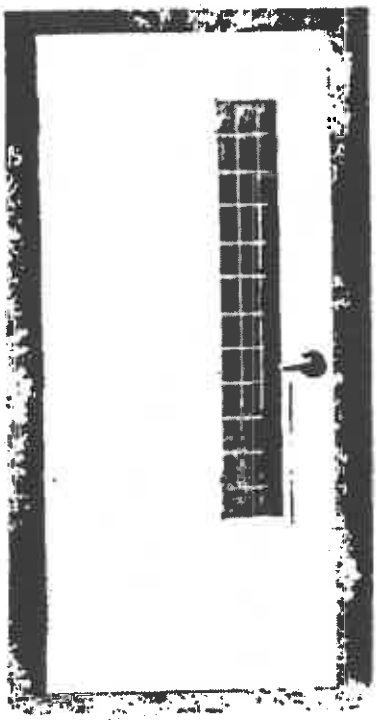
Designs shown may be combined for pairs of doors.
Pairs of doors consist of two leaves and a 14 ga. steel "Z" astragal field mounted to inactive leaf of pair. Inactive leaf may be secured with flush bolts or surface bolts.

Note: For pairs of doors, right hand will be active, unless specifically ordered.

Steelcraft

L18 and L16-Series Honeycomb Doors

HD X-HD



FEATURES AND BENEFITS:

Steelcraft's L-Series Doors offer the following standard unique features, which enhance long term performance and durability.

1. **Honeycomb core system** enhances the structural integrity of the door, while significantly reducing the weight.
2. **Full height, epoxy filled mechanical interlock edges** provide structural support and stability the full height of the door edges.
3. **Patented universal hinge preparations** allow for easy field conversion from standard weight (.134) hinges to heavy weight (.180) hinges.
4. **14 gage top and bottom channels** provide stability and protection for the top and bottom edges from abuse.
5. **Beveled hinge and lock edges** allow for tighter installation tolerances, ensure easier operation, and eliminate binding and sticking.
6. **Recessed Dezigner™ glass trim** provide a clean, neat, and flush finish with the door surface.
7. **Factory applied baked on rust inhibiting primer** in accordance with ANSI A250.10.

ABOUT THE PRODUCT:

The L18 and L16-Series Flush Doors are designed to meet the architectural requirements for full flush doors. This premium door construction combines the strength and dimensional stability of steel with the structural integrity of the honeycomb core. The continuous bonding of core to metal provides an attractive flat door, free of face welding marks. Tests have proven that the L-Series door has integral high resistance to impact damage, low thermal conductivity, and high STC ratings.

To meet application, specification and performance requirements, the L-Series doors offer a wide range of specifiable options including sizes, glass lite designs, hardware (mechanical, pneumatic, electrical) preparations and edge constructions.

SPECIFICATION COMPLIANCE:

1. Door construction for the Steelcraft L18 and L16-Series Full Flush Doors meet the requirements of ANSI A250.8-1998 (commonly referred to as SDI-100).
2. Hardware preparations and reinforcements are in accordance with ANSI A250.6-1997. Locations are in accordance with ANSI/DHI A115.

FIRE RATINGS:

The L-Series doors meet the broadest fire rating requirements. They are listed for installations requiring compliance to both negative pressure testing (ASTM E152 and UL-10B) and positive pressure standards (UBC 7-2 and UL-10C).

Steel Thickness	Opening	Usage Frequency[1]	Frame Applications
16 gage (1.3mm)	Interior & Exterior	Extra-heavy duty	• 16 & 14 gage steel frames
18 gage (1mm)	Interior & Exterior	Heavy duty	• 16 gage steel frames
Steel Type	**Opening**	**Building Applications**	
Non Galvannealed[2]	Mainly Interior	• Typical building conditions	
Galvannealed[2]	Mainly Exterior	• Used in locations with high humidity and/or weather exposure	

MATERIAL:

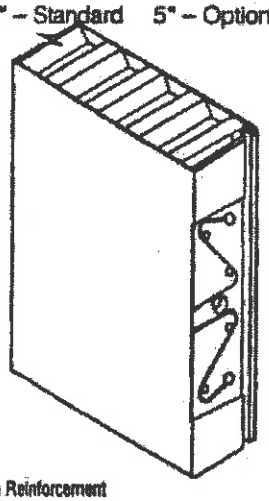
Depending on environmental conditions, exterior doors are generally galvannealed and interior doors non galvanneal. All doors are supplied with a factory applied baked on primer for field applied finish paints.

[1] Usage frequency is based on ANSI A250.8-1998
[2] Reinforcements for galvannealed doors are also galvannealed
[3] Commercial quality carbon steel

IR Security & Safety

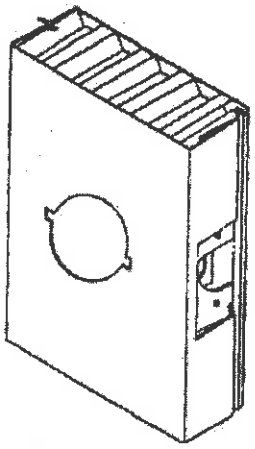
Details are subject to change without prior notice.

Universal Mortise Hinge Prep
4 ½" – Standard 5" – Optional



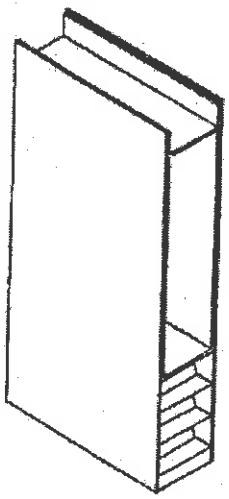
7 Gage Hinge Reinforcement

Lock Prep

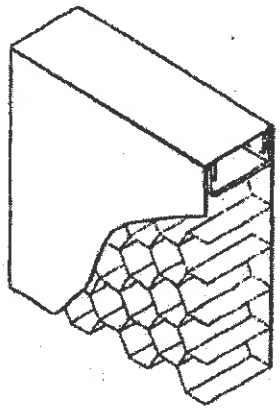


161 Cylindrical Lock shown

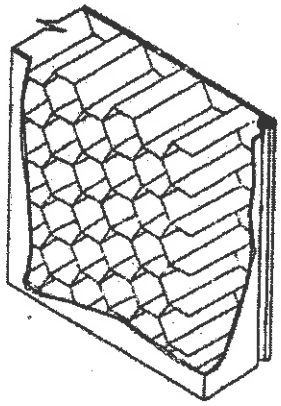
Optional 14 Gage Closer Reinforcement



Optional Snap-in Top Cap



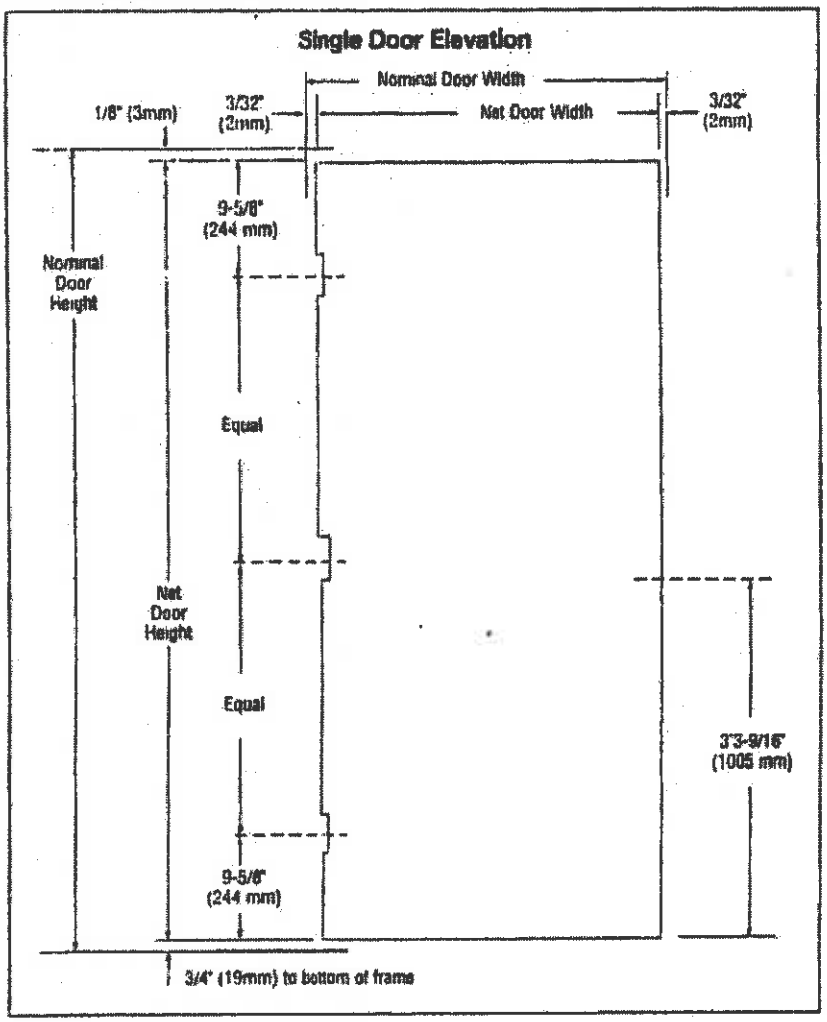
Rigid Honeycomb Core



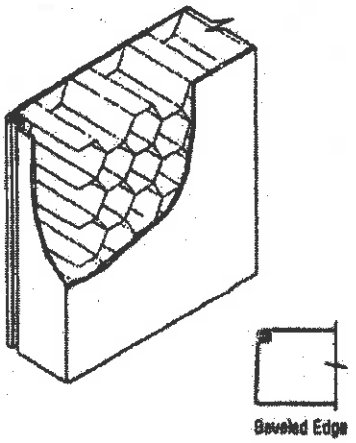
GENERAL NOTES:

1. **Edge construction:**
   - Vertical edges (both hinge and lock) are beveled with a visible seam.
   - Top and bottom edges are closed with inverted 14 gage welded channels. Exterior applications require the addition of snap-in top caps to protect against the weather.
2. **Optional edge seams** available in the L-Series door construction are as follows:
   - **LF** – The mechanical edge seam is filled and finished prior to applying the factory primer.
   - **LW** – The mechanical edge seam is welded and finished prior to applying the factory primer.
3. **Optional cores** available in the L-Series door construction:
   - **Polystyrene** for exterior applications in extreme weather conditions.
   - **Polyurethane** for exterior applications in arctic weather conditions. Not Fire Rated.
4. **Standard hardware preparations:** standard mortised and reinforced for:
   - **Universal hinge preps** – 4½"(114mm) patented preparation which allows easy and quick field conversion from standard to heavy weight hinges.
   - **Locks** – A multitude of standard lock preps are available. The most commonly used with a 4⅞" (124mm) strike are 161, 61L and 86.

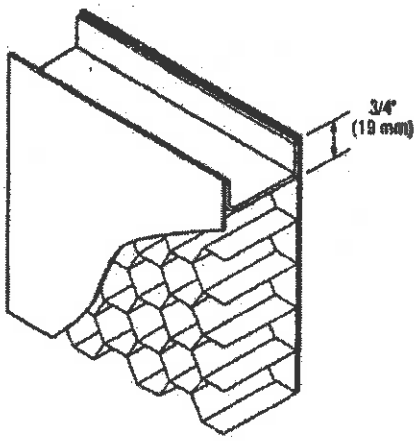
Single Door Elevation



Beveled Edge with Full Height Mechanical Interlock

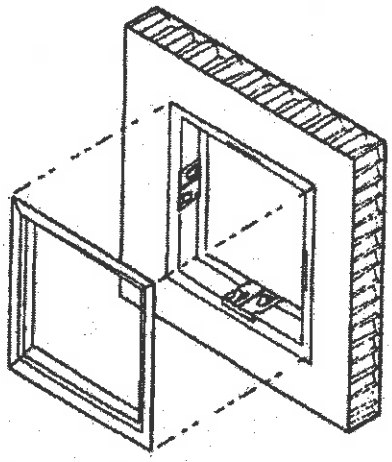


Inverted Top & Bottom Channels 14 Gage



Dezigner Trim Option

¼" – Standard ½" – Optional



CONSTRUCTION NOTES:

1. **Doors** are 1¾" (45mm) thick.
2. **Door opening size maximum:**
   Single door opening size 4'0" x 10'0" (1219mm x 3048mm)
   Double door opening size 8'0" x 10'0" (2438mm x 3048mm)
3. **Standard operating clearances** *(installed in frame)*:
   Head = ⅛" (3mm) to bottom of head or transom panel
   Hinge and lock side = 3⁄32" (2mm) to rabbet on jamb
4. **Standard core system:**
   1" (25mm) cell Kraft honeycomb core is laminated to both face sheets with contact adhesive. The honeycomb is phenolic resin impregnated and sanded to insure ultimate lamination and performance. To further enhance the structural stability of the door the honeycomb core material is subjected to several unique operations prior to assembly. If any of these operations are eliminated, the strength and durability of the door is compromised.
5. **Hardware preparations:** to meet specifications, doors can be prepared for all commercial mortised hardware, and can be factory reinforced for surface applied hardware applications.
   - **Lock preps** – details and dimensions shown are for cylindrical (ANSI 115.2) type locks. For mortise (ANSI A115.1) locks, the centerline of the lock is located ⅜" (9mm) lower.
6. **Glass lites with Dezigner® trim and louvers:** doors with glazed cutouts and doors with louvers are available (see *Lites and Louvers* section of *Spec Manual).*

INSTALLATION:

1. Installation shall conform to the published Steelcraft installation instructions, SDI 105 *Recommended Installation Instructions for Steel Frames*, and ANSI/DHI A115-IG *Installation Guide for Doors and Hardware*.
2. Fire Rated Assemblies must be in accordance with NFPA Pamphlet 80. The *Authority Having Jurisdiction* is the final authority in issues related to the installation and use of installed Fire Rated Doors.

DOOR EDGE APPLICATIONS:

The L-Series Doors are used in virtually all buildings and construction applications. The application and functionality dictate the door edge construction specified.

Edge	Usage	Application
L	Heavy & Extra-heavy duty	High traffic in all commercial applications
LF	Heavy & Extra-heavy duty	High traffic, in sanitation conditions
LW	Heavy & Extra-heavy duty	High traffic, in sanitation and high abuse conditions

CONVERSION CHART

ANSI A250.8 (SDI 100) *Recommended Specification for Standard Steel Doors and Frames.*

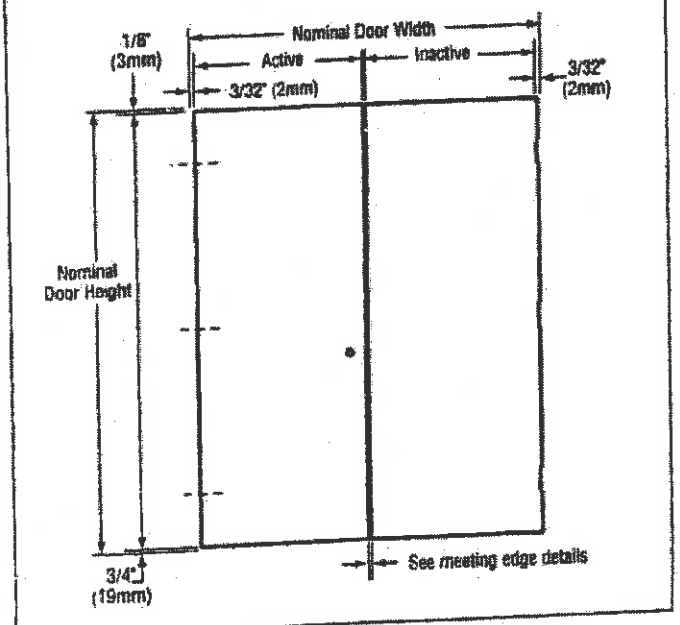
Series	Level	Model	Description	Edge Construction
L18	2	1	Full Flush	Full height, visible mechanical interlocked edge
LF18	2	2	Seamless	L-Series with epoxy filled edge seams
LW18	2	2	Seamless	L-Series with welded edge seams
L16	3	1	Full Flush	Full height, visible mechanical interlocked edge
LF16	3	2	Seamless	L-Series with epoxy filled edge seams
LW16	3	2	Seamless	L-Series with welded edge seams

DOUBLE DOOR APPLICATIONS:

L-Series doors are available in double door elevations, with active and inactive leaves and an overlapping astragal.

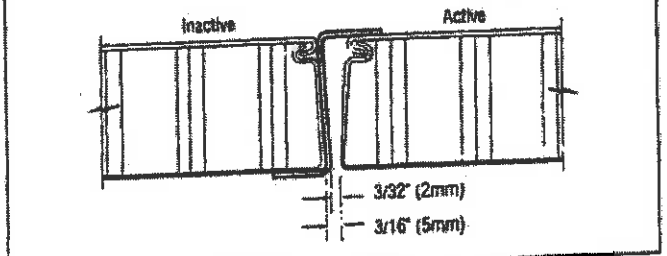
- **Standard operating clearances** *(installed in frame)*:
  - Head = ⅛" (3mm) to bottom of head or transom panel
  - Hinge side = 3/32" (2mm) to rabbet on jamb
  - Meeting edges = 3/32" (2mm) with or without astragal. For openings without an astragal, a wide inactive leaf is used.
  - Bottom = ¾" (19mm) to bottom of frame
- **Meeting edges:**
  - 14 Gage astragal is furnished loose for installation in the field by others.
  - Overlapping astragal kits are available to convert an active leaf to an inactive leaf.
  - When an astragal is not used, the width of the inactive leaf is increased 3/32" (2mm).
- **Hardware preparations:** the inactive leaf can be prepared for hardware as specified.

Double Door Elevation

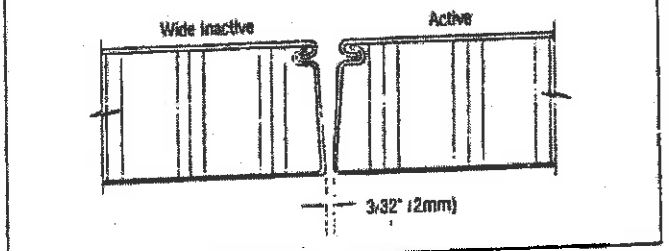


MEETING EDGE DETAILS:

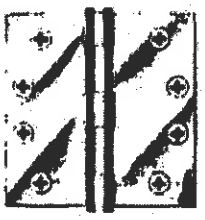
Typical Astragal 14 Gage



Pairs without Astragal



Five Knuckle



Plain Bearing - Standard Weight

For use on medium weight doors or doors requiring low frequency service

1191 Brass with Stainless Steel pin - ANSI A2133
Stainless Steel with Stainless Steel pin - ANSI A5133

1279 Steel with Steel pin - ANSI A8133

- Non-rising removable pin with button tip and plug
- With door closer use ball bearing hinge

Hinge Size		Gauge of Metal	Hole Count	Screw Size	
Inches	mm			Machine	Wood
2 x 2	51 x 51	0.083	4	-	3/4 x 8
2 1/2 x 2 1/2	64 x 64	0.089	6	-	3/4 x 8
3 x 3	76 x 76	0.097	6	-	1 x 9
3 1/2 x 3 1/2	89 x 89	0.119	6	1/2 x 10-24	1 x 9
4 x 4	102 x 102	0.129	8	1/2 x 12-24	1 1/4 x 12
4 1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1 1/4 x 12
4 1/2 x 4 1/2	114 x 114	0.134	8	1/2 x 12-24	1 1/4 x 12
5 x 4	127 x 102	0.145	8	1/2 x 12-24	1 1/4 x 12
5 x 4 1/2	127 x 114	0.145	8	1/2 x 12-24	1 1/4 x 12
5 x 5	127 x 127	0.145	8	1/2 x 12-24	1 1/4 x 12
6 x 4 1/2	152 x 114	0.160	10	1/2 x 1/4-20	1 1/2 x 14
6 x 5	152 x 127	0.160	10	1/2 x 1/4-20	1 1/2 x 14
6 x 6	152 x 152	0.160	10	1/2 x 1/4-20	1 1/2 x 14

Five Knuckle

Plain Bearing - Standard Weight - Wide Throw

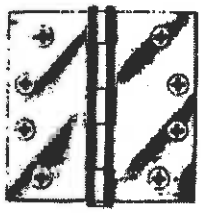
For use on medium weight doors or doors requiring low frequency service

1191 Wide Throw
Brass with Stainless Steel pin - ANSI A2133
Stainless Steel with Stainless Steel pin - ANSI A5133

1279 Wide Throw
Steel with Steel pin - ANSI A8133

- Non-rising removable pin with button tip and plug
- With door closer use ball bearing hinge

Hinge Size		Gauge of Metal	Hole Count	Screw Size	
Inches	mm			Machine	Wood
3 1/2 x 5	89 x 127	0.119	6	1/2 x 10-24	1 x 9
3 1/2 x 6	89 x 152	0.119	6	1/2 x 10-24	1 x 9
4 x 5	102 x 127	0.129	8	1/2 x 12-24	1 1/4 x 12
4 x 6	102 x 152	0.129	8	1/2 x 12-24	1 1/4 x 12
4 x 7	102 x 178	0.129	8	1/2 x 12-24	1 1/4 x 12
4 1/2 x 5	114 x 127	0.134	8	1/2 x 12-24	1 1/4 x 12
4 1/2 x 6	114 x 152	0.134	8	1/2 x 12-24	1 1/4 x 12
4 1/2 x 7	114 x 178	0.134	8	1/2 x 12-24	1 1/4 x 12
4 1/2 x 8	114 x 203	0.134	8	1/2 x 12-24	1 1/4 x 12
5 x 6	127 x 152	0.145	8	1/2 x 12-24	1 1/4 x 12
5 x 7	127 x 178	0.145	8	1/2 x 12-24	1 1/4 x 12
5 x 8	127 x 203	0.145	8	1/2 x 12-24	1 1/4 x 12



Concealed Bearing - Standard Weight

For use on medium weight doors or doors requiring medium frequency service

CB1191 Stainless Steel with Stainless Steel pin - ANSI A5112

- Non-rising removable pin with button tip and plug
- Only available with SecureCoat® Lifetime finish (US3SC)
- Specify machine screws

Hinge Size		Gauge of Metal	Hole Count	Screw Size	
Inches	mm			Machine	Wood
3 1/2 x 3 1/2	89 x 89	0.119	6	-	1 x 9
4 x 4	102 x 102	0.129	8	-	1 1/4 x 12
4 1/2 x 4	114 x 102	0.134	8	-	1 1/4 x 12
4 1/2 x 4 1/2	114 x 114	0.134	8	-	1 1/4 x 12
5 x 4	127 x 102	0.145	8	-	1 1/4 x 12
5 x 4 1/2	127 x 114	0.145	8	-	1 1/4 x 12
5 x 5	127 x 127	0.145	8	-	1 1/4 x 12
6 x 4 1/2	152 x 114	0.160	10	-	1 1/2 x 14
6 x 5	152 x 127	0.160	10	-	1 1/2 x 14
6 x 6	152 x 152	0.160	10	-	1 1/2 x 14

Saddle Thresholds

All thresholds this page

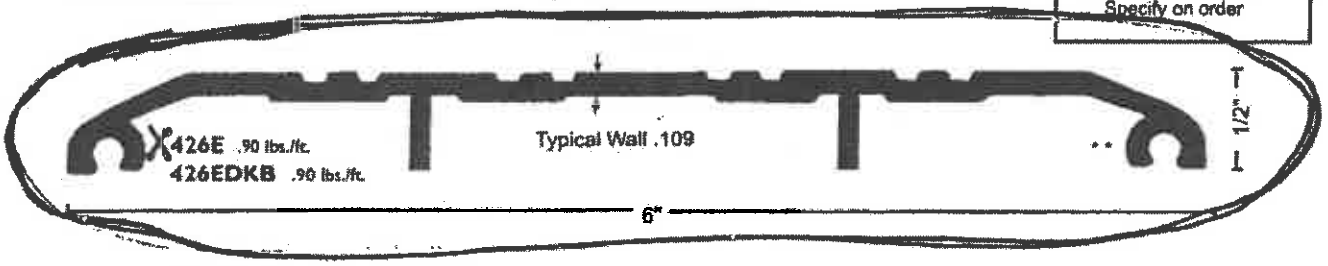
MATERIALS & FINISHES

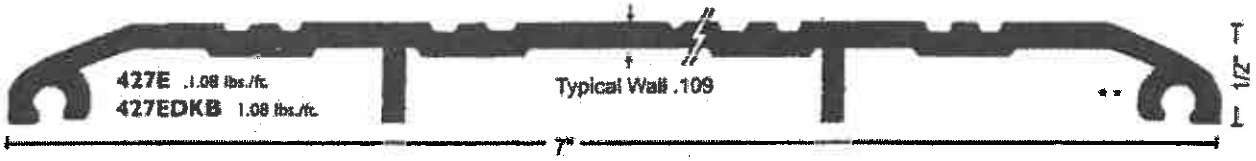
- Aluminum mill finish
- DKB - Aluminum dark bronze finish

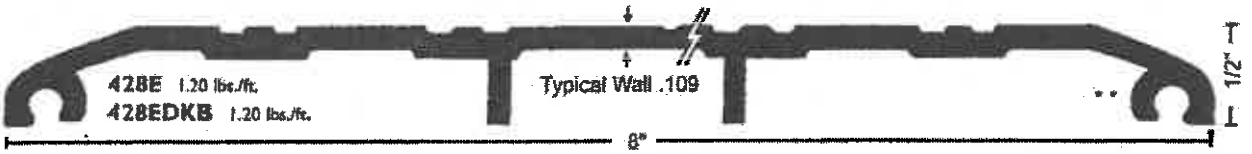
Slip Resistant SIA Finish

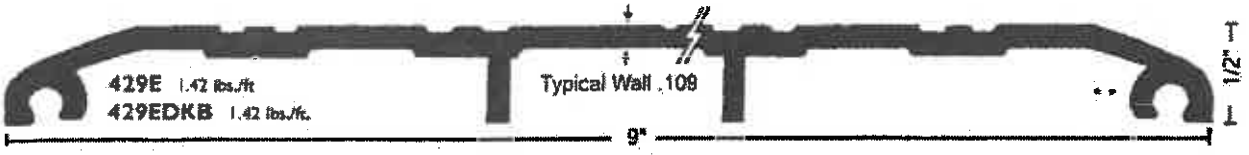
All thresholds are available with our slip resistant, non-skid finish for better traction. Suffix "SIA".

