Former National Guard Armory
Walters, Oklahoma

Remediation Final Report

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

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

The Oklahoma Department of Environmental Quality (DEQ) is pleased to present the Cotton County Free Fair Association with the Final Remediation Report for the former Walters 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 Walters 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 and mastic, window glazing, and pipe insulation and fittings.
- Asbestos Abatement, including:
  Removal of floor tile, mastic, windows and window glazing, and pipe insulation and fittings.

TARGETED BROWNFIELD ASSESSMENT

On August 22, 2013, DEQ provided a Phase I Targeted Brownfield Assessment to the City of Walters. 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:
  Removal of all overhead doors and tracks, all windows and ventilation frames, and all doors which contain LBP.
  Scraping and sealing interior and exterior metal overhead door frames, overhead door lintels, modified bollards, and edge protectors; window lintels, window sills, door lintels, and I-beams and bar joists in Drill Floor and Rooms 23, 24, & 25; ceilings of Rooms 23, 24, & 25; and wood board on wall in Drill Floor.
- Lead dust abatement, including:
  HEPA vacuuming and wet washing of floors in the building
- Proper disposal of associated waste

DEQ
OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY

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

DEEDS AND LEGAL DOCUMENTS

696

11-11665

I-2011-001665 Book 0369 Pg: 696
06/27/2011 2:11 pm Pg 0696-0697
Fee: $ 15.00 Doc: $ 0.00
Nikki Vardell - Cotton County Clerk
State of Oklahoma

QUITCLAIM DEED

KNOW ALL MEN BY THESE PRESENTS:

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

A tract of land commencing at a point 958.1 feet west of the Northeast corner of the Northeast Quarter of Section twenty-six (26), in Township two (2) South of Range eleven (11) West of the Indian Meridian; thence south a distance of three hundred and fifty (350) feet; thence west a distance of two hundred and fifty (250) feet; thence north a distance of three hundred and fifty (350) feet; thence east a distance of two hundred and fifty (250) feet to the point of beginning.

NUM. INDEX

JOURNAL

together with the improvements thereon and appurtenances thereunto belonging.

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

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

Signed and delivered this 15 day of June 2011.

STATE OF OKLAHOMA

COUNTY CLERK SEAL COTTON COUNTY, OKLAHOMA

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

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

I-2011-001665 Book 0369 Pg: 697
06/27/2011 2:11 pm Pg 0696-0697
Fee: $ 15.00 Doc: $ 0.00
Nikki Vardell - Cotton County Clerk
State of Oklahoma

ACKNOWLEDGMENT

STATE OF OKLAHOMA)
) ss
COUNTY OF OKLAHOMA)

Before me, Jennifer Meyer in and for this state, on this 15 day of June, 2011, personally appeared Major General Myles L. Deering, as Adjutant General of the State of Oklahoma, to me known to be the identical person who executed the within and foregoing Quitclaim Deed, and acknowledged to me that he executed the same as free and voluntary act and deed for the uses and purposes therein set forth.

Jennifer Meyer
Notary Public

NOTARY PUBLIC IN AND FOR STATE OF OKLAHOMA

My Commission Expires:

Commission Number:
04002685

Return:

Amber Corbin
3501 Military Circle
Oklahoma City, OK 73111

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

512

14-1538

DEED NOTICE

COMPLETION OF REMEDIATION
FORMER WALTERS ARMORY
WALTERS, OKLAHOMA

AFFECTED PROPERTY: The Affected Property is the former Walters Armory located at 608 West Missouri Street, City of Walters, Cotton County, Oklahoma, 73527.

The legal description of the Affected Property is as follows:

A tract of land commencing at a point of 958.1 feet west of the Northeast corner of the Northeast Quarter of Section twenty-six (26), in Township Two (2) South of Range eleven (11) West of the Indian Meridian; thence south a distance of three hundred and fifty (350) feet; thence west a distance of two hundred and fifty (250) feet; thence north a distance of three hundred and fifty (350) feet; thence east a distance of two hundred and fifty (250) feet to the point of beginning.

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

REASON FOR NOTICE: The Affected Property was contaminated with materials that required remediation pursuant to state and federal environmental laws and regulations. Sampling performed by DEQ contractors, conducted on November 1, 2011, indicated that there was asbestos, lead-based paint, and lead dust in the building.

REMEDY: Remediation activities ("Remedy") at the Affected Property included abatement of asbestos, lead-based paint and dust. The remedy was completed on April 28, 2014.

I-2014-001538 Book 0388 Pg: 513
05/12/201412 17 pm Pg 0512-0514
Fee: $ 17.00 Doc. $ 0.00
Nikki Vardell - Cotton County Clerk
State of Oklahoma

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

Oklahoma Department of Environmental Quality
Central Records

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

Physical Address
707 N Robinson
Oklahoma City, OK 73102

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

DISCLAIMER:

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

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

CONTINUING OPERATION, MAINTENANCE AND MONITORING:

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

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

5-5-14
Date

514

I-2014-001538 Book 0388 Pg: 514
05/12/201412:17 pm Pg 0512-0514
Fee: $ 17.00 Doc: $ 0.00
Nikki Vardell - Cotton County Clerk
State of Oklahoma

Walters Armory

ACKNOWLEDGMENT

STATE OF OKLAHOMA
COUNTY OF OKLAHOMA

Before me, a Notary Public, in and for said County and State, on this 5th day of May 2014, personally appeared Scott A. Thompson to me known to be the identical person who executed the within and foregoing instrument and acknowledged to me that executed the same as free and voluntary act and deed for the uses and purposed therein set forth. In Testimony Whereof, I have hereunto set my hand and official seal the day and year above written.

My Commission expires:

January 17, 2016.

Teresa McPherson
Notary Public

TERESA MCPHERSON
Notary Public
State of Oklahoma
Commission # 09007751 Expires 01/17/16

MAINTENANCE PLAN

MAINTENANCE PLAN
FORMER WALTERS ARMORY
WALTERS, OKLAHOMA

The Armory located at 608 West Missouri Street, Walters, 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 November 1, 2011, indicated that there was asbestos, lead-based paint, and lead dust in the building. Remediation activities at the Affected Property included abatement of asbestos, lead-based paint, and lead dust. The remedy was completed on April 28, 2014. The following maintenance plan is to be completed by the owner of the Affected Property. DEQ recommends inspection of remediated areas every 5 years. During site inspections the owner should note any signs of disrepair or improper maintenance. Continuing operation, maintenance and monitoring should include:

1. All window lintels, window sills, and the door lintels in the Drill Floor and Rooms 23, 24, and 25 were scraped and encapsulated with lead-based paint encapsulant. These surfaces need to be re-encapsulated if lead-based paint encapsulant shows signs of deterioration, damage, or flaking. See Attachment 2 for Walters Armory Floor Plan Map.
2. All interior and exterior metal overhead door frames, overhead door lintels, modified bollards, and edge protectors were scraped and encapsulated with lead-based paint encapsulant. These surfaces need to be re-encapsulated if lead-based paint encapsulant shows signs of deterioration, damage, or flaking.
3. The wood board on top of the wall in the Drill Floor, all I-Beams and ceilings of Rooms 23, 24, and 25, and all bar joists in the Drill Floor were scrapped and encapsulated with lead-based paint encapsulant. These surfaces need to be re-encapsulated if lead-based paint encapsulant shows signs of deterioration, damage, or flaking. See Attachment 2 for Walters Armory Floor Plan Map.

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

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

Sincerely,

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

ATTACHMENT 1

Land use Restrictions

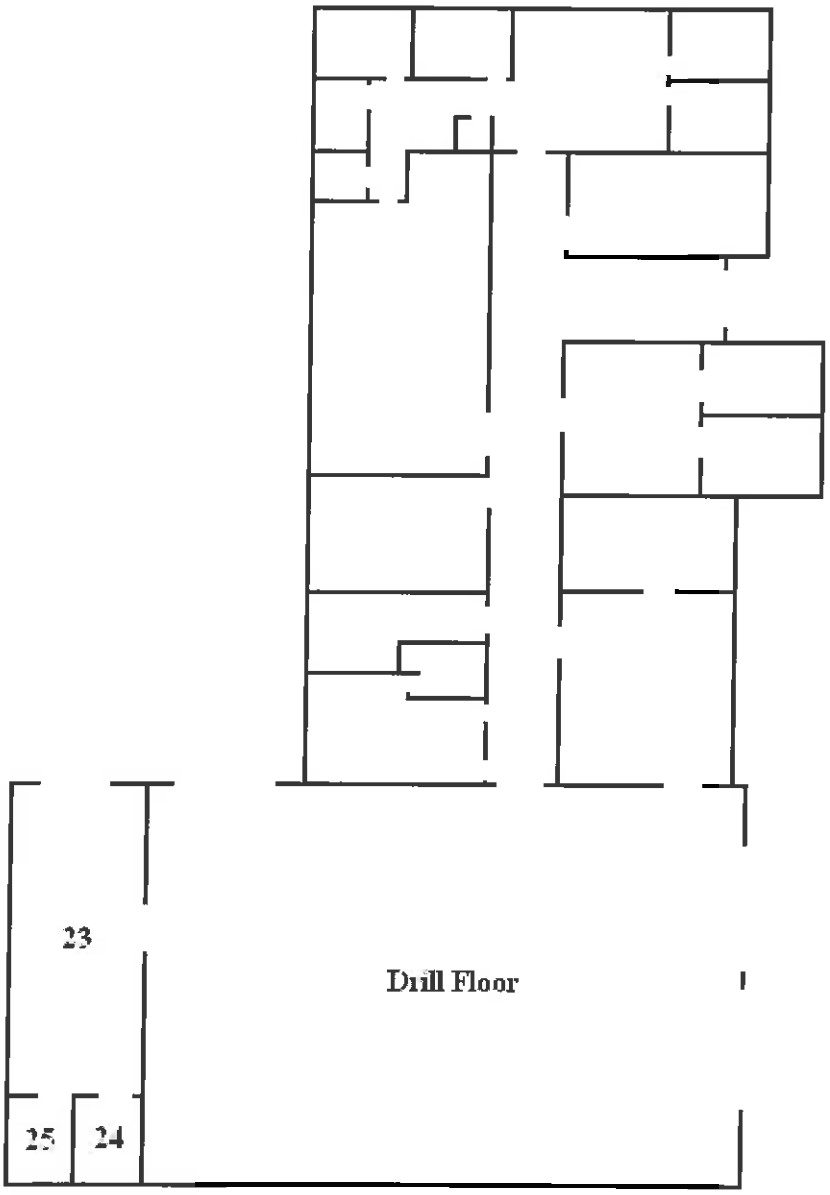
LAND USE RESTRICTIONS: The land use restrictions at the above-described Affected Property are:

There are no land use restrictions that apply to this property.

ATTACHMENT 2

Floor Plan Map

Labeled areas represent locations with encapsulant and/or sealant.



Not to scale
Floor plan approximate

ATTACHMENT 3

DEQ Approved Sealants and Encapsulants List

Acrylic Sealant approved by DEQ

KM-669 Acrylic

Lead-Based Paint Encapsulants approved by DEQ

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

INSPECTION REPORTS

ENERCON

Excellence – Every project, Every day

ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY
608 WEST MISSOURI
WALTERS, OKLAHOMA

Enercon Project Number – ENMISC2509

May 3, 2012

Prepared for:

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

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

Inspected By:

Richard D. Belcher
AHERA Asbestos Inspector OK-159310

Reviewed By:

Emmett W. Muenker
AHERA Asbestos Management Planner OK-MP130435

Table of Contents

ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY
608 WEST MISSOURI
WALTERS, OKLAHOMA

Executive Summary

An asbestos survey of the National Guard Armory, 608 West Missouri, Walters, Oklahoma was conducted on November 1, 2011. The armory consisted of a single building with a large drill room on the south portion with an office wing north of the drill room. During the survey, a total of 48 bulk samples were collected from 20 homogeneous areas. A summary of the asbestos-containing building materials (ACBMs) is provided below.

Summary of Asbestos-Containing Building Materials

MATERIAL CATEGORY	MATERIAL DESCRIPTION	TOTAL APPROXIMATE AMOUNT
FRIABLE	Asbestos Piping Asbestos Pipe Fittings	250 LF 25 EA
CATEGORY I NON-FRIABLE	Floor Tiles/Black Mastic Window Glazing	550 SF 100 LF
CATEGORY II NON-FRIABLE	Corrugated Transite® Roof Panels	4,700 SF

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

Recommended actions for planned renovation:

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

Recommended actions prior to planned demolition:

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

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

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

ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY
608 WEST MISSOURI
WALTERS, OKLAHOMA

1.0 INTRODUCTION

An asbestos survey of the National Guard Armory, 608 West Missouri, Walters, Oklahoma was conducted on November 1, 2011. The armory consisted of a single building with a large drill room on the south portion with an office wing north of the drill room. The inspection was performed by Richard Belcher, AHERA Inspector OK-159310. Appendix A contains a copy of the Inspector's License.

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

2.0 SURVEY PROCEDURES

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

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

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

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

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

3.0 SURVEY RESULTS

During the survey, a total of 48 bulk samples were collected from 20 homogeneous areas. A summary of the asbestos-containing building materials (ACBMs) is provided below. Appendix B contains site layouts with sample and asbestos locations. Appendix C contains the laboratory reports of analyses/chains of custody.

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

Table 1
Summary of Asbestos Containing Building Materials

MATERIAL CATEGORY	MATERIAL DESCRIPTION	TOTAL APPROXIMATE AMOUNT
FRIABLE	Domestic Water Piping Insulation Domestic Water Fitting Insulation	250 LF 25 EA
CATEGORY I NON-FRIABLE	Floor Tiles/Black Mastic Window Glazing	550 SF 100 LF
CATEGORY II NON-FRIABLE	Corrugated Transite® Roof Panels	4,700 SF

SF=Square Feet; LF=Linear Feet

Table 2
Bulk Material Samples & Laboratory Analytical Results

SAMPLE ID	DESCRIPTION & LOCATION	APPROX. AMOUNT	ASBESTOS TYPE/ PERCENT
WA-01-01,02	2x4 White Ceiling Tiles	NQ	None Detected
WA-02-01,02	12x12 Cream Floor Tiles	NQ	None Detected
WA-03-01,02	12x12 Gray Floor Tiles	NQ	None Detected
WA-04-01,02	12x12 Peach/Green Floor Tiles	NQ	None Detected
WA-05-01,02	12x12 Peach/Green over Tan 12 x12 Floor Tiles	NQ	None Detected
WA-06-01	**Window Glazing**	**100 LF**	**2% Chrysotile**
WA-07-01,02,03	**Domestic Cold Water Line Insulation-Office**	**125 LF**	**30-40% Chrysotile**
WA-08-01,02,03	**Domestic Cold Water Fittings-Office Wing**	**13 LF**	**7-10% Chrysotile**
WA-09-01,02,03	White Wall Texture	NQ	None Detected
WA-10-01,02	Drywall	NQ	None Detected
WA-11-01,02, 03	Drywall Joint Compound	NQ	None Detected
WA-12-01,02, 03	**Domestic Hot Water Line Insulation-Office Wing**	**125 LF**	**45-55% Chrysotile**
WA-13-01,02,03	**Domestic Hot Water Fittings-Office Wing**	**12 EA**	**8-10% Chrysotile**
WA-14-01,02	Carpet Mastic	NQ	Not Detected
WA-15-01,02	**Gray 9x9 Floor Tiles/Black Mastic-Rooms 11-13**	**550 SF**	**3-8% Chrysotile**
WA-16-01,02,03	Wall Texture	NQ	None Detected
WA-17-01,02,03	Ceiling Texture	NQ	None Detected
WA-18-01,02	Joint Compound	NQ	None Detected
WA-19-01,02	Dry Wall	NQ	None Detected
WA-20-01,02	Roofing/Ceiling material	NQ	None Detected
WA-21-PACM	**Corrugated Transite® Roof Panels-Drill Room**	**4,700 SF**	**30%-40%Chrysotile**

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

4.0 CONCLUSIONS & RECOMMENDATIONS

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

Friable Asbestos-Containing Materials:

- Domestic Hot and Cold Water Line and Fitting Insulation: Approximately 250 LF of piping with approximately 25 fittings in good condition were present above ceilings and inside walls/chases.

Non-friable Asbestos-Containing Materials:

- Floor Tiles/Black Mastic: Approximately 550 SF of asbestos-containing black mastic was present beneath non-asbestos floor tiles and/or carpet in the Computer lab, FDC, and ALOC/NBC rooms (Rooms 11, 12 and 13).

- Window Glazing: Approximately 100 LF of widow glazing was present on the exterior windows.

- Corrugated Transite® Roof Panels: The roof above the drill room consisted of approximately 4,700 SF of corrugated Transite® roof panels.

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

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

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

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

Recommendations for Non-friable Asbestos-containing Materials: The only non-friable asbestos present was black floor tile mastic located beneath non-asbestos floor tiles and the corrugated Transite® roof over the drill room. These materials containing asbestos are not regulated unless they are disturbed in a manner that renders them friable. However, if they are to be removed, removal may only be performed by workers who are properly trained. Removal of the floor tiles will disturb the mastic; therefore, both the tiles and mastic must be removed by properly trained personnel. The following actions are recommended for addressing non-friable materials:

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

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

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

APPENDIX A

FEE: $25.00

Oklahoma Department of Labor

Richard Belcher

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

AHERA INSPECTOR

Now, therefore, The Commissioner of Labor of the State of Oklahoma, by virtue of
the power vested in him by law hereby issues to the
applicant license **No. OK159310.**

Mark Costello

MARK COSTELLO
Commissioner of Labor

August 31, 2011
Date of Issuance

EXPIRES: August 31, 2012

FEE: $500.00

Oklahoma Department of Labor

Emmett Muenker

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

AHERA MANAGEMENT PLANNER

Now, therefore, The Commissioner of Labor of the State of Oklahoma, by virtue of the power vested in him by law hereby issues to the applicant license **No. OK-MP130435.**

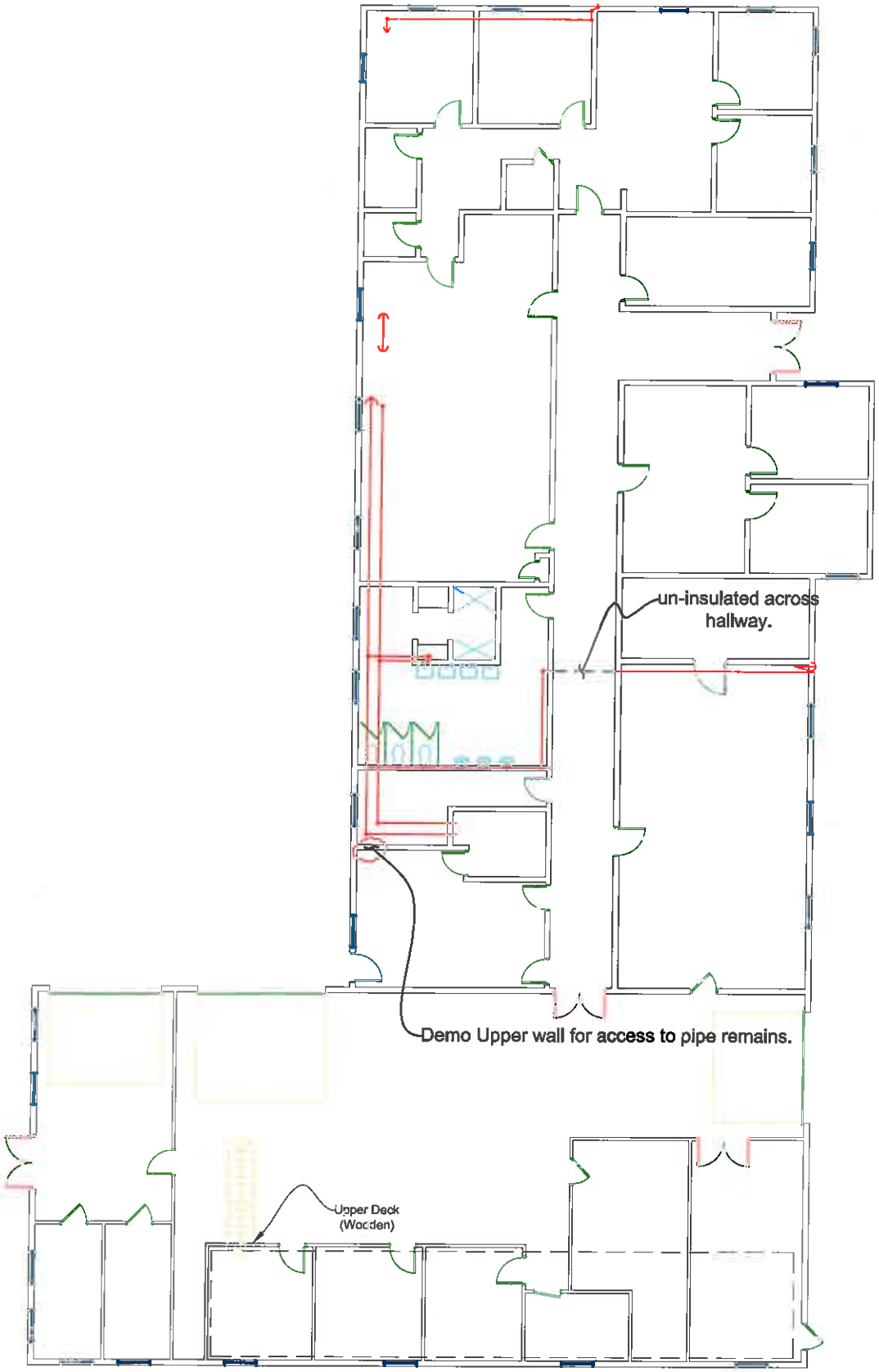
Mark Costello

MARK COSTELLO
Commissioner of Labor

March 14, 2011
Date of Issuance

EXPIRES: March 04, 2012

APPENDIX B



Walters Armory
Walters, Ok.
Main Building

Legend:
= ACM Piping @ 250 LF
= ACM Piping Fittings @ 25 each.