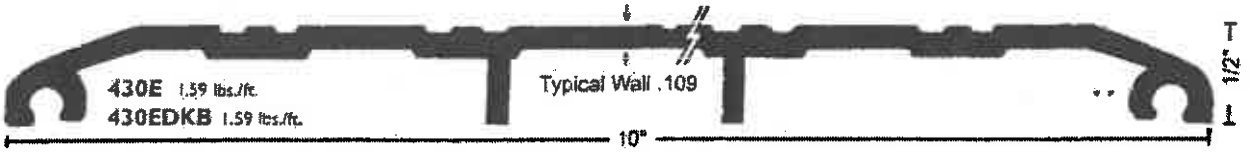
**
VINYL FOOT SEAL
used instead of caulking to increase the weather resistance of the threshold. Specify on order











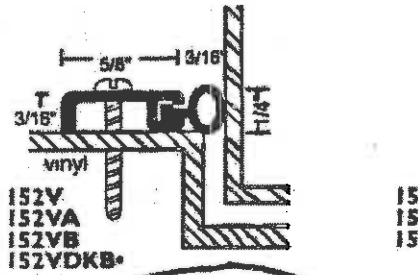
Vinyl Seals

Properties:
- Synthetic polymer: Polyvinyl Chloride
- Economical
- Flame resistant
- Moisture resistant
- Temperature range 0F to 140F
- Plasticizers evaporate with age and exposure to UV, Cold, Heat causing hardening, loss of memory, loss of resilience, cracking and crazing

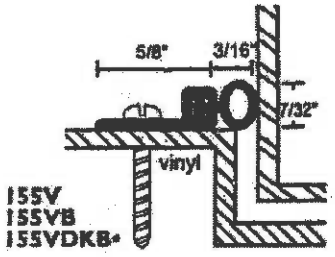
#6 x 3/4" Stainless Steel Sheet Metal Screws furnished
Screw holes slotted for adjustment

All vinyl seals this section

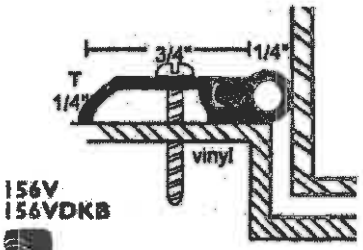
A - clear
B - gold
DKB - dark bronze
no suffix - mill
Vinyl is gray
(exception: *vinyl is black)



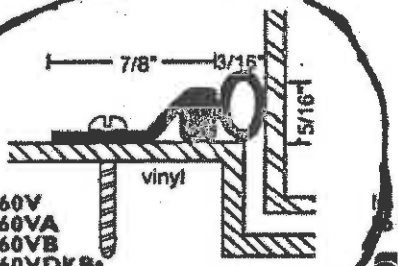
152V
152VA
152VB
152VDKB*



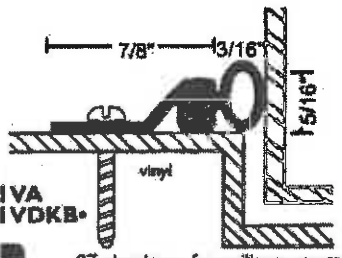
155V
155VB
155VDKB*



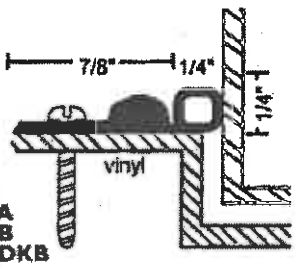
156V
156VDKB



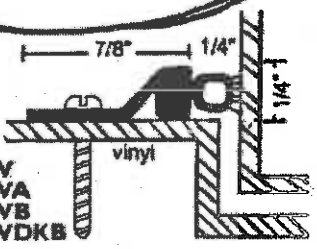
160V
160VA
160VB
160VDKB*



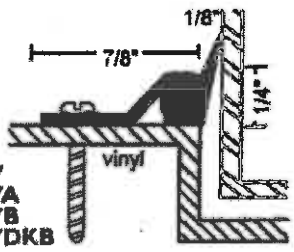
161VA
161VDKB*
.07 aluminum for military specs



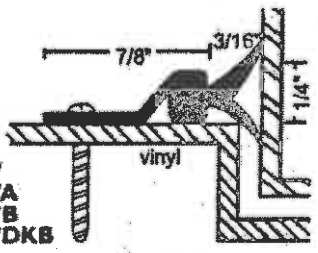
162V
162VA
162VB
162VDKB



164V
164VA
164VB
164VDKB

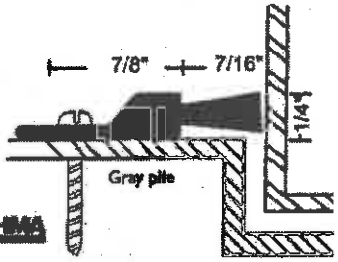


188V
188VA
188VB
188VDKB

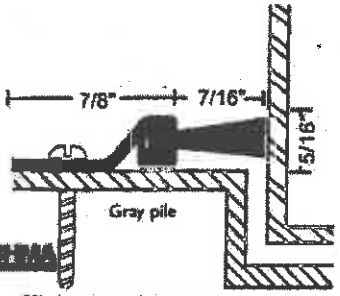


190V
190VA
190VB
190VDKB

Pile Seals



185P
185PA
185PB
185PDKB



161PA
161PDKB
.07 aluminum for military specs

Specifications

Handing:
All D-Series lever locksets are non-handed.

Door Thickness:
1⅜" to 2⅛" (41mm–54mm) standard including Vandlgard® functions.
See accessories (Page 12) for spacers required for 1⅜" doors.

Backset:
2¾" (70mm) standard. 2⅜", 3¾" and 5" (60mm, 95mm, 127mm) optional.

Faceplate:
Brass, bronze or stainless steel. 1⅛" x 2¼" (29 mm x 57mm) square corner, beveled.

Lock Chassis:
Zinc plated for corrosion resistance.

Latch Bolt:
Steel, ½" (12mm) throw, deadlocking on keyed and exterior functions. ¾" (19mm) throw anti-friction latch available for pairs of fire doors.

Exposed Trim:
Levers: Pressure cast zinc, plated to match finish symbols.
Roses: Solid brass.

Strike:
ANSI curved lip strike 1¼" x 4⅞" x 1³⁄₁₆" lip to center standard. Optional strikes, lip lengths and ANSI strike box available. See page 11.

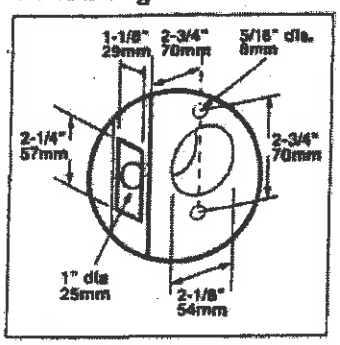
Cylinder & Keys:
6-pin Everest C123 keyway standard with two patented nickel silver keys per lock.

Keying Options:
Interchangeable core and Primus® high security cylinders. Master keying, grand master keying and construction keying.

Warranty:
Seven-year limited for all functions including Vandlgard®.

Door Preparation

Lever Designs



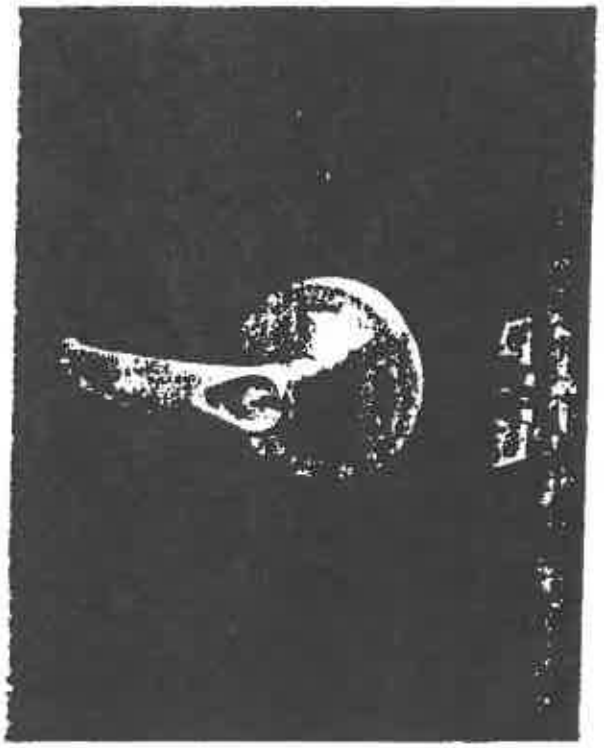
Certifications

ANSI
Meets or exceeds A156.2 Series 4000, Grade 1 strength and operational requirements. Meets A117.1 Accessibility Code.

Federal
Meets FF-H-106C Series 161.

California State Reference Code
(Formerly Title 19, California State Fire Marshal Standard)
All levers with returns comply; levers return to within ½" of door face.

UL / cUL:
All locks listed for A label single doors, 4' x 8'.
Letter F and UL symbol on latch front indicate listing.
Electrified functions are UL19X Listed for single point locking applications.
UL437 Listed locking cylinder optional: specify Primus 20-500 Series cylinder.

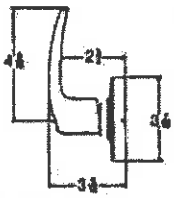


Lever Designs & Finishes

ATHENS

Symbol: ATH
Material: Pressure cast zinc lever; wrought brass rose
Finishes:
605, 606, 612, 613, 619, 625, 626

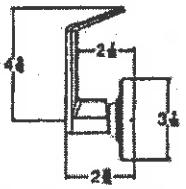
606



RHODES

Symbol: RHO (06)
Material: Pressure cast zinc lever; wrought brass rose
Finishes:
605, 606, 612, 613, 619, 625, 626

612

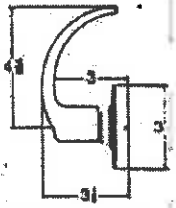


Lever Designs & Finishes

SPARTA

Symbol: SPA (17)
Material: Pressure cast zinc lever; wrought brass rose
Finishes:
605, 606, 612, 613, 619, 625, 626

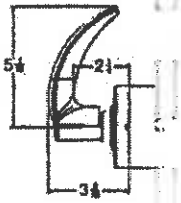
626

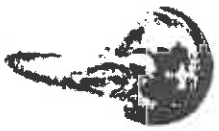


OMEGA

Symbol: OME
Material: Pressure cast zinc lever; wrought brass rose
Finishes:
605, 606, 612, 613, 619, 625, 626

619





605
Bright Brass

606
Satin Brass

612
Satin Bronze

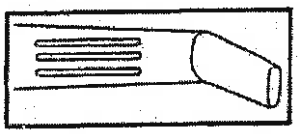
613
Oil Rubbed Bronze

619
Satin Nickel

625
Bright Chromium Plated

626
Satin Chromium Plated

Keyed functions available with interchangeable core options. Levers are available for full size and small format interchangeable cores.



TACTILE WARNING (KNURLING)

Change symbol designation as follows:
8AT for Athens
8RO for Rhodes
8SP for Sparta

Only outside lever is knurled unless otherwise specified.

Not available with Omega trim

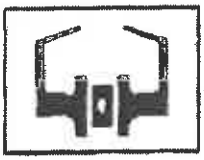
Finishes
605 Bright Brass
606 Satin Brass
612 Satin Bronze
613 Oil Rubbed Bronze
619 Satin Nickel
625 Bright Chromium Plated
626 Satin Chromium Plated

Functions

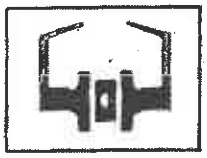
Non-Keyed Locks

SCHLAGE ANSI

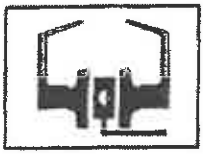
ND10S F75 — **Passage Latch**
Both levers always unlocked.



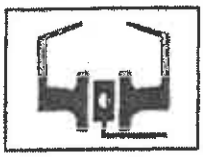
ND12D F89 — **Exit Lock**
Outside lever always fixed. Inside lever always unlocked.



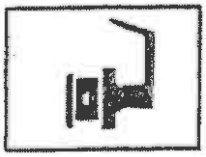
ND12DEL — **Electrically Locked (Fail Safe)**
Outside lever continuously locked electrically. Unlocked by switch or power failure. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit.



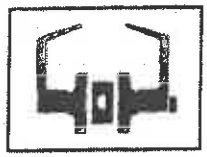
ND12DEU — **Electrically Unlocked (Fail Secure)**
Outside lever continuously locked until unlocked by electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit.



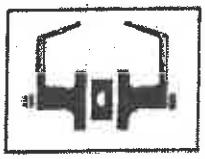
ND25D — **Exit Lock**
Blank plate outside. Inside lever always unlocked.



ND40S F76 — **Bath/Bedroom Privacy Lock**
Push-button locking. Can be opened from outside with small screwdriver. Turning inside lever or closing door releases button.



ND44S — **Hospital Privacy Lock**
Push-button locking. Unlocked from outside by turning emergency turn-button. Turning inside lever or closing door releases button.

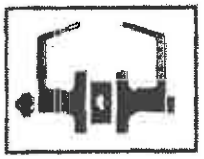


ND170 — **Single Dummy Trim**
Dummy trim for one side of door. Used for door pull or as matching inactive trim.

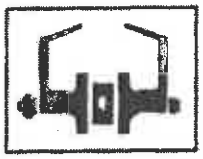
Keyed Locks

SCHLAGE ANSI

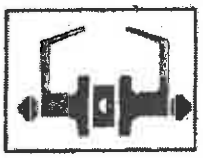
ND50PD F82 — **Entrance/Office Lock***
Push-button locking. Push-button locks outside lever until unlocked with key or by turning inside lever.



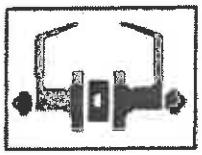
ND53PD F109 — **Entrance Lock***
Turn/push-button locking; pushing and turning button locks outside lever, requiring use of key until button is manually unlocked. Push-button locking; pushing button locks outside lever until unlocked by key or by turning inside lever.



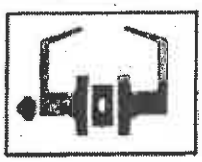
ND60PD F88 — **Vestibule/Classroom Security Lock***
Latch retracted by key from outside when outside lever is locked by key in inside lever. Inside lever is always unlocked.



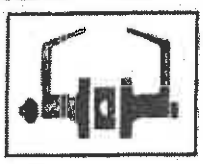
ND66PD F91 — **Store Lock*†**
Key in either lever locks or unlocks both levers.



ND70PD F84 — **Classroom Lock***
Outside lever locked and unlocked by key. Inside lever always unlocked.



ND73PD F90 — **Corridor Lock***
Outside lever locked by key outside or push-button inside. Push-button released by rotating inside lever or closing door. When outside lever is locked by key, key must be used to unlock it. Inside lever is always unlocked.



* *Available functions for small format interchangeable core.*

† *Caution: Double cylinder locks on residences and any door in any structure which is used for egress are a life safety hazard in times of emergency and their use is not recommended. Installation should be in accordance with existing codes only.*

Specifications

Handing:
Keyed functions are reversible. Non-keyed functions are not handed.

Door Thickness:
1⅛" to 1⅞" (35 mm to 48 mm) standard.
2" (51 mm) to 2½" (64 mm) optional extended inside.

Backset:
2⅜" (60 mm) standard. 2¾" (70 mm), 3¾" (95 mm) and 5" (127 mm) optional.

Front:
Steel. 1⅛" x 2¼" square corner, beveled, for 2⅜" backset standard. Optional 1" square corner, 1" radius corner, and non-UL drive-in / round face. For availability with specific backsets, see page 6.

Lock Chassis:
Steel, zinc dichromate plated for corrosion resistance.

Latch Bolt:
Brass, chrome plated, ½" throw, deadlocking on keyed and exterior functions.

Exposed Trim:
Wrought brass, bronze or stainless steel. Levers are pressure cast zinc, plated to match finish symbols.

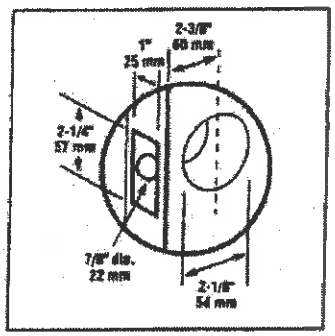
Strike:
T-strike 1⅛" x 2¾" (29 mm x 70 mm) x 1⅛" (29 mm) lip to center with box standard. Optional strikes, lip lengths and ANSI strike box available. See page 7.

Cylinder & Keys:
Commercial: 6-pin patented Everest C123 keyway standard with two nickel silver keys per lock.
Residential: 6-pin C keyway, keyed 5-pin.

Keying Options:
Interchangeable core and Primus® high security cylinders. Master keying, grand master keying, and construction keying.

Warranty:
Commercial: three-year limited.
Residential: Full mechanical lifetime.

Door Preparation



Certifications

ANSI
Meets or exceeds A156.2 Series 4000, Grade 2 strength and operational requirements.

Federal
Meets FF-H-106C.

California State Reference Code
(Formerly Title 19, California State Fire Marshal Standard)
All levers with returns comply; levers return to within ½" of door face.

UL / ULC:
All locks listed for A label single doors, 4' x 8'.
Letter F and UL symbol on latch front indicate listing.
UL437 Listed locking cylinder optional: specify Primus 20-500 Series cylinder.

Designs & Finishes

GEORGIAN

Symbol: GEO
Material: Wrought brass
Finishes: 605, 606, 609, 610, 625, 626

609

LEVON

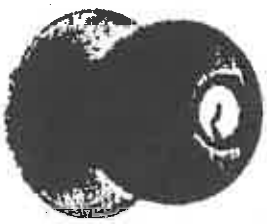
Symbol: LEV
Material: Pressure cast zinc lever; wrought brass or bronze rose
Finishes: 605, 612, 613, 626

605

Note: Levon available as inside trim only on deadlatch functions. Specify complete trim application and door handing when ordering with deadlatch functions.

ORBIT

Symbol: ORB
Material: Wrought brass or bronze
Finishes: 605, 606, 609, 610, 611, 612, 613, 616, 625, 626



613

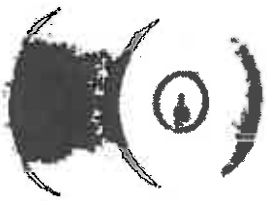
PLYMOUTH

Symbol: PLY
Material: Wrought brass, bronze, or stainless steel
Finishes: 605, 606, 609, 610, 611, 612, 613, 616, 625, 626, 629, 630

605

TULIP

Symbol: TUL
Material: Wrought brass
Finishes: 605, 606, 609, 610, 625, 626



626

Finishes

605 Bright Brass
606 Satin Brass
609 Antique Brass
610 Bright Brass, Blackened
611 Bright Bronze
612 Satin Bronze
613 Oil Rubbed Bronze
616 Antique Bronze
625 Bright Chromium Plated
626 Satin Chromium Plated
629 Bright Stainless Steel
630 Satin Stainless Steel

8 Keyed functions available with full size interchangeable core option for Orbit design.

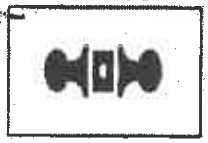
Functions

ANSI A156.2 Series 4000 Grade 2

Non-Keyed Functions

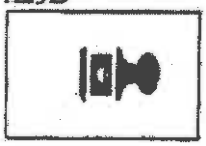
SCHLAGE ANSI

A10S F75 — **Passage Latch**



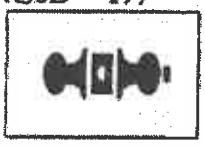
Both knobs always unlocked.

A25D — **Exit Lock**



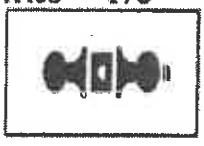
Blank plate outside. Inside knob always unlocked. Specify door thickness, 1⅜" or 1¾".

A30D F77 — **Patio Lock**



Push-button locking. Turning inside knob or closing door releases button, preventing lock-out.

A40S F76 — **Bath/Bedroom Privacy Lock**



Push-button locking. Can be opened from outside with small screwdriver. Turning inside knob or closing door releases button.

A43D F79 — **Communicating Lock**

Turn-button in outer knob locks and unlocks knob and inside thumbturn.

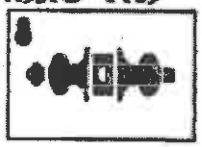
A170 — **Single Dummy Trim**

Dummy trim for one side of door. Used for door pull or as matching inactive trim.

Keyed Functions

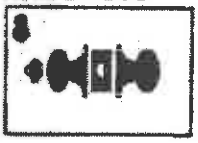
SCHLAGE ANSI

A53PD F109 — **Entrance Lock**



Turn/push-button locking: pushing and turning button locks outside knob requiring use of key until button is manually unlocked Push-button locking: pushing button locks outside knob until unlocked by key or by turning inside knob.

A70PD F84 — **Classroom Lock**

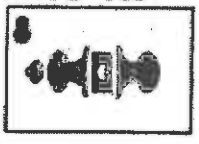


Outside knob locked and unlocked by key. Inside knob always unlocked.

A79PD — **Communicating Lock**

Locked or unlocked by key from outside. Blank plate inside.

A80PD F86 — **Storeroom Lock**



Outside knob fixed. Entrance by key only. Inside knob always unlocked.

A85PD F93 — **Hotel/Motel Lock**

Outside knob fixed. Entrance by key only. Push-button in inside knob activates visual occupancy indicator, allowing only emergency masterkey to operate. Rotation of inside spanner-button provides lock-out feature by keeping indicator thrown.

Keyed functions available with full size interchangeable core option for Orbit design.

SECTION 07920 - JOINT SEALANTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data.
B. Warranty: Warranty materials and workmanship of sealing against leaks, adhesion, and cohesive failure for a period of two years from the date of substantial completion.
C. References:
1. American Society for Testing and Materials
a) ASTM C790 – Recommended practices for use of latex sealing compounds.
b) ASTM C920 – Elastomer Joint Sealants.
2. Federal Specifications
a) FS TT-S-00230C (2), Sealing Compound, Elastomeric Type, Single Component (for caulking, sealing and glazing in buildings and other structures).
b) FS TT-S-00227E (3), Sealing Compound, Elastomeric Type, Multi-component (for caulking, sealing and glazing in buildings and other structures).

PART 2 - PRODUCTS

2.1 JOINT SEALANTS

A. Compatibility: Provide joint sealants, joint fillers, and other related materials that have been tested and found compatible with one another and with joint substrates under service and application conditions.
B. Interior Sealant: Provide ASTM C 834. If no color is specified, use Gray. Location(s) of sealant for the following:
1. Small voids between walls or partitions and adjacent door frames, and similar items.
2. Perimeter of frames at doors, windows, and access panels which adjoin exposed interior concrete and masonry surfaces.
C. Exterior Sealant: Provide ASTM C 920, polyurethane or polysulfide, Type M, Grade NS, Class 25, Shore A hardness of 20-40. If no color is specified, use Gray. Location(s) of sealant for the following:
1. Joints and recesses formed where frames and vents adjoin masonry, concrete, or metal frames. Use sealant at both exterior and interior surfaces of exterior wall penetrations. Color to match adjacent surface.

2.2 ACCESSORIES

A. Primers: Provide a nonstaining, quick-drying type and consistency recommended by the sealant manufacturer for the particular application.
B. Bond Breakers: Provide the type and consistency recommended by the sealant manufacturer to prevent adhesion of the sealant to backing or to bottom of the joint.
C. Cleaning Solvents: Provide type(s) recommended by the sealant manufacturer, except for aluminum and bronze surfaces that will be in contact with sealant.

PART 3 - EXECUTION

3.1 PREPARATION

A. Clean surfaces from dirt frost, moisture, grease, oil, wax, lacquer, paint, or other foreign matter that would tend to destroy or impair adhesion. Remove oil and grease with solvent. Surfaces must be wiped dry with clean cloths. When resealing an existing joint, remove existing calk or sealant prior to applying new sealant. For surface types not listed below, contact sealant manufacturer for specific recommendations.
1. Steel Surfaces: Remove loose mill scale by sandblasting or, if sandblasting is impractical or would damage finish work, scraping and wire brushing. Remove protective coatings by sandblasting or using a residue-free solvent.
2. Aluminum or Bronze Surfaces: Remove temporary protective coatings from surfaces that will be in contact with sealant. When masking tape is used as a protective coating, remove tape and any residual adhesive just prior to sealant application. For removing protective coatings and final cleaning, use nonstaining solvents recommended by the manufacturer of the item(s) containing aluminum or bronze surfaces.
3. Concrete and Masonry Surfaces: Where surfaces have been treated with curing compounds, oil, or other such materials, remove materials by sandblasting or wire brushing. Laitance, remove efflorescence and loose mortar from the joint cavity.

4. Wood Surfaces: Keep wood surfaces to be in contact with sealants free of splinters and sawdust or other loose particles.

B. Do not add liquids, solvents, or powders to the sealant. Mix multi-component elastomeric sealants in accordance with manufacturer's instructions.

3.2 INSTALLATION

A. Joint Width-to-Depth Ratios: Install per manufacturer's recommendation or as described below, whichever is more stringent.

1. Acceptable Ratios:

	Minimum	Maximum
a) For metal, glass, or other nonporous surfaces:		
(1) 1/4 inch (6 mm) (minimum)	1/4 inch (6 mm)	1/4 inch (6 mm)
(2) Over 1/4 inch (6 mm)	1/2 of width	Equal to width
b) For wood, concrete, masonry, or stone:		
(1) 1/4 inch (6 mm) (minimum)	1/4 inch (6 mm)	1/4 inch (6 mm)
(2) Over 1/4 inch(6 mm) to 1/2 inch (13 mm)	1/4 inch (6 mm)	Equal to width
(3) Over 1/2 inch (13 mm) to 2 inch (50 mm)	1/2 inch (50 mm)	5/8 inch (16 mm)
(4) Over 2 inch (50 mm)	(As recommended by sealant mfr.)	

2. Unacceptable Ratios: Where joints of acceptable width-to-depth ratios have not been provided, clean out joints to acceptable depths and grind or cut to acceptable widths without damage to the adjoining work. Grinding is not required on metal surfaces.

B. Masking Tape: Place masking tape on the finish surface on one or both sides of a joint cavity to protect adjacent finish surfaces from primer or sealant smears. Remove masking tape within 10 minutes after joint has been filled and tooled.

C. Immediately prime prior to application of the sealant, clean out loose particles from joints. Where recommended by sealant manufacturer, apply primer to joints in concrete masonry units, wood, and other porous surfaces in accordance with sealant manufacturer's instructions. Do not apply primer to exposed finish surfaces.

D. Provide bond breakers to the back or bottom of joint cavities, as recommended by the sealant manufacturer for each type of joint and sealant used, to prevent sealant from adhering to these surfaces. Carefully apply the bond breaker to avoid contamination of adjoining surfaces or breaking bond with surfaces other than those covered by the bond breaker.

E. Provide a sealant compatible with the material(s) to which it is applied. Do not use a sealant that has exceeded shelf life or has jelled and can not be discharged in a continuous flow from the gun. Apply the sealant in accordance with the manufacturer's printed instructions with a gun having a nozzle that fits the joint width. Force sealant into joints to fill the joints solidly without air pockets. Tool sealant after application to ensure adhesion. Make sealant uniformly smooth and free of wrinkles. Upon completion of sealant application, roughen partially filled or unfilled joints, apply sealant, and tool smooth as specified. Apply sealer over the sealant when and as specified by the sealant manufacturer.

F. Thresholds: Place double band of sealant under and along all sides of all exterior thresholds.

END OF SECTION 07920

ATTACHMENT 6

Lead-Based Paint Inspection Report
For
Marlow Armory

Lead-Based Paint Inspection
And
Settled Dust Sampling

Marlow Armory
702 West Main Street
Marlow, OK 73055

Date of Inspection
September 17, 2009

DCS Contract NO.: ID009139-4

PROVIDED FOR
Oklahoma Department of Environmental Quality
Land Protection Division
707 North Robinson
Oklahoma City, OK 73102

PROVIDED BY
Marshall Environmental Management, Inc.
1601 Southwest 89th Street, Suite 100-A
Oklahoma City, OK 73159

STATEMENT OF WORK
For
Remediation of Lead Contamination at Marlow 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 Marlow, Oklahoma. This statement of work (SOW) describes the cleanup of lead contamination associated with the indoor firing range (IFR), and lead contaminated dust on the floors of the building. 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. Sample results are attached for review (**Attachment 1**).

The Marlow Armory building is located at **702 West Main Street, Marlow, Oklahoma 73055**. The building **does** have available electricity but **does not** have available water to use during remediation.

SPECIAL PROVISIONS:

1. Work Schedule: The Contractor shall schedule all work to be complete within forty five (45) calendar days after date of the written "Notice to Proceed".
    a. A pre-construction meeting shall be held at the site after the Notice to Proceed date to review Scope of Work and answer any questions the contractor may have.
    b. All on-site work shall be completed by the Contractor five (5) days prior to the scheduled contract completion date, with the remaining five (5) days utilized for final inspection and correction of all deficiencies.
2. Conditions of Work: The following conditions of work will apply in accomplishment of this contract:
    a. All work shall be performed in accordance with all applicable State and Federal regulations.
    b. 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. Coordination of work areas shall be scheduled with DEQ.
    d. Disposal of Removed Materials: All materials removed by the Contractor under this contract shall be disposed of in accordance with State and Federal regulations. DEQ will sign as generator, if necessary.

CONTRACTOR SHALL:

- Attend mandatory pre-bid meeting and site walk through.
- Possess a current lead-based paint firm license and have a certified lead-based paint supervisor on staff in order to perform lead-based paint abatement.
- Read Guidelines for Rehabilitation and Conversion of Indoor Firing Ranges, November 3, 2006, Departments of the Army and Air Force, National Guard Bureau (**Attachment 4**), and refer to this document as a reference and guideline for remediating IFR lead contamination.
- Follow OSHA Lead in Construction Interim Final Standard (29 CFR 1926.62) for 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.
- 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.

LEAD REMEDIATION INSTRUCTIONS

Sequence of Events

The initial cleaning of the building shall be as follows:

1. First –
    - Any remaining debris inside the building determined by DEQ to be trash shall be properly disposed.
    - The indoor firing range (IFR) shall be cleaned (See Section 1. Indoor Firing Range (IFR) below for details).
2. Second –
    - All floors of the entire building shall be cleaned (See Section 2. Remaining Building for details).

1. Indoor Firing Range (IFR)

The IFR in these buildings is a long narrow basement room with attached small side room where the Oklahoma Military Department would target practice with weapons. Sometimes the IFR will have a steel bullet deflection plate and sand trap. The IFR is to be cleaned by removal of all lead contaminated materials, including debris (if present), sand (if present), steel plate (if present), lead-based paint (if present), and lead contaminated dust and other lead containing particulates on the floor, walls, and ceiling of the IFR.

- **Pre-remediation Preparation**
    - To ensure cross contamination does not occur, use engineering controls such as:
        - Sealing openings with 6 mil poly sheeting to contain dust inside IFR;
        - Covering floor of area outside IFR with 6 mil poly sheeting to make sure not to track lead dust into clean areas;
        - Securing IFR at the end of the work day. At no time shall the IFR be accessible for unauthorized entry without the contractor present;
    - When inside IFR wear appropriate personal protective equipment (See **Attachment 2**).
- **Water Removal**
    - All wash water from the IFR shall be filtered through a 1 micron filter and then 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. Wash water shall be disposed appropriately. Sample results shall be submitted to DEQ to determine if wash water can be disposed at the local Waste Water Treatment Facility.

- **Pre-remediation Removal**

  - Decontaminate door to IFR side room, remove from frame, wrap in poly sheeting, and properly dispose;

  - Remove all paint from side room door frame to bare metal and paint frame with neutral colored primer;

  - If sand trap is present:
    - Decontaminate metal backstop, wrap in poly sheeting and properly dispose;
    - Decontaminate sand trap framework, wrap in poly sheeting and properly dispose;
    - Place sand in sealed drums and dispose of sand as hazardous waste.

  - Decontaminate all items to be removed from the IFR, wrap in poly sheeting, and properly dispose.
    - Items such as acoustical tiles, carpet, or other porous materials shall be HEPA vacuumed, washed, and sampled for TCLP. Acoustical tile, if present, will have 3 – five part composite samples taken. All other materials shall have 1 – five part composite sample taken of each material. If samples pass TCLP then properly dispose. If any samples fail TCLP, dispose of that item as hazardous waste.

- **Remediation**

  - HEPA vacuum and wet wash walls, floor, ceiling, vent fan, and other structures that are contaminated;

  - Dispose lead contaminated dust, wash water, and appropriate cleaning materials as hazardous waste or as appropriate (See section 3. Disposal of Materials for detailed information).

- **Post-remediation**

  - All post-remediation sampling shall be performed by Enercon Services, Inc. (ESI). The Contractor shall provide ESI a minimum of five (5) calendar days prior notice to perform sampling. See Section C (Confirmation and Clearance Sampling) for contact information;

  - Post remediation sampling is required to confirm the IFR has been remediated to 200 micrograms per square foot (ug/SF);
    - Areas above 200 ug/SF shall be re-cleaned and re-tested until results are at or below 200 ug/SF;

  - If surfaces of the IFR cannot be cleaned and DEQ determines that these surfaces contain imbedded lead fragments, construction grout shall be used over these surfaces.

- Surfaces shall be thoroughly cleaned;
- BASF Acryl 60 or DEQ approved equivalent shall be applied to surfaces according to manufacturer's specifications. Specifications are attached (Attachment 3);
- BASF Construction Grout or DEQ approved equivalent shall be applied (sprayed or troweled) to surfaces according to manufacturer's specifications. Specifications are attached (**Attachment 3**).

- Once the IFR has been remediated to 200 ug/SF, seal the floor, ceiling, and walls with appropriate sealant;
  - Floor, ceiling, and walls will be sealed with KM-669 Acrylic Sealer or equivalent. Specifications attached (**Attachment 3**);
  - IFR area will have forced air applied to room 4 days after sealer is applied. This will be done to remove all vapors from the area;

- After surfaces are sealed, the Contractor shall provide ESI a minimum of five (5) calendar days prior notice to perform post remediation wipe sampling to confirm the IFR has been remediated to 40 ug/SF;

- Areas above 40 ug/SF shall be cleaned to remove lead dust from sealed surface. Once cleaned, the area shall be retested to confirm area has been remediated to 40 ug/SF;

- All re-testing of previously failed areas shall be performed by ESI. Contractor shall provide ESI a minimum of five (5) calendar day's prior notice to perform sampling.

- The chart below summarizes the clearance numbers for the indoor firing range. All lead wipe samples must be at or below these numbers in order for the room to be considered clean.

Post Remediation	Post Sealant
200 ug/SF	40 ug/SF

2. Remaining Building

Lead Dust Remediation (See Attachment 1)

- 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, Inc. to perform independent third-party 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.

3. Disposal of Materials

Hazardous Waste

- Lead contaminated sand shall be disposed as hazardous waste;
- Lead contaminated dust from the cleaning of the IFR and remaining building shall be disposed as hazardous waste;
- Wash water filters shall be disposed as hazardous waste;
- Mop heads, towels, brushes, wipes, and other cleaning supplies 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.

4. Confirmation and Clearance Sampling

- Contractor may use his own lab to check progress of remediation, however all DEQ decisions shall be based on analytical data from ESI.
- Enercon Services, Inc. (ESI) will be responsible for taking all post remediation samples.
- ESI shall be notified five (5) days prior to each sampling event.
- Contact Information:

  Enercon Services, Inc.
  6525 North Meridian, Suite 400
  Oklahoma City, Oklahoma 73116
  Contact: Bill Muenker
  Phone: (405) 722-7693

- The third-party sampling shall not be included in the contractors base bid;
- All post remediation sampling done outside the indoor firing range will be performed after all initial abatement, remediation, and cleaning is complete.
- The chart below summarizes the clearance numbers for the building. All lead wipe samples shall be at or below these numbers in order for these areas to be considered clean.

IFR Post Remediation	IFR Post Sealant	Room Floors
200 ug/SF	40 ug/SF	40 ug/SF

5. FINAL REPORT

- Write final report and submit to DEQ;
- Final report shall include:
  - A detailed summary of work including any warranties and data;
  - copy of post remediation sampling report;
  - waste manifests (if any); and

- photo documentation of work;
  - Photo documentation of work will have color digital photos with captions describing photo;

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

OWNER REPRESTATIVE

Owner's Representative:

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

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

ATTACHMENT 1

Sample Results and Floor Plan

Lead-Based Paint Inspection
And
Settled Dust Sampling

Marlow Armory
702 West Main Street
Marlow, OK 73055

Date of Inspection
September 17, 2009

DCS Contract NO.: ID009139-4

PROVIDED FOR
Oklahoma Department of Environmental Quality
Land Protection Division
707 North Robinson
Oklahoma City, OK 73102

PROVIDED BY
Marshall Environmental Management, Inc.
1601 Southwest 89th Street, Suite 100-A
Oklahoma City, OK 73159

ATTACHMENT 2

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*

ATTACHMENT 3

Sealant and Encapsulant Specifications

KELLY-MOORE PAINTS

INDUSTRIAL COATINGS

HIGH PERFORMANCE SYSTEMS

KM-669

Acrylic Sealer

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

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

Performance Features

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

Product Specifications

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

Surface Preparation

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

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

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

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

Dry Times: 8 hours

See Precautions and Limited Warranty next page

KM-669 (cont.)

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

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

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

SEE MATERIAL SAFETY DATA SHEETS FOR FULL SAFETY PRECAUTIONS.

KM-669 IS FOR PROFESSIONAL USE ONLY

KM-669 IS FOR INDUSTRIAL USE ONLY

KEEP AWAY FROM CHILDREN

MATERIAL SAFETY DATA SHEET

For Coatings, Resins & Related Materials

Section I

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

Prep Date: 07/28/06

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

Information Phone: 1-888-677-2468

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

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.

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.

BASF

The Chemical Company

PRODUCT DATA

3 03 01 00 Maintenance of Concrete

ACRYL 60®

Water-based acrylic bonding and modifying admixture

Description

Acryl 60® is an acrylic-polymer emulsion mixed with Portland cement mortars, plasters, stucco, and concrete mixes to enhance their physical properties, adhesion to substrates, and durability.

Packaging

1 quart (0.9 L) bottles

1 gallon (3.8 L) bottles

5 gallon (18.9 L) pails

30 gallon (113.5 L) drums

55 gallon (208 L) drums

Color

Milky white

Shelf Life

1 year when properly stored

Storage

Transport and store in unopened containers between 40 and 100° F (4 and 38° C). Protect from freezing.

Features	Benefits
• Acrylic polymer	Significantly improves adhesion, cohesion, tensile, compressive, and flexural strengths of cement-based materials
• Excellent chemical and UV resistance	Promotes long-lasting repairs
• Improved freeze/thaw stability of Portland cement-based materials	Suitable for cold climate applications
• Stable	Will not re-emulsify when exposed to water

Where to Use

APPLICATION

- Cement-based mixes to improve their adhesion, and durability
- As gauging liquid for Thoro® waterproofing and repair products, such as Thoroseal® and Thorite®
- Walkways
- Ramps and structural beams

LOCATION

- Interior or exterior
- Above or below grade

SUBSTRATE

- Columns

How to Apply

Surface Preparation

1. The methods required for preparation will vary depending on the end product to be applied and the site and substrate conditions.

2. In all cases the surface must be clean and sound. Remove all loose and disintegrated material. Remove any and all traces of oil, grease, dirt, dust, efflorescence, biological, mold or mildew, and release or curing agents.

3. Vacuum, sweep, or blow out the areas to be patched with clean, oil-free air.

CONCRETE/CMU/MASONRY SURFACES

Predampen the area to be patched or coated with potable water to a saturated surface-dry (SSD) condition. Do not leave standing water on surface. Proper surface preparation and cleanliness are extremely important.

OTHER SURFACES

For other surface preparation guidelines, refer to the specific Thoro® product data guide for information.

Mixing

1. The normal ratio of Acryl 60® to clean potable water is 1 part Acryl 60® to 3 parts water (1 to 3). Where increased physical and chemical resistance are required, increase the Acryl 60® content in the mixing liquid to a 1 to 2 or 1 to 1 Acryl 60® to water ratio (see chart above).

2. Always mechanically mix. Do not overmix or mix at a high speed.

Thoro

Departments of the Army and the Air Force
National Guard Bureau
Arlington, VA 22202-3231
3 November 2006

***NG Pam 420-15**

Facilities Engineering

Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges

By Order of the Secretaries of the Army and the Air Force:

H STEVEN BLUM
Lieutenant General, USA
Chief, National Guard Bureau

Official:

GEORGE R. BROCK
Chief, Plans and Policy Division

History. This printing publishes a revision of NG Pam (AR) 385-16/ANGPAM 91-101.

Summary. This pamphlet prescribes policy for rehabilitation and conversion of National Guard Indoor Firing Ranges (IFR).

Applicability. This guidance applies to all persons responsible for the operation of National Guard IFRs. As no regulation/guidance can foresee all situations that might arise, the following is written in a broad scope and is intended to be interpreted so as to ensure compliance with all applicable Federal and State laws and regulations.

Proponent and exception authority. The proponent of this regulation is Chief, NGB-SG-IH. The proponent has the authority to approve exceptions to this regulation that are consistent with controlling law and regulation.

Suggested Improvements. Users of this pamphlet are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to NGB-SG-IH, 1411 Jefferson Davis Highway, Arlington, VA 22202-3231.

Distribution. A.

Table of Contents

* This publication supersedes NP Pam (AR) 385-16/ANGPAM 91-101, dated 31 January 1994.

1-1. Purpose
This pamphlet establishes the policy and procedures for rehabilitation and conversion, of National Guard IFRs.

1-2. References
Required and related publications and referenced and prescribed forms are listed in Appendix A.

1-3. Explanation of abbreviations and terms
Abbreviations and special terms used in this publication are listed in the glossary.

1-4. Policy and Procedures
Indoor firing ranges can be safely rehabilitated or converted for other uses, such as a storage area, classrooms or office space, provided the following –

a. Prior to conversion active ranges must be thoroughly decontaminated and cleaned to acceptable levels. *All ranges converted prior to the publication date of this pamphlet, must be inspected and evaluated to determine lead contamination.* This will be accomplished by a certified National Guard Industrial Hygienist (IH) or a person certified to perform inspections, evaluations, and determinations of IFRs IAW with OSHA standards, other nationally accepted standards, and accepted IH practices for maintenance, cleaning, conversion, ventilation, and air sampling of IFRs.

b. The level of cleanliness is to be determined by sampling. The Occupational Safety and Health Administration's (OSHA) Technical Manual, 5th Edition, provides guidance on the methods and techniques needed to collect wipe samples (Appendix B).

(1) Wipe samples must be collected and analyzed prior to and after cleaning.

(2) Post-cleaning surface wipe sample results must be less than 200 micrograms per square foot (ug/ft^2) (40 micrograms in the case of child exposure). The sampling strategy, which is the amount and location of wipe samples to be collected, is provided in Appendix C.

c. Equipment/Items previously stored in the range must be decontaminated and cleaned to acceptable levels as determined by a person certified to perform inspections, evaluations, and determinations of IFRs IAW with OSHA standards, other nationally accepted standards, and accepted IH practices for maintenance, cleaning, conversion, ventilation, and air sampling of IFRs.

(1) Samples must be collected from equipment/items stored in the range. Sample selection is critical, because the number of items stored, length of storage, and level of contamination differs from range to range. The amount and location of the samples should be representative of the areas where lead dust is most likely to accumulate. The more samples collected, the better the statistical comparison of the results.

(2) Samples must be collected from the smooth surfaces of the equipment/items, as much as possible. Results of samples collected from a rough surface will be inaccurate due to the minimal surface contact of the media. Further, the likelihood of tearing the media filter is greater on rough surfaces.

(3) Samples should also be collected on items stored the longest period of time, and which have not been disturbed. Items stored closest to the bullet trap and firing line are likely to have higher concentrations of lead dust.

1-5. Goal
To ensure that every IFR is free of lead dust which means to test less than 200 micrograms and to reduce the number of unsafe National Guard IFRs.

1-6. Deviation
Deviations from this guidance will require a written exception to policy from your Regional Industrial Hygiene Office. Questions and/or comments regarding this subject should be directed to your Regional Industrial Hygiene Office or Chief, National Guard Bureau, Office of the Joint Surgeon, ATTN: NGB-SG-IH, 1411 Jefferson Davis Highway, Arlington, VA 22202-3231.

Chapter 2
Health and Medical Aspects

2-1. 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.

2-2. Medical Surveillance for Occupational Exposure to Lead (Pb)

a. Per 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 2-1 lists medical surveillance criteria for employees "who are or may be exposed above the action level for 30 days/year."

2-3. Air Monitoring

Worker breathing zone air samples must be collected to ensure that personnel are not overexposed to airborne lead during the cleanup phase. Daily air samples will be collected from all personnel involved in the cleanup operation. These exposure levels will be used to evaluate work practices and medical surveillance requirements.

2-4. Wipe Sampling Protocol and Media

A template measuring 10 centimeters by 10 centimeters square, approximately 4 inches square, should be used to accurately measure and mark the area before collecting wipe samples. Samples should be staggered to different areas of the range. A grid system should be utilized. Samples should not be collected all on one section of a wall, or end of the building. OSHA Technical Manual provides the necessary guidance on the technique needed to collect wipe samples (Appendix B). Only distilled or deionized water will be used to saturate dry sample media. At least one field blank must be submitted with every 10 samples. The field blank must be from the same lot, and labeled as a blank.

2-5. 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 will 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 will 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 will 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 will 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.*

Chapter 3
Education, Maintenance, Cleaning and Conversion

3-1. Worker Education

a. 29 CFR 1910.1025, Appendix B, 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 will be repeated annually for personnel in range cleanup operations.

b. The commander/supervisor will ensure that each soldier or Army National Guard (ARNG) 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 will not be permitted in contaminated areas.
(7) Soldiers and ARNG 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 soldiers and ARNG 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.

3-2. Range Cleaning Instructions

a. Written procedures, such as a scope of work, or standing operating procedure that complies with all Federal, State and local regulations must be established prior to decontamination operations.

b. The range ventilation system will be in operation during range cleaning to ensure that a negative pressure environment is maintained. In the absence of mechanical ventilation system, all doors and windows will be sealed to eliminate fugitive emissions.

c. A High Efficiency Particulate Air (HEPA) filtered vacuum system, which is designed to collect loose surface lead dust particles, is the preferred method of cleanup. If a HEPA filtered vacuum is not available, the range can be cleaned using a wet method.

d. Prohibited methods include:

(1) Wet cleaning using high-pressure systems, since this method may embed the lead into the substratum and generate large quantities of hazardous waste.
(2) Dry sweeping is not permitted.

e. All surface areas of the range must be cleaned. In addition, areas outside of the IFR where lead can be tracked must be cleaned.

f. The preferred progression of cleaning is from top to bottom and from behind the steel bullet trap to the firing line.

(1) Clean the steel bullet trap, areas in front of and behind the bullet trap, and the steel bullet trap plate(s), after removing the sand (if applicable).
(2) Clean the ceiling, floors, lights, baffles, retrieval system, heating system(s), and ventilation duct(s).
(3) Vacuum and remove acoustical material. *Painting over this material is not recommended.*
(4) Clean the floor the last, starting at the bullet trap and ending behind the firing line.

g. When using a HEPA filtered vacuum, vacuum all surface areas until no dust or residue is visible.

h. Any general purpose cleaning solutions can be used for the wet method. However, Spic and Span™ has been found to be an effective cleaning solution by other Army organizations. Mix new solutions of cleaning solution frequently. Wet wiping will require dual containers of water; one container for wetting the applicator (mops, rags, sponge, etc.) and the other container for rinsing the applicator after the dust has been wiped from the surfaces. After wet wiping all surfaces, permit the area to dry.

i. *Properly dispose of all hazardous waste. Do not place lead contaminated waste into the sewer system or onto the ground.*

(1) When placed in containers, wastewater should be left to evaporate.

(2) Mop-heads, sponges and rags will be discarded as hazardous waste following cleanup.

j. A thorough visual inspection to detect dust should be made following cleanup and prior to collecting post surface wipe samples.

k. Wood floors should receive a coat of deck enamel or urethane; concrete floors should be sealed with deck enamel.

l. As a variety of conditions exist in ranges, unique situation may arise and specific written guidance from your Regional Industrial Hygiene Office may be required.

m. Any cleaning activities must be under the supervision by a trained and competent personnel IAW with OSHA and other nationally accepted standards and the work shall be according to current industry engineering standards under the control of the State Construction and Facilities Management Officer. Cleaning must recognize that there likely will be "background" lead presence in the readiness center totally independent of the existence of an indoor range and that the method of cleaning is less important than achieving the goal of less than 200 micrograms (40 micrograms in the case of child exposure).