ENERCON

Asbestos Piping Locations

Drawn By: Richard Belcher

Walters Armory
Walters, Ok.
Main Building

Legend:

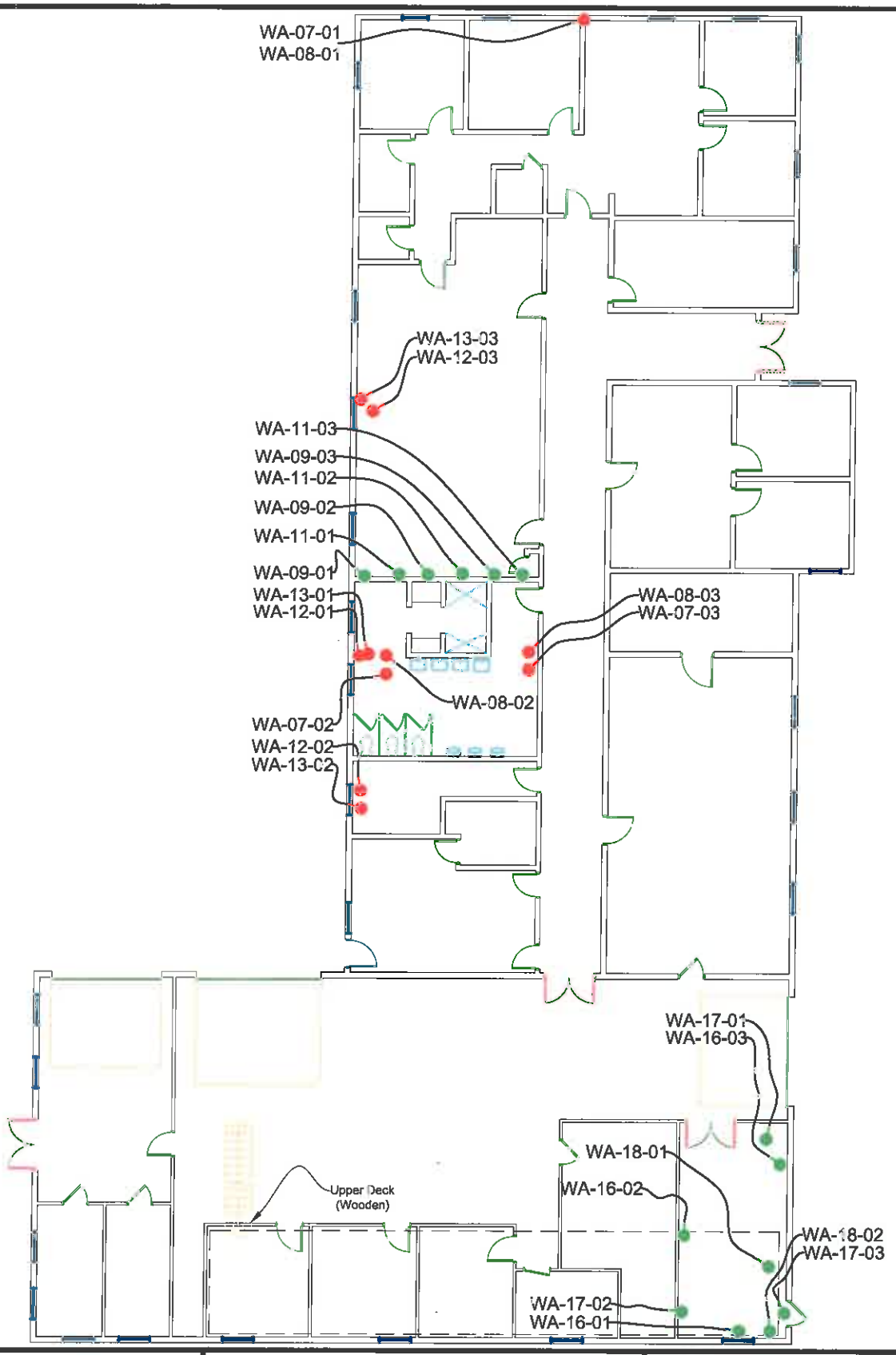
= ACM Floor tile / mastic @ 550 SF(under carpet)

= Transite roofing Panels @ 4,700 SF

ENERCON

Miscellaneous Asbestos Locations

Drawn By: Richard Belcher



Walters Armory
Walters, Ok.
Main Building

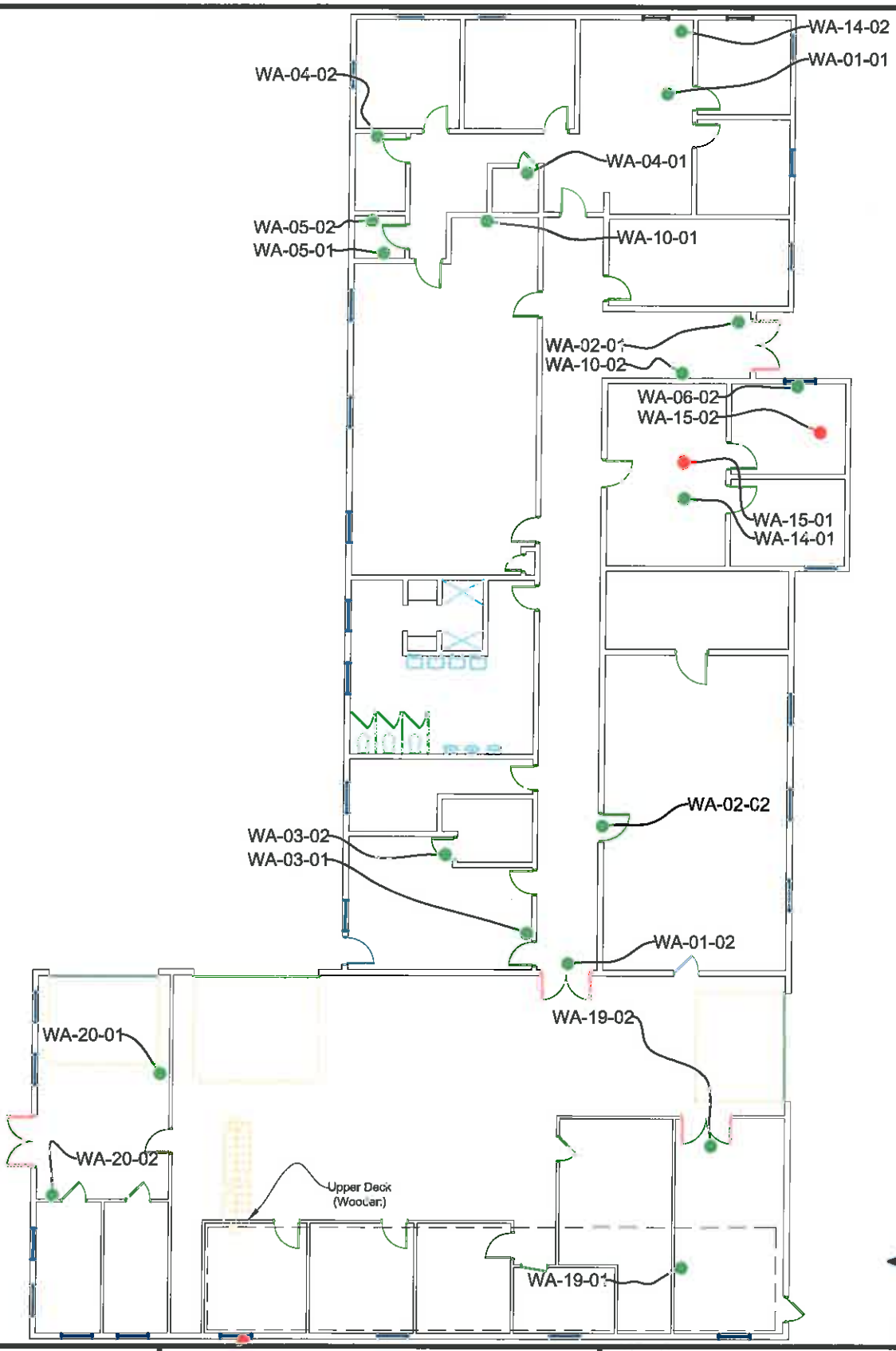
Legend:

- = Positive Sample Location
- = Negative Sample Location

ENERCON

Friable Asbestos
Sample Locations

Drawn By: Richard Belcher



Walters Armory
Walters, Ok.
Main Building

Legend:

- = Positive Sample Location
- = Negative Sample Location

ENERCON

Miscellaneous Asbestos Sample Locations

Drawn By: Richard Belcher

APPENDIX C

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
001	WA-1-01	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose Glass Fiber	30 30	Binder Perlite
002	WA-1-02	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose Glass Fiber	30 30	Paint Perlite
003	WA-2-01	Layered	Cream Floor Tile	Asbestos Not Present	NA		Vinyl CaCO3
003a		Layered	Yellow Mastic	Asbestos Not Present	NA		Glue
003b		Layered	Gray Leveling Compound	Asbestos Not Present	Cellulose	2	CaCO3 Binder
004	WA-2-02	Layered	Cream Floor Tile	Asbestos Not Present	Cellulose	3	Vinyl CaCO3
004a		Layered	Yellow Mastic	Asbestos Not Present	NA		Glue

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

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
004b		Layered	Gray Leveling Compound	Asbestos Not Present	NA	Quartz CaCO3 Binder
005	WA-3-01	Layered	Beige Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
005a		Layered	Yellow Mastic	Asbestos Not Present	NA	Glue
006	WA-3-02	Layered	Beige Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
006a		Layered	Yellow Mastic	Asbestos Not Present	NA	Glue
007	WA-4-01	Layered	Pink Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
007a		Layered	Yellow Mastic	Asbestos Not Present	NA	Glue

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

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
008	WA-4-02	Layered	Pink Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
008a		Layered	Yellow Mastic	Asbestos Not Present	NA	Glue
008b		Layered	Gray Leveling Compound	Asbestos Not Present	NA	CaCO3 Binder
009	WA-5-01	Layered	Pink Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
009a		Layered	Yellow Mastic	Asbestos Not Present	Cellulose <1	Glue
009b		Layered	White Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
009c		Layered	Yellow Mastic	Asbestos Not Present	NA	Glue

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

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
010	WA-5-02	Layered	Pink Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
010a		Layered	Yellow Mastic	Asbestos Not Present	Cellulose <1	Glue
010b		Layered	White Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
010c		Layered	Yellow Mastic	Asbestos Not Present	NA	Glue
011	WA-6-01	Homogeneous	Gray Window Glazing	Asbestos Present Chrysotile 2	NA	CaCO3 Binder
012	WA-6-02	Layered	Gray Caulk	Asbestos Not Present	NA	CaCO3 Binder
012a		Layered	Red Window Glazing	Asbestos Not Present	NA	CaCO3 Binder

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

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
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Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
013	WA-7-01	Layered	Gray Pipe Insulation	Asbestos Present Chrysotile 40	Cellulose 15	Binder
013a		Layered	Tan Pipe Insulation	Asbestos Not Present	Cellulose 95	Binder
014	WA-7-02	Layered	Gray Pipe Insulation	Asbestos Present Chrysotile 35	Cellulose 20	Binder
014a		Layered	Tan Pipe Insulation	Asbestos Not Present	Cellulose 95	Binder
015	WA-7-03	Layered	Gray Pipe Insulation	Asbestos Present Chrysotile 35	Cellulose 35	Binder
015a		Layered	Tan Pipe Insulation	Asbestos Not Present	Cellulose 95	Binder
015b		Layered	Black Tar Paper	Asbestos Not Present	Cellulose 35	Tar

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

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2068

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
016	WA-8-01	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 7	Glass Fiber 25	CaCO3 Binder
017	WA-8-02	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 8	Glass Fiber 25	CaCO3 Binder
018	WA-8-03	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 10	Glass Fiber 25	CaCO3 Binder
019	WA-9-01	Homogeneous	White Wall Texture	Asbestos Not Present	Cellulose <1	CaCO3 Paint
020	WA-9-02	Homogeneous	White Wall Texture	Asbestos Not Present	NA	CaCO3 Paint
021	WA-9-03	Homogeneous	White Wall Texture	Asbestos Not Present	Cellulose <1	CaCO3 Paint
022	WA-10-01	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose 3	Gypsum

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

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
023	WA-10-02	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose 3	Gypsum
024	WA-11-01	Homogeneous	White Joint Compound	Asbestos Not Present	NA	CaCO3 Binder
025	WA-11-02	Homogeneous	White Joint Compound	Asbestos Not Present	NA	CaCO3 Binder
026	WA-11-03	Homogeneous	White Joint Compound	Asbestos Not Present	NA	CaCO3 Binder
027	WA-12-01	Layered	Gray Pipe Insulation	Asbestos Present Chrysotile 45	Cellulose 15	Binder
027a		Layered	Tan Pipe Insulation	Asbestos Not Present	Cellulose 95	Binder
028	WA-12-02	Layered	Gray Pipe Insulation	Asbestos Present Chrysotile 45	Cellulose 20	Binder

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

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
028a		Layered	Tan Pipe Insulation	Asbestos Not Present	Cellulose	95	Binder
028b		Layered	Black Tar Paper	Asbestos Not Present	Cellulose	35	Tar
029	WA-12-03	Layered	Gray Pipe Insulation	Asbestos Present Chrysotile 55	Cellulose	10	Binder
029a		Layered	Tan Pipe Insulation	Asbestos Not Present	Cellulose	95	Binder
030	WA-13-01	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 10	Glass Fiber	25	CaCO3 Binder
031	WA-13-02	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 10	Glass Fiber	25	CaCO3 Binder
032	WA-13-03	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 8	Glass Fiber	25	CaCO3 Binder

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

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
033	WA-14-01	Homogeneous	Yellow Carpet Mastic	Asbestos Not Present	NA	Glue
034	WA-14-02	Homogeneous	Yellow Carpet Mastic	Asbestos Not Present	NA	Glue
035	WA-15-01	Layered	Yellow Mastic	Asbestos Not Present	NA	Glue
035a		Layered	Gray Floor Tile	Asbestos Present Chrysotile 8	NA	Vinyl CaCO3
035b		Layered	Black Mastic	Asbestos Present Chrysotile 3	NA	Tar
036	WA-15-02	Layered	Yellow Mastic	Asbestos Not Present	NA	Glue
036a		Layered	Gray Floor Tile	Asbestos Present Chrysotile 8	NA	Vinyl CaCO3

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

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2068

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
036b		Layered	Black Mastic	Asbestos Not Present	NA	Tar
037	WA-16-01	Homogeneous	White Wall Texture	Asbestos Not Present	NA	CaCO3 Paint
038	WA-16-02	Homogeneous	White Wall Texture	Asbestos Not Present	NA	CaCO3 Paint
039	WA-16-03	Homogeneous	White Wall Texture	Asbestos Not Present	NA	CaCO3 Paint
040	WA-17-01	Homogeneous	White Ceiling Texture	Asbestos Not Present	NA	CaCO3 Paint
041	WA-17-02	Homogeneous	White Ceiling Texture	Asbestos Not Present	NA	CaCO3 Paint
042	WA-17-03	Homogeneous	White Ceiling Texture	Asbestos Not Present	NA	CaCO3 Paint

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

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
043	WA-18-01	Homogeneous	White Joint Compound	Asbestos Not Present	NA		CaCO3 Binder
044	WA-18-02	Homogeneous	White Joint Compound	Asbestos Not Present	NA		CaCO3 Binder
045	WA-19-01	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	10	Gypsum
046	WA-19-02	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	20	Gypsum
047	WA-20-01	Homogeneous	White KAYLO Block	Asbestos Not Present	Cellulose	<1	Gypsum
048	WA-20-02	Homogeneous	White KAYLO Block	Asbestos Not Present	Cellulose	<1	Gypsum

Gayle Ooten, Analyst

11/14/2011
Date of Report

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

QUANTEM LABORATORIES

Asbestos Chain-of-Custody

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

This Box for Lab Use Only
Lab No. 201394
Accept (circled) Reject

Company Name: Envirom Services Inc Acct.#: B

Project Name: Walters Armory ~~[illegible]~~

Project Location: Walters, OK 608 W-Missouri

Project Number:

	Sample Number	To Be Analyzed	Color / Description	Volume / Area (if applicable)	Comments
1	WA-1-01		2X4 White CT		
2	02				
3	WA-2-01		1X1 Cream/tan FT		
4	02		"		
5	WA-3-01		Gray/tan 1X1 FT		
6	02		"		
7	WA-4-01		Peach/brown 1X1 FT		
8	02		"		
9	WA-5-01		Peach/brown over Tan 1X1 FT		(2 Layers)
10	02		"		"
11	WA-6-01		Window Calking		Bay
12	02		"		NE corner
13	WA-7-01 ✓		Pipe Insulation		Cold
14	02 ✓		"		"
15	03		"		"
16	WA-8-01 ✓		Pipe Fitting		Cold
17	02 ✓		"		"
18	03		"		"
19	WA-9-01		Wall tex		Knockdown
20	02		"		"

LEGAL DOCUMENT
Please Print Legibly

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

PCM	
	NIOSH 7400
	Other

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

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

CONTACT INFORMATION
Name: Rich
Phone: 209 9677
Report Results VIA (CHOOSE ONE):
[ ] FAX
[X] QuanTEM WebSite
[ ] E-Mail

Relinquished by	Date/Time	Via	Received by	Date/Time	Date Sampled	Sampled By
[signature]	11-1-11 1600	H	M. Bussmann	11-1-11 1600	11/1/11	RB
M. Bussmann	11-3-11 / 1025	Hd	[signature]	1025 11-3-11		

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 2008

QUANTEM LABORATORIES

Asbestos Chain-of-Custody

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

This Box for Lab Use Only
Lab No. 201394
Acct# Rate

Company Name: Emerson Services Inc Acct.#: B Project Name: Walters Warren

Project Location: Walters OK 109 W Missouri Project Number:

Sample Number	To Be Analyzed	Color / Description	Volume / Area (if applicable)	Comments
WA-9-03				
WA-10-01		Drywall		
02		"		
WA-11-01		Drywall Joint Compound		
02		"		
03				
WA-12-01	✓	Pipe Insulation		HOT
02		"		"
03				
WA-13-01	✓	Pipe Fitting		Hot
02		"		"
03				
WA-14-01		Carpet Mastic (Tan)		
02		"		
WA-15-01		Tan/Black 9x9 FT		Under Carpet
02		"		
WA-16-01		Wall Tex		Popcorn
02		"		"
03				

LEGAL DOCUMENT
Please Print Legibly

PLM	
X	Bulk Analysis (EPA 600/R-93/116)
	400 Point Count
	1000 Point Count
	Gravimetric Preparation Fee
	Other

PCM	
	NIOSH 7400
	Other

TEM	
	Air - AHERA
	Air - NIOSH 7402
	Bulk - Qualitative (Yes / No) - EPA 600/R-93/116
	Bulk - Quantitative (weight %) - Chatfield
	Dust - Qualitative (Yes / No)
	Dust - Quantitative (fibers/sq cm) - ASTM D6785
	Drinking Water - EPA 100.2
	Waste Water - EPA 600/4-83-043
	Other

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

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

Relinquished By	Date/Time	VIA	Received By	Date/Time	Date Received	Received By:
[signature]	11-11 1600	H	[signature]	11-11 1600	11/11	RB
[signature]	11-3-11 1025	[illegible]	[signature]	11-3-11		

Saturday FedEx Shipping - CALL TO SCHEDULE
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QUANTEM LABORATORIES

Asbestos Chain-of-Custody

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

This Box for Lab Use Only
Lab No. 201394
Accept Reject

Company Name: Emerson Services Acct.#: B
Project Location: Walters PS 608 W Missouri
Project Name: Walters Armory
Project Number:

	Sample Number	To Be Analyzed	Color / Description	Volume / Area (if applicable)	Comments
)	WA-17-01		Ceiling Tex		
1	02		''		
2	03				
3	WA-18-01		Joint Compound		
4	02		''		
5	WA-19-01		Dry Wall		Wall
6	02		''		Ceiling
7	WA-20-01		Roofing/ceiling mastic		[illegible]
8	02		''		''

LEGAL DOCUMENT
Please Print Legibly

PLM
- [X] Bulk Analysis EPA/600/R-93/116
- [ ] 400 Point Count
- [ ] 1000 Point Count
- [ ] Gravimetric Preparation Fee
- [ ] Other

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

PCM
- [ ] NIOSH 7400
- [ ] Other

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

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

Relinquished by	Date/Time	QA	Received by	Date/Time	Date Sampled	Sampled by
[illegible signature]	11-1-11 1600	H	M Bunton	11-1-11 1600	11/1/11	Rb
M Bunton	11-3-11 1025		[illegible signature]	1025A 11-3-11		

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SURVEY AND ASSESSMENT FOR LEAD IN PAINT AND SETTLED DUST

NATIONAL GUARD ARMORY
608 WEST MISSOURI STREET
WALTERS, OKLAHOMA 73572

ENERCON Project Number ENMISC2509
April 5, 2012

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

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

Marshall L. Branscum
Environmental Scientist
LBP Inspector, OKINSR13415
OKRASR11260

Reviewed By :

Emmett W. Muenker
Senior Project Manager
LBP Risk Assessor,

TABLE OF CONTENTS

SECTION **PAGE**

APPENDICES

EXECUTIVE SUMMARY

Enercon Services, Inc. (ENERCON) has completed a Survey and Assessment for Lead in Paint and Settled Dust (Survey) at the Walters National Guard Armory, 608 West Missouri Street, Walters, Oklahoma. The survey was conducted on November 1, 2011 by Mr. Marshall Branscum of ENERCON.

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

The results of XRF sampling indicated the following:

- Interior: All metal roll-up door frames; the brown door frame in Room 23; the black door frame in Room 15; the gray door, metal bar joists, lintel on Side C and the wood boards at the top of the wall on Sides B and D in Room 16; the white-painted lintel on Side B, Room 16; and the I-beam and kaylo ceiling in Room 23 were coated with LBP.

- Exterior: All metal roll-up doors; all yellow window frames on Sides B, C and D of the drill room end of the building; the red-painted metal modified bollards on Sides A and D; the yellow-painted metal edge protectors on Sides A and D; the yellow-painted metal roll-up door lintel on Sides A and D; the yellow-painted wood and metal window lintels on Sides B, C and D; the brown-painted metal door lintel on Side D; the yellow-painted metal roll-up door lintels; and the gray-painted wood window lintels on Side D were coated with LBP.

The results of wipe samples collected from the floors revealed:

- Lead contamination above 40 $\mu g/ft^2$ was present in ten rooms; specifically, Rooms 14, 16, 17, 18, 19, 20, 21, 23, 24, and 25.

1.0 INTRODUCTION

Enercon Services, Inc. (ENERCON) has completed a Survey and Assessment for Lead in Paint and Settled Dust (Survey) at the Walters National Guard Armory, 608 West Missouri Street, Walters, Oklahoma. The inspection was conducted on November 1, 2011 by Mr. Marshall Branscum of ENERCON.

The Walters National Guard Armory was constructed on a concrete slab-on-grade foundation with flat roofs covered with tar and gravel over the office areas and a pitched roof covered with transite over the Drill Room. The exterior walls are brick. The interior walls were brick, concrete block, wood paneling, painted gypsum board, and vinyl-covered gypsum board.

The building contained a large central drill room with offices and other rooms located north of the drill room. Rooms had been added along the south wall of the drill room. Layouts are included in Appendix A.

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

2.0 METHODOLOGY

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

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

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

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

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

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

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

3.0 RESULTS

3.1 Lead-Based Paint

A total of 226 XRF samples were collected, including calibration and null readings. Figure 1 in Appendix A shows the location of the components with LBP. Tables 1, 2, and 3 provide a summary of building components with LBP as identified by XRF sampling along with their locations and sizes. Components determined to be the same as those sampled were identified by reference to have LBP. The painted surfaces sampled during the survey ranged from intact to poor condition. Representative photographs were taken of components where positive readings (1.0 mg/cm^2 or greater) were obtained and are provided in Appendix B.

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

Interior Components:

- All metal roll-up door frames
- Brown door frame, Room 23
- Black door frame in Room 15
- Gray door, metal bar joists, lintel, Side C
- Wood Boards at the top of the walls, Room 16, Sides B and D
- White-painted lintel, Room 16, Side B
- I-beam and kaylo ceiling, Room 23

Exterior Components:

- All metal roll-up doors
- All yellow window frames, Sides B, C and D of drill room end of the building
- Red-painted metal modified bollards, Sides A and D
- Yellow-painted metal edge protectors, Sides A and D
- Yellow-painted metal roll-up door lintel, Sides A and D
- Yellow-painted wood and metal window lintels, Sides B, C and D of drill room end of building
- Brown-painted metal door lintel, Side D
- Yellow-painted metal roll-up door lintels
- Gray-painted wood window lintels, Side D

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

Identified Lead-Based Paint (Color/Description)	Lead Content (mg/cm^2)	Location	Size of Door/Frame
Red/Roll-up Door	1.5	Room 16, Side A, Exterior	168" x 168"
Red/Roll-up Door	3.2	Room 17, Side A, Exterior	168" x 168"
Beige/Roll-up Door Frame	3.2	Room 16, Side A	168" x 168" (2)
Red/Roll-up Door	2.9	Room 16, Side D, Exterior	168" x 167"
Beige/Roll-up Door Frame	2.9	Room 16, Side D	168" x 167"
Red/Roll-up Door	*	Room 23, Side D, Exterior	144" x 132"
Beige/Roll-up Door Frame	*	Room 23, Side D, Exterior	144" x 132"
Brown/Door Frame	1.8	Exterior, Side A	39" x 86"
Brown/Door Frame	2.2	Exterior, Side C	75" x 84"
Black/Door Frame	1.2	Room 15, Side C	36" x 84"
Gray/Door	1	Room 16, D	36" x 84"

*Not tested, assumed positive by reference to other similar components painted the same color that tested positive.

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

Identified Lead-Based Paint (Color/Description)	Lead Content (mg/cm^2)	Location	Size and Number of Windows
Yellow/Window Frame	1.7	Exterior, Side B	45" x 34"
Yellow/Window Frame	2.8	Exterior, Side B	45" x 34"
Yellow/Window Frame	1.7	Exterior, Side C	45" x 34" (2)
Yellow/Window Frame	1.7	Exterior, Side C	45" x 34"
Yellow/Window Frame	2.8	Exterior, Side C	45" x 34"
Yellow/Window Frame High Bay	4.6	Exterior, Side B	45" x 33" (2)
Yellow/Window Frame High Bay	2.9	Exterior, Side B	45" x 33" (2)
Yellow/Window Frame High Bay	4	Exterior, Side D	45" x 33" (3)

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

Identified Lead-Based Paint (Color)	Lead Content (mg/cm^2)	Location	Surface/Components
Red	15.2	Exterior, Side A	Modified Bollard (Metal)
Red	27.8	Exterior, Side A	Modified Bollard (Metal)
Red	15.6	Exterior, Side A	Modified Bollard (Metal)
Red	20.5	Exterior, Side A	Modified Bollard (Metal)
Yellow	7.5	Exterior, Side A	Edge Protector (Metal)-(2)
Yellow	9.4	Exterior, Side A	Edge Protector (Metal)-(2)
Yellow	7.6	Exterior, Side A	Edge Protector (Metal)-(2)
Yellow	7.9	Exterior, Side A	Door Roll Up Lintel (Metal) -(2)
Brown	2.7	Exterior, Side A	Door Lintel (Metal)
Yellow	2.6	Exterior, Side B	Window Lintel (Metal)

Yellow	6.3	Exterior, Side B	Window Lintel (Metal)
Yellow	3.5	Exterior, Side B	Window Lintel High Bay (Wood)-(2)
Yellow	3.9	Exterior, Side B	Window Lintel High Bay (Wood)
Yellow	2.6	Exterior, Side B	Window Lintel High Bay (Wood)
Yellow	3.8	Exterior, Side C	Window Lintel (Metal)-(4)
Brown	3.1	Exterior, Side C	Door Lintel (Metal)
Brown	6.3	Exterior, Side D	Door Lintel Roll Up (Metal)
Red	16.8	Exterior, Side D	Modified Bollard (Metal)-(4)
Yellow	11.1	Exterior, Side D	Edge Protector (Metal)-(2)
Yellow	2.3	Exterior, Side D	Edge Protector (Metal)-(2)
Gray	3.9	Exterior, Side D	Window Lintel High Bay (Wood)-(3)
Gray	11.8	Room 16	Bar Joist (Metal)
Gray	10.8	Room 16	Bar Joist (Metal)
Gray	5.5	Room 16	Bar Joist (Metal)
Gray	3.2	Room 16, Side B	Board On Top of Wall (Wood)
Gray	4.7	Room 16, Side D	Board On Top of Wall (Wood)
White	5.5	Room 16, Side C	Lintel (Metal)
Gray	5.6	Room 23	I-Beam (Metal)
Gray	3	Room 23	Ceiling (Kaylo)

NOTE: Many components were not tested and were assumed positive by reference to other similar components painted the same color that tested positive. These components were not listed in this table; however, their locations are noted on Figure 1 in Appendix A.

3.2 Dust Wipe Samples

Dust wipe samples were obtained following the EPA/HUD protocol. A template measuring one square foot was used to provide a known sampling area. Concentrations of 40.0 $\mu g/ft^2$ or greater are considered contaminated, in accordance with HUD/EPA guidelines. One dust wipe sample was obtained in each room except for the drill room, where three samples were collected. A total of 31 wipe samples were collected.

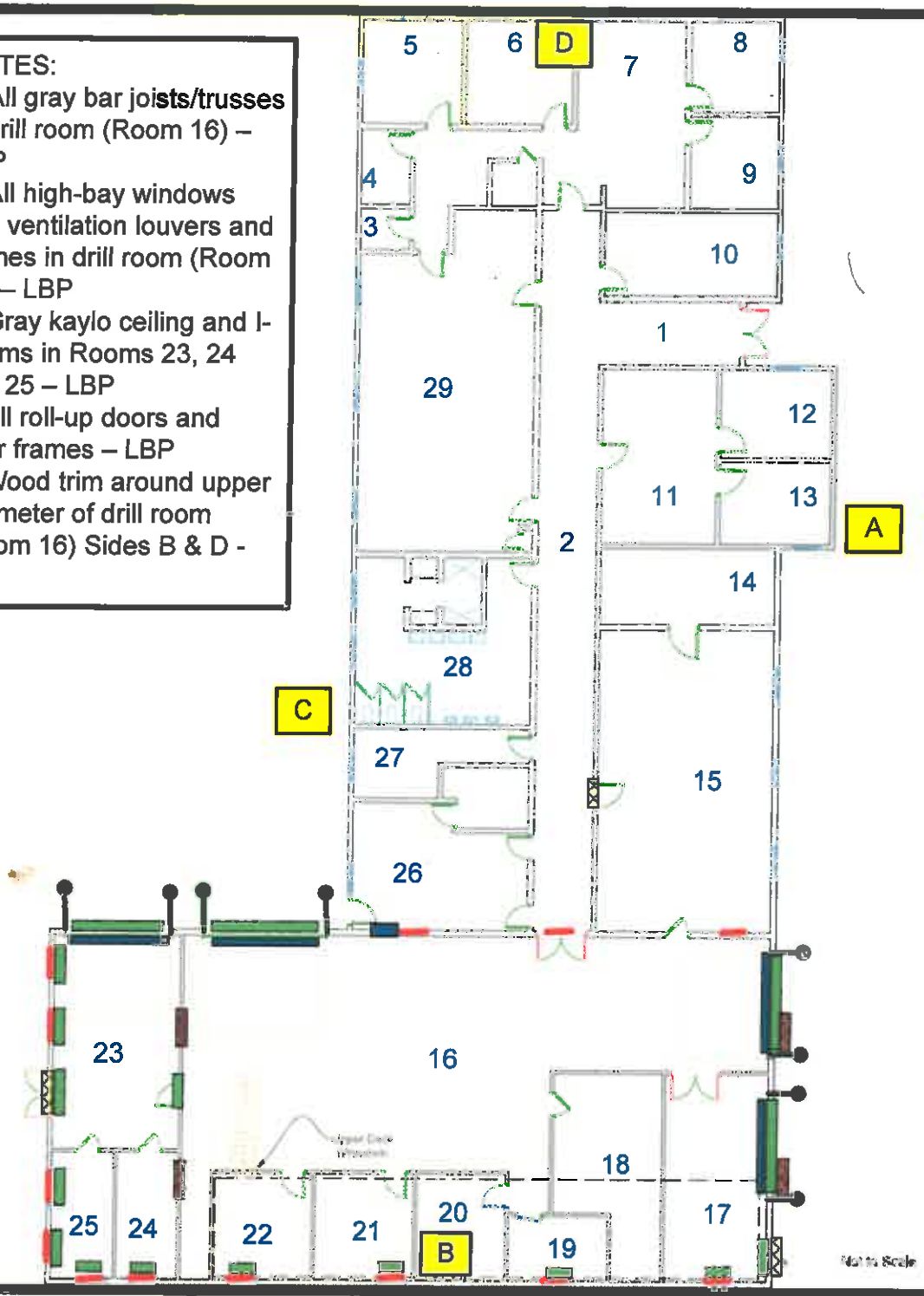
Laboratory results from the dust wipe samples are presented in Appendix C. Ten rooms had lead dust contamination above the threshold. The locations determined by laboratory analysis to be contaminated with lead dust are listed in Table 4 and on Figure 2 in Appendix A.

Table 4 – Positive Dust Wipe Locations

Sample Number	Lead Content ($\mu g/ft^2$)	Location	Square Footage of Positive Location
WA-14	176	Room 14	189
WA-16	57.4, 51.9	Room 16	1726
WA-17	118	Room 17	308
WA-18	52.8	Room 18	266
WA-19	89.3	Room 19	88
WA-20	56.0	Room 20	136
WA-21	138	Room 21	150
WA-23	72.5	Room 23	386
WA-24	161	Room 24	109
WA-25	59.0	Room 25	111

APPENDIX A

NOTES:
1. All gray bar joists/trusses in drill room (Room 16) – LBP
2. All high-bay windows and ventilation louvers and frames in drill room (Room 16) – LBP
3. Gray kaylo ceiling and I-beams in Rooms 23, 24 and 25 – LBP
4. All roll-up doors and door frames – LBP
5. Wood trim around upper perimeter of drill room (Room 16) Sides B & D - LBP



Oklahoma Department of Environmental Quality
National Guard Armory
608 West Missouri Street
Walters, OK

Legend:
- Windows - LBP
- Lintels - LBP
- Door - LBP
- Door Frame - LBP
- Ventilation Louvers and Frames - LBP
- Edge Protector and Modified Bollard - LBP
- 1 Room Number

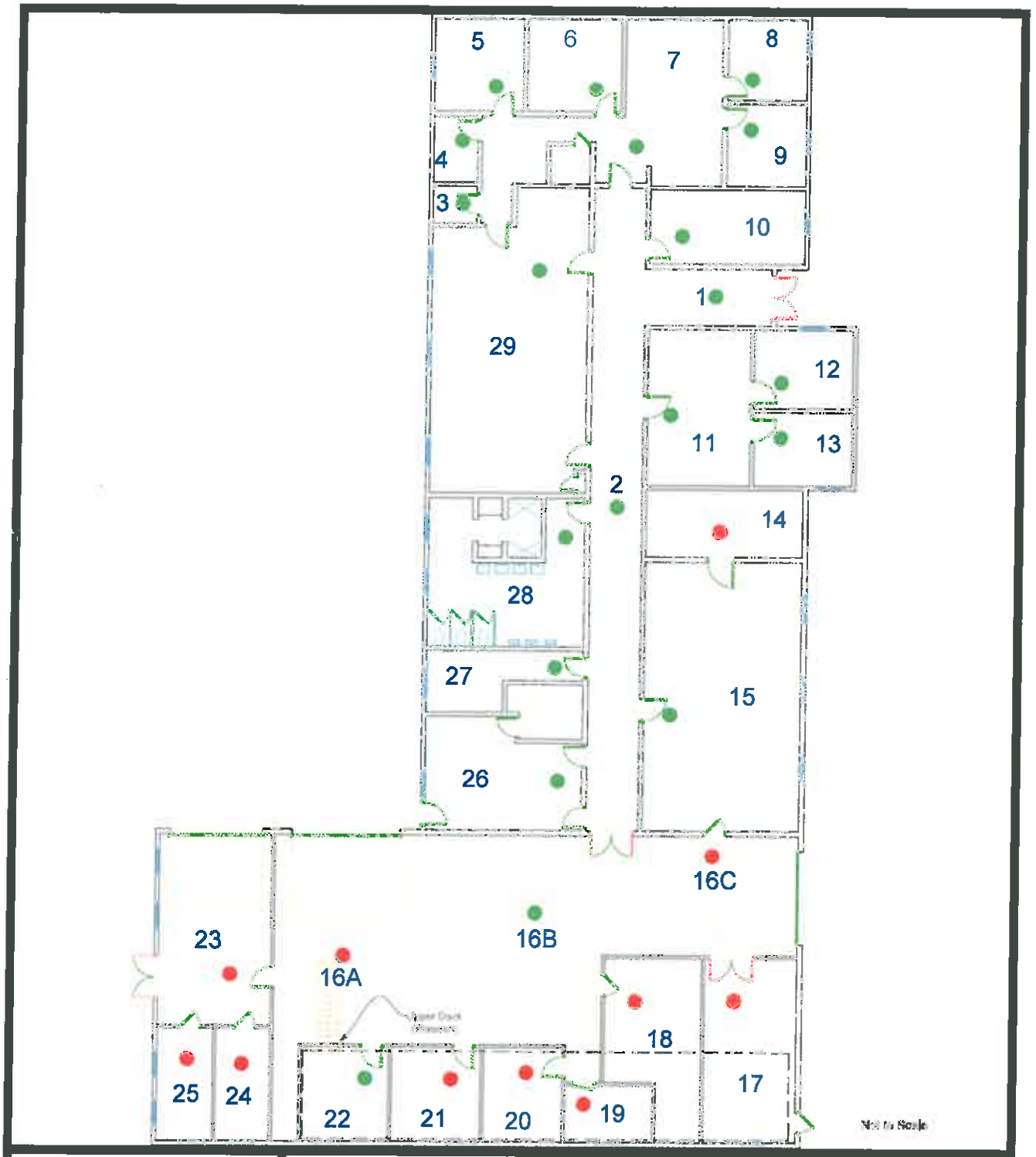
N

Not to Scale

ENERCON

FIGURE 1
Lead Paint Locations

Project No: ENMISC2509



Oklahoma Department of Environmental Quality
National Guard Armory
608 West Missouri Street
Walters, OK

Legend:

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

N

Not to Scale

ENERCON

FIGURE 2
Lead Dust Wipe Locations

Project No: ENMISC2509

APPENDIX B

APPENDIX B - PHOTOGRAPHIC RECORD

Project No: ENMISC2509

Project Name: Walters National Guard Armory

Photo #1: Walters National Guard Armory.

Photo #2: Beige-painted rollup door and metal frame - LBP.

Photo #3: Brown-painted metal door frame, Room 23 - LBP.

Photo #4: Black painted metal door frame, Room in 15 – LBP.

Photo #5: Gray-painted metal door, Room 16 – LBP.

Photo #6: Gray-painted metal bar joist/trusses, Room 16 - LBP.

APPENDIX B - PHOTOGRAPHIC RECORD

Project No: ENMISC2509

Project Name: Walters National Guard Armory

Photo #7: View of white painted lintel, Room 16, Side B - LBP.

Photo #8: Wood boards at the top of the wall, Room 16 - LBP.

Photo #9: I-beams and kaylo ceiling, Room 23 - LBP.

Photo #10: Red-painted rollup doors – LBP.

Photo #11: Yellow-painted window frame and lintel – LBP.

Photo #12: Brown painted metal door lintel, as found on Sides A & C - LBP.

APPENDIX B - PHOTOGRAPHIC RECORD

Project No: ENMISC2509

Project Name: Walters National Guard Armory

Photo #13: Yellow-painted rollup door lintels, on Sides A & D - LBP.

Photo #14: Red-painted metal modified bollards on Sides A and D- LBP.

Photo #15: Yellow-painted metal edge protectors, Sides A & D - LBP.

Photo #16: Yellow-painted wood window lintels on Sides B & C – LBP.

Photo #17: Grey-painted window lintel on Side D – LBP.

APPENDIX C

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 201396
Date Received: 11/03/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 11/4/2011

AIHA ID: 101352

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

Acct. No.: A845

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

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	WA-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
002	WA-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
003	WA-03	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
004	WA-04	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
005	WA-05	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
006	WA-06	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
007	WA-07	Wipe	Lead	23.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
008	WA-08	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
009	WA-09	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
010	WA-10	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
011	WA-11	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
012	WA-12	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
013	WA-13	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
014	WA-14	Wipe	Lead	176	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
015	WA-15	Wipe	Lead	39.9	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
016	WA-16A	Wipe	Lead	57.4	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
017	WA-16B	Wipe	Lead	39.5	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)

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

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

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

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

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

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

QUANTEM LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 201396
Date Received: 11/03/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 11/4/2011

AIHA ID: 101352

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

Acct. No.: A845

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

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	WA-16C	Wipe	Lead	51.9	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
019	WA-17	Wipe	Lead	118	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
020	WA-18	Wipe	Lead	52.8	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
021	WA-19	Wipe	Lead	89.3	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
022	WA-20	Wipe	Lead	56.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
023	WA-21	Wipe	Lead	138	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
024	WA-22	Wipe	Lead	39.4	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
025	WA-23	Wipe	Lead	72.5	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
026	WA-24	Wipe	Lead	161	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
027	WA-25	Wipe	Lead	59.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
028	WA-26	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
029	WA-27	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
030	WA-28	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)
031	WA-29	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/04/11 10:30	W EPA 7420 (1)

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

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 201396
Date Received: 11/03/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 11/4/2011

AIHA ID: 101352

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

Acct. No.: A845

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

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

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: 9342
Test: Lead

Date: 11/4/2011
Matrix: Wipe

Lab Number: 201396
Approved By: Rebecca Sparks
Date Approved: 11/4/2011

Notes:

Blank Data:

Type of Blank	Blank Value
ICB	0
FCB	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	0.333	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W3	0.000	5.438	5.162	94.9	5.139	94.5	0.5
MS-W2	0.000	5.449	5.585	102.5	5.340	98.0	4.5
MS-W1	0.000	5.460	5.464	100.1	5.510	100.9	0.8

Authorized Signature: Rebecca Sparks
Rebecca Sparks, Analyst

QUANTEM LABORATORIES

Lead Chain-of-Custody

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(888) 822-1650 (405) 755-7272 Fax: (405) 755-2058
www.quantem.com

Page 1 of 3

This Box for Lab Use Only
Lab No. 201396
(Accept) Reject

Company Name: Enercon Services, Inc. Acct.#: ____ Project Name: Walters Armory

Project Location: Walters, OK Project Number: ____

	Sample Number	Sample Description	Volume or Area	Sample Matrix	Analysis: Pb				Units Requested: Field	% Wt.	mg / kg	mg / l	ug / sq. ft.	ug / cu. ft.	ug / cm²
1.	WA-01		144 in²	C	X								X		
2.	-02														
3.	-03														
4.	-04														
5.	-05														
6.	-06														
7.	-07														
8.	-08														
9.	-09														
10	-10														
11.	-11														
12.	-12														
13.	-13														
*14.	-14														
15.	-15														

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: 802-5900
Report Results VIA (CHOOSE ONE):
- [ ] FAX:
- [X] QuanTEM WebSite
- [ ] E-Mail:

Relinquished by		Received by			Sampled By:
M. Branscum 11-3-2011 / 1030	Hand	S. [signature] 11/3/11 10:20		11-1	MLB/RB

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

Revision: May 2008

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. 201396 (Accept) Reject

Company Name: Enercon   Acct #: ______   Project Name: Walters Armory
Project Location: Walters, 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
16.	WA-16A		144 in²	C	X								X		
17.	-16B														
18.	-16C														
19.	-17														
20.	-18														
21.	-19														
22.	-20														
23.	-21														
24.	-22														
25.	-23														
26.	-24														
27.	-25														
28.	-26														
29.	-27														
30.	-28														

(Arrows drawn down the Sample Number, Volume of Area, Sample Matrix, Pb and ug/sq. ft. columns from row 16 to row 30.)

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	Received by	Date/Time	Date Sampled	Sampled by
Marshall L. Branscum	11-3-2011/1020	S. Puffwick [illegible]	11/3/11 10:20	11-1	MLB/RB

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

Revision: May 2006

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. 201396
(Accept) Reject

Company Name: Enercon
Acct #:
Project Name: Walters Armory
Project Location: Walters, 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
31. WA-29		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: 722-7693
Report Results VIA (CHOOSE ONE):
- [ ] FAX:
- [X] QuanTEM WebSite
- [ ] E-Mail:

Relinquished by: Marshall K. Branscum 11-3-11 / 1020 Hand
Received by: S. Pijflowicz 11/3/11 10:20
11-1
Sampled by: MLB/RB

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

APPENDIX D

Walters National Guard Armory
608 West Missouri Street
Walters, OK

Lead-Based Paint Survey

Inpsector: Marshall L. Branscum
Date: November 1, 2011

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Room	Results	PbC	Pbl	PbK
1	11/1/2011 9:53									2.58	0.41	0.02
2	11/1/2011 9:57						CALIBRATE		Positive	1	1	0.8
3	11/1/2011 10:02						CALIBRATE		Null	1	1	1
4	11/1/2011 10:03						CALIBRATE		Negative	0.9	0.9	< LOD
5	11/1/2011 10:03						CALIBRATE		Negative	0.9	0.9	< LOD
6	11/1/2011 10:25	DOOR	METAL	A	FAIR	GRAY	WALTERS ARMORY	EXTERIOR	Negative	< LOD	0.2	< LOD
7	11/1/2011 10:26	DOOR FRAME	METAL	A	FAIR	BLACK	WALTERS ARMORY	EXTERIOR	Null	< LOD	< LOD	< LOD
8	11/1/2011 10:26	DOOR FRAME	METAL	A	FAIR	BLACK	WALTERS ARMORY	EXTERIOR	Negative	< LOD	0.27	< LOD
9	11/1/2011 10:27	DOOR LINTEL	METAL	A	FAIR	BLACK	WALTERS ARMORY	EXTERIOR	Null	0.29	0.29	< LOD
10	11/1/2011 10:27	DOOR LINTEL	METAL	A	FAIR	BLACK	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
11	11/1/2011 10:34	CEILING PORCH CANOPY	WOOD	A	FAIR	WHITE	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
12	11/1/2011 10:35	CEILING BEAM	WOOD	A	FAIR	WHITE	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
13	11/1/2011 10:36	TRIM BOARD	WOOD	A	FAIR	WHITE	WALTERS ARMORY	EXTERIOR	Negative	0.2	0.2	1
14	11/1/2011 10:38	PORCH FASCIA	WOOD	A	POOR	WHITE	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
15	11/1/2011 10:38	FASCIA	WOOD	A	FAIR	WHITE	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
16	11/1/2011 10:41	WINDOW FRAME	METAL	A	FAIR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
17	11/1/2011 10:42	WINDOW LINTEL	METAL	A	FAIR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
18	11/1/2011 10:42	WINDOW LINTEL	METAL	A	FAIR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
19	11/1/2011 10:42	WINDOW LINTEL	METAL	A	FAIR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
20	11/1/2011 10:43	WINDOW LINTEL	METAL	A	FAIR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
21	11/1/2011 10:43	WINDOW LINTEL	METAL	A	FAIR	RED	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
22	11/1/2011 10:44	WINDOW LINTEL	METAL	A	FAIR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
23	11/1/2011 10:44	WINDOW FRAME	METAL	A	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
24	11/1/2011 10:45	WINDOW FRAME	METAL	A	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
25	11/1/2011 10:46	WINDOW FRAME	METAL	A	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
26	11/1/2011 10:46	WINDOW FRAME	METAL	A	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
27	11/1/2011 10:47	WINDOW SILL	CONCRETE	A	POOR	RED	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
28	11/1/2011 10:47	WINDOW SILL	CONCRETE	A	POOR	RED	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
29	11/1/2011 10:48	WINDOW SILL	CONCRETE	A	POOR	RED	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
30	11/1/2011 10:49	PARKING RAIL	METAL	A	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	0.5	0.5	< LOD
31	11/1/2011 10:50	MODIFIED BOLLARD	METAL	A	FAIR	RED	WALTERS ARMORY	EXTERIOR	Positive	15.2	1.6	15.2
32	11/1/2011 10:50	MODIFIED BOLLARD	METAL	A	FAIR	RED	WALTERS ARMORY	EXTERIOR	Positive	7.8	1.2	7.8
33	11/1/2011 10:50	MODIFIED BOLLARD	METAL	A	FAIR	RED	WALTERS ARMORY	EXTERIOR	Positive	15.6	1.4	15.6
34	11/1/2011 10:51	MODIFIED BOLLARD	METAL	A	FAIR	RED	WALTERS ARMORY	EXTERIOR	Positive	20.5	< LOD	20.5
35	11/1/2011 10:58	EDGE PROTECTOR	METAL	A	FAIR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	7.5	1.2	7.5
36	11/1/2011 10:58	EDGE PROTECTOR	METAL	A	FAIR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	9.4	1.5	9.4
37	11/1/2011 10:58	EDGE PROTECTOR	METAL	A	FAIR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	7.6	1.6	7.6
38	11/1/2011 11:05	DOOR ROLL_UP LINTEL	METAL	A	FAIR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	7.9	1.6	7.9
39	11/1/2011 11:07	DOOR ROLL_UP	METAL	A	POOR	RED	WALTERS ARMORY	EXTERIOR	Positive	1.5	1.3	1.5
40	11/1/2011 11:08	DOOR ROLL_UP	METAL	A	POOR	RED	WALTERS ARMORY	EXTERIOR	Positive	3.2	1.1	3.2
41	11/1/2011 11:10	FLOOR GUARD	METAL	A	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	0.5	0.5	< LOD
42	11/1/2011 11:11	THUNDERBIRD SYMBOL	CONCRETE	A	POOR	WHITE	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
43	11/1/2011 11:12	DOOR	METAL	A	POOR	BROWN	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
44	11/1/2011 11:12	DOOR FRAME	METAL	A	POOR	BROWN	WALTERS ARMORY	EXTERIOR	Positive	1.8	1.8	< LOD
45	11/1/2011 11:13	DOOR LINTEL	METAL	A	POOR	BROWN	WALTERS ARMORY	EXTERIOR	Positive	2.7	2.7	5.9
46	11/1/2011 11:15	WINDOW FRAME	METAL	B	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	1.7	1.7	< LOD
47	11/1/2011 11:16	WINDOW FRAME	METAL	B	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	2.8	2.8	< LOD
48	11/1/2011 11:16	WINDOW LINTEL	METAL	B	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	2.6	2.6	< LOD
49	11/1/2011 11:17	WINDOW LINTEL	METAL	B	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	6.3	< LOD	6.3