3-3. Cleaning Stored Contaminated Equipment

a. Equipment contaminated (sample result is higher than 200 ug/ft^2) with lead dust must be decontaminated before it is removed from the range.

b. Equipment located near the bullet trap and firing line should be cleaned first and then removed. The cleaning method depends on the size of the equipment and the material it is comprised of, i.e. metal, wood, concrete, porous, non-porous, smooth or rough finish etc. However, either HEPA vacuum or the wet wipe method will be used. Refer to paragraph 3-2 for additional guidance.

c. Every attempt should be made to clean and reclaim items since disposing of equipment, as hazardous waste is costly and wasteful. Only as a last resort will the item be discarded as hazardous waste. Porous items, such as office partitions and carpet that were present during firing should be considered grossly contaminated and be discarded unless analysis proves otherwise. Consult your State Environmental Office for the proper hazardous waste disposal methods.

3-4. Contaminated Sand and Lead Waste

Consult your State Environmental Office for specific disposal guidance to ensure compliance with local laws and regulations.

3-5. Range Rehabilitation

This chapter applies to all IFRs that have been identified as candidates for rehabilitation. It provides further guidance for cleaning and/or sampling that might be required prior to the start of rehabilitation.

a. The portion(s) of the range to under go rehabilitation must be sampled to determine the level of lead contamination. Wipe samples will be taken per the established sampling protocol. See Appendix B.

b. All personnel involved in range rehabilitation will wear a NIOSH approved respirator (P-100) and proper personal protective equipment as prescribed in paragraph 2-5 above.

c. Prior to the start of rehabilitation, the environmental office must be notified to determine the disposition of any debris containing hazardous materials (lead).

d. Supervision shall be by a person who is certified to perform inspections, evaluations, and determinations of IFRs IAW with OSHA standards, other nationally accepted standards, and accepted IH practices for maintenance, cleaning, conversion, ventilation, and air sampling of IFRs. All work shall be according to current industry engineering standards under the control of the State Construction and Facilities Management Officer.

3-6. Conversion of Indoor Firing Ranges

Prior to the start of decontamination, employers must ensure that all procedures to be used comply with Federal, State, and local regulations. To ensure that all lead contamination is eradicated, the following procedure is established.

a. The State shall follow the project approval process as delineated in NGR 420-10 (or NGR 415-5 if the use of the military construction appropriation is required).

b. All ranges slated for conversion will be inspected and evaluated by the NGB Regional Industrial Hygiene Office.

c. All equipment stored in the range, if applicable, prior to the start of decontamination must be sampled, decontaminated, re-sampled and removed or turned in as lead contaminated material.

d. All acoustical tiles and/or sound proofing material (if applicable) must be removed and turned in as lead contaminated material through the environmental office.

e. The bullet trap, target retrieval system and firing line stations must be removed and turned in as lead containing material through the environmental office.

f. Light fixtures and ventilation system grills must be removed and decontaminated.

g. Ventilation system ducts need to be decontaminated or removed and replaced.

h. The exhaust fans and/or the complete ventilation air-handling unit (if applicable) must be decontaminated or removed to include roof fans.

i. Cover all openings of any component previously decontaminated prior to start of interior decontamination of the firing range.

j. Prior to start of washing, the interior of the range should be vacuumed with a HEPA filtered vacuum. The range should be washed using a cleaning solution of hot water and Spic and Span in five gallons of hot water. A progression of cleaning from top to bottom, and from back to front should be used. All surface areas of the range must be cleaned. Mix new solutions of water frequently. Washing will require dual containers of water; one container for wetting the applicators (mops, rags, sponges, etc.), and the other container for rinsing the applicators. Waste water placed into containers can be left to evaporate. *Properly dispose of all hazardous waste and do not place any lead contaminated waste into the sewer system or onto the ground.* Mop heads, sponges and rags will be discarded as hazardous waste following decontamination of the range. After completion of decontamination, and prior to taking clearance samples, the ventilation system must be run for a period of 36 hours. Wipe clearance samples will be taken from ceiling, walls and floors. The range will be considered clean if no clearance sample is greater than 200 ug/ft^2, if any sample is above 200 ug/ft^2, the range is not considered clean, the range will need to be re-washed until clearance samples are below 200 ug/ft^2.

k. The regional industrial hygienist will do quality assurance sampling as needed.

l. After obtaining clearance, the walls of the range will be coated with a sealant (Not Paint), which is smooth, wood floors will receive a coat of deck enamel or urethane, concrete floors will be sealed with deck enamel. After sealing, floors will be tiled or covered with linoleum.

m. As a variety of conditions exist in ranges, unique situations may arise and specific written guidance from the Regional Industrial Hygiene Office may be required.

n. All personnel involved in the decontamination/conversion of IFRs as a minimum will be provided with the following personal protective equipment.

(1). Full Face air purifying respirator with HEPA cartridges. The requirements outline in 29 CFR 1910.134, must be met prior to placing workers in respiratory protection.

(2). Individuals will be provided personal protective equipment as required per paragraph 2-5, this pamphlet.

o. Any conversion must be supervised by a person certified to perform inspections, evaluations, and determinations of IFRs IAW with OSHA standards, other nationally accepted standards, and accepted IH practices for maintenance, cleaning, conversion, ventilation, and air sampling of IFRs. All work shall be according to current industry engineering standards under the control of the State Construction and Facilities Management Officer. Cleaning must recognize that there likely will be "background" lead presence in the readiness center totally independent of the existence of an indoor range and that the method of cleaning is less important than achieving the goal of less than 200 micrograms (40 micrograms in the case of child exposure).

p. After conversion, lead testing shall continue on an annual basis to verify that no lead migration from the substrate is occurring.

5

Appendix A
References

Section I
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
Prescribed Forms

There are no entries in this section

Section IV
Referenced Forms

There are no entries in this section

Appendix B
Protocol for Collecting Wipe Samples

B-1. If multiple samples are to be collected at the work site, prepare a rough sketch of the area(s) or room(s), which are to be wipe sampled.

B-2. A new set of clean, impervious gloves should be used for each sample to avoid contamination of the media by previous samples and to prevent contact with the substance.

B-3. **Wipe Samples**
a. If using Ghost Wipes™, tear open the individually sealed package. Remove the moistened wipe. Unfold the wipe.
b. If using a dry media such as MCE or Whatman™ filter, moisten the filter with distilled or deionized water prior to sampling.

B-4. Place a 10 centimeter by 10 centimeter template on the area to be wiped.

B-5. Apply uniform firm pressure while wiping the area inside the template.

B-6. To ensure that all portions of the partitioned area are wiped, start at the outside edge and progress toward the center making concentric squares decreasing in size.

B-7. After collecting a sample, fold the filter or wipe inward and place into a container and number it. Note the number at the sample location on the sketch.

B-8. At least one blank filter treated in the same fashion but without wiping, should be submitted to the laboratory.

Appendix C
Sampling Strategy for Collection of Wipe Samples

C-1. Prior to cleaning the ranges, three samples must be collected and analyzed for total lead dust on each surface, i.e., floor, ceiling, bullet trap, and wall to include the plenum wall, if applicable. In addition, a total of three samples should be collected from areas which have been least disturbed by airflow. Established walkways should be avoided.

C-2. Samples should be collected from different areas of the range. A grid system should be utilized. Each range surface areas should be divided evenly into 3 by 3 sections. Samples should not be collected from only one section of a wall or end of the building.

Glossary

Section I
Abbreviations

ARNG
Army National Guard

CFR
Code of Federal Regulations

HEPA
High Efficiency Particulate Air

IFR
Indoor Firing Range

NIOSH
National Institute for Occupational Safety and Health

OSHA
Occupational Safety and Health Administration

ug/ft²
Micrograms per square foot

Section II
Terms

Air monitoring
The sampling for and measuring of pollutants in the atmosphere.

Breathing zone
The imaginary globe of two feet radius surrounding the head.

General area
Collection of and later analysis of airborne contaminants in a given work environment. As the sampling pump and collection media are not attached to a worker, the concentrations found represent average concentrations in that area but may not representative of the actual exposure of the worker.

HEPA
Refers to high efficiency particulate air filter systems capable of capturing up to 99.97 percent of particles 0.3 microns in size or larger.

Lead-Contaminated Range
It is assumed that all IFRs, which have been fired in, are lead-contaminated.

Respirator
A device designed to provide the wearer with respiratory protection against inhalation of airborne contaminants.

Wipe Sample
The terms wipe, swipe, or smear samples are used synonymously to describe the techniques utilized for assessing lead surface contamination.

Section III
Special Abbreviations and Terms

This section contains no entries

FINAL ABATEMENT REPORTS

LEAD BASED PAINT REMEDIATION REPORT

FOR

MARLOW ARMORY

MARLOW, STEPHENS COUNTY, OKLAHOMA

Prepared for

Oklahoma Department of Environmental Quality
Land Protection Division
Dustin Davidson
707 North Robinson
Oklahoma City, Oklahoma 73102

Basin Work Order No. S-10-100
DCS Project No. 11171
Site Contact: Dustin Davidson
Field Team Lead: Rick Williams

Prepared by

Basin Environmental and Safety Technologies
325 N Portland Ave
Oklahoma City, OK 73107
(405) 232-5737

10 August, 2011

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ATTACHMENTS

EXECUTIVE SUMMARY

This is the final report describing the Marlow Armory Phase I Lead Based Paint Remediation and window and door replacement performed for the Oklahoma Department of Environmental Quality (ODEQ) at the Marlow Armory located in Marlow, Stephens County, Oklahoma. Basin Environmental and Safety Technologies (Basin) was contracted by the Land Protection Division of the Oklahoma Department of Environmental Quality (ODEQ) to conduct lead-based paint abatement and window and door replacement at the former National Guard Armory in Marlow, Oklahoma. This work was performed as "Phase I" to provide for unrestricted, safe re-use of the storage areas, classrooms and offices at this facility. Abatement activities included extensive wet scraping techniques and lead based paint encapsulation of non-friction and non-impact surfaces as well as Lead Based Paint removal and primer paint on all Friction / Impact surfaces. Critical barriers and drop cloths were installed. High Efficiency Particulate Air (HEPA) vacuuming, wet wiping and wet mopping were preformed at the end of each day, and as needed to supplement the engineering controls. Abatement activities took place from April 2011 to July 2011. All remediation processes were performed under the guidance of the ODEQ and in accordance with the Occupational Safety and Health Administration's (OSHA), 29 CFR 1926.62, "Lead in Construction Interim Final Standard".

Window replacement / installation were performed by Consolidated Builders Supply, Inc. and the doors were replaced and installed by Construction Building Specialties, Inc. Both installation companies are certified and recommended by the manufacturers. All work was performed in a manner consistent with accepted practices of the profession undertaken in similar projects for the Oklahoma Department of Environmental Quality Land Protection Division.

Included in this closure report are a detailed summary of work, SOW variances, waste manifests and site photos.

This final report was prepared by Basin under Verbal Tasking from Dustin Davidson. The ODEQ Site Contact was Dustin Davidson, and the Basin Team Leader was Rick Williams.

[X] The ODEQ did not provide final approval of this report prior to the completion date of the work assignment. Therefore, Basin Environmental and Safety Technologies has submitted this report absent ODEQ's approval.

[ ] ODEQ has provided final approval of this report. Therefore, Basin Environmental and Safety Technologies has submitted this report with ODEQ approval.

1. INTRODUCTION

Basin Environmental and Safety Technologies (Basin) was contracted by ODEQ to provide Phase I Lead Based Paint abatement as well as window and door replacement services at the Marlow Armory located 702 West Main Street Marlow, OK in Stephens County. Abatement activity was initiated by ODEQ as part of the Site Cleanup Assistance Program (SCAP) and the Armory Cleanup Program.

All workers were trained, fit tested, and medically cleared to wear respirators in accordance with the 29 CFR 1910.134. Medical exams are performed annually under the supervision of a licensed physician.

Throughout the duration of the project, every change in work procedure was preceded by a tailgate safety meeting. Level C PPE (Tyvek coveralls, Scott or 3M half-face respirator masks with appropriate P100 HEPA filters, and nitrile chemical resistant gloves) and Level D PPE were utilized throughout the project dependant upon the hazards assessment conducted on each process.

Wet wiping and mopping was conducted using tri-sodium phosphate (TSP), lint free mop heads, and rags. Concurrent and final cleaning was performed using "Spic & Span" as well as Swiffer wet mops.

Throughout Phase I Remediation the following engineering and administrative controls and waste stream management practices were followed:

- Poly sheeting was used as a critical barrier on floors and entry ways to minimize cross contamination.
- Booties were worn by all personnel and changed upon entering and exiting clean areas.
- Project areas were delineated as dirty or clean dependant upon the processes and hazards present.
- Media collected from abatement procedures, HEPA vacuums and appropriate cleaning materials were double bagged in 6 mil poly drum liners, labeled and stored in the un-occupied section of the drill floor on site until accepted final visual inspection. Upon

accepted visual inspection these products were manifested and transported for appropriate disposal.

1.1 REPORT FORMAT

This report has been organized as follows:

- Section 1 – Introduction
- Section 2 – Site Background
- Section 3 – Abatement Activities

1.2 VARIANCES

Variances to the Statement of Work (SOW) were necessary to accomplish desired results.

Item # 1.
Reference;
Section 1, Non-Friction and Non- Impact Surfaces, Item 4 addressing IFR vent fan wood shall be removed and properly disposed. Variance; Basin completely removed all paint from the surface of the wood and discovered the wood was still in good condition. Keeping the vent fan intact for possible re-use, the original wood was not removed; instead it was primed and painted to > 20 mil thickness.

Item # 2.
Reference;
Section 1, Friction and Impact Surfaces, floors; the floor in the vault (Room # 12) and all painted concrete stairs contains lead-based paint. All paint shall be removed from the floor and all painted steps then sealed with KM-699 Acrylic sealer or equivalent. Variance; Basin visibly removed all paint from the vault floor (Room # 12) and stairs leading to rooms from the drill floor (Room # 15). Upon completion of the paint removal, Basin primed and painted the substrate with a grey epoxy paint satisfying the encapsulation instruction and dressed it up cosmetically.

2. SITE BACKGROUND

Information regarding the site location, description, and history is included in this section.

2.1 SITE LOCATION AND DESCRIPTION

The Marlow Armory site is located at 702 West Main Street Marlow, in Stephens County, Oklahoma. The armory is a stone and concrete constructed single story building with a concrete slab foundation and metal-sloped roof. The building consists of twenty two (22) interior room equivalents. Several types of rooms are present within the building including offices, restrooms, meeting rooms, and the IFR. The flooring of the facility is concrete. The facility was not being ventilated at the time of the abatement activity. (See Attachment C for facility photos and Attachment D for a floor plan).

2.2 BACKGROUND INFORMATION

This project is Phase I of the ODEQ's SCAP & Armory Cleanup Program to abate Lead-Based Paint (LBP) and replace windows and doors containing LBP. The Statement of Work (SOW) describes the cleanup procedures of LBP located on surfaces throughout the building.

3. ABATEMENT ACTIVITIES

On April 14, 2011, Basin mobilized to the armory with a Lead Abatement Supervisor and three (3) abatement personnel. Each employee was trained, made familiar with the statement of work and Environmental, Health, & Safety (EH&S) aspects of the project with emphasis on engineering controls, administrative controls, and personal protective equipment (PPE) to minimize employee exposure and cross-contamination. Basin workers began work in level D PPE, installing a double wall poly barrier room with a Negative Pressure HEPA unit to the vault (Room # 12). In level C Workers began Lead Based Paint abatement on the floor and entry stairs.

The following table details Basin's abatement activities at the Marlow Armory:

PPE	ABATEMENT ACTION
Initial Level D	Safety Tool Box, Engineering Controls, installing a Negative Pressure containment in Room # 10 to remove LBP on the steps into and vault floor (Room #12)
Level C/ full face respirators with P-100/OV Cartridges	Using Non-flammable, low odor paint remover (Fiber lock Piranha II) along with razor scrapers and needle guns, abatement workers began remediation operations on room # 12 floor until completion. *** A variance was approved upon completion to cover the floor and steps into room #12 (vault) with a grey epoxy primer and paint for absolute encapsulation of LBP that could have permeated the concrete floor.**
3M ½ face with P100	Lead Based Paint Abatement of Friction Surfaces began with all steps in (Room # 15), Drill floor leading into (Rooms # 16 & #19) and stairs going down to the IFR. Critical barriers and 6mil poly drop cloths were installed prior to beginning abatement. LBP was removed using Piranha and wet scraping techniques. HEPA Vac, wet mop and wet cleaning was preformed once the remediation was complete. *** Variance, epoxy primer and paint for absolute encapsulation of LBP that could have permeated the concrete floor surfaces.**
Level D	All interior doors were removed throughout the building, double wrapped in 6 mil polyurethane sheeting and stored on-site for proper disposal at the project end.
3M ½ face with P100	All interior door frames were scraped down to the metal removing all the LBP from each frame. A thorough wet wipe, HEPA vac and mopping was performed on the walls and floor of each room. DEQ visually inspected to insure all LBP was appropriately removed. Surfaces were then painted and sealed.
3M ½ face with P100	Paint was removed from all the drill floor hand rails and painted with a neutral colored primer.
3M ½ face with P100	All down spouts, window lintels, overhead door frames and door guards were wet scraped and painted with a neutral color primer, then encapsulated with a lead barrier compound > 20 mils thick.

ATTACHMENT A

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

WASTE CONNECTIONS INC.
Connect with the Future®

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

No. 037476

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

a. Generator Name: Oklahoma Dept of Env. Quality
b. Generating Location: Marlow Armory
c. Address: 707 N. Robinson, OKC, OK 73102
d. Address: 702 W Main, Marlow, OK 73055
e. Phone No.: 702-5100
f. Phone No.:

If owner of the generating facility differs from the generator, provide:

g. Owner's Name:
h. Owner's Phone No.:

i. WC WASTE CODE
j. Description of Waste: Construction Debris
k. Quantity | Units | Containers No. | Containers TYPE

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

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

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

Generator Authorized Agent Name | Signature | Shipment Date: 07281

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

TRANSPORTER I

a. Name: Basin Environmental
b. Address: 325 N. Portland, OKC, OK 73107
c. Driver Name/Title:
d. Phone No.: 405-232-5737 (PRINT/TYPE)
e. Truck No.:
f. Vehicle License No./State:
Acknowledgment of Receipt of Materials:
g. Driver Signature | Shipment Date: 07281

TRANSPORTER II

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

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

a. Site Name: Waste Connections-OKC
c. Phone No.: 405-745-3002
b. Physical Address: 7600 SW 15th, OKC, OK 73128
d. Mailing Address:
e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

f. Name of Authorized Agent | Signature | Receipt Date: 07281 | PO# PS6955

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

a. Shippers's* Name:
b. Shippers's* Phone No.:
c. Shippers's* Address:
d. Shippers's* Special Handling Instructions and additional information:

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

e. Shippers's* Name & Title:
b. Shipper's* Phone No.:
f. Name and Address
Date

ATTACHMENT B

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number
2. Page 1 of
3. Emergency Response Phone
4. Manifest Tracking Number: 007392224 JJK

GENERATOR

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1.	3	DM	660	P	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name — Signature — Month 8 Day 30 Year 11

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month 8 Day 30 Year 11

Transporter 2 Printed/Typed Name — Signature — Month 08 Day 30 Year 11

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name — Signature — Month Day Year

EPA Form 8700-22 (Rev. 9-05) Previous editions are obsolete.

Front view of Armory Facing South from Main Street

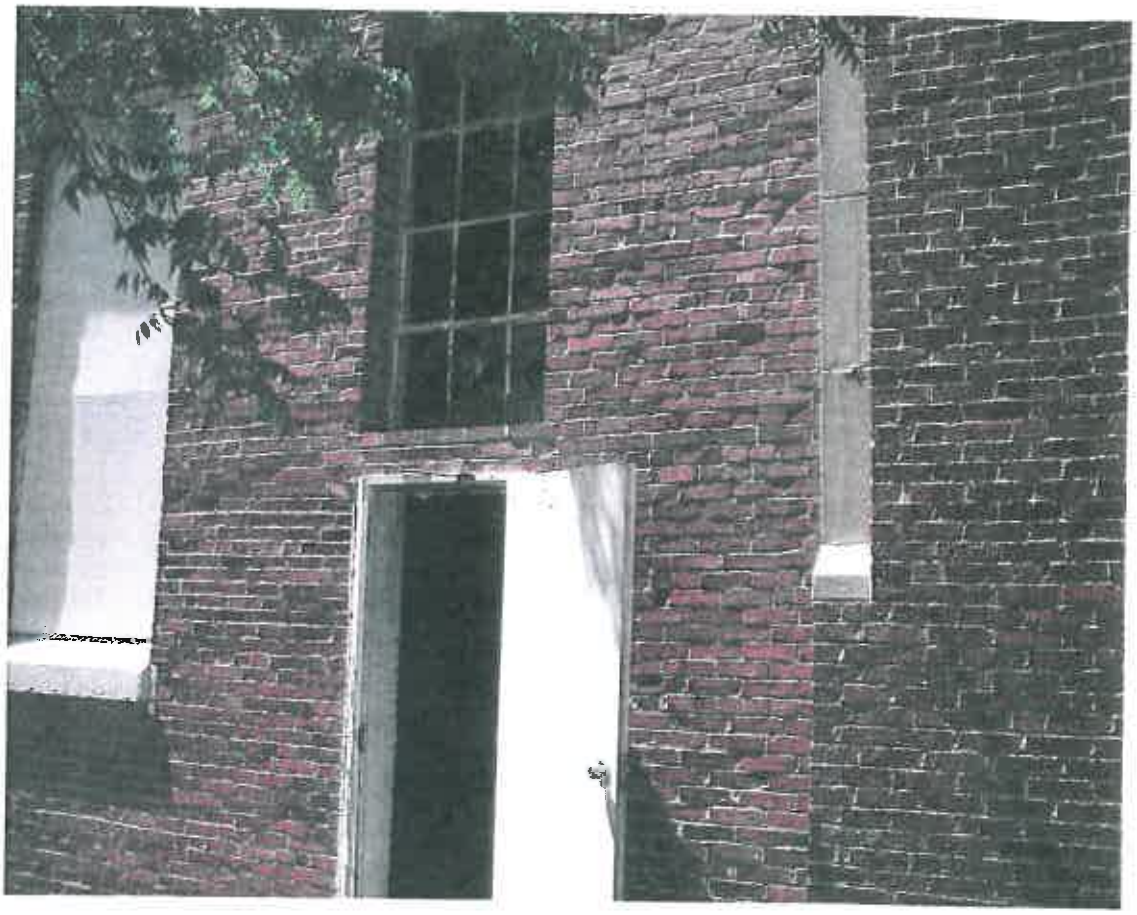
East Bay Doors post wet scrap and encapsulation

View Facing West of Alley on the South side of the Armory pre-window installation

View showing a window sill prior to window installation

Down spout showing post wet scrape and encapsulation.

Down spout, East side of armory post wet scrape and encapsulation.

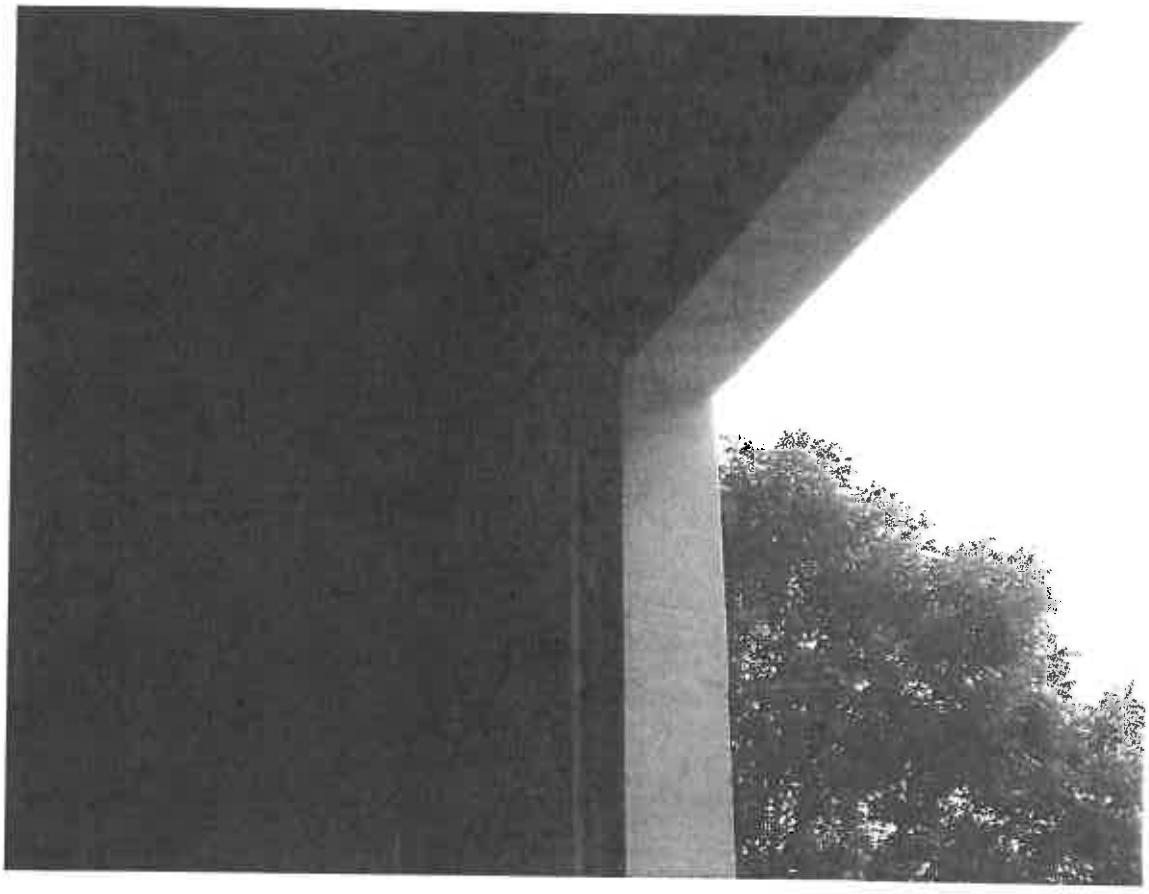


East side door entrance to drill floor.