Walters National Guard Armory
608 West Missouri Street
Walters, OK

Lead-Based Paint Survey

Inpsector: Marshall L. Branscum
Date: November 1, 2011

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Room	Results	PbC	PbL	PbK
50	11/1/2011 11:24	WINDOW LINTEL HIGH BAY	WOOD	B	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	3.5	3.5	< LOD
51	11/1/2011 11:25	WINDOW LINTEL HIGH BAY	WOOD	B	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	3.9	3.9	< LOD
52	11/1/2011 11:25	WINDOW LINTEL HIGH BAY	WOOD	B	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	2.6	2.6	3.3
53	11/1/2011 11:26	WINDOW FRAME HIGH BAY	METAL	B	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	4.6	4.6	< LOD
54	11/1/2011 11:26	WINDOW FRAME HIGH BAY	METAL	B	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	2.9	2.9	< LOD
55	11/1/2011 11:33	WINDOW FRAME	METAL	C	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	2.8	2.8	< LOD
56	11/1/2011 11:33	WINDOW FRAME	METAL	C	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	1.7	1.7	1.7
57	11/1/2011 11:34	WINDOW FRAME	METAL	C	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	1.7	1.7	< LOD
58	11/1/2011 11:35	WINDOW LINTEL	METAL	C	FAIR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	< LOD	5	< LOD
59	11/1/2011 11:35	WINDOW LINTEL	METAL	C	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	3.8	3.8	10
60	11/1/2011 11:36	DOOR	METAL	C	POOR	BROWN	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
61	11/1/2011 11:36	DOOR FRAME	METAL	C	POOR	BROWN	WALTERS ARMORY	EXTERIOR	Positive	2.2	2.2	4.3
62	11/1/2011 11:36	DOOR LINTEL	METAL	C	POOR	BROWN	WALTERS ARMORY	EXTERIOR	Positive	3.1	3.1	6.1
63	11/1/2011 11:48	DOOR LINTEL ROLL_UP	METAL	D	INTACT	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	6.3	< LOD	6.3
64	11/1/2011 11:49	DOOR ROLL_UP	METAL	D	POOR	RED	WALTERS ARMORY	EXTERIOR	Positive	2.9	2.9	< LOD
65	11/1/2011 11:49	MOD BOLLARD	METAL	D	POOR	RED	WALTERS ARMORY	EXTERIOR	Positive	16.8	1.7	16.8
66	11/1/2011 11:50	EDGE PROTECTOR	METAL	D	FAIR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	11.1	< LOD	11.1
67	11/1/2011 11:50	EDGE PROTECTOR	METAL	D	FAIR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	2.3	2.3	6.6
68	11/1/2011 12:06	CANOPY	WOOD	C	POOR	GRAY	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
69	11/1/2011 12:06	DOOR	WOOD	C	POOR	GRAY	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
70	11/1/2011 12:07	DOOR FRAME	METAL	C	POOR	GRAY	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
71	11/1/2011 12:07	DOOR FRAME	METAL	C	POOR	GRAY	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
72	11/1/2011 12:07	DOOR FRAME	METAL	C	POOR	GRAY	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
73	11/1/2011 12:08	DOOR LINTEL	METAL	C	POOR	GRAY	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
74	11/1/2011 12:08	WINDOW FRAME	METAL	C	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	0.22	0.22	1.5
75	11/1/2011 12:09	WINDOW FRAME	METAL	C	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
76	11/1/2011 12:09	WINDOW LINTEL	METAL	C	FAIR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
77	11/1/2011 12:10	WINDOW SILL	CONCRETE	C	POOR	RED	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
78	11/1/2011 12:10	WINDOW SILL	CONCRETE	C	POOR	RED	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
79	11/1/2011 12:11	WINDOW FRAME	METAL	C	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
80	11/1/2011 12:11	WINDOW FRAME	METAL	C	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
81	11/1/2011 12:11	WINDOW FRAME	METAL	C	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
82	11/1/2011 12:12	WINDOW LINTEL	METAL	C	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
83	11/1/2011 12:12	WINDOW LINTEL	METAL	C	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
84	11/1/2011 12:14	WINDOW LINTEL	METAL	C	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
85	11/1/2011 12:15	WINDOW FRAME	METAL	C	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
86	11/1/2011 12:15	WINDOW FRAME	WOOD	C	POOR	RED	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
87	11/1/2011 12:16	WINDOW FRAME	WOOD	C	POOR	RED	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
88	11/1/2011 12:18	WINDOW FRAME	METAL	D	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
89	11/1/2011 12:18	WINDOW FRAME	METAL	D	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
90	11/1/2011 12:19	WINDOW LINTEL	METAL	D	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
91	11/1/2011 12:19	WINDOW LINTEL	METAL	D	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
92	11/1/2011 12:19	WINDOW LINTEL	METAL	D	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Null	< LOD	< LOD	< LOD
93	11/1/2011 12:49	WINDOW LINTEL HIGH BAY	WOOD	D	POOR	GRAY	WALTERS ARMORY	EXTERIOR	Negative	< LOD	< LOD	< LOD
94	11/1/2011 12:50	WINDOW FRAME HIGH BAY	METAL	D	POOR	YELLOW	WALTERS ARMORY	EXTERIOR	Positive	3.9	3.9	< LOD
95	11/1/2011 12:58	DOOR FRAME	METAL	C	INTACT	BLACK	WALTERS ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
96	11/1/2011 12:59	WALL	DRYWALL	A	INTACT	WHITE	WALTERS ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
97	11/1/2011 12:59	WALL	DRYWALL	B	INTACT	WHITE	WALTERS ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
98	11/1/2011 12:59	WALL	DRYWALL	D	INTACT	WHITE	WALTERS ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Room	Results	PbC	PbL	PbK
99	11/1/2011 13:00	WALL	CONCRETE	C	INTACT	WHITE	WALTERS ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
100	11/1/2011 13:01	WALL	CONCRETE	A	INTACT	WHITE	WALTERS ARMORY	ROOM 2	Negative	0.06	0.06	< LOD
101	11/1/2011 13:02	WALL	CONCRETE	C	INTACT	WHITE	WALTERS ARMORY	ROOM 2	Negative	< LOD	< LOD	< LOD
102	11/1/2011 13:02	WALL	DRYWALL	D	INTACT	WHITE	WALTERS ARMORY	ROOM 2	Negative	< LOD	< LOD	< LOD
103	11/1/2011 13:46						CALIBRATE		Negative	0.9	0.9	1.2
104	11/1/2011 13:47						CALIBRATE		Negative	0.9	0.9	1
105	11/1/2011 13:48						CALIBRATE		Positive	1	1	1
106	11/1/2011 13:53	CEILING	WOOD	D	INTACT	WHITE	WALTERS ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
107	11/1/2011 13:53	TRIM BOARD	WOOD	D	INTACT	WHITE	WALTERS ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
108	11/1/2011 13:54	CEILING BEAM	WOOD	D	INTACT	WHITE	WALTERS ARMORY	ROOM 1	Negative	< LOD	< LOD	< LOD
109	11/1/2011 13:57	WALL	BRICK	C	INTACT	GRAY	WALTERS ARMORY	ROOM 2	Negative	< LOD	< LOD	< LOD
110	11/1/2011 14:01	CEILING DECKING	WOOD	C	INTACT	WHITE	WALTERS ARMORY	ROOM 5	Negative	0.25	0.25	< LOD
111	11/1/2011 14:02	WALL	BRICK	D	INTACT	WHITE	WALTERS ARMORY	ROOM 5	Negative	0.14	0.14	1.2
112	11/1/2011 14:02	WALL	CONCRETE	D	INTACT	GREEN	WALTERS ARMORY	ROOM 5	Negative	0.08	0.08	< LOD
113	11/1/2011 14:05	CEILING	WOOD	D	INTACT	WHITE	WALTERS ARMORY	ROOM 7	Negative	< LOD	< LOD	< LOD
114	11/1/2011 14:06	WINDOW FRAME	METAL	D	FAIR	BEIGE	WALTERS ARMORY	ROOM 7	Negative	< LOD	< LOD	< LOD
115	11/1/2011 14:07	DOOR	METAL	B	FAIR	GRAY	WALTERS ARMORY	ROOM 7	Null	0.6	0.6	< LOD
116	11/1/2011 14:08	DOOR FRAME	METAL	B	FAIR	BLACK	WALTERS ARMORY	ROOM 7	Negative	0.6	0.6	< LOD
117	11/1/2011 14:10	DOOR FRAME	METAL	C	FAIR	BLACK	WALTERS ARMORY	ROOM 10	Negative	0.26	0.26	< LOD
118	11/1/2011 14:11	DOOR	METAL	C	FAIR	GRAY	WALTERS ARMORY	ROOM 10	Null	0.8	0.8	< LOD
119	11/1/2011 14:11	DOOR	METAL	C	FAIR	GRAY	WALTERS ARMORY	ROOM 10	Negative	0.6	0.6	< LOD
120	11/1/2011 14:13	DOOR	METAL	C	POOR	GRAY	WALTERS ARMORY	ROOM 11	Negative	< LOD	0.5	< LOD
121	11/1/2011 14:15	DOOR FRAME	METAL	C	POOR	BLACK	WALTERS ARMORY	ROOM 11	Null	0.9	0.9	1.2
122	11/1/2011 14:15	DOOR FRAME	METAL	C	POOR	BLACK	WALTERS ARMORY	ROOM 11	Negative	0.3	0.3	< LOD
123	11/1/2011 14:16	CEILING	WOOD	C	INTACT	WHITE	WALTERS ARMORY	ROOM 11	Negative	< LOD	< LOD	< LOD
124	11/1/2011 14:16	WALL	CONCRETE	A	INTACT	WHITE	WALTERS ARMORY	ROOM 11	Negative	0.12	0.12	< LOD
125	11/1/2011 14:17	WALL	CONCRETE	C	INTACT	WHITE	WALTERS ARMORY	ROOM 11	Negative	0.07	0.07	< LOD
126	11/1/2011 14:17	WALL	CONCRETE	D	INTACT	WHITE	WALTERS ARMORY	ROOM 11	Negative	0.04	0.04	< LOD
127	11/1/2011 14:18	WALL	BRICK	B	INTACT	WHITE	WALTERS ARMORY	ROOM 11	Negative	< LOD	< LOD	1
128	11/1/2011 14:19	WINDOW FRAME	WOOD	A	INTACT	WHITE	WALTERS ARMORY	ROOM 11	Negative	< LOD	< LOD	< LOD
129	11/1/2011 14:20	DOOR	METAL	A	INTACT	WHITE	WALTERS ARMORY	ROOM 12	Negative	< LOD	< LOD	< LOD
130	11/1/2011 14:20	DOOR FRAME	METAL	A	INTACT	WHITE	WALTERS ARMORY	ROOM 12	Negative	< LOD	< LOD	< LOD
131	11/1/2011 14:21	DOOR FRAME	METAL	A	FAIR	WHITE	WALTERS ARMORY	ROOM 13	Negative	< LOD	< LOD	< LOD
132	11/1/2011 14:21	DOOR	METAL	A	FAIR	WHITE	WALTERS ARMORY	ROOM 13	Negative	< LOD	< LOD	< LOD
133	11/1/2011 14:24	DOOR	METAL	B	FAIR	WHITE	WALTERS ARMORY	ROOM 14	Null	0.08	0.08	< LOD
134	11/1/2011 14:24	DOOR	METAL	B	FAIR	WHITE	WALTERS ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD
135	11/1/2011 14:24	DOOR FRAME	METAL	B	FAIR	GRAY	WALTERS ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD
136	11/1/2011 14:25	CEILING	CONCRETE	B	FAIR	WHITE	WALTERS ARMORY	ROOM 14	Null	< LOD	< LOD	< LOD
137	11/1/2011 14:25	CEILING	CONCRETE	B	FAIR	WHITE	WALTERS ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD
138	11/1/2011 14:26	WALL	BRICK	B	POOR	WHITE	WALTERS ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD
139	11/1/2011 14:26	WALL	BRICK	C	POOR	WHITE	WALTERS ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD
140	11/1/2011 14:27	WALL	BRICK	D	POOR	WHITE	WALTERS ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD
141	11/1/2011 14:27	WALL	BRICK	A	POOR	WHITE	WALTERS ARMORY	ROOM 14	Negative	< LOD	< LOD	< LOD
142	11/1/2011 14:28	WALL	BRICK	B	FAIR	BLACK	WALTERS ARMORY	ROOM 15	Negative	0.05	0.05	< LOD
143	11/1/2011 14:29	WALL	BRICK	D	FAIR	BLACK	WALTERS ARMORY	ROOM 15	Negative	0.07	0.07	1
144	11/1/2011 14:30	WINDOW FRAME	METAL	A	POOR	GRAY	WALTERS ARMORY	ROOM 15	Negative	< LOD	< LOD	< LOD
145	11/1/2011 14:31	WINDOW SILL	BRICK	A	FAIR	GRAY	WALTERS ARMORY	ROOM 15	Negative	0.13	0.13	1
146	11/1/2011 14:32	DOOR FRAME	METAL	B	POOR	GRAY	WALTERS ARMORY	ROOM 15	Negative	< LOD	< LOD	< LOD
147	11/1/2011 14:32	DOOR LINTEL	METAL	B	FAIR	WHITE	WALTERS ARMORY	ROOM 15	Negative	< LOD	< LOD	< LOD

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Room	Results	PbC	PbL	PbK
148	11/1/2011 14:33	DOOR	METAL	B	POOR	WHITE	WALTERS ARMORY	ROOM 15	Negative	< LOD	< LOD	< LOD
149	11/1/2011 14:34	DOOR	METAL	C	POOR	GRAY	WALTERS ARMORY	ROOM 15	Negative	< LOD	0.7	< LOD
150	11/1/2011 14:34	DOOR FRAME	METAL	C	POOR	BLACK	WALTERS ARMORY	ROOM 15	Positive	1.2	1.2	< LOD
151	11/1/2011 14:37	WINDOW BARS	METAL	A	FAIR	GRAY	WALTERS ARMORY	ROOM 15	Negative	< LOD	< LOD	< LOD
152	11/1/2011 14:38	FLOOR	CONCRETE	A	POOR	GRAY_BLUE	WALTERS ARMORY	ROOM 15	Negative	0.16	0.16	< LOD
153	11/1/2011 14:46	BAR JOIST	METAL	A	POOR	GRAY	WALTERS ARMORY	ROOM 16	Positive	11.8	7.9	11.8
154	11/1/2011 14:46	BAR JOIST	METAL	A	POOR	GRAY	WALTERS ARMORY	ROOM 16	Positive	10.8	6.6	10.8
155	11/1/2011 14:46	BAR JOIST	METAL	A	POOR	GRAY	WALTERS ARMORY	ROOM 16	Positive	5.5	5.5	< LOD
156	11/1/2011 14:48	BOARD ON TOP OF WALL	WOOD	B	POOR	GRAY	WALTERS ARMORY	ROOM 16	Positive	3.2	3.2	< LOD
157	11/1/2011 14:48	BOARD ON TOP OF WALL	WOOD	D	POOR	GRAY	WALTERS ARMORY	ROOM 16	Positive	4.7	4.7	< LOD
158	11/1/2011 14:50	WALL	CONCRETE	B	FAIR	WHITE	WALTERS ARMORY	ROOM 16	Negative	0.07	0.07	< LOD
159	11/1/2011 14:51	WALL	BRICK	C	FAIR	WHITE	WALTERS ARMORY	ROOM 16	Negative	< LOD	< LOD	< LOD
160	11/1/2011 14:52	WALL	BRICK	D	FAIR	WHITE	WALTERS ARMORY	ROOM 16	Negative	0.1	0.1	< LOD
161	11/1/2011 14:53	WALL	BRICK	A	FAIR	WHITE	WALTERS ARMORY	ROOM 16	Null	< LOD	< LOD	< LOD
162	11/1/2011 14:53	WALL	BRICK	A	FAIR	WHITE	WALTERS ARMORY	ROOM 16	Negative	< LOD	< LOD	< LOD
163	11/1/2011 14:56	DOOR ROLL_UP FRAME	METAL	A	POOR	BEIGE	WALTERS ARMORY	ROOM 16	Positive	3.2	3.2	< LOD
164	11/1/2011 14:57	DOOR ROLL_UP FRAME	METAL	D	POOR	BEIGE	WALTERS ARMORY	ROOM 16	Positive	2.9	2.9	< LOD
165	11/1/2011 15:01	DOOR FRAME	METAL	D	FAIR	GRAY	WALTERS ARMORY	ROOM 16	Negative	0.7	0.7	< LOD
166	11/1/2011 15:02	DOOR LINTEL	METAL	D	FAIR	GRAY	WALTERS ARMORY	ROOM 16	Negative	0.9	0.9	< LOD
167	11/1/2011 15:06	DOOR	METAL	D	FAIR	GRAY	WALTERS ARMORY	ROOM 16	Positive	1	1	0.8
168	11/1/2011 15:07	WINDOW PASS THROUGH	WOOD	D	FAIR	GRAY	WALTERS ARMORY	ROOM 16	Negative	0.9	0.9	1
169	11/1/2011 15:08	WINDOW PASS THROUGH FRAME	WOOD	D	FAIR	GRAY	WALTERS ARMORY	ROOM 16	Negative	0.5	0.5	< LOD
170	11/1/2011 15:08	WINDOW PASS THROUGH CTOP	WOOD	D	FAIR	GRAY	WALTERS ARMORY	ROOM 16	Negative	0.6	0.6	< LOD
171	11/1/2011 15:11	DOOR	METAL	D	POOR	GRAY	WALTERS ARMORY	ROOM 16	Negative	< LOD	0.6	< LOD
172	11/1/2011 15:11	DOOR FRAME	METAL	D	FAIR	BLACK	WALTERS ARMORY	ROOM 16	Negative	0.4	0.4	< LOD
173	11/1/2011 15:14	LINTEL	METAL	C	FAIR	WHITE	WALTERS ARMORY	ROOM 16	Positive	5.5	6.7	5.5
174	11/1/2011 15:15	FLOOR	CONCRETE	C	POOR	YELLOW	WALTERS ARMORY	ROOM 16	Null	0.6	0.6	1.2
175	11/1/2011 15:16	FLOOR	CONCRETE	C	POOR	YELLOW	WALTERS ARMORY	ROOM 16	Negative	0.3	0.3	< LOD
176	11/1/2011 15:16	FLOOR	CONCRETE	C	POOR	RED	WALTERS ARMORY	ROOM 16	Negative	< LOD	< LOD	< LOD
177	11/1/2011 15:20	WALL	DRYWALL	A	INTACT	WHITE	WALTERS ARMORY	ROOM 17	Negative	< LOD	< LOD	< LOD
178	11/1/2011 15:20	WALL	DRYWALL	B	INTACT	WHITE	WALTERS ARMORY	ROOM 17	Negative	< LOD	< LOD	< LOD
179	11/1/2011 15:20	WALL	WOOD	D	INTACT	WHITE	WALTERS ARMORY	ROOM 17	Negative	< LOD	< LOD	< LOD
180	11/1/2011 15:27	WALL	WOOD	A	POOR	GRAY	WALTERS ARMORY	ROOM 23	Negative	< LOD	< LOD	< LOD
181	11/1/2011 15:27	WALL	WOOD	C	POOR	GRAY	WALTERS ARMORY	ROOM 23	Null	< LOD	< LOD	< LOD
182	11/1/2011 15:27	WALL	WOOD	C	POOR	GRAY	WALTERS ARMORY	ROOM 23	Negative	< LOD	< LOD	< LOD
183	11/1/2011 15:28	I_BEAM	METAL	C	FAIR	GRAY	WALTERS ARMORY	ROOM 23	Positive	5.6	5.6	< LOD
184	11/1/2011 15:32	CEILING	KAYLO	C	FAIR	GRAY	WALTERS ARMORY	ROOM 23	Positive	3	3	< LOD
185	11/1/2011 15:33	WINDOW SILL	WOOD	C	POOR	WHITE	WALTERS ARMORY	ROOM 23	Negative	< LOD	< LOD	< LOD
186	11/1/2011 15:35	WALL	DRYWALL	C	INTACT	WHITE	WALTERS ARMORY	ROOM 24	Negative	< LOD	< LOD	< LOD
187	11/1/2011 15:35	WALL	DRYWALL	A	INTACT	WHITE	WALTERS ARMORY	ROOM 24	Negative	< LOD	< LOD	< LOD
188	11/1/2011 15:37	WALL	DRYWALL	A	INTACT	WHITE	WALTERS ARMORY	ROOM 25	Negative	< LOD	< LOD	< LOD
189	11/1/2011 15:37	WALL	DRYWALL	D	INTACT	WHITE	WALTERS ARMORY	ROOM 25	Negative	< LOD	< LOD	< LOD
190	11/1/2011 15:40	WALL	CONCRETE	A	INTACT	WHITE	WALTERS ARMORY	ROOM 26	Negative	0.18	0.18	< LOD
191	11/1/2011 15:41	WALL	BRICK	B	INTACT	WHITE	WALTERS ARMORY	ROOM 26	Negative	0.12	0.12	< LOD
192	11/1/2011 15:43	WALL	BRICK	C	INTACT	WHITE	WALTERS ARMORY	ROOM 26	Negative	0.16	0.16	1
193	11/1/2011 15:44	CEILING	WOOD	C	INTACT	WHITE	WALTERS ARMORY	ROOM 26	Negative	< LOD	< LOD	< LOD
194	11/1/2011 15:44	DOOR	METAL	A	FAIR	GRAY	WALTERS ARMORY	ROOM 26	Negative	< LOD	< LOD	< LOD
195	11/1/2011 15:44	DOOR	WOOD	A	FAIR	GRAY	WALTERS ARMORY	ROOM 26	Negative	< LOD	< LOD	< LOD
196	11/1/2011 15:45	DOOR	METAL	A	FAIR	GRAY	WALTERS ARMORY	ROOM 26	Null	0.6	0.6	< LOD

Walters National Guard Armory
608 West Missouri Street
Walters, OK

Lead-Based Paint Survey

Inpsector: Marshall L. Branscum
Date: November 1, 2011

Reading No	Time	Component	Substrate	Side	Condition	Color	Site	Room	Results	PbC	PbL	PbK
197	11/1/2011 15:46	DOOR	METAL	A	FAIR	GRAY	WALTERS ARMORY	ROOM 26	Negative	< LOD	0.7	< LOD
198	11/1/2011 15:46	DOOR FRAME	METAL	A	FAIR	WHITE	WALTERS ARMORY	ROOM 26	Negative	0.6	0.6	< LOD
199	11/1/2011 15:46	DOOR FRAME	METAL	A	FAIR	BLACK	WALTERS ARMORY	ROOM 26	Null	0.7	0.7	< LOD
200	11/1/2011 15:47	DOOR FRAME	METAL	A	FAIR	BLACK	WALTERS ARMORY	ROOM 26	Negative	0.8	0.8	0.7
201	11/1/2011 15:50	DOOR FRAME	METAL	A	FAIR	BLACK	WALTERS ARMORY	ROOM 27	Negative	< LOD	< LOD	< LOD
202	11/1/2011 15:50	DOOR	METAL	A	FAIR	GRAY	WALTERS ARMORY	ROOM 27	Negative	< LOD	< LOD	< LOD
203	11/1/2011 15:51	FLOOR	CONCRETE	A	POOR	GRAY	WALTERS ARMORY	ROOM 27	Negative	0.07	0.07	< LOD
204	11/1/2011 15:51	CEILING	WOOD	A	INTACT	GRAY	WALTERS ARMORY	ROOM 27	Negative	< LOD	< LOD	< LOD
205	11/1/2011 15:52	WALL	BRICK	A	FAIR	GREEN	WALTERS ARMORY	ROOM 27	Negative	< LOD	< LOD	< LOD
206	11/1/2011 15:53	WALL	BRICK	B	FAIR	GREEN	WALTERS ARMORY	ROOM 27	Negative	0.06	0.06	< LOD
207	11/1/2011 15:53	WALL	BRICK	C	FAIR	GREEN	WALTERS ARMORY	ROOM 27	Negative	< LOD	< LOD	< LOD
208	11/1/2011 15:54	WALL	BRICK	D	FAIR	GREEN	WALTERS ARMORY	ROOM 27	Negative	0.08	0.08	1
209	11/1/2011 15:55	WALL	BRICK	A	FAIR	GREEN	WALTERS ARMORY	ROOM 28	Negative	< LOD	< LOD	< LOD
210	11/1/2011 15:55	WALL	BRICK	C	FAIR	GREEN	WALTERS ARMORY	ROOM 28	Negative	< LOD	< LOD	< LOD
211	11/1/2011 15:56	DOOR	METAL	D	FAIR	GREEN	WALTERS ARMORY	ROOM 28	Negative	< LOD	< LOD	< LOD
212	11/1/2011 15:56	DOOR FRAME	METAL	D	FAIR	GREEN	WALTERS ARMORY	ROOM 28	Negative	< LOD	< LOD	< LOD
213	11/1/2011 15:57	DOOR FRAME	METAL	A	FAIR	BLACK	WALTERS ARMORY	ROOM 28	Negative	< LOD	< LOD	< LOD
214	11/1/2011 15:57	DOOR	METAL	A	FAIR	GRAY	WALTERS ARMORY	ROOM 28	Negative	< LOD	< LOD	< LOD
215	11/1/2011 15:59	DOOR	METAL	A	FAIR	GRAY	WALTERS ARMORY	ROOM 29	Null	0.6	0.6	< LOD
216	11/1/2011 15:59	DOOR	METAL	A	FAIR	GRAY	WALTERS ARMORY	ROOM 29	Null	0.5	0.5	< LOD
217	11/1/2011 16:00	DOOR	METAL	A	FAIR	GRAY	WALTERS ARMORY	ROOM 29	Negative	< LOD	0.6	< LOD
218	11/1/2011 16:00	DOOR	METAL	A	FAIR	GRAY	WALTERS ARMORY	ROOM 29	Negative	0.4	0.4	< LOD
219	11/1/2011 16:00	DOOR FRAME	METAL	A	FAIR	BLACK	WALTERS ARMORY	ROOM 29	Negative	0.4	0.4	< LOD
220	11/1/2011 16:00	DOOR FRAME	METAL	A	FAIR	BLACK	WALTERS ARMORY	ROOM 29	Negative	0.5	0.5	< LOD
221	11/1/2011 16:01	WALL	CONCRETE	A	INTACT	WHITE	WALTERS ARMORY	ROOM 29	Negative	< LOD	< LOD	1
222	11/1/2011 16:02	WALL	CONCRETE	C	INTACT	WHITE	WALTERS ARMORY	ROOM 29	Negative	< LOD	< LOD	< LOD
223	11/1/2011 16:02	WALL	DRYWALL	B	INTACT	WHITE	WALTERS ARMORY	ROOM 29	Negative	< LOD	< LOD	< LOD
224	11/1/2011 16:06						CALIBRATE		Negative	0.9	0.9	0.9
225	11/1/2011 16:07						CALIBRATE		Negative	0.9	0.9	1
226	11/1/2011 16:07						CALIBRATE		Negative	0.9	0.9	1.1

APPENDIX E

Performance Characteristic Sheet

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

MANUFACTURER AND MODEL:

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

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

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

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

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

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive)

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

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

SUBSTRATE CORRECTION:

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

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

INCONCLUSIVE RANGE OR THRESHOLD:

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

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

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

OPERATING PARAMETERS:

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

SUBSTRATE CORRECTION VALUE COMPUTATION:

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

EVALUATING THE QUALITY OF XRF TESTING:

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

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

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

Compute the Retest Tolerance Limit by the following steps:

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

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

Square the average for each testing combination.

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

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

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

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

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

Compute the average of all ten original XRF results.

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

Find the absolute difference of the two averages.

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

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

TESTING TIMES:

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

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

CLASSIFICATION RESULTS:

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

DOCUMENTATION:

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

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

APPENDIX F

Department of Environmental Quality

This is to Certify That

ENERCON SVC INC

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

FIRM

Certification #: OKFIRM11152

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

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

Division Director
Air Quality Division

DEQ OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

MARSHALL BRANSCUM

INSPECTOR

Certification #: OKINSR13415

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

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

EMMETT MUENKER

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

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR11260

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

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

Division Director
Air Quality Division

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Environmental Programs Manager
Air Quality Division

SCOPES OF WORK

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

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

The building is located at **608 West Missouri, Walters, Oklahoma**. The square footage is approximately **9,880 FT^2**. **The building does not have available water and electricity to use during remediation.**

SPECIAL PROVISIONS:

1. Work Schedule: The Contractor shall schedule all work to be complete within sixty (60) calendar days after date of the written "Notice to Proceed".
    a. A pre-construction meeting shall be held at the site after the Notice to Proceed date to review Scope of Work and answer any questions the contractor may have.
    b. All on-site work shall be completed by the Contractor five (5) days prior to the scheduled contract completion date, with the remaining five (5) days utilized for final inspection and correction of all deficiencies.
2. Conditions of Work: The following conditions of work will apply in accomplishment of this contract:
    a. All work shall be performed in accordance with all applicable State and Federal regulations.
    b. Contractor shall not cause damage to building structures, property, walls, fixtures, etc. during remediation/abatement process unless required for abatement and approval is given by DEQ. If damage is caused to these items without prior approval, contractor is responsible for repairing the damage.
    c. Coordination of work areas shall be scheduled with DEQ.
    d. Disposal of Removed Materials: All materials removed by the Contractor under this contract shall be disposed of in accordance with State and Federal regulations. DEQ will sign as generator, if necessary.

CONTRACTOR SHALL:

- Attend mandatory pre-bid meeting and site walk through;
- Posses a current lead-based paint firm license and have a certified lead-based paint supervisor in order to perform lead-based paint abatement;
- Posses a current Oklahoma Department of Labor (ODOL) Asbestos Abatement Contractor License in order to perform asbestos abatement;
- Follow all appropriate OSHA requirements;

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

Submit After Contract Award:

- A Work Plan with planned activities and schedule to DEQ for approval;

SEQUENCE OF EVENTS

The remediation of the building shall be as follows:

1. First – The asbestos abatement shall be completed.
2. Second – Enercon shall be contacted to confirm all asbestos has been appropriately removed.
3. Third – Structures in Drill Floor shall be removed
4. Fourth - The lead-based paint abatement shall be completed including replacement of doors and windows.
5. Fifth - All floors of the entire building shall be cleaned.
6. Sixth – DEQ shall be contacted to perform third party confirmation sampling to confirm all floors have been appropriately remediated.

ASBESTOS ABATEMENT INSTRUCTIONS

- Non-friable and/or non-regulated Asbestos Containing Material (ACM) shall be removed as described in the instructions listed below. For more details see the attached Walters Armory Asbestos Inspection Report with floor plan map showing locations of ACM (**Attachment 2**).
    - Remove asbestos containing floor tile and mastic.
        - Total of 550 Square Feet of Asbestos Containing Floor Tile and Mastic
        - The floor tile and mastic is located under carpet. The carpet will have to be removed in order to remove the asbestos containing floor tile and mastic.
    - Remove windows and asbestos containing window glazing.
        - Removed windows shall be replaced (See the Window section under Lead-Based Paint Abatement Instructions for more details on window replacement).

- Friable ACM shall be removed as described in the attached Asbestos Abatement Project Design **(Attachment 2).** For more details see the attached Walters Armory Asbestos Inspection Report with floor plan map showing locations of ACM **(Attachment 2).**
    - Remove approximately 250 linear feet of Asbestos Containing Pipe Insulation.
    - Remove approximately 25 Asbestos Containing Pipe Fitting Insulation.
    - All pipes with asbestos containing pipe insulation and pipe fittings removed shall be re-insulated.

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

LEAD-BASED PAINT ABATEMENT INSTRUCTIONS

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

1. **Non-Friction and Non-Impact Surfaces**

   - All items listed below shall be wet scraped, painted with a neutral colored primer, and encapsulated with DEQ approved elastomeric encapsulant. A list of DEQ approved elastomeric encapsulants is attached (**Attachment 4**). Encapsulant shall be a minimum of 20 mils thick. The Lead-Based Paint and Settled Dust Sampling Report with floor plan maps detailing the locations of the lead-based paint is attached for review (**Attachment 5**);
     - All interior and exterior metal overhead door frames, overhead door lintels, modified bollards, and edge protectors.
     - All window lintels, window sills, and door lintels in Drill Floor and Rooms 23, 24, and 25.
     - The wood board on top of wall in Drill Floor.
     - All I-Beams and ceiling of Rooms 23, 24, and 25.
     - All Bar Joists (steel support beams) in Drill Floor.

2. **Friction and Impact Surfaces**

   Overhead Garage Doors and Tracks
   - All four overhead doors and tracks in the armory building shall be removed, wrapped in 6 mil poly sheeting, and properly disposed.
   - Contractor is responsible for taking field measurements of the overhead doors;
   - The two overhead doors shall be replaced with 24 gauge steel CHI Model 3240 section overhead doors or equivalent;
   - A third party professional overhead door installer shall remove existing overhead doors and tracks and install new overhead doors and tracks;
   - Contractor shall be responsible for wrapping removed doors and tracks in poly sheeting and properly disposing of items;

   Windows (See Attachment 6 for Specifications)
   - All 13 windows and 4 ventilation frames with associated louvers containing lead-based paint shall be removed, properly disposed and replaced with windows.
   - The window glazing contains asbestos. This material shall be handled appropriately during removal.
   - 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.
     - Window installer shall have no less than five (5) years of installation experience.

- Window installer shall have experience with removal of steel casement windows.
- All interior and exterior window and vent sills shall be HEPA vacuumed, wet washed, and sealed with a lead-based paint encapsulant after windows and vent frames are removed and replaced.
- Product Substitution: Substitutions include products differing from those required by the specification.
  - 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.
  - Submit requests for product substitution in accordance with the time allotted to do so by the Scope of Work included within the Bid Solicitation.
  - 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.
- Window measurements are listed as approximate Width X Height; Contractor to field verify.
  - All 7 High Bay windows located in Drill Room are approximately 45" X 33"
  - All 6 windows located in Rooms 23, 24, and 25 are approximately 45" X 34"
  - All 4 Ventilation Openings located in Drill Room are approximately 37" X 20"
- The 7 High Bay windows and the 4 Ventilation Openings located in the Drill Room shall be replaced with General Aluminum Series #2700/2800 Picture Windows or equivalent. Specifications are attached (**Attachment 6**).
  - Windows shall be non-opening windows
  - Windows shall have Low E glazing
  - Windows shall have Bronze Finish on frame with powder baked on enamel
- The 6 windows located in Rooms 23, 24, and 25 shall be replaced with General Aluminum Series #2700 Single Hung Thermal Break Windows or equivalent. Specifications are attached (**Attachment 6**).
  - Windows shall be functional windows
  - Windows shall have Low E glazing
  - Windows shall have Bronze Finish on frame with powder baked on enamel

Doors and Frames (See Attachment 7)

- Doors and frames with lead-based paint shall have doors removed, all paint shall be removed from door frame, frame shall be painted with a neutral colored primer, and replacement door shall be installed with continuous geared hinges.

- 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.
- Below is a list of the doors and frames containing lead-based paint. Door measurements are listed as approximate Width X Height; Contractor shall field verify measurements.
    - Drill Floor (Side A) – Door Measurement 3' X 7'
    - Drill Floor (Side D) – Door Measurement 3' X 7'
    - Room 23 (Side C) – Double Door Measurement 6' X 7'
    - Room 15 (Side C) – Door Measurement 3' X 7'
- All removed doors shall be wrapped in 6 mil poly sheeting and properly disposed;
- Specifications for replacement items are attached **(Attachment 7)**;
- 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;

a. Exterior Doors

- Exterior doors will be replaced with galvannealed, 16 gage, honeycomb core insulated doors;
- Continuous Geared Door Hinges: As manufactured by Pemko or approved equal – Satin Nickel – Half Surface Safety Hinges: Standard (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.

b. Interior Doors (All Except Indoor Firing Range Door)

- Interior doors will be replaced with non-galvannealed, 18 gage, honeycomb core insulated doors;
- Continuous Geared Door Hinges: As manufactured by Pemko or approved equal – Satin Nickel – Half Surface Safety Hinges: Standard (Specifications 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.

3. **Sampling and Disposal**

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

LEAD DUST REMEDIATION INSTRUCTIONS

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

1. Lead Dust Remediation (See Attachment 5)

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

- All rooms built in the drill floor shall be removed and properly disposed.

- 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;
  - Dispose any materials, determined by the DEQ to be trash, as non-hazardous waste;
  - HEPA vacuum and wet wash floors of entire building;
  - Contact DEQ to perform post remediation wipe sampling to confirm that room floors with lead contamination have been appropriately remediated to 40 micrograms per square foot (ug/SF). See Section C (Confirmation and Clearance Sampling) for additional information;
  - Areas above 40 ug/SF shall be re-cleaned and re-tested until results are at or below 40 ug/SF;
  - Lead dust and appropriate cleaning materials shall be disposed as appropriate.

3. Disposal of Materials

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

4. Confirmation and Clearance Sampling

- Contractor may use his own lab to check progress of remediation, however all DEQ decisions shall be based on analytical data from samples taken by DEQ.
- DEQ will be responsible for taking all post remediation samples.
- DEQ shall be notified five (5) days prior to each sampling event.
- Contact Information: DEQ
  Contact: Dustin Davidson
  Phone: (405) 702-5115
- <u>The third-party sampling shall not be included in the contractors base bid;</u>
- All post remediation sampling will be performed after all initial abatement, remediation, and cleaning are complete.

5. FINAL REPORT

- Write final report and submit to DEQ;
- Final report shall include:
  - A detailed summary of work including any warranties and data;
  - copy of post remediation sampling report;
  - waste manifests (if any); and
  - photo documentation of work;
    - Photo documentation of work will have color digital photos with captions describing photo;
- Final report will be submitted in a bound hard copy and electronically on disc.

OWNER REPRESTATIVE

Owner's Representative:

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

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

ATTACHMENT 1

Walters Armory Floor Plan Map

FLOOR PLAN
SCALE 1/8" = 1'-0"

ATTACHMENT 2

Walters Armory Asbestos Inspection Report
And
Walters Armory Asbestos Project Design

roject Design Review Form

Approved: ___X___

Disapproved: _____

Oklahoma Department of Labor
Asbestos Division
3017 N. Stiles, Oklahoma City, OK 73105
Phone - 405.521.6464 Fax - 405.521-6025

Project Name: Walters Armory

Project No: 12-6980 Date: 02/22/12

Project Designer: Bill Muenker

	ITEM	ACCEPTED	REJECTED	COMMENTS
1.	A statement that DOL Abatement of Friable Materials Rules apply.	X		Work to be performed according to OAC 380:50 (Oklahoma rules for Abatement of Friable Asbestos).
2.	Sequencing and phasing of work.	X		One Task
3.	Identification of means of egress and a fire protection plan and a diagram for emergency escape routes, and fire extinguisher placements.	X		Workers briefed on emergency egress procedures. One 10#ABC fire extinguisher placed inside work area and one placed at decon.
4.	The quantity , type, percentage with bulk analysis unless presumed and a diagramed location of asbestos materials to be abated.	X		Approximately 250 LF of pipe insulation with fittings and 25 fittings on fiberglass lines containing 7%-40% chrysotile.
5.	Abatement methods, and techniques, and numbers of containments, glove bags or mini-containments.	X		Glovebagging procedures.
6.	Details of personal and area air monitoring samples.	X		Personnel= 25% of workforce with a min. of (2), inside work area, outside decon, load out path, decon AFD discharge..
7.	Numbers and locations of Clean Test samples and type of analysis to be employed.	X		(5) PCM clearances achieving 1200 L each sample..
8.	Numbers, capacities, a diagram to identify locations, and discharge points, if any, of negative air machines.	X		One AFD at decon exhausted outside..
9.	Details of project containment(s), glove bag or mini-containments, including drawings. Details shall include all applicable subchapters, including but not limited to scaffolding and live electric isolation.	X		All electric within arm's reach and below glovebags will be shut off and locked out/tagged out prior to prep procedures. Criticals, drop cloths, attached decon and load out.
10.	Details of decontamination system(s).	X		Attached three stage decon adhering to OAC 380.50-15-7,8 and 12.
11.	The extent to which asbestos-contaminated soils, if any, must be removed, and the sampling methods of determining the efficacy of such removal.	N/A		
12.	Special materials or methods required to protect objects in the work area should be detailed, (plywood over carpeting or hardwood floors to prevent damage from scaffolds and/or falling materials.	X		Contractor to protect building and materials that will be re-used after abatement procedures
13.	Any variances from the Abatement of Friable Asbestos Materials Rules.	N/A		

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

REVIEWED BY: Carl Brewer DATE: 2/23/12

REVIEWED BY: Benito Cruz DATE: 2/23/12

ASBESTOS ABATEMENT PROJECT DESIGN
WALTERS ARMORY
WALTERS, OKLAHOMA

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

B. PROJECT INFORMATION:

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

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

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

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

F. MATERIALS TO BE ABATED (4):

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

2. Amount, Location and Type of Asbestos-Containing Materials (ACM): There is approximately 250 linear feet of piping insulation with fittings and an additional 25 fittings on fiberglass-insulated lines to be abated. The piping and fitting insulation contains from 35-40% Chrysotile and the fitting insulation on fiberglass-insulated lines contains 7-10% Chrysotile. The laboratory report excerpt is attached.

G. ASBESTOS ABATEMENT METHODS (5):

Line/fitting and fitting insulation will be removed within critical barriers using glove-bag procedures with an attached decon and load-out. Removal of ceiling tiles for piping access may be necessary in some areas prior to prep and hanging of glove-bags. Demolition of portions of the restroom chase wall and walls with piping inside will be necessary for access to piping serving fixtures in the restrooms. Demolition will be done during prep with care taken not to disturb the piping. If the ACM piping insulation is damaged or the demolition for access cannot be completed without damaging the ACM, workers will cease demolition, don full-body suits and full-face respirators to complete the demolition. If ACM debris is encountered when removing ceiling tiles for access to piping for abatement, workers will cease removing ceiling tiles and finish the ceiling tile removal in full-body suits and full-face respirators. The decon will be fully operational and critical barriers will be installed prior to removing ceiling tiles or beginning wall demolition. Poly drop cloths will be placed on the floor beneath the piping during installation of glove-bags. The decon and loadout will be will be erected at the doors into the drill room. Refer to the attached layout for the locations. A 600-1,200 CFM air filtration device (AFD) will be attached to the decon and exhausted outside. Bagged waste may be stored temporarily on a drop cloth in a convenient location inside of the work area awaiting loadout into a waste container. At the end of the work shift or when sufficient waste has accumulated for loadout, the waste will be removed from the storage area and loaded into a poly-lined disposal trailer/van.

H. ASBESTOS AIR MONITORING/RESPIRATORY PROTECTION (6-8): All prep work may be done unprotected unless damaged ACM is encountered during prep or if demolition cannot be completed without disturbing ACM. Full-body protective clothing and full-face APR with HEPA-cartridges will be worn during abatement and any time respiratory protection is required. Full-body protective clothing and half-face APR may be worn during handling and loadout of the double-bagged waste. Personal air samples will be collected on a minimum of two workers or 25%, whichever is greater, during work requiring respiratory protection. One inside area air monitor will be placed inside the work area while abatement is in progress and moved as work progresses. One area monitor will be set outside the decon clean room during abatement and one will be placed along the load-out path during load-out. The decon AFD will be exhausted outside and will be monitored. Piping from which insulation was removed will be locked down using a tinted lockdown encapsulant or spray paint.

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

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

J. CONTAINMENT METHODS (9):

Critical barriers and a drop cloth beneath the piping during glove-bagging will be used. Rolling scaffolding or ladders will be used as necessary to access the piping. Workers will be briefed by the supervisor regarding relevant safety issues associated with the work at the beginning of each work shift. Asbestos barrier tape will be used as necessary to demarcate the regulated area. All electrical circuits within arm's reach of the glove-bags will be shut off and locked out/tagged out in compliance with OSHA 29 CFR 1910.331-336 prior to the ODOL prep inspection. Where lockout/tagout procedures are not sufficient for isolation of electrical circuits, the procedures in OAC380:50-17-4(1) are to be followed. Power for the decon shower, any temporary work lighting, HEPA-vacuums, and AFD for the decon will be supplied through a GFCI-board or pigtails. Power for abatement activities will be obtained from building sources.