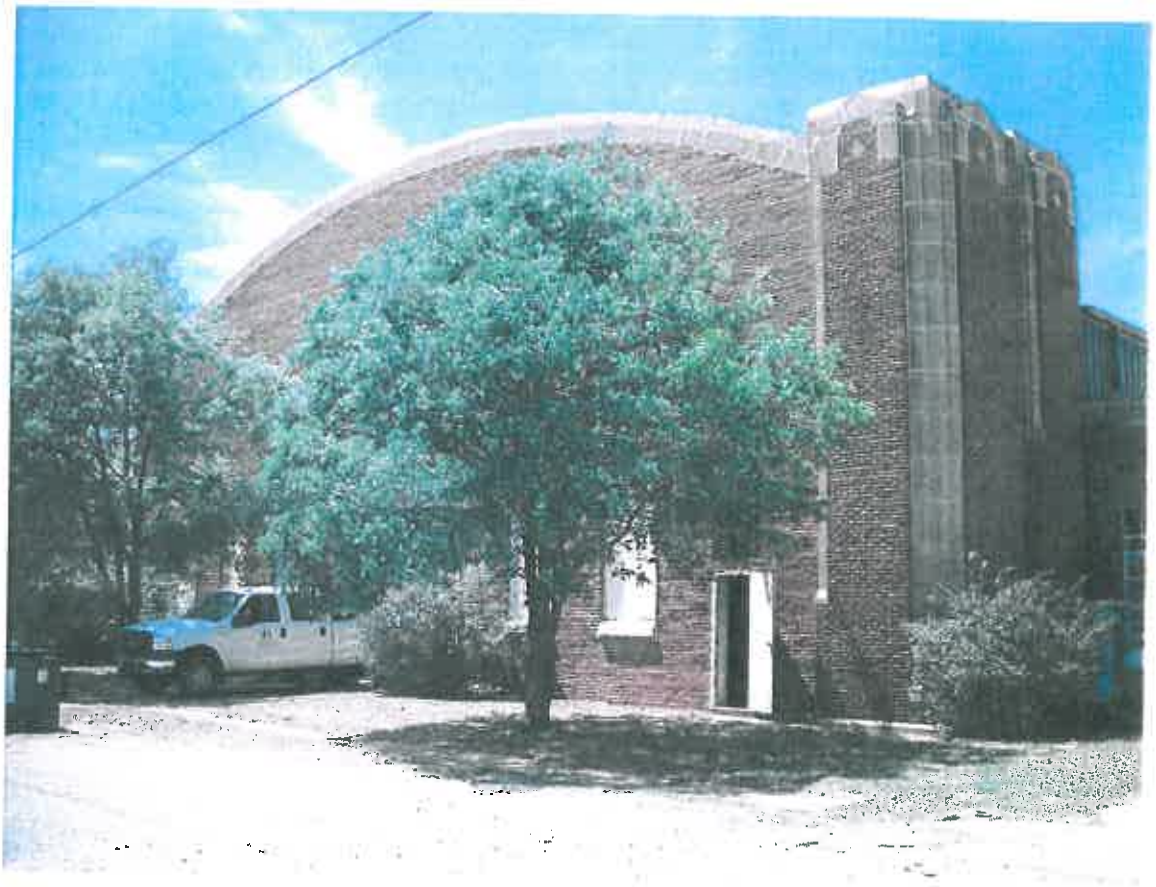
Outside View of Indoor Firing Range Vent Fan
Post west scrape & LBC encapsulation.

*** Variance from SOW. Tear out all contaminated Wood and replace.**

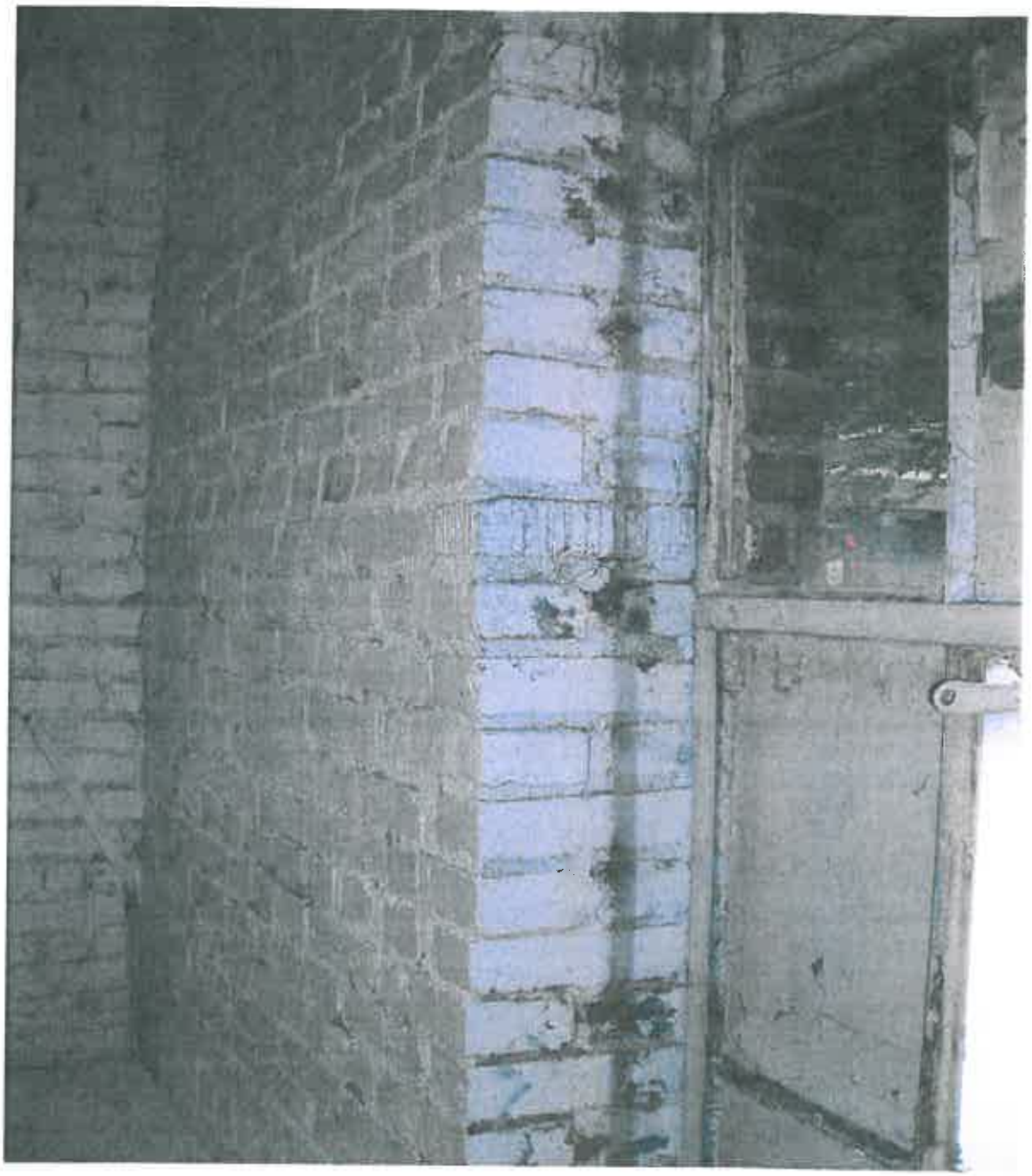
East Side View of Garage Bay Door, Post Wet Scrape and encapsulation.



East Bay door Post Wet Scrape and Encapsulation

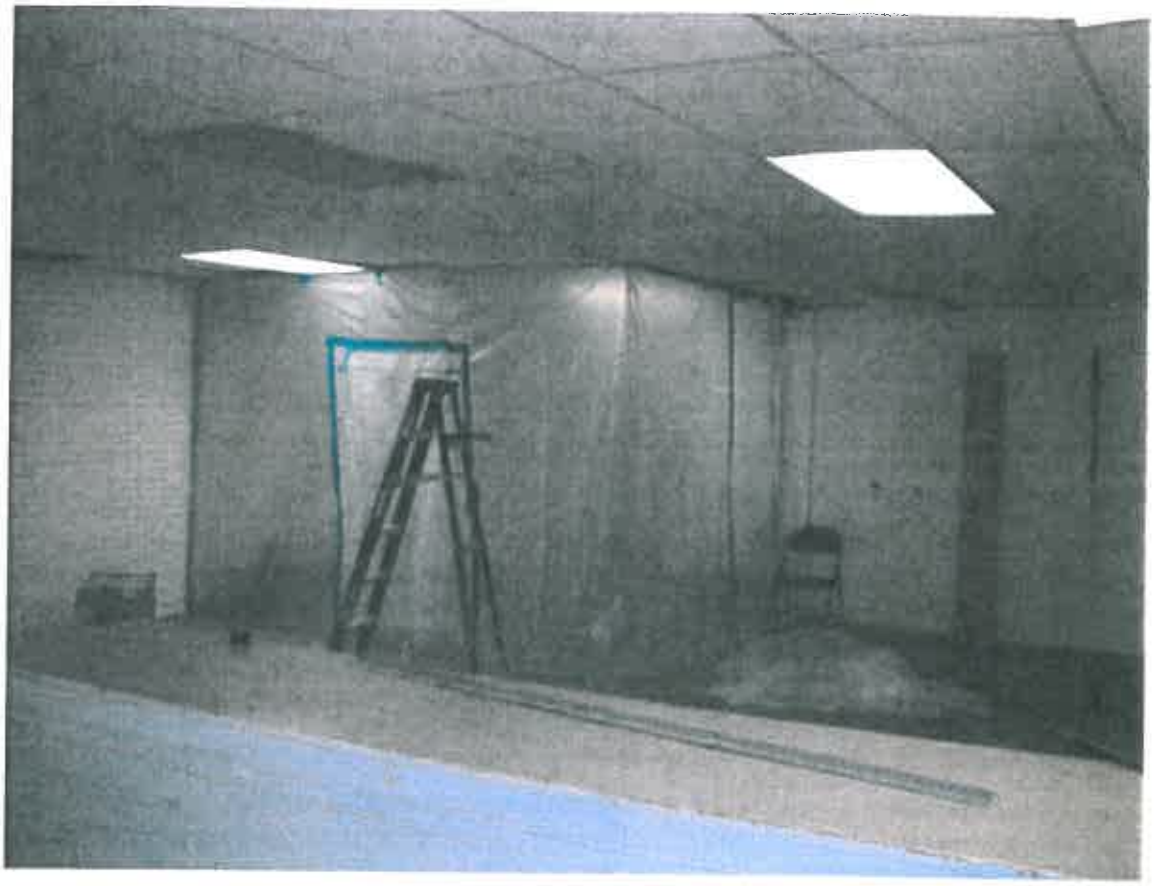


View from 7th street facing West

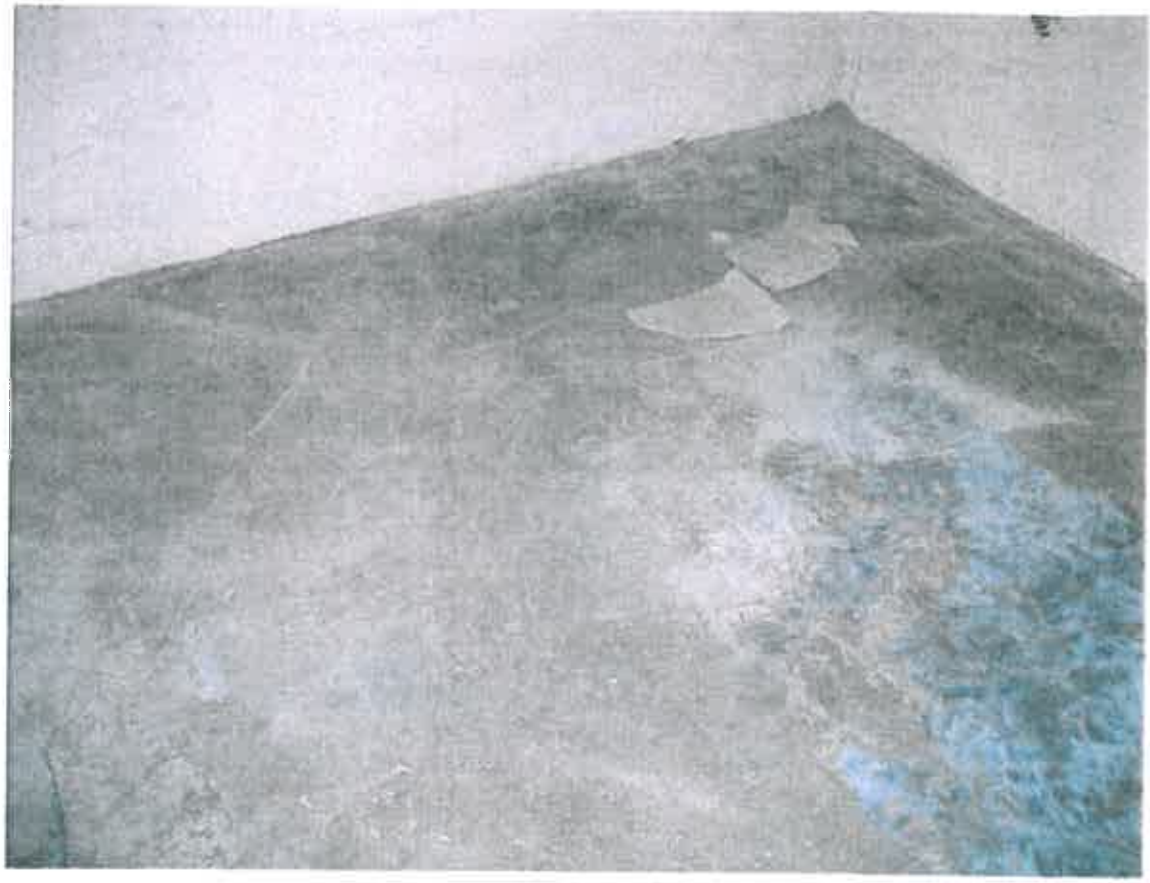


Room # 4 prior to window replacement.

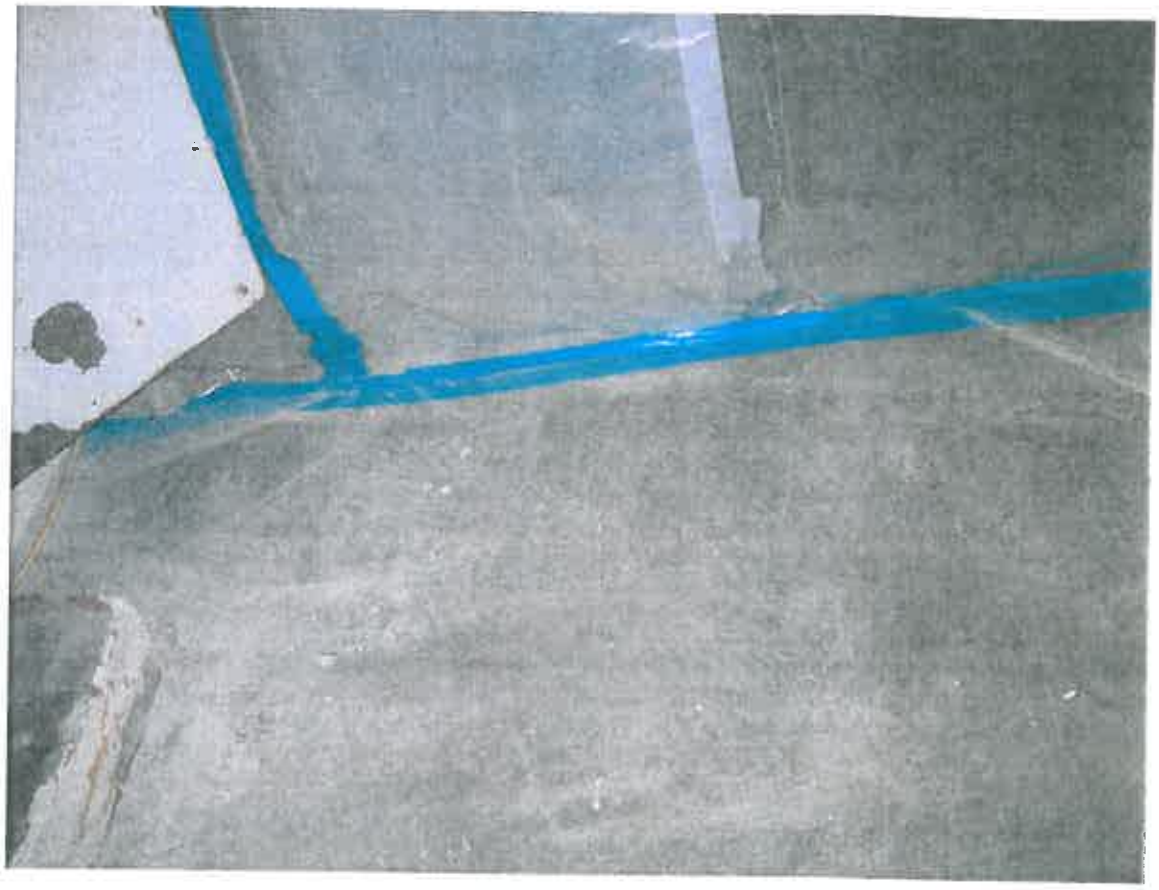
Critical Barrier Room # 10 Adjacent to Room # 12 (vault)



View from room # 10



Room 12 vault floor

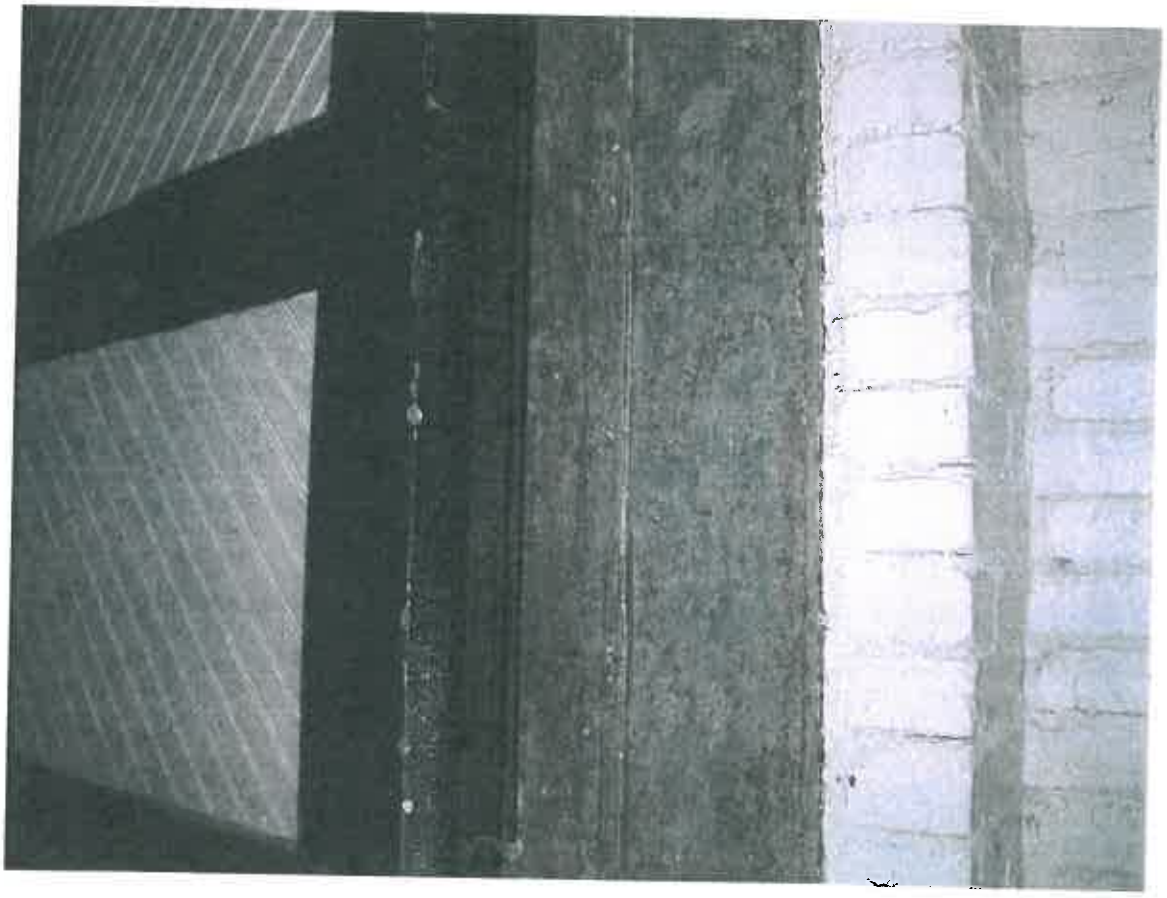


Inside Critical Barrier prior to LBP removal

Stairs leading to entry of room # 16 prior to applying epoxy primer and encapsulant.

View of stairs leading into room # 17 post encapsulation.

Stairs leading to IFR post encapsulation.



View of a door jam during LBP removal.

CONFIRMATION SAMPLING

ARMORY LEAD CONFIRMATION SAMPLING
MARLOW ARMORY
702 WEST MAIN
MARLOW, OKLAHOMA

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

March 23, 2012

ENERCON SERVICES, INC.
6525 North Meridian, Suite 400
Oklahoma City, Oklahoma 73116
(405) 722-7693 Fax: (405) 722-7694

Prepared by:

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OKINSR-13415

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Lead-Based Paint Inspector/Risk Assessor
OKRASR-11260

TABLE OF CONTENTS

APPENDICES

1.0 PURPOSE AND SCOPE

This clearance sampling was requested by the Oklahoma Department of Environmental Quality, Land Protection Division, in order to confirm that lead remediation at the Marlow Armory, 702 West Main, Marlow, Oklahoma, had been satisfactorily completed. Enercon was contracted to conduct confirmation wipe samples following remediation using the sampling protocols described in the Scope of Work provided in Appendix A.

2.0 BACKGROUND

The State of Oklahoma has determined that a number of armories located throughout the State that are no longer needed are to be transferred to local communities. Prior to these transfers, environmental investigations were conducted by the Oklahoma Department of Environmental Quality to determine if there are any environmental issues associated with these armories. As a result, inspections for lead contamination and lead-based paint have been conducted, resulting in contracts for remediation of lead contamination by private contractors. In order to determine if the contamination has been satisfactorily remediated, following remediation confirmation testing is being done by firms licensed by the State to conduct Lead-Based Paint Inspections and Clearance Tests. These firms are independent of the remediation contractor. The remediation contractor for the Marlow Armory was Basin Environmental, 325 North Portland Ave., Oklahoma City, Oklahoma 73107.

3.0 CONFIRMATION PROCEDURES

Confirmation of the adequacy of remediation is done by collecting wipe samples on the floors and/or walls of the armory on a room by room basis using the sampling criteria set forth in the Scope of Work (Appendix A). All wipe samples are collected by an Oklahoma-licensed LBP Inspector or Risk Assessor who is employed by an Oklahoma-licensed Lead-Based Paint Firm. Copies of these licenses are provided in Appendix B. The procedure involves using a layout or sketch of the armory to mark all sample locations and collecting samples using a 12" by 12" template and lead wipes to collect the samples. In the Indoor Firing Range (IFR) and IFR storage room, the walls, floor and ceiling were gridded using a 3x3 grid for ranges/rooms 50 feet long or less. For ranges longer than 50 feet, the range was divided into two halves, with each half using a 3x3 grid for sampling. Following remediation, confirmation wipe samples were collected. If any sample within a 3x3 grid in an indoor firing range or range storage room exceeded 200 $\mu g/ft^2$, the entire 3x3 gridded area was re-cleaned and

re-tested. The next step in the process involved sealing the area using an encapsulant, followed by confirmation wipe testing. Following sealing, wipe samples were not to exceed 40 $\mu g/ft^2$. The Inspector marked the grid intersections and wipe sample locations with duct tape in preparation for sampling. Procedures for individual wipe samples as outlined for EPA/HUD dust wipe sampling were used for this project.