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

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

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

N. VARIANCES REQUESTED (13): None.

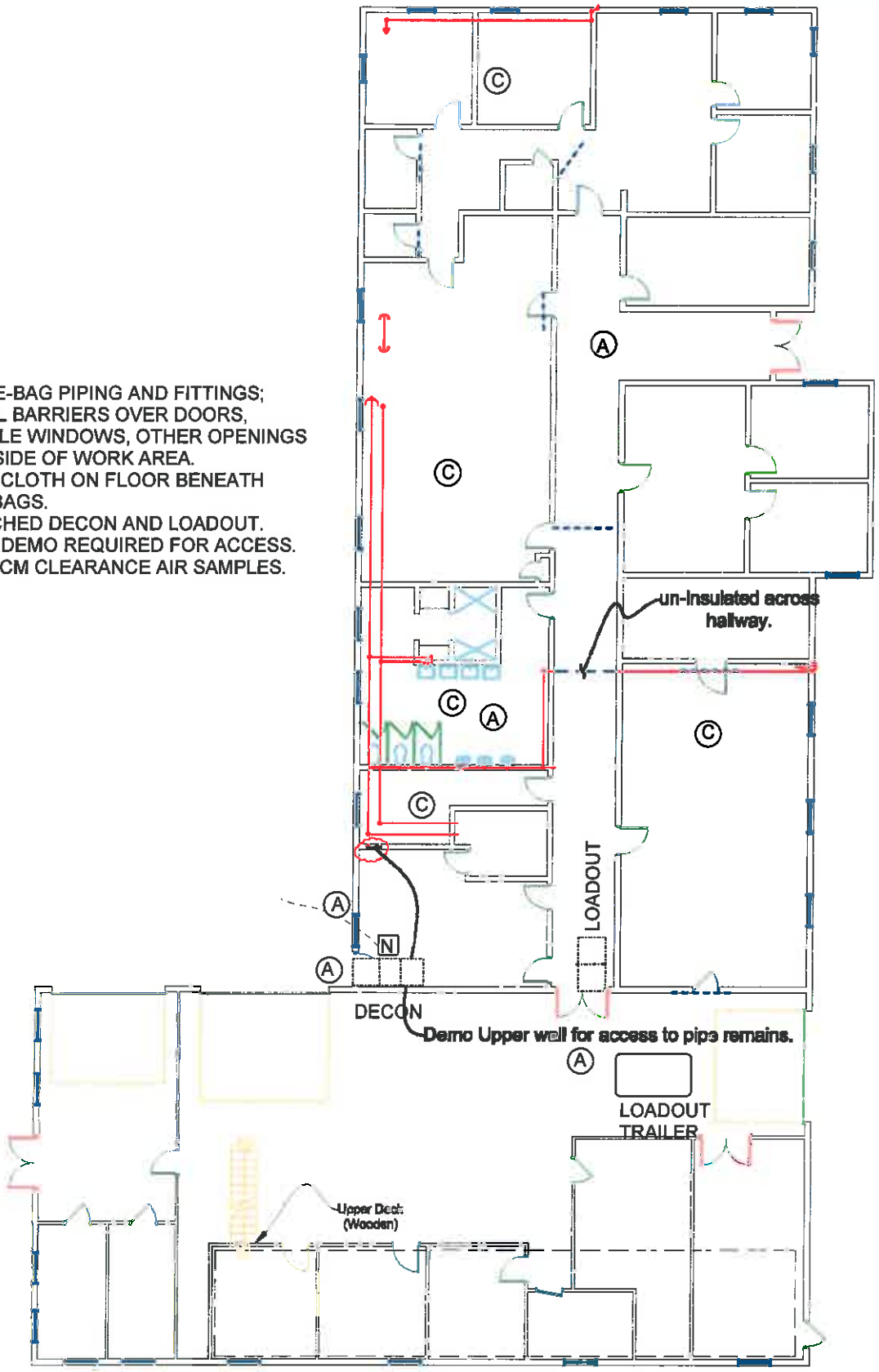
O. INSPECTIONS: ODOL is expected to conduct routine prep, in-progress, visual and final inspections for this project.

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

2/20/2012 .

Bill Muenker Date
Asbestos Project Designer, OKPD-140007

NOTES:
1. GLOVE-BAG PIPING AND FITTINGS; CRITICAL BARRIERS OVER DOORS, OPENABLE WINDOWS, OTHER OPENINGS TO OUTSIDE OF WORK AREA.
2. DROP CLOTH ON FLOOR BENEATH GLOVE-BAGS.
3. ATTACHED DECON AND LOADOUT.
4. SOME DEMO REQUIRED FOR ACCESS.
5. FIVE PCM CLEARANCE AIR SAMPLES.



Walters Armory
Walters, Ok.
Main Building

Legend:
- = ACM Piping @ 250 LF
- = ACM Piping Fittings @ 25 each.
- Critical Barriers

ENERCON

GLOVE-BAG PIPING AND FITTINGS

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
013	WA-7-01	Layered	Gray Pipe Insulation	Asbestos Present Chrysotile 40	Cellulose 15	Binder
013a		Layered	Tan Pipe Insulation	Asbestos Not Present	Cellulose 95	Binder
014	WA-7-02	Layered	Gray Pipe Insulation	Asbestos Present Chrysotile 35	Cellulose 20	Binder
014a		Layered	Tan Pipe Insulation	Asbestos Not Present	Cellulose 95	Binder
015	WA-7-03	Layered	Gray Pipe Insulation	Asbestos Present Chrysotile 35	Cellulose 35	Binder
015a		Layered	Tan Pipe Insulation	Asbestos Not Present	Cellulose 95	Binder
015b		Layered	Black Tar Paper	Asbestos Not Present	Cellulose 35	Tar

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

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
016	WA-8-01	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 7	Glass Fiber 25	CaCO3 Binder
017	WA-8-02	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 8	Glass Fiber 25	CaCO3 Binder
018	WA-8-03	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 10	Glass Fiber 25	CaCO3 Binder
019	WA-9-01	Homogeneous	White Wall Texture	Asbestos Not Present	Cellulose <1	CaCO3 Paint
020	WA-9-02	Homogeneous	White Wall Texture	Asbestos Not Present	NA	CaCO3 Paint
021	WA-9-03	Homogeneous	White Wall Texture	Asbestos Not Present	Cellulose <1	CaCO3 Paint
022	WA-10-01	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose 3	Gypsum

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

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
023	WA-10-02	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose 3	Gypsum
024	WA-11-01	Homogeneous	White Joint Compound	Asbestos Not Present	NA	CaCO3 Binder
025	WA-11-02	Homogeneous	White Joint Compound	Asbestos Not Present	NA	CaCO3 Binder
026	WA-11-03	Homogeneous	White Joint Compound	Asbestos Not Present	NA	CaCO3 Binder
027	WA-12-01	Layered	Gray Pipe Insulation	Asbestos Present Chrysotile 45	Cellulose 15	Binder
027a		Layered	Tan Pipe Insulation	Asbestos Not Present	Cellulose 95	Binder
028	WA-12-02	Layered	Gray Pipe Insulation	Asbestos Present Chrysotile 45	Cellulose 20	Binder

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

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201394
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/04/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

Project: Walters Armory REVISED
Project Location: Walters, OK 608 W-Missouri
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
028a		Layered	Tan Pipe Insulation	Asbestos Not Present	Cellulose	95	Binder
028b		Layered	Black Tar Paper	Asbestos Not Present	Cellulose	35	Tar
029	WA-12-03	Layered	Gray Pipe Insulation	Asbestos Present Chrysotile 55	Cellulose	10	Binder
029a		Layered	Tan Pipe Insulation	Asbestos Not Present	Cellulose	95	Binder
030	WA-13-01	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 10	Glass Fiber	25	CaCO3 Binder
031	WA-13-02	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 10	Glass Fiber	25	CaCO3 Binder
032	WA-13-03	Homogeneous	Gray Pipe Insulation	Asbestos Present Chrysotile 8	Glass Fiber	25	CaCO3 Binder

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

ATTACHMENT 3

Health & Safety Aspects to Consider

Health & Safety Aspects to Consider

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

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

Health and Medical Aspects

Health Effects

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

Medical Surveillance for occupational Exposure to Lead

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

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

Personal Protective Equipment

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

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

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

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

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

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

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

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

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

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

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

Education, Maintenance, Cleaning and Conversion

Worker Education

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

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

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

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

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

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

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

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

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

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

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

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

REFERENCES

Section 1 Required Publications

There are no entries in this section

Section II Related Publications

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

AR 11-34
The Respiratory Protection Program

AR 40-5
Preventive Medicine

DODI 6055.5
Industrial Hygiene and Occupational Health

DOD 6055.5-M
Occupational Medical Surveillance Manual

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

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

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

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

NGR 420-10
Construction and Facilities Management Office Operations

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

ATTACHMENT 4

DEQ Approved Lead-Based Paint Encapsulants List

Lead-Based Paint Encapsulants approved by DEQ

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

ATTACHMENT 5

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

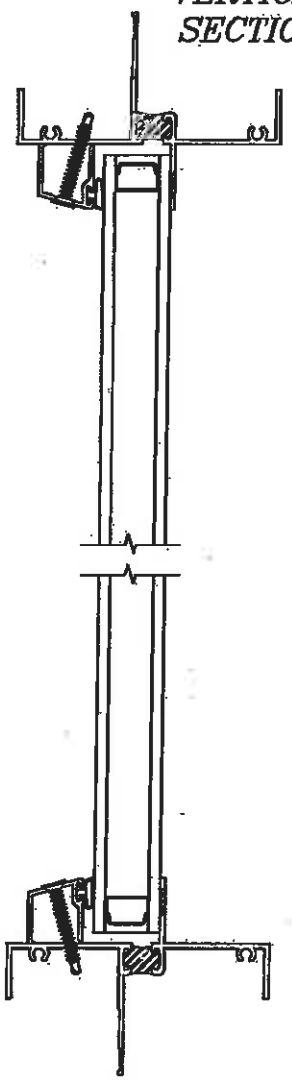
ATTACHMENT 6

REPLACEMENT WINDOW SPECIFICATIONS

GENERAL ALUMINUM
Company of Texas, LP

SERIES # 2700/2800 PICTURE WINDOW

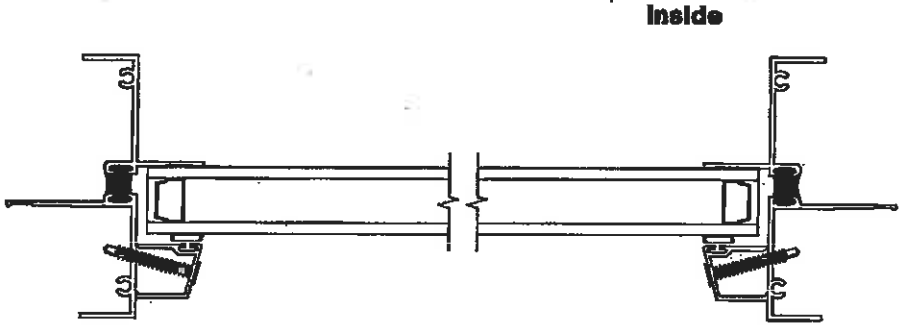
VERTICAL SECTION



SPECIFICATIONS

PICTURE WINDOW		
OUTSIDE WET DROP GLAZED		
SERIES 2700/2800 HAS 1/2" AIR SPACER INS. GLASS		
SERIES # 2700 IS FOR USE WITH 2700 S.H.		
SERIES # 2800 IS FOR USE WITH 2800 H.S. OR P.W.S.		
INSIDE FRAME DIMENSION	HORIZONTAL: CALL SIZE – 1/2"	
	VERTICAL: CALL SIZE – 1/2"	
ROUGH OPENING	HORIZONTAL: CALL SIZE	
	VERTICAL: CALL SIZE	
MINIMUM SIZE I.F.D.	8" X 8"	
MAXIMUM SIZE	UP TO 36 SQUARE FT. (TEMPERED GLASS 30 TO 36 SQ.FT.) AND NOT OVER 9'–0" IN EITHER DIRECTION.	
TEST REPORT No.: 09–157	P–HC40 72 x 72	
GLASS SIZE	HORIZONTAL: CALL SIZE – 2"	
	VERTICAL: CALL SIZE – 2"	
MAXIMUM OVERALL GLASS THICKNESS:	7/8"	
U–VALUE: 0.39	(WITH LOW–E GLASS AND WITH MUNTINS)	
SHGC: 0.30	(WITH LOW–E GLASS AND WITH MUNTINS)	
STC: 27	(DSB EXT. GLASS/1/2 SPACER/DSB INT. GLASS)	
STC: 32	(3/16 EXT. GLASS/1/2 SPACER/DSB INT. GLASS)	
DRAWN BY: FA	HALF SCALE	EXPIRATION DATE: 8/21/2011
		REVISION DATE: 8/27/2009

HORIZONTAL SECTION



ATTACHMENT 7

REPLACEMENT DOOR SPECIFICATIONS

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.

		Minimum	Maximum
1.	Acceptable Ratios:		
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.

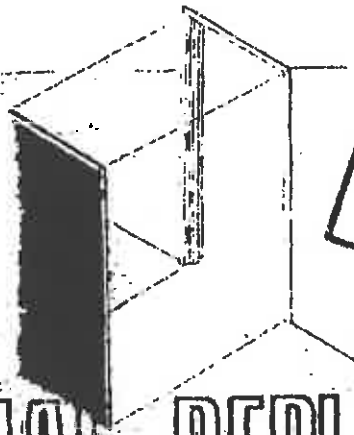
C. Immediately prime prior to application of the sealant, clean out loose particles from joints. Where recommended by sealant manufacturer, apply primer to joints in concrete masonry units, wood, and other porous surfaces in accordance with sealant manufacturer's instructions. Do not apply primer to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

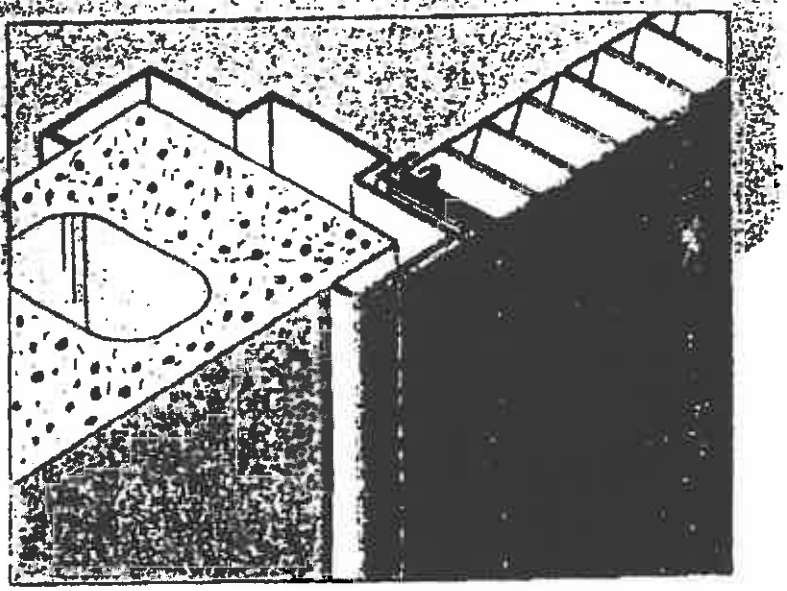


UL LISTED
1½ HR (B) LABEL
can be used in existing non-listed or listed steel frame.

Install a pre-hung

Steelcraft

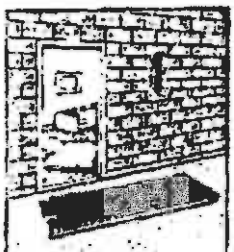
COMMERCIAL REPLACEMENT DOOR UNIT



New beauty and security for worn out doors.

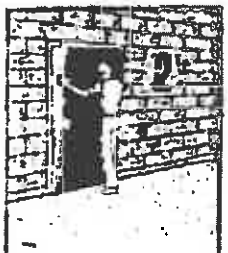
The Steelcraft Commercial Replacement Unit is the only product of its kind specifically designed for the rehab market. Fits these nominal sizes: 2868, 3068, 3668, 3868, 4068, 2870, 3070, 3670, 3870, 4070 single, and 5468, 6068, 5470 and 8070 double doors.

- 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.



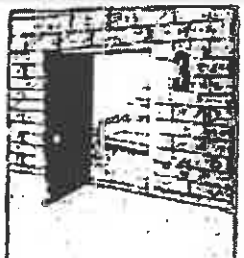
QUICK

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



'N EASY

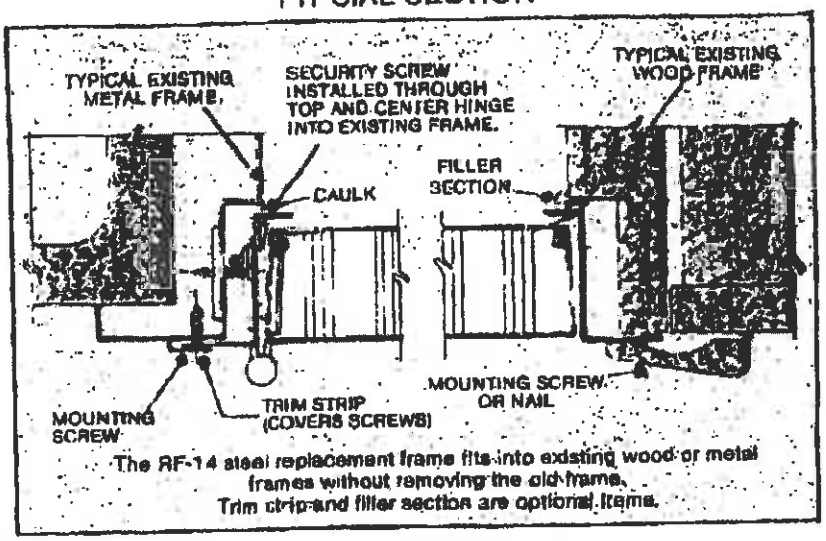
2. Set pre-hung unit into frame opening. Install mounting screws through face, cut banding and install security screws.



INSTALLATION

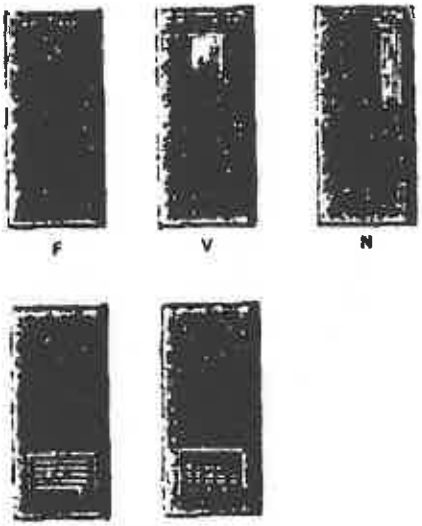
3. Mount hardware as required. Paint.

TYPCIAL SECTION

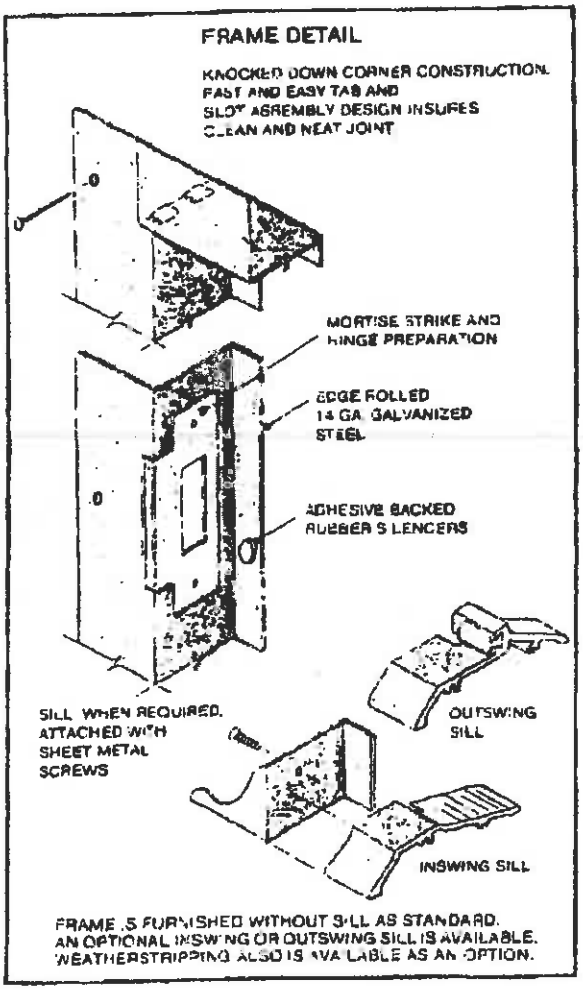


The RF-14 steel replacement frame fits into existing wood or metal frames without removing the old frame. Trim strip and filler section are optional items.

DESIGNS AND FINISHES AVA



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 16 ga. door (RL-16) 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-16 (1¾" 16 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.

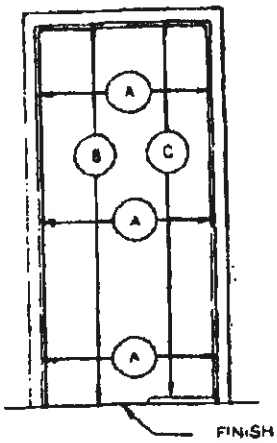
Frames shall conform to the following:

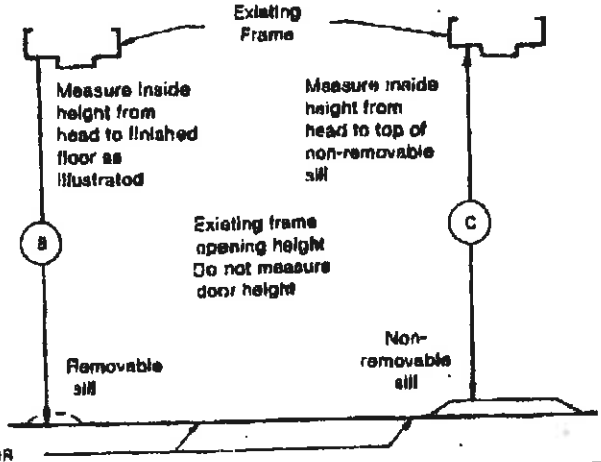
- Frames shall be as manufactured by Steelcraft, Cincinnati, Ohio, and designated as RF-14 (14 ga.).
- Frames shall be accurately formed from galvanized steel.
- Frames shall be furnished knocked down (KD). Corners shall have tabs for secure and easy interlocking of jambs to head at each corner.
- Frames 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.