4.0 CONFIRMATION SAMPLING

4.1 Results of Initial Confirmation Sampling Following Remediation in the Indoor Firing Range, IFR Storage Room & Office Area

The initial round of clearance testing was conducted on November 30, 2011 following remediation in the Indoor Firing Range and IFR Storage Room. The IFR was approximately 110 FT long; therefore, it was divided into two 55 FT long 3 x 3 gridded areas for wipe sampling. A total of 30 wipe samples were collected from the walls, floor and ceiling of the IFR and 18 wipe samples were collected from the IFR Storage Room. Four of the 30 samples collected from the IFR contained lead in excess of the threshold of 200 $\mu g/ft^2$. No samples from the IFR Storage Room were in excess of the threshold. Appendix C contains sketches showing the areas that exceeded the threshold during the initial round of sampling in these rooms and the laboratory report and chain of custody.

Based upon the recommended locations provided by ODEQ, initial confirmation wipe samples were also collected in the Drill Floor and Office Areas. A total of 29 samples were collected, with five exceeding the 40 $\mu g/ft^2$ threshold. A layout sketch showing the location of the wipe samples, the laboratory report and chain of custody are in Appendix C.

4.2 Results of Confirmation Re-sampling 1 Following Re-cleaning in the Indoor Firing Range, & Office Area

The areas that failed the initial clearance testing in the IFR were re-cleaned and then re-sampled on December 8, 2011. A total of nine wipe samples were collected in the IFR. Two samples in the IFR area exceeded the 200 $\mu g/ft^2$ threshold during the re-test. Sketches showing the results of re-testing, along with the laboratory reports and chains of custody are provided in Appendix D.

Following additional cleaning in the areas that exceeded the threshold, re-sampling confirmation wipe

samples were also collected in the Drill Floor and Office Areas. A total of five samples were collected, with none exceeding the 40 $\mu g/ft^2$ threshold. A layout sketch showing the location of the wipe samples, the laboratory report and chain of custody are in Appendix D.

4.3 Results of Confirmation Re-Sampling 2 Following Re-Cleaning in the Indoor Firing Range

The areas that failed the first re-sampling clearance testing in the IFR were re-cleaned and then re-sampled on December 13, 2011. A total of six wipe samples were collected in the IFR. One of the samples in the IFR area exceeded the threshold during the re-test. A sketch showing the results of re-testing, and the laboratory report and chain of custody are provided in Appendix E.

4.4 Results of Confirmation Re-Sampling 3 Following Re-Cleaning in the Indoor Firing Range

The area that failed the second re-sampling clearance testing in the IFR was re-cleaned and then re-sampled on December 19, 2011. A total of three wipe samples were collected in the IFR. One of the samples in the IFR again exceeded the threshold during the re-test. A sketch showing the results of re-testing, and the laboratory report and chain of custody are provided in Appendix F.

4.5 Results of Confirmation Re-Sampling 4 Following Re-Cleaning in the Indoor Firing Range

The area that failed the third re-sampling clearance testing in the IFR was re-cleaned and then re-sampled on December 28, 2011. A total of three wipe samples were collected in the IFR. One of the samples in the IFR again exceeded the threshold during the re-test. A sketch showing the results of re-testing, and the laboratory report and chain of custody are provided in Appendix G.

4.6 Results of Confirmation Re-Sampling 5 Following Re-Cleaning in the Indoor Firing Range

The area that failed the fourth re-sampling clearance testing in the IFR was re-cleaned and then re-sampled on January 5, 2012. One wipe sample was collected in the IFR and the result was below the threshold. A sketch showing the results of re-testing, and the laboratory report and chain of custody are provided in Appendix H.

4.7 Results of Confirmation Sampling Following Sealant Application in the Indoor Firing Range and IFR Storage Room

With the area on the IFR ceiling covered with construction grout and the acrylic sealant applied, ODEQ recommended collecting two samples rather than three wipe samples for confirmation in the

IFR and one sample on each surface in the Storage Room. The confirmation sampling was completed on January 20, 2012. A total of 20 samples were collected in the IFR; six samples were collected in the IFR Storage Room. One sample in the IFR exceeded the 40 $\mu g/ft^2$ threshold. Sketches showing the sample locations, laboratory report and chain of custody are contained in Appendix I.

4.8 Results of Confirmation Re-Sampling 1 After Sealant Application in the Indoor Firing Range

The area that failed the clearance testing in the IFR was re-cleaned and then re-sampled on January 30, 2012. A total of two wipe samples were collected in the IFR. One of the samples in the IFR still exceeded the 40 □g/ft² threshold during the re-test. All samples in the IFR Storage Room were below the threshold. A sketch showing the results of re-testing, and the laboratory report and chain of custody are provided in Appendix J.

4.9 Results of Confirmation Re-Sampling 2 After Sealant Application in the Indoor Firing Range

The area that failed the clearance testing in the IFR was re-cleaned and then re-sampled on February 2, 2012. One wipe sample was collected in the IFR and the result was below 40 □g/ft² threshold. A sketch showing the results of re-testing, and the laboratory report and chain of custody are provided in Appendix K.

5.0 CONCLUSIONS

Based upon the foregoing confirmation sampling, it is concluded that the lead hazard associated with the walls, floor and ceiling in the IFR and IFR Storage Room and the floors in the remainder of the Armory has been effectively mitigated.

APPENDIX A

SCOPE OF WORK
For
Armory Lead Confirmation Sampling

The Department of Environmental Quality will soon be hiring contractors to remediate lead-based paint and lead contaminated dust from former National Guard Armories located in Sulphur, Minco, Marlow, Pawhuska, Perry, and Kingfisher, Oklahoma. Once abatement is complete, confirmation wipe samples will need to be taken on floors in areas where lead-based paint abatement was performed and in rooms that previously tested high for lead dust on floors. Attached is the Confirmation Sampling Instructions (Attachment 1). Below is a detailed list of what will be required at each site.

- Perform each sampling event within five (5) days of notice from remediation contractor.
- Provide DEQ with sampling plan for approval prior to each sampling event. There will be up to five (5) sampling events per armory.
- Travel to the each site up to (5) times to take confirmation wipe samples.
- A total of 250 confirmation wipe samples will be taken per armory.
- A total of 1500 confirmation wipe samples will be taken for this project.
- Samples will be run with a 24 hour turnaround time and results with sample location map will be submitted to DEQ for review.
- Once all sampling is complete at an armory, a Confirmation Sampling Report will be submitted to DEQ for approval.
    - A total of six (6) Confirmation Sampling Reports shall be submitted.
    - One report will be submitted for each armory.

APPENDIX B

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

This is to Certify That

MARSHALL BRANSCUM

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

INSPECTOR

Certification #: OKINSR13415

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

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

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

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

DEQ OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Environmental Programs Manager
Air Quality Division

OKLAHOMA
Lead-Based Paint
Certification

Richard Belcher

OKRASR13549

Inspector/Risk Assessor

Expires March 31, 2012

DEQ

Department of Environmental Quality

This is to Certify That

RICHARD BELCHER

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

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR13549

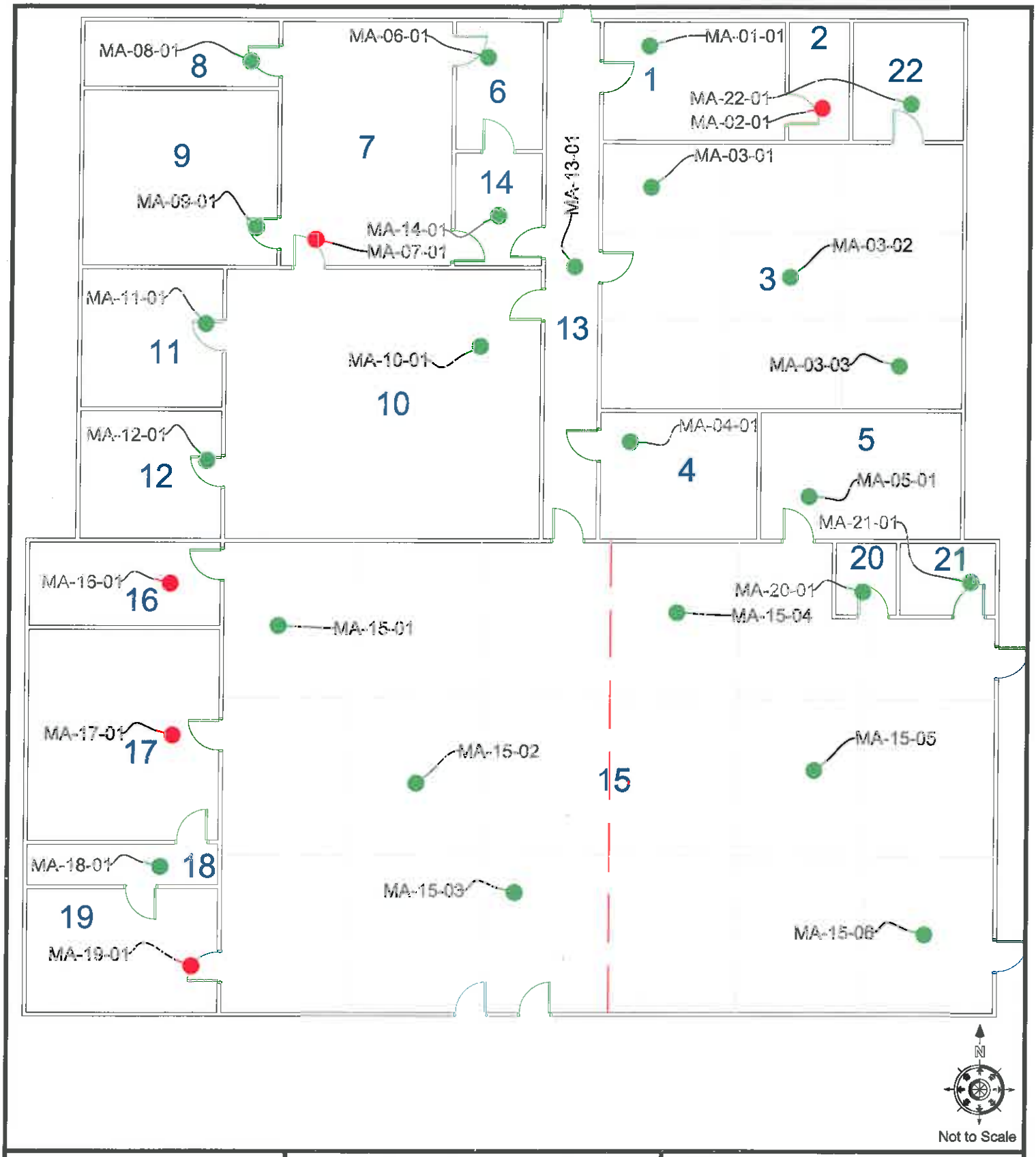
This certificate is valid from the date of issuance and expires as prescribed by law.

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

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

APPENDIX C



Oklahoma Department of Environmental Quality
Marlow Armory
702 W. Main.
Marlow, Ok.

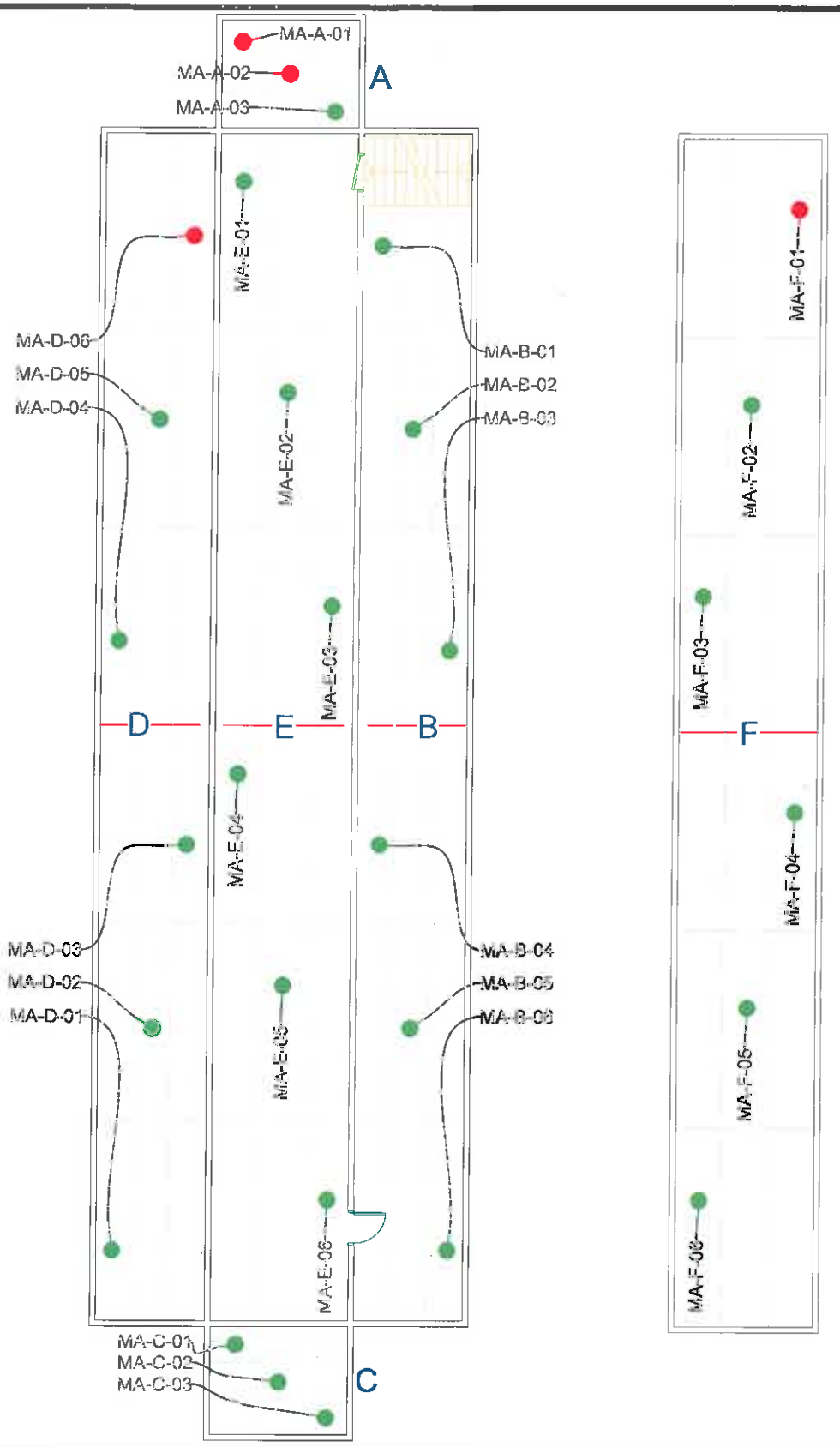
Legend:

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

ENERCON

Lead Wipe Sample Locations
Main Floor (Initial) 11-30-11

Project Number: ENMISC-2536



Note:
A,B,C, and D= Walls
E = Floor
F = Ceiling

Oklahoma Department of Environmental Quality
Marlow Armory
702 W. Main.
Marlow, Ok.

Legend:

=Dust Wipe Sample Location Positive, > 200 ug / SF
=Dust Wipe Sample Location Negative,< 200 ug / SF

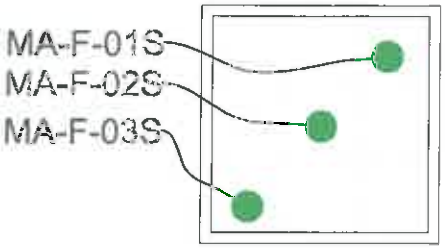
ENERCON

Lead Wipe Sample Locations
IFR (Initial) 11-30-11

Project Number: ENMISC-2536

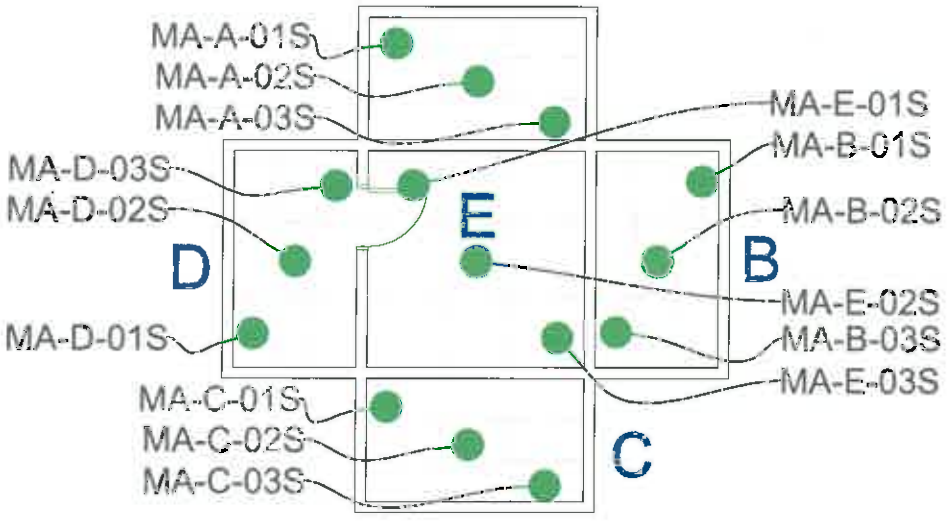
Storage Ceiling

F



Storage

A



Note:
A,B,C, and D= Walls
E = Floor
F = Ceiling

N

Not to Scale

Oklahoma Department of Environmental Quality
Marlow Armory
702 W. Main.
Marlow, Ok.

Legend:

=Dust Wipe Sample Location Positive, > 200 ug / SF
=Dust Wipe Sample Location Negative,< 200 ug / SF

ENERCON

Lead Wipe Sample Locations
Storage Room (Initial) 11-30-11

Project Number: ENMISC-2536

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 202153
Date Received: 11/30/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 12/1/2011

AIHA ID: 101352

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

Acct. No.: A845

Project: Marlow Armory
Location: 702 West Main Street, Marlow, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	MA-01-01	Wipe	Lead	35.1	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
002	MA-02-01	Wipe	Lead	59.9	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
003	MA-03-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
004	MA-03-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
005	MA-03-03	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
006	MA-04-01	Wipe	Lead	30.7	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
007	MA-05-01	Wipe	Lead	19.2	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
008	MA-06-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
009	MA-07-01	Wipe	Lead	64.1	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
010	MA-08-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
011	MA-09-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
012	MA-10-01	Wipe	Lead	28.5	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
013	MA-11-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
014	MA-12-01	Wipe	Lead	19.2	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
015	MA-13-01	Wipe	Lead	28.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
016	MA-14-01	Wipe	Lead	34.7	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
017	MA-15-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)

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

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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: 202153
Date Received: 11/30/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 12/1/2011

AIHA ID: 101352

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

Acct. No.: A845

Project: Marlow Armory
Location: 702 West Main Street, Marlow, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	MA-15-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
019	MA-15-03	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
020	MA-15-04	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
021	MA-15-05	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
022	MA-15-06	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
023	MA-16-01	Wipe	Lead	47.3	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
024	MA-17-01	Wipe	Lead	50.2	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
025	MA-18-01	Wipe	Lead	35.1	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
026	MA-19-01	Wipe	Lead	56.4	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
027	MA-20-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
028	MA-21-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
029	MA-22-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
030	MA-A-01	Wipe	Lead	265	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
031	MA-A-02	Wipe	Lead	1,370	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
032	MA-A-03	Wipe	Lead	72.4	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
033	MA-B-01	Wipe	Lead	36.2	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
034	MA-B-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)

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AIHA ID: 101352

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

Acct. No.: A845

Project: Marlow Armory
Location: 702 West Main Street, Marlow, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
035	MA-B-03	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
036	MA-B-04	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
037	MA-B-05	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
038	MA-B-06	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
039	MA-C-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
040	MA-C-02	Wipe	Lead	25.8	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
041	MA-C-03	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
042	MA-D-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
043	MA-D-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
044	MA-D-03	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
045	MA-D-04	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
046	MA-D-05	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
047	MA-D-06	Wipe	Lead	575	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
048	MA-E-01	Wipe	Lead	35.5	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
049	MA-E-02	Wipe	Lead	30.2	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
050	MA-E-03	Wipe	Lead	53.6	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
051	MA-E-04	Wipe	Lead	20.4	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)

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

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

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

Acct. No.: A845

Project: Marlow Armory
Location: 702 West Main Street, Marlow, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
052	MA-E-05	Wipe	Lead	16.5	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
053	MA-E-06	Wipe	Lead	19.2	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
054	MA-F-01	Wipe	Lead	1,750	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
055	MA-F-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
056	MA-F-03	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
057	MA-F-04	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
058	MA-F-05	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
059	MA-F-06	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
060	MA-A-01S	Wipe	Lead	60.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
061	MA-A-02S	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
062	MA-A-03S	Wipe	Lead	19.6	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
063	MA-B-01S	Wipe	Lead	35.6	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
064	MA-B-02S	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
065	MA-B-03S	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
066	MA-C-01S	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
067	MA-C-02S	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
068	MA-C-03S	Wipe	Lead	24.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)

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

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

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AIHA ID: 101352

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6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Acct. No.: A845

Project: Marlow Armory
Location: 702 West Main Street, Marlow, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
069	MA-D-01S	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
070	MA-D-02S	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
071	MA-D-03S	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
072	MA-E-01S	Wipe	Lead	152	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
073	MA-E-02S	Wipe	Lead	78.6	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
074	MA-E-03S	Wipe	Lead	108	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
075	MA-F-01S	Wipe	Lead	66.3	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
076	MA-F-02S	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)
077	MA-F-03S	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/01/11 13:30	W EPA 7420 (1)

Authorized Signature: _____
Benton Miller, Analyst

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

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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: 9417
Test: Lead
Date: 12/1/2011
Matrix: Wipe
Lab Number: 202153
Approved By: Benton Miller
Date Approved: 12/1/2011

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	0.8	1.1	1.2
RLVS	0.256	0.285	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W4	0.000	5.438	5.448	100.2	5.482	100.8	0.6
MS-W3	0.000	5.536	5.243	94.7	5.656	102.2	7.6
MS-W2	0.000	5.449	5.892	108.1	5.268	96.7	11.2
MS-W1	0.000	5.503	5.377	97.7	5.992	108.9	10.8

Authorized Signature: _____

Benton Miller, 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. 202153
(Accept) Reject

Company Name: Enercon Services, Inc.   Acct #: ______   Project Name: Marlow Armory
Project Location: 702 West Main Street, Marlow, OK   Project Number: ______

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

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	Sampled By
Marshall L. Branscum	11-30-2011/1600	Hand	S. Pfizwick	11/30/11 4:00	MLB
Relinquished by			Received by	11-30	

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'

Revision: May 2009

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
www.quantem.com

This Box for Lab Use Only
Lab No. 202153
Accept (circled) Reject

Company Name: Enercon Acct #: Project Name: Madow Armory

Project Location: Madow, OK Project Number:

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb				Units Requested: PPM	Wt %	mg / kg	mg / l	ug / sq. ft.	ug / cu. ft.	mg / cm²
16.	MA-14-01		144in²	C	X								X		
17.	-15-01														
18.	-15-02														
19.	-15-03														
20.	-15-04														
21.	-15-05														
22.	-15-06														
23.	-16-01														
24.	-17-01														
25.	-18-01														
26.	-19-01														
27.	-20-01														
28.	-21-01														
29.	-22-01														
30.	-A-01		↓	↓	↓								↓		

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: 722-7657
Report Results VIA (CHOOSE ONE):
- [ ] FAX:
- [X] QuanTEM WebSite
- [ ] E-Mail:

Relinquished by: Marshall L Branscum 11-30-2011 / 1600 Hand
Received by: SL Shafwire 11/30/11 4:00
Date/Time: 11-30
Sampled By: MLB

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"

Revision: May 2009

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. 202153 Accept (circled) Reject

Company Name: Enercon Acct.#: ______ Project Name: Marlow Armory
Project Location: Marlow, OK Project Number: ______

#	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb				Units: PPM	Wt %	mg / kg	mg / l	ug / sq. ft.	ug / cu. ft.	mg / cm²
31.	MA-A-02		144 in²	C	X								X		
32.	-A-03														
33.	-B-01														
34.	-B-02														
35.	-B-03														
36.	-B-04														
37.	-B-05														
38.	-B-06														
39.	-C-01														
40.	-C-02														
41.	-C-03														
42.	-D-01														
43.	-D-02														
44.	-D-03														
45.	-D-04														

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 L. Branscum	11-30-2011/1600	Hand	[illegible]	11/30/11 4:00	11-30	MLB

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"

Revision: May 2005

Lead Chain-of-Custody

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 522-1659 (405) 755-7272 Fax: (405) 755-2058
www.quantem.com

This Block for Lab Use Only
Lab No. 202153
Accept / Reject

Company Name: Enercon Acct.#: Project Name: Marlow Armory

Project Location: Marlow, OK Project Number:

	Sample Number	Sample Description	Volume or Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt %	mg / kg	mg / l	µg / wipe	µg / cm²	Sample Matrix Codes
46.	MA-D-05		144in²	C	X					X		A - Soil
47.	-D-06											B - Paint Chips
48.	-E-01											C - Surface / Dust Wipes
49.	-E-02											D - Bulk Miscellaneous
50.	-E-03											E - Air Cassette
51.	-E-04											F - Other (SPECIFY)
52.	-E-05											
53.	-E-06											
54.	-F-01											
55.	-F-02											
56.	-F-03											
57.	-F-04											
58.	-F-05											
59.	-F-06											
60.	-A-01S											

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	Received By:	Date/Time	Sampled By:
Marshall K. Branscum	11-30-2011/1600	S Lightsey	11/30/11 4:00	MCB
Relinquished By:		Received By:	11-30	

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"

Lead Chain-of-Custody

QUANTEM LABORATORIES
2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 522-1650 (405) 755-7272 Fax: (405) 755-2058
www.quantem.com

This Box for Lab Use Only
Lab No. 202153
Accept / Reject

Company Name: Enercon Acct.#: Project Name: Marlow Armory

Project Location: Marlow, OK Project Number:

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt. %	mg / kg	mg / l	ug / sq. ft.	ug / cu. M.	mg / cm²
61.	MA-A-02S		1 Wipe	C	X					X		
62.	MA-A-03S											
63.	-B-01S											
64.	-B-02S											
65.	-B-03S											
66.	-C-01S											
67.	-C-02S											
68.	-C-03S											
69.	-D-01S											
70.	-D-02S											
71.	-D-03S											
72.	-E-01S											
73.	-E-02S											
74.	-E-03S											
75.	-F-01S											

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 Bramscum
Phone: 722-1693
Report Results VIA (CHOOSE ONE):
- [ ] FAX:
- [X] QuanTEM WebSite
- [ ] E-Mail:

Relinquished By	Date / Time	Received By	Date / Time	Sampled By
Marshall Bramscum	11-30-2011 / 1600	[illegible]	11-30	MLB

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"

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. 202153
Accept Reject

Company Name: Emerson Acct.#: Project Name: Marlow Armory

Project Location: Marlow, OK Project Number:

Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt %	mg/kg	mg/l	µg/cm²	µg/wipe	mg/cm²
76 MA-F-025		144ft²	C	X					X		
77 MA-F-035		144ft²	C	X					X		

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

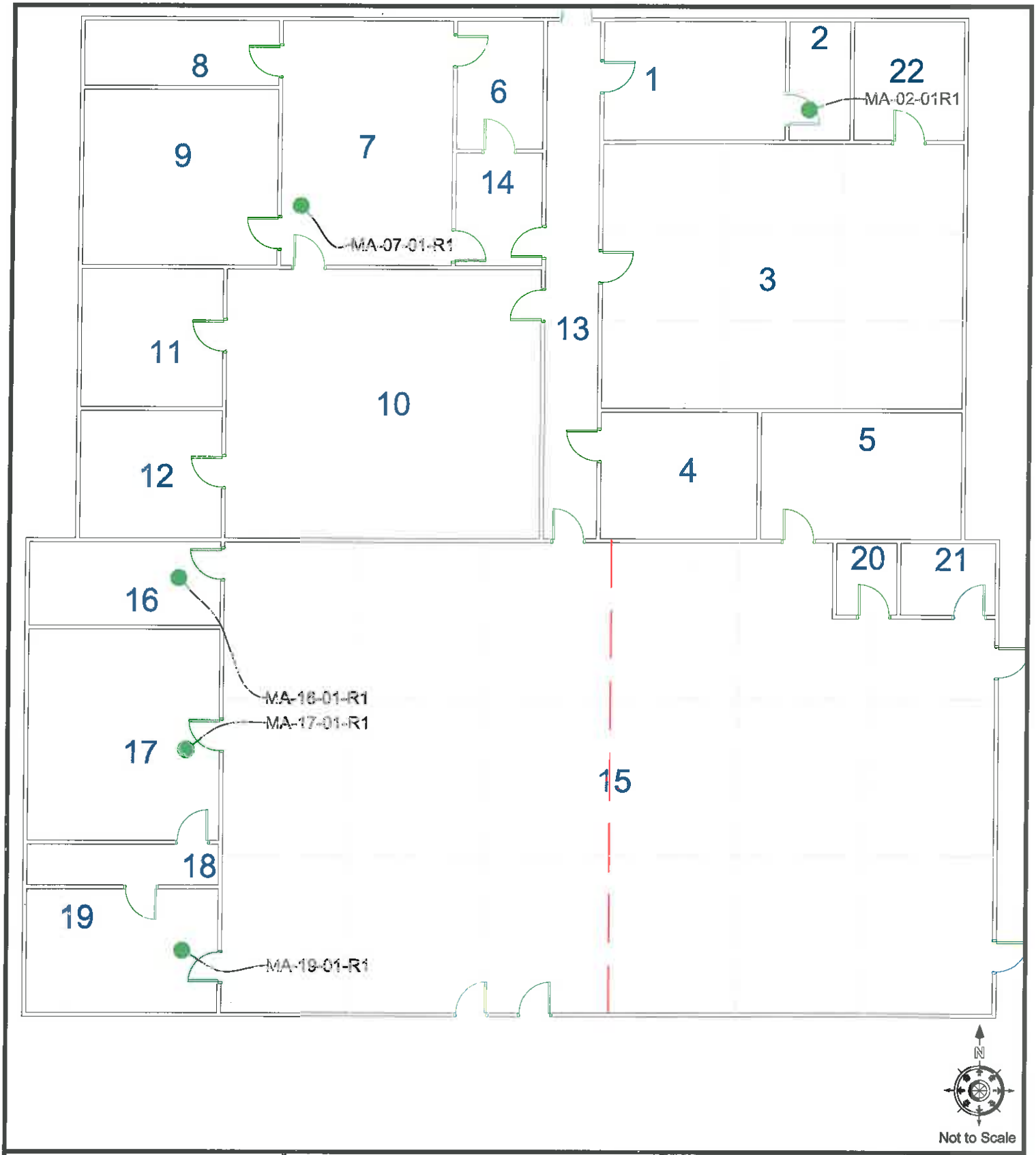
TURNAROUND TIME
- Same Day
- X 24 Hour
- 3-Day
- 5-day

CONTACT INFORMATION
Name: Marshall Branscum
Phone:
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 Branscum	11-30-2011 1600	Hand	S Clifford	11/30/11 4:00	11-30	MCB

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



Oklahoma Department of Environmental Quality
Marlow Armory
702 W. Main.
Marlow, Ok.

Legend:

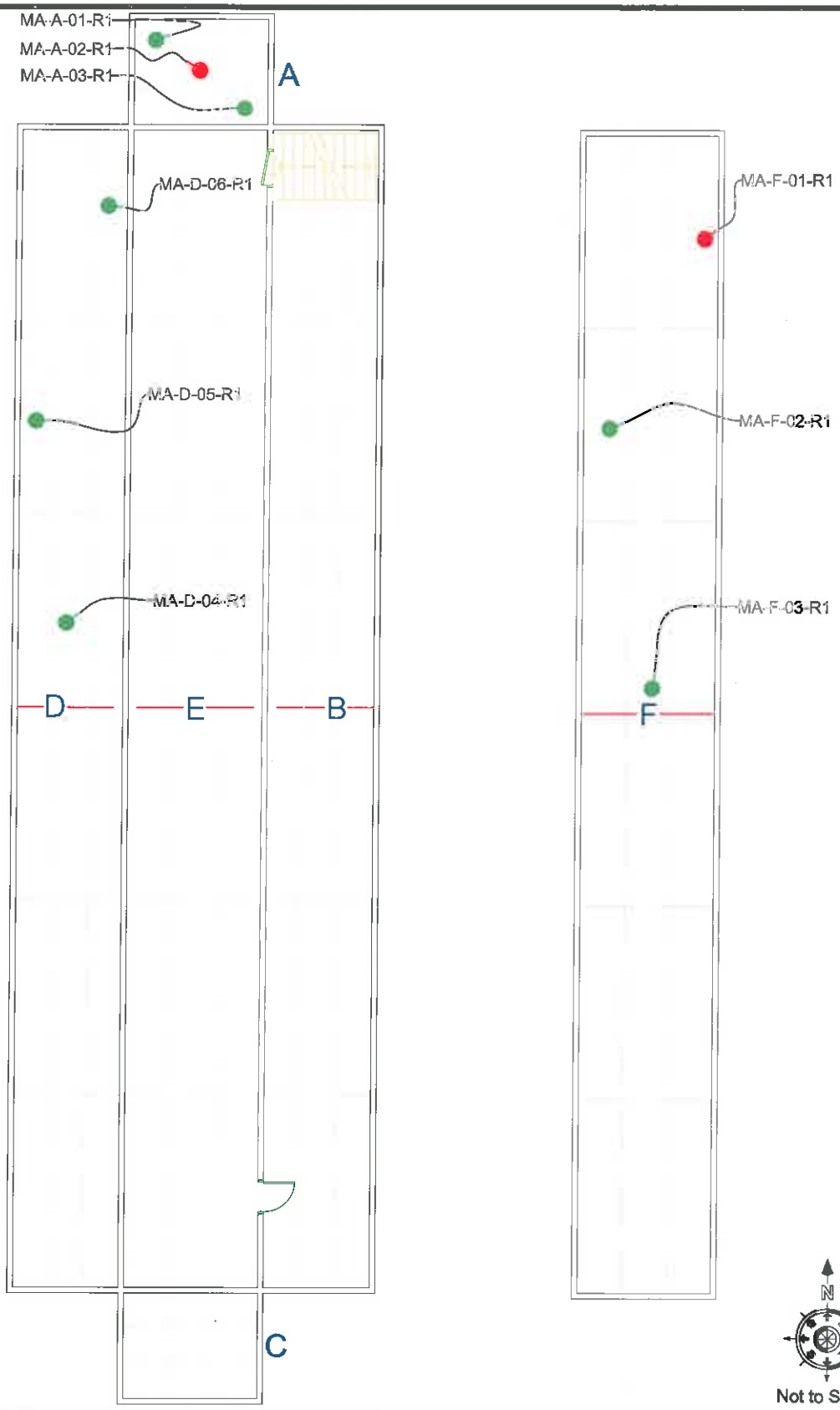
=Dust Wipe Sample Location Positive, > 40 ug / SF
=Dust Wipe Sample Location Negative,< 40 ug / SF

Note: Samples < 40ug / SF on previous round not shown

ENERCON

Lead Wipe Re-Sample Locations
Main Floor (Round 1) 12-08-11

Project Number: ENMISC-2536



Note:
A,B,C, and D= Walls
E = Floor
F = Ceiling

Oklahoma Department of Environmental Quality
Marlow Armory
702 W. Main.
Marlow, Ok.

Legend:

=Dust Wipe Sample Location Positive, > 200 ug / SF
=Dust Wipe Sample Location Negative,< 200 ug / SF

Note: Samples < 200ug / SF on previous round not shown

ENERCON

Lead Wipe Re-Sample Locations
IFR (Round 1) 12-08-11

Project Number: ENMISC-2536

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 202410
Date Received: 12/08/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 12/9/2011

AIHA ID: 101352

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

Acct. No.: A845

Project: Marlow Armory
Location: N/A
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	MA-A-01-RI	Wipe	Lead	188	16	ug/sq. Ft.	12/09/11 10:45	W EPA 7420 (1)
002	MA-A02-RI	Wipe	Lead	292	16	ug/sq. Ft.	12/09/11 10:45	W EPA 7420 (1)
003	MA-A03-RI	Wipe	Lead	32.2	16	ug/sq. Ft.	12/09/11 10:45	W EPA 7420 (1)
004	MA-D-04-RI	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/09/11 10:45	W EPA 7420 (1)
005	MA-D-05-RI	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/09/11 10:45	W EPA 7420 (1)
006	MA-D-06-RI	Wipe	Lead	74.1	16	ug/sq. Ft.	12/09/11 10:45	W EPA 7420 (1)
007	MA-F-01-RI	Wipe	Lead	21,100	16	ug/sq. Ft.	12/09/11 10:45	W EPA 7420 (1)
008	MA-F-02-RI	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/09/11 10:45	W EPA 7420 (1)
009	MA-F-03-RI	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/09/11 10:45	W EPA 7420 (1)
010	MA-02-01-RI	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/09/11 10:45	W EPA 7420 (1)
011	MA-07-01-RI	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/09/11 10:45	W EPA 7420 (1)
012	MA-16-01-RI	Wipe	Lead	17.0	16	ug/sq. Ft.	12/09/11 10:45	W EPA 7420 (1)
013	MA-17-01-RI	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/09/11 10:45	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: 202410
Date Received: 12/08/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 12/9/2011

AIHA ID: 101352

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

Acct. No.: A845

Project: Marlow Armory
Location: N/A
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
014	MA-19-01-RI	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/09/11 10:45	W EPA 7420 (1)

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 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: 9442
Test: Lead

Date: 12/9/2011
Matrix: Wipe

Lab Number: 202410
Approved By: Benton Miller
Date Approved: 12/9/2011

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.8	5.5
FCV	4.5	4.9	5.5
ICV	0.8	1.1	1.2
RLVS	0.256	0.319	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	5.286	5.349	101.2	5.656	107.0	5.6
MS-W1	0.000	5.427	5.690	104.9	5.892	108.6	3.5

Authorized Signature: _____

Benton Miller, Analyst

QuanTEM LABORATORIES

www.QuanTEM.com

LEAD CHAIN OF CUSTODY

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

LEGAL DOCUMENT – PLEASE PRINT LEGIBLY

For Lab Use Only	
Lab No.	202410
(Accept)	Reject

Report Results (☑ one box)	
	QuanTEM Website
	Other ______

Contact Information		Project Information
Company: Enercon Services, Inc	Phone: 722-7693	Project Name: Marlow Armory
Contact: Marshall Branscum	Cell Phone: 802-5900	Project Location:
Account #:	E-mail: mbranscum@enercon.com	Project ID:

Sampled By:	Name:	Date:

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Marshall L. Branscum	12-8-2011/1211	Hand	[signature]	12/8/11 12:10

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis: Pb			Units: PPM	Wt %	mg / l	µg /ft²	µg / m³	mg / cm²
1	MA-A-01-R1			144in2	C	X						X		
2	-A-02-R1													
3	-A-03-R1													
4	-D-04-R1													
5	-D-05-R1													
6	-D-06-R1													
7	-F-01-R1													
8	-F-02-R1													
9	-F-03-R1													
10	-02-01-R1													
11	-07-01-R1													
12	-16-01-R1													

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

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. 202410
Accept / Reject

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

Contact Information

Company: Enercon Services	Phone:
Contact: Marshall Branscum	Cell Phone:
Account #:	E-mail:

Project Information

Project Name:	
Project Location:	
Project ID:	

Sampled By: Name: Date:

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Marshall Branscum	12-8-2011 / 1211	Hand	S Lefthewich	12/8/11 12:10

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	Analysis:	Analysis:	Units (☑ ONE box only): PPM	Wt %	mg / l	µg /ft²	µg / m³	mg / cm²
13. 1	MA-17-01-R1			144 in²	C	X						X		
14. 2	MA-19-01-R1			↓	↓	↓						↓		
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

Sample Matrix Codes

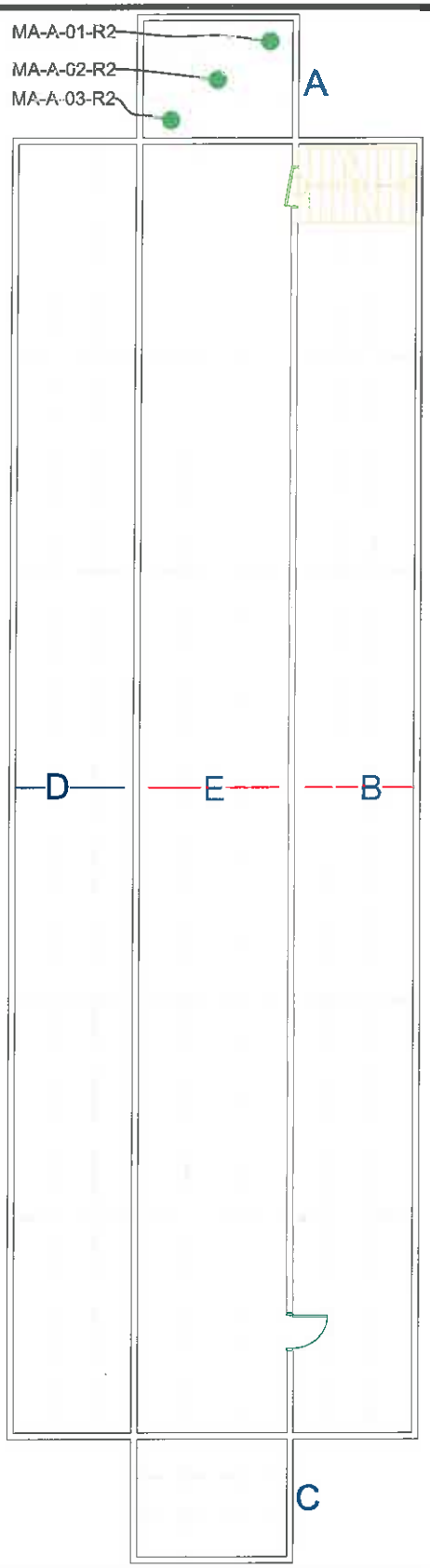
A	Soil
B	Paint Chips
C	Surface / Dust Wipes
D	Bulk Miscellaneous
E	Air Cassette

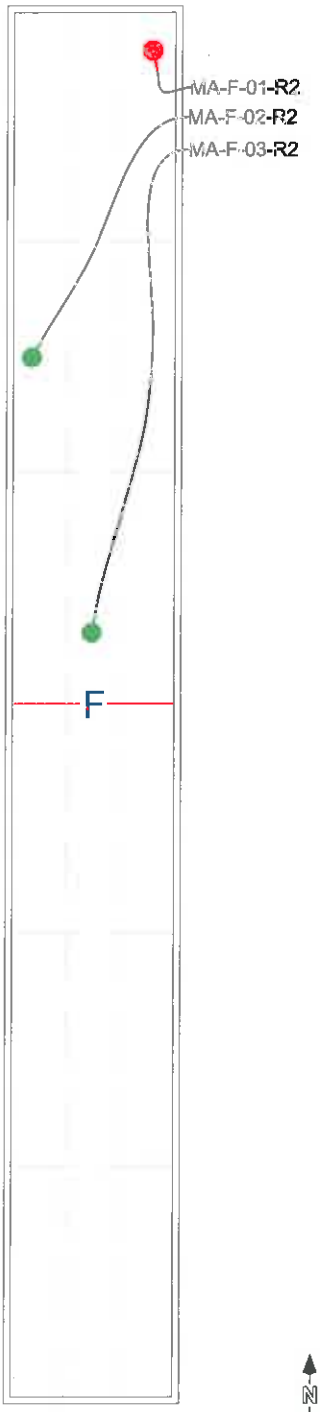
TURNAROUND TIME

☐	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"

APPENDIX E





Note:
A,B,C, and D= Walls
E = Floor
F = Ceiling

N

Not to Scale

Oklahoma Department of Environmental Quality
Marlow Armory
702 W. Main.
Marlow, Ok.

Legend:

=Dust Wipe Sample Location Positive, > 200 **ug / SF**
=Dust Wipe Sample Location Negative,< 200 **ug / SF**

Note: Samples < 200ug / SF on previous round not **shown**

ENERCON

Lead Wipe Re-Sample Locations
IFR (Round 2) 12-13-11

Project Number: ENMISC-2536

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 202547
Date Received: 12/13/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 12/15/2011

AIHA ID: 101352

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

Acct. No.: A845

Project: Marlow Armory REVISED
Location: Marlow , OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	MA-A-01-R2	Wipe	Lead	21.4	16	ug/sq. Ft.	12/14/11 10:00	W EPA 7420 (1)
002	MA-A-02-R2	Wipe	Lead	169	16	ug/sq. Ft.	12/14/11 10:00	W EPA 7420 (1)
003	MA-A-03-R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/14/11 10:00	W EPA 7420 (1)
004	MA-F-01-R2	Wipe	Lead	362	16	ug/sq. Ft.	12/14/11 10:00	W EPA 7420 (1)
005	MA-F-02-R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/14/11 10:00	W EPA 7420 (1)
006	MA-F-03-R2	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/14/11 10:00	W EPA 7420 (1)

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 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: 9457
Test: Lead

Date: 12/14/2011
Matrix: Wipe

Lab Number: 202547
Approved By: Benton Miller
Date Approved: 12/14/2011

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	5.5
FCV	4.5	5	5.5
ICV	0.8	1.1	1.2
RLVS	0.256	0.37	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	5.525	5.599	101.3	5.594	101.2	0.1

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.	202547
	Accept / Reject

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

Contact Information		Project Information	
Company: Emercon Services, Inc.	Phone: 722-7693	Project Name: Pawhuska Armory	
Contact: Marshall Branscum	Cell Phone: 202-5900	Project Location: Pawhuska, OK	
Account #:	E-mail:	Project ID:	

Sampled By: Name: Date:

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Marshall Branscum	12-13-2011/1157	Hand	Shiftwicke	12/13/11 12:08

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

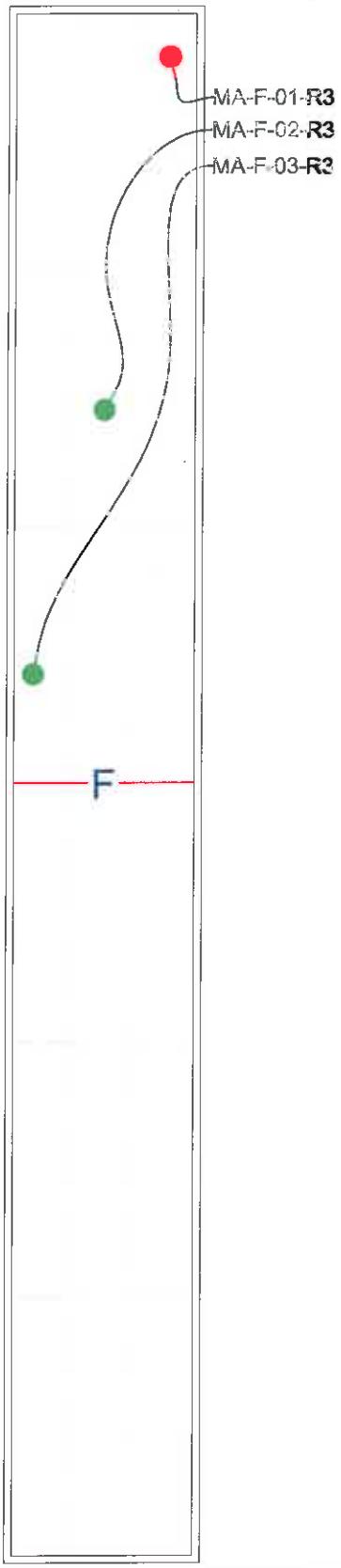
No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis: Pb	Units (☑ ONE box only): PPM	Wt %	mg / l	µg / ft²	µg / m³	mg / cm²
1	MA-A-01-RZ			144 ft²	C	X				X		
2	-A-02-RZ			↓	↓	↓				↓		
3	-A-03-RZ											
4	-F-01-RZ											
5	-F-02-RZ											
6	-F-03-RZ			↓	↓	↓				↓		
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"

APPENDIX F



Note:
A,B,C, and D= Walls
E = Floor
F = Ceiling

N

Not to Scale

Oklahoma Department of Environmental Quality
Marlow Armory
702 W. Main.
Marlow, Ok.

Legend:

=Dust Wipe Sample Location **Positive**, > 200 ug / SF
=Dust Wipe Sample Location **Negative**,< 200 ug / SF

Note: Samples < 200ug / SF on previous round not **shown**

ENERCON

Lead Wipe Re-Sample Locations
IFR (Round 3) 12-19-11

Project Number: ENMISC-2536

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 202746
Date Received: 12/20/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 12/20/2011

AIHA ID: 101352

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

Acct. No.: A845

Project: Marlow Armory
Location: 702 West Main Street, Marlow, OK
Project No.: ENMISC2536

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	MA-F-01-R3	Wipe	Lead	261	16	ug/sq. Ft.	12/20/11 11:30	W EPA 7420 (1)
002	MA-F-02-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/20/11 11:30	W EPA 7420 (1)
003	MA-F-03-R3	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/20/11 11:30	W EPA 7420 (1)

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 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: 9472
Test: Lead
Date: 12/20/2011
Matrix: Wipe
Lab Number: 202746
Approved By: Benton Miller
Date Approved: 12/20/2011

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.9	5.5
FCV	4.5	4.6	5.5
ICV	0.8	1.1	1.2

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W2	0.000	5.351	5.278	98.6	5.767	107.8	8.8

Authorized Signature: _____

Benton Miller, Analyst

Lead Chain-of-Custody

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 622-1650 (405) 755-7272 Fax: (405) 755-2058
www.quantem.com

Page 1 of 1

This Box for Lab Use Only
Lab No. 202746
Accept / Reject

Company Name: Enercon Services, Inc. Acct.#: _____ Project Name: Marlow Armory

Project Location: 702 West Main Street, Marlow, OK Project Number: ENMTSC2536

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt %	mg / kg	mg / l	ug / sq. ft	ug / cu. M	mg / cm²
1.	MA-F-01-R3	IFR-Ceiling	144 in²	C	X					X		
2.	MA-F-02-R3	↓	↓	↓	↓					↓		
3.	MA-F-03-R3	↓	↓	↓	↓					↓		

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

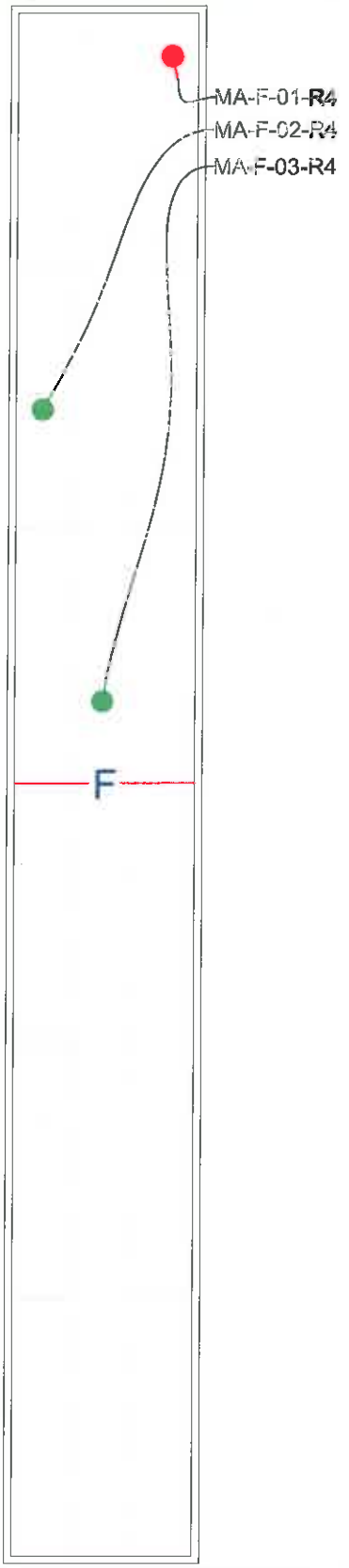
CONTACT INFORMATION
Name: Marshall Branscum
Phone: 722-7693
Report Results VIA (CHOOSE ONE):
- [ ] FAX:
- [X] QuanTEM WebSite
- [ ] E-Mail:

Relinquished By	Date/Time	via	Received By	Date/Time	Date Received	Sampled By
Marshall Branscum	12-19-2011 / 1617	Hand	Rebecca Spencer	12/19 4:20pm	12-19	MLB

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'**

Revision May 2006

APPENDIX G



Note:
A,B,C, and D= Walls
E = Floor
F = Ceiling

N

Not to Scale

Oklahoma Department of Environmental Quality
Marlow Armory
702 W. Main.
Marlow, Ok.

Legend:

=Dust Wipe Sample Location Positive, > 200 ug / SF
=Dust Wipe Sample Location Negative,< 200 ug / SF

Note: Samples < 200ug / SF on previous round not shown

ENERCON

Lead Wipe Re-Sample Locations
IFR (Round 4) 12-28-11

Project Number: ENMISC-2536

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 202941
Date Received: 12/28/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 12/29/2011

AIHA ID: 101352

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

Acct. No.: A845

Project: Marlow Armory
Location: Marlow OK 702 W Main
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	MA-F-01-R4	Wipe	Lead	364	16	ug/sq. Ft.	12/29/11 9:15	W EPA 7420 (1)
002	MA-F-02-R4	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/29/11 9:15	W EPA 7420 (1)
003	MA-F-03-R4	Wipe	Lead	<16.0	16	ug/sq. Ft.	12/29/11 9:15	W EPA 7420 (1)

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 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: 9497
Test: Lead

Date: 12/29/2011
Matrix: Wipe

Lab Number: 202941
Approved By: Benton Miller
Date Approved: 12/29/2011

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.9	5.5
FCV	4.5	4.9	5.5
ICV	0.8	1.2	1.2
RLVS	0.256	0.315	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	5.503	5.231	95.0	4.917	89.4	6.2

Authorized Signature: RTJ

Benton Miller, Analyst

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

Page 1 of 1

This Box for Lab Use Only
Lab No. 202941
Accept / Reject

Company Name: Envirocon Services Inc. Acct.#: _____ Project Name Marlow Armory

Project Location: Marlow, ok 702 W Main Project Number: _____

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt %	mg / kg	mg / l	ug / sq. ft	ug / cu M	mg / cm²
1.	MA-F-01-R4	Ceiling w/ pa	12X12	C								
2.	MA-F-02-R4	11	12X12	C								
3.	MA-F-03-R4	11	+	C								

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

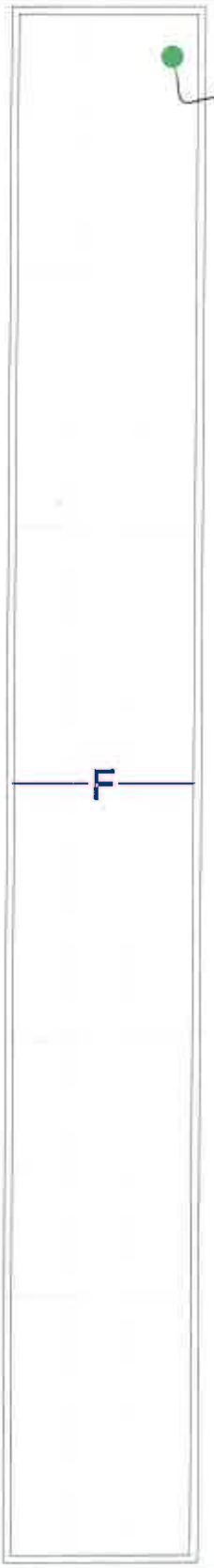
CONTACT INFORMATION
Name: Rich
Phone: 209637
Report Results VIA (CHOOSE ONE):
- FAX:
- X QuanTEM WebSite
- E-Mail:

Relinquished By	Date-Time	VIA	Received By	Date-Time	Date Sampled	Sampled By
	12/8/11-1350	H	BAC 220	12-28-11	12/8/11	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'

Revision May 2006

APPENDIX H



Note:
A,B,C, and D= Walls
E = Floor
F = Ceiling

N

Not to Scale

Oklahoma Department of Environmental Quality
Marlow Armory
702 W. Main.
Marlow, Ok.

Legend:

=Dust Wipe Sample Location Positive, > 200 ug / SF
=Dust Wipe Sample Location Negative,< 200 ug / SF

Note: Samples < 200ug / SF on previous round not shown

ENERCON

Lead Wipe Re-Sample Locations
IFR (Round 5) 1-5-12

Project Number: ENMISC-2536

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 203103
Date Received: 01/05/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 1/6/2012

AIHA ID: 101352

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

Acct. No.: A845

Project: Marlow Armory
Location: Marlow, OK
Project No.: ENMISC 2536

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	MA-F-01-R5	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/06/12 10:30	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: 9512
Test: Lead
Date: 1/6/2012
Matrix: Wipe
Lab Number: 203103
Approved By: Rebecca Sparks
Date Approved: 1/6/2012

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	5.5
FCV	4.5	4.9	5.5
ICV	0.8	1.2	1.2
RLVS	0.256	0.373	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	5.405	5.621	104.0	5.624	104.1	0.1
MS-W2	0.000	5.438	5.701	104.8	5.523	101.6	3.2

Authorized Signature: Rebecca Sparks

Rebecca Sparks, 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
www.quantem.com

This Box for Lab Use Only
Lab No. 203103
Accept / Reject

Company Name: Environ Services, Inc. Acct.#: Project Name: Marlow Armory

Project Location: Marlow, OK Project Number: EUMISC 2536

Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt %	mg / kg	mg / l	µg / sq ft	lb / cu in	mg / cm²
MA-F-01-RS	Ceiling	144in2	C	X					X		

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

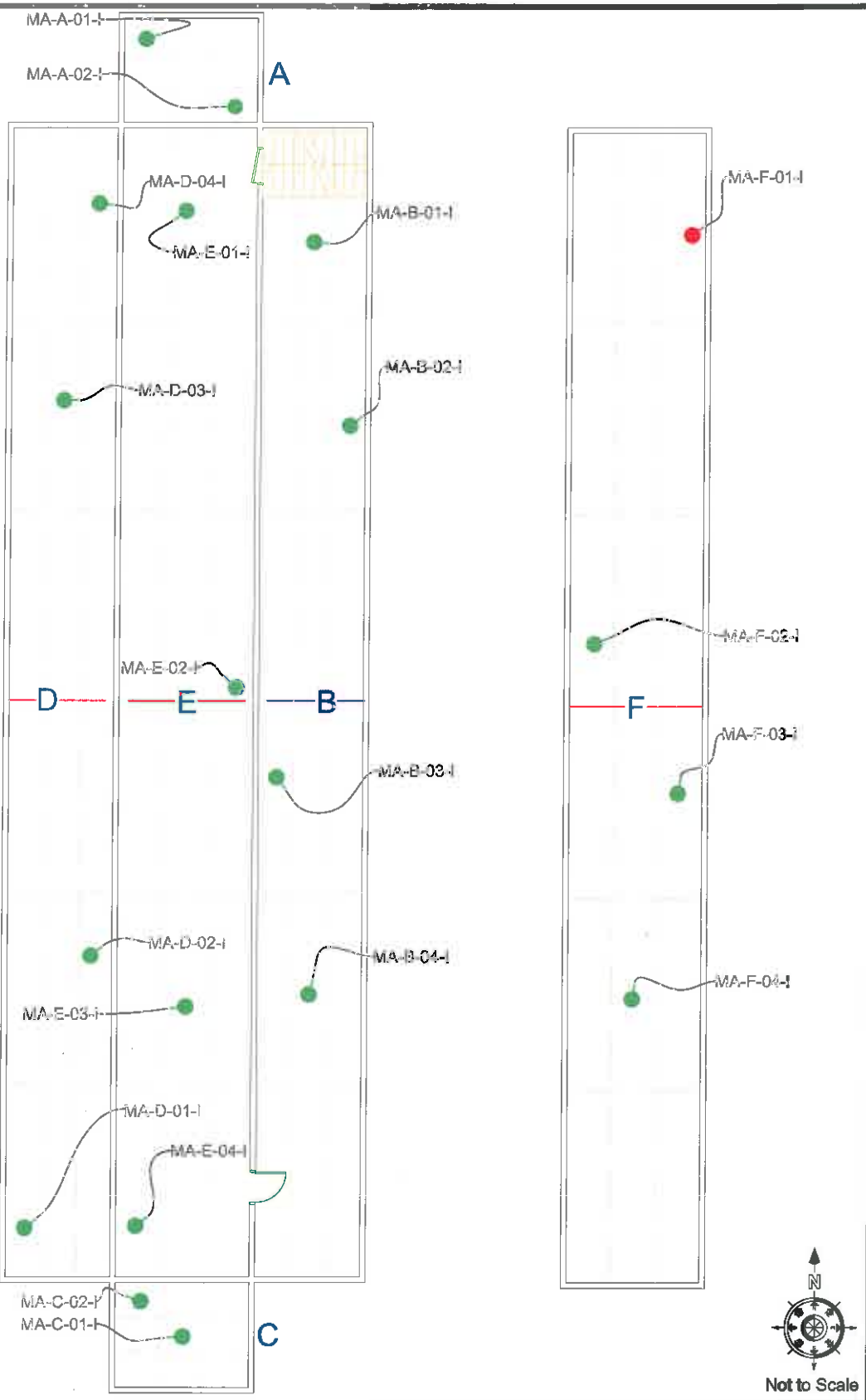
TURNAROUND TIME
- Same Day
- [X] 24 Hour
- 3-Day
- 5-day

CONTACT INFORMATION
Name: Marshall Branscum
Phone: 405-722-7693
Report Results VIA (CHOOSE ONE):
- FAX:
- [X] QuanTEM WebSite
- E-Mail:

Relinquished By / Date/Time	VIA	Received By / Date/Time	Date Received	Sampled By
Marshall Branscum / 1-5-2012 / 1238	Hand	SPeltwich 1/5/12 12:38	1-5-12	MLB

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 I



Note:
A,B,C, and D= Walls
E = Floor
F = Ceiling

Oklahoma Department of Environmental Quality
Marlow Armory
702 W. Main.
Marlow, Ok.

Legend:

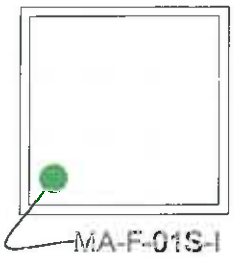
=Dust Wipe Sample Location Positive, > 40 ug / SF
=Dust Wipe Sample Location Negative,< 40 ug / SF

ENERCON

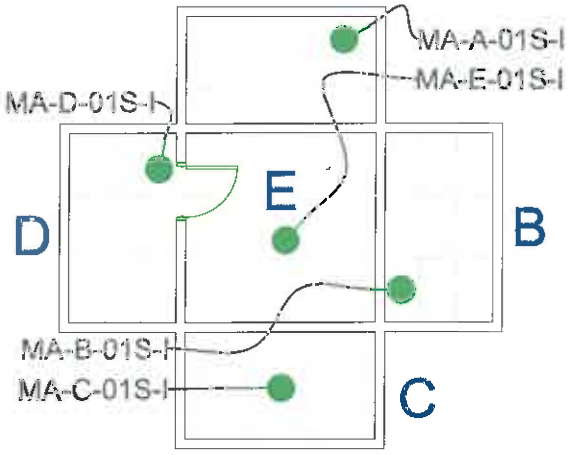
Lead Wipe Locations
IFR (Post Sealant) 1-11-12

Project Number: ENMISC-2536

Storage Ceiling
F



Storage
A



Note:
A,B,C, and D= Walls
E = Floor
F = Ceiling

Not to Scale

Oklahoma Department of Environmental Quality
Marlow Armory
702 W. Main.
Marlow, Ok.

Legend:

=Dust Wipe Sample Location Positive, > 40 ug / SF
=Dust Wipe Sample Location Negative,< 40 ug / SF

ENERCON

Lead Wipe Locations-Store room
(Post Sealant) Dates:1-11-12, 1-17-12

Project Number: ENMISC-2536

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 203603
Date Received: 01/20/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 1/20/2012

AIHA ID: 101352

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

Acct. No.: A845

Project: Marlow Armory
Location: Marlow, OK
Project No.: ENMISC2536

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	MA-A-01-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
002	MA-A-02-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
003	MA-B-01-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
004	MA-B-02-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
005	MA-B-03-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
006	MA-B-04-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
007	MA-C-01-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
008	MA-C-02-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
009	MA-D-01-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
010	MA-D-02-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
011	MA-D-03-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
012	MA-D-04-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
013	MA-E-01-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
014	MA-E-02-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
015	MA-E-03-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
016	MA-E-04-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
017	MA-F-01-I	Wipe	Lead	1,130	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)

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

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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: 203603
Date Received: 01/20/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 1/20/2012

AIHA ID: 101352

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

Acct. No.: A845

Project: Marlow Armory
Location: Marlow, OK
Project No.: ENMISC2536

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	MA-F-02-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
019	MA-F-03-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
020	MA-F-04-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
021	MA-A-01S-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
022	MA-B-01S-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
023	MA-C-01S-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
024	MA-D-O1S-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
025	MA-E-O1S-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)
026	MA-F-O1S-I	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/20/12 16:00	W EPA 7420 (1)

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 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: 9574 **Date:** 1/20/2012 **Lab Number:** 203603
Test: Lead **Matrix:** Wipe **Approved By:** Benton Miller
Date Approved: 1/20/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.8	5.5
FCV	4.5	4.7	5.5
ICV	0.8	1.1	1.2

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W3	0.000	5.514	5.275	95.7	5.214	94.6	1.2
MS-W2	0.000	5.460	5.341	97.8	6.089	111.5	13.1

Authorized Signature: _____

Benton Miller, 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. 203603
Accept (circled) Reject

Company Name: Enercon Services, Inc. Acct.#: ______ Project Name: Marlow Armory

Project Location: Marlow, OK Project Number: ENMFSC2536

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb				Units Requested: PPM	Wt %	mg / kg	mg / l	ug / sq. ft	ug / cu M	mg / cm²
1.	MA-A-01-I		144 in²	C	X								X		
2.	-A-02-I														
3.	-B-01-I														
4.	-B-02-I														
5.	-B-03-I														
6.	-B-04-I														
7.	-C-01-I														
8.	-C-02-I														
9.	-D-01-I														
10.	-D-02-I														
11.	-D-03-I														
12.	-D-04-I														
13.	-E-01-I														
14.	-E-02-I														
15.	-E-03-I														

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

- [X] Same Day
- [ ] 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 L. Branscum	1-20-2012/1053	Hand	[signature]	1-20-12 1053	1-17-12	MLB/RB
[signature]	1-20-12/1235		[signature]	1/20/12 12:45	1-17-12	

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'

Revision: May 2006

Lead Chain-of-Custody

QUANTEM LABORATORIES
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This Box for Lab Use Only
Lab No. 203603
Accep. Reject

Company Name: Erescon Acct.#: Project Name: Marlow Armory
Project Location: Marlow, OK Project Number: ENMSC 2536

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt. %	mg / kg	mg / l	µg / sq ft	µg / ml	mg / cm²
16.	MA-E-04-I		144in²	C	X					X		
17.	-F-01-I											
18.	-F-02-I											
19.	-F-03-I											
20.	-F-04-I											
21.	-A-01S-I											
22.	-B-01S-I											
23.	-C-01S-I											
24.	-D-01S-I											
25.	-E-01S-I											
26.	V-F-01S-I											

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

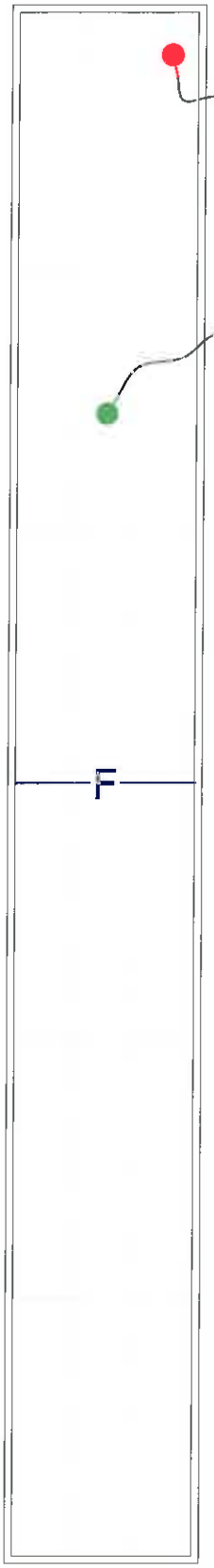
TURNAROUND TIME
- [X] Same Day
- [ ] 24 Hour
- [ ] 3-Day
- [ ] 5-day

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

Relinquished By	Date/Time	VIA	Received By	Date/Time	Date Received	Sampled By
Marshall Branscum	1-20-2012/1053		[illegible]	1-20-12/1053	1-11-12	MB/RB
			Stephanie Hall	1/20/12 12:45	1-11-12	

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 J



Note:
A,B,C, and D= Walls
E = Floor
F = Ceiling

N

Not to Scale

Oklahoma Department of Environmental Quality
Marlow Armory
702 W. Main.
Marlow, Ok.

Legend:

Dust Wipe Sample Location Positive, > 40 ug / SF

Dust Wipe Sample Location Negative,< 40 ug / SF

Note: Samples < 40ug / SF on previous round not shown

ENERCON

Lead Wipe Re-Sample Location
IFR (Post Sealant Round 1)1-30-12

Project Number: ENMISC-2536

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 203886
Date Received: 01/30/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 1/30/2012

AIHA ID: 101352

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

Acct. No.: A845

Project: Marlow Armory
Location: Marlow, OK
Project No.: ENMISC2536

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	MA-F-01-IR1	Wipe	Lead	61.5	16	ug/sq. Ft.	01/30/12 14:30	W EPA 7420 (1)
002	MA-F-02-IR1	Wipe	Lead	<16.0	16	ug/sq. Ft.	01/30/12 14:30	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: 9606
Test: Lead
Date: 1/30/2012
Matrix: Wipe
Lab Number: 203886
Approved By: Rebecca Sparks
Date Approved: 1/30/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.6	5.5
FCV	4.5	4.6	5.5
ICV	0.8	1.1	1.2

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W2	0.000	5.351	5.388	100.7	5.337	99.7	1.0

Authorized Signature: Rebecca Sparks
Rebecca Sparks, Analyst

Lead Chain-of-Custody

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Page 1 of 1

This Box for Lab Use Only
Lab No. 203886
Accept Reject

Company Name: Enercon Services, Inc. Acct.#: _____ Project Name: Marlow Armory

Project Location: Marlow, OK Project Number: EAMTSC 2536

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt %	mg / kg	mg / l	ug / sq. ft.	ug / cu. M	mg / cm²
1.	MA-F-01-IR1		1 ft²	C	X					X		
2.	MA-F-02-IR1		1 ft²	C	X					X		

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

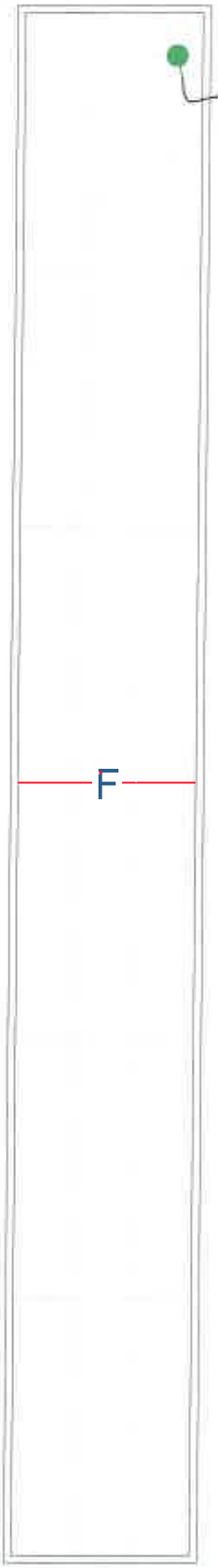
CONTACT INFORMATION
Name: Marshall Branscum
Phone: 722-7693
Report Results VIA (CHOOSE ONE):
- [ ] FAX:
- [X] QuanTEM WebSite
- [X] E-Mail: mbranscum@enercon.com

Relinquished By	Date/Time	VIA	Received By	Date/Time	Date Sampled	Sampled By
Marshall Branscum	1-30-2012/1212	Hand	L Hatley	1/30/12 1220	1-30-12	MLB

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'

Revision: May 2006

APPENDIX K



Note:
A,B,C, and D= Walls
E = Floor
F = Ceiling

N

Not to Scale

Oklahoma Department of Environmental Quality
Marlow Armory
702 W. Main.
Marlow, Ok.

Legend:

=Dust Wipe Sample Location Positive, > 40 ug / SF

=Dust Wipe Sample Location Negative,< 40 ug / SF

Note: Samples < 40ug / SF on previous round not shown

ENERCON

Lead Wipe Re-Sample Location
IFR (Post Sealant Round 2) 2-2-12

Project Number: ENMISC-2536

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 204014
Date Received: 02/02/12
Received By: Barbara Holder
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 2/2/2012

AIHA ID: 101352

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

Acct. No.: A845

Project: Marlow Armory
Location: N/A
Project No.: ENMISC2536

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	MA-F-01-IR2	Wipe	Lead	34.5	16	ug/sq. Ft.	02/02/12 16:00	W EPA 7420 (1)

Authorized Signature: Rebecca Sparks

Rebecca Sparks, 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 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: 9635 **Date:** 2/2/2012 **Lab Number:** 204014
Test: Lead **Matrix:** Wipe **Approved By:** Rebecca Sparks
Date Approved: 2/2/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.8	5.5
FCV	4.5	4.7	5.5
ICV	0.8	1.1	1.2
RLVS	0.256	0.319	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	5.449	5.883	108.0	5.899	108.3	0.3

Authorized Signature: Rebecca Sparks

Rebecca Sparks, Analyst

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For Lab Use Only
Lab No. 204014
Accept Reject

Contact Information		Project Information	
Company: Enercon Services, Inc	Phone: 802-5900	Project Name: Marlow Armory	
Contact: Marshall Branscum	Cell Phone: 802-5900	Project Location:	
Account #:	E-mail: mbranscum@enercon.com	Project ID: ENMTSC2536	

Report Results (☑ one box)
- [X] QuanTEM Website
- [ ] Other _____

Sampled By: Name: Marshall Branscum Date: 2-2-2012

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Marshall Branscum	2-2-12 1128	Hand		2-2-12 1128

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	MA-F-01-IR2			144in2	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"