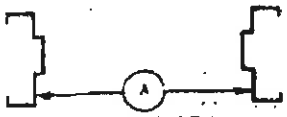
*Single openings are designed to be pre-hung and installed. Units are supplied KD for pre-hanging at job site or by distributor.

OCT 24 2000

HOW TO DETERMINE SIZE OF EXISTING FRAME







FRAME WIDTH

Measure in 3 places. Use narrowest dimension for ordering

SIZE (Nominal)	FITS THESE EXISTING OPENINGS			
	A WIDTHS		B* C HEIGHTS	
	MIN.	MAX.	MIN.	*MAX.
2'8" x 6'8"	31⅛"	32⅛"	79⅛"	80⅛"
3'0" x 6'8"	35⅛"	36⅛"	79⅛"	80⅛"
3'6" x 6'8"	41⅛"	42⅛"	79⅛"	80⅛"
3'8" x 6'8"	43⅛"	44⅛"	79⅛"	80⅛"
4'0" x 6'8"	47⅛"	48⅛"	79⅛"	80⅛"
2'8" x 7'0"	31⅛"	32⅛"	83⅛"	84⅛"
3'0" x 7'0"	35⅛"	36⅛"	83⅛"	84⅛"
3'6" x 7'0"	41⅛"	42⅛"	83⅛"	84⅛"
3'8" x 7'0"	43⅛"	44⅛"	83⅛"	84⅛"
4'0" x 7'0"	47⅛"	48⅛"	83⅛"	84⅛"
5'4" x 6'8"	63⅝"	64⅝"	79½"	80½"
6'0" x 6'8"	71⅛"	72⅛"	79½"	80½"
5'4" x 7'0"	63⅝"	64⅝"	83½"	84½"
6'0" x 7'0"	71⅛"	72⅛"	83½"	84½"

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

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

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 513/745-8400

Printed in U.S.A.

Cat No. 616 Rev. 6/98

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

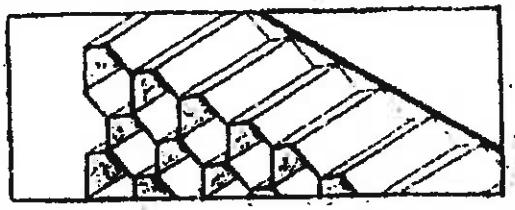
Lock and Strike:
Government 161 (ANSI-A115.2) cylindrical or Government 86 (ANSI-A115.1) mortise lock with an ANSI-A115.1 or .2 strike.

Consult distributor for other hardware preparations.

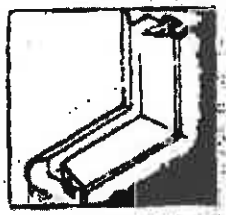
	NOMINAL SIZE	FRAME SIZE (FINISHED OPENING) WIDTH	FRAME SIZE (FINISHED OPENING) HEIGHT	NET DOOR SIZE* WIDTH	NET DOOR SIZE* HEIGHT
SINGLE	2868	31"	79¼"	30-13/16"	79¼"
	3068	35"		34-13/16"	
	3668	41"		40-13/16"	
	3868	43"		42-13/16"	
	4068	47"		46-13/16"	
	2870	31"	83¼"	30-13/16"	82¼"
	3070	35"		34-13/16"	
	3670	41"		40-13/16"	
	3870	43"		42-13/16"	
	4070	47"		46-13/16"	
PAIR	5468	63"	79¼"	30-13/16" & 31-13/16"	78¼"
	6068	71"		34-13/16" & 35-13/16"	
	5470	63"	83¼"	30-13/16" & 31-13/16"	82¼"
	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



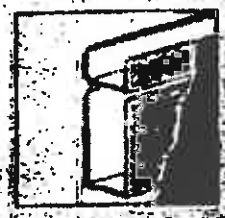
Full honeycomb core of phenolic resin-impregnated kraft paper reinforces the door every 1 inch, providing superlative resistance to impact and assuring a flat surface.



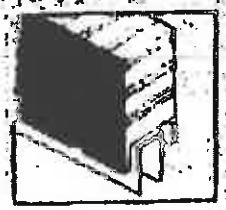
Aluminum glass trim (snap-in).

8-gage mick hinge reinforcement.

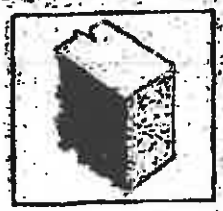
Snap-metal top caps for exterior openings.



Steel top and bottom reinforcing channels (18-gage closer reinforcement 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.

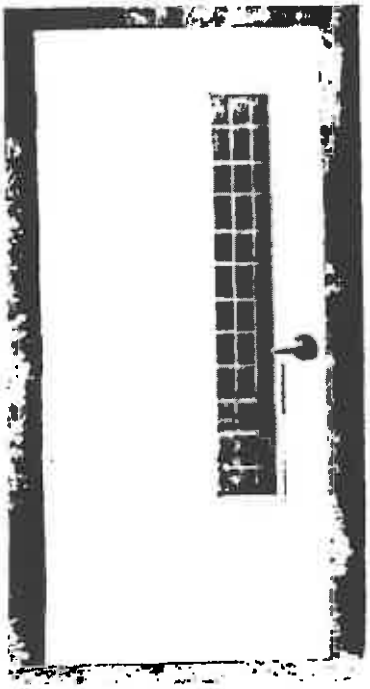
Pairs of doors consist of two leaves and a 14 ga. steel "Z" astragal field mounted to inactive leaf of pair. Inactive leaf may be secured with flush bolts or surface bolts.

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

STEELCRAFT

L18 AND L16-SERIES HONEYCOMB DOORS

HD X-HD



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.

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.

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[3]	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.

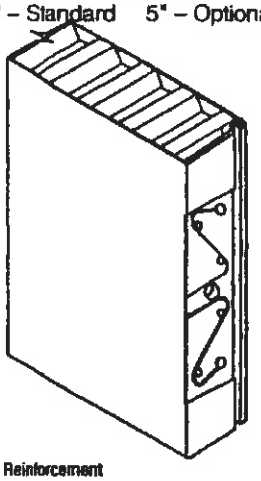
[1] Usage frequency is based on ANSI A250.8-1998
[2] Reinforcements for galvannealed doors are also galvannealed
[3] Commercial quality carbon steel

OCT 24 2006

IR Security & Safety

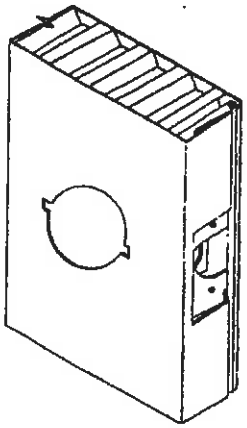
Details are subject to change without prior notice.

Universal Mortise Hinge Prep
4½" – Standard 5" – Optional



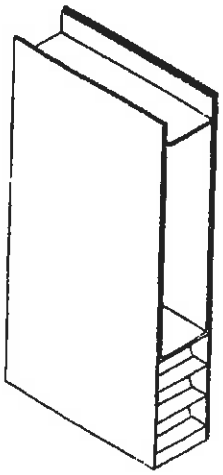
7 Gage Hinge Reinforcement

Lock Prep

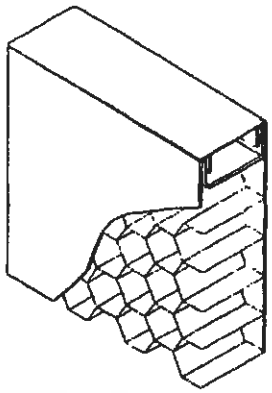


161 Cylindrical Lock shown

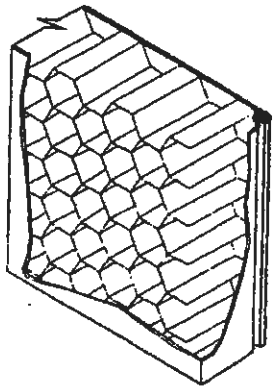
Optional 14 Gage Closer Reinforcement



Optional Snap-In Top Cap



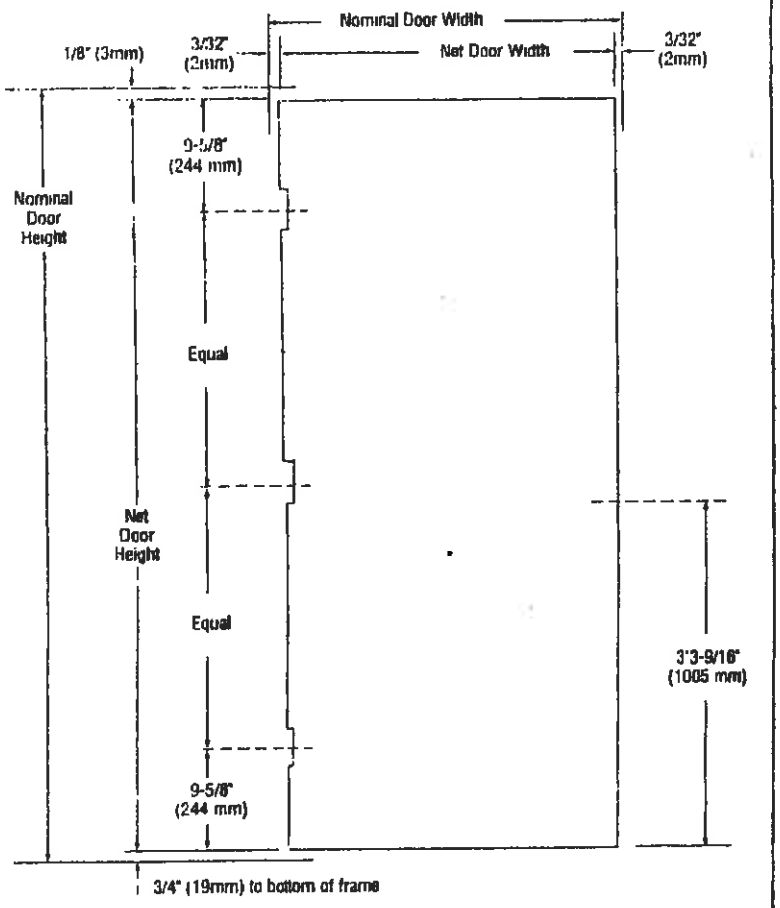
Rigid Honeycomb Core



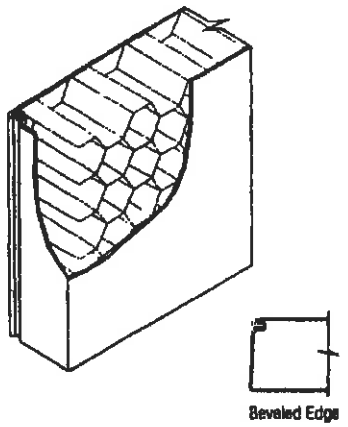
GENERAL NOTES:

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.

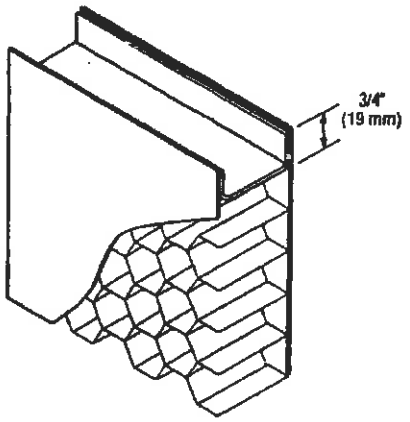
Single Door Elevation



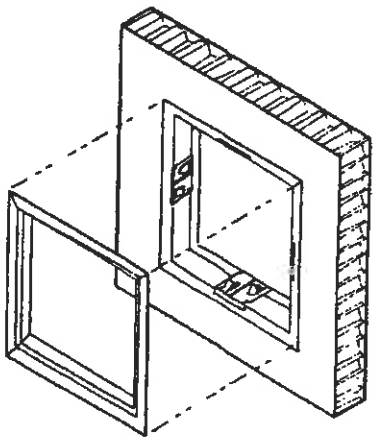
Beveled Edge with Full Height Mechanical Interlock



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.*

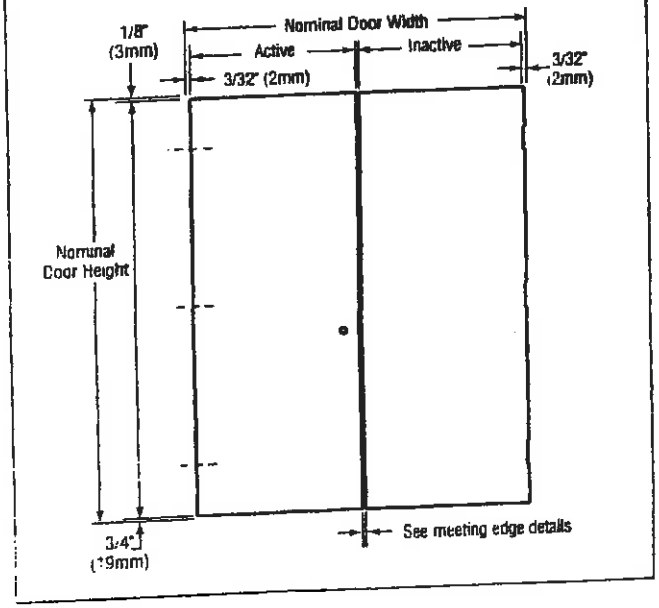
Series	Level	Model	Description	Edge Construction
L18	2	1	Full Flush	Full height, visible mechanical interlocked edge
LF18	2	2	Seamless	L-Series with epoxy filled edge seams
LW18	2	2	Seamless	L-Series with welded edge seams
L16	3	1	Full Flush	Full height, visible mechanical interlocked edge
LF16	3	2	Seamless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

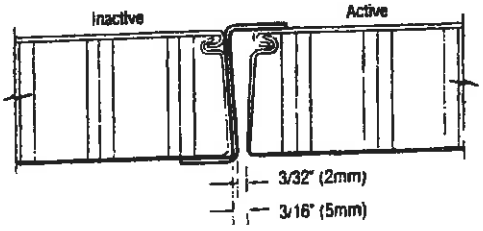
- **Standard operating clearances** *(installed in frame)*:
  - Head = ⅛" (3mm) to bottom of head or transom panel
  - Hinge side = 3/32" (2mm) to rabbet on jamb
  - Meeting edges = 3/32" (2mm) with or without astragal. For openings without an astragal, a wide inactive leaf is used.
  - Bottom = ⅜" (19mm) 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

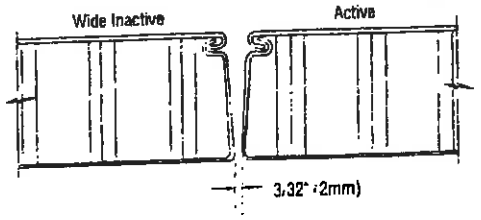


MEETING EDGE DETAILS:

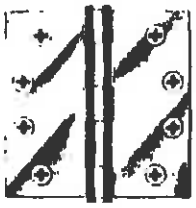
Typical Astragal 14 Gage



Pairs without Astragal



Five Knuckle



Plain Bearing - Standard Weight

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

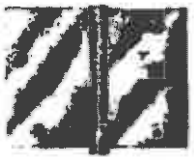
1191 Brass with Stainless Steel pin - ANSI A2133
Stainless Steel with Stainless Steel pin - ANSI A5133

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

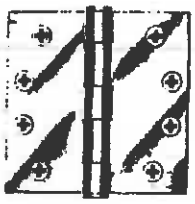
For use on medium weight doors or doors requiring low frequency service

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

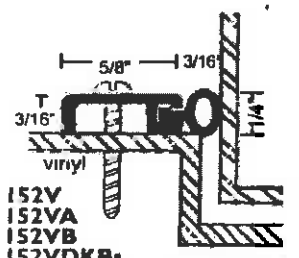
Vinyl Seals

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

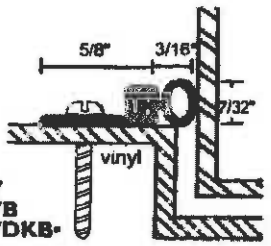
#6 x 3/4" Stainless Steel Sheet Metal Screws furnished
Screw holes slotted for adjustment

All vinyl seals this section

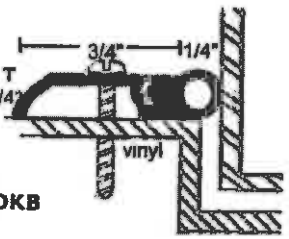
A - clear
B - gold
DKB - dark bronze
no suffix - mill
Vinyl is gray
(exception: •vinyl is black)



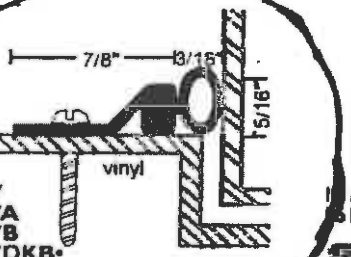
152V
152VA
152VB
152VDKB•



155V
155VB
155VDKB•



156V
156VDKB



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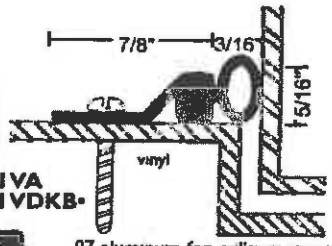
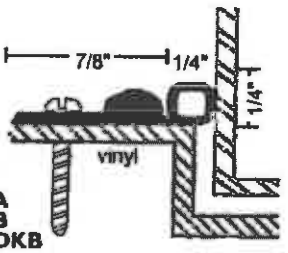
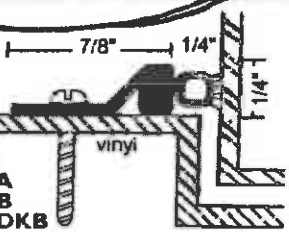
160VA
160VB
160VDKB•



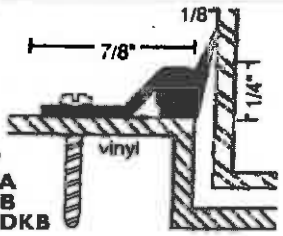
1VA
1VDKB•
.07 aluminum for military specs



162V
162VA
162VB
162VDKB



164V
164VA
164VB
164VDKB



188V
188VA
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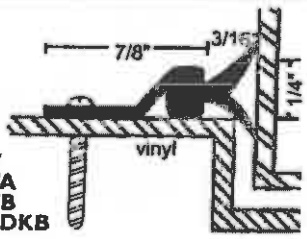
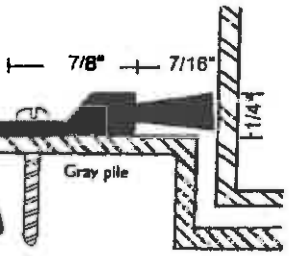
188VDKB

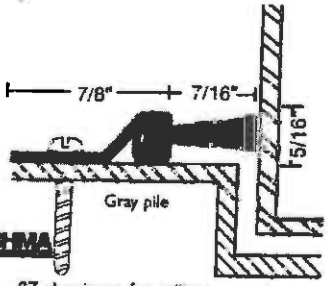


190V
190VA
190VB
190VDKB

Pile Seals



185P
185PA
185PB
185PDKB
BHMA



161PA
161PDKB
BHMA
.07 aluminum for military specs

Saddle Thresholds

All thresholds this page

MATERIALS & FINISHES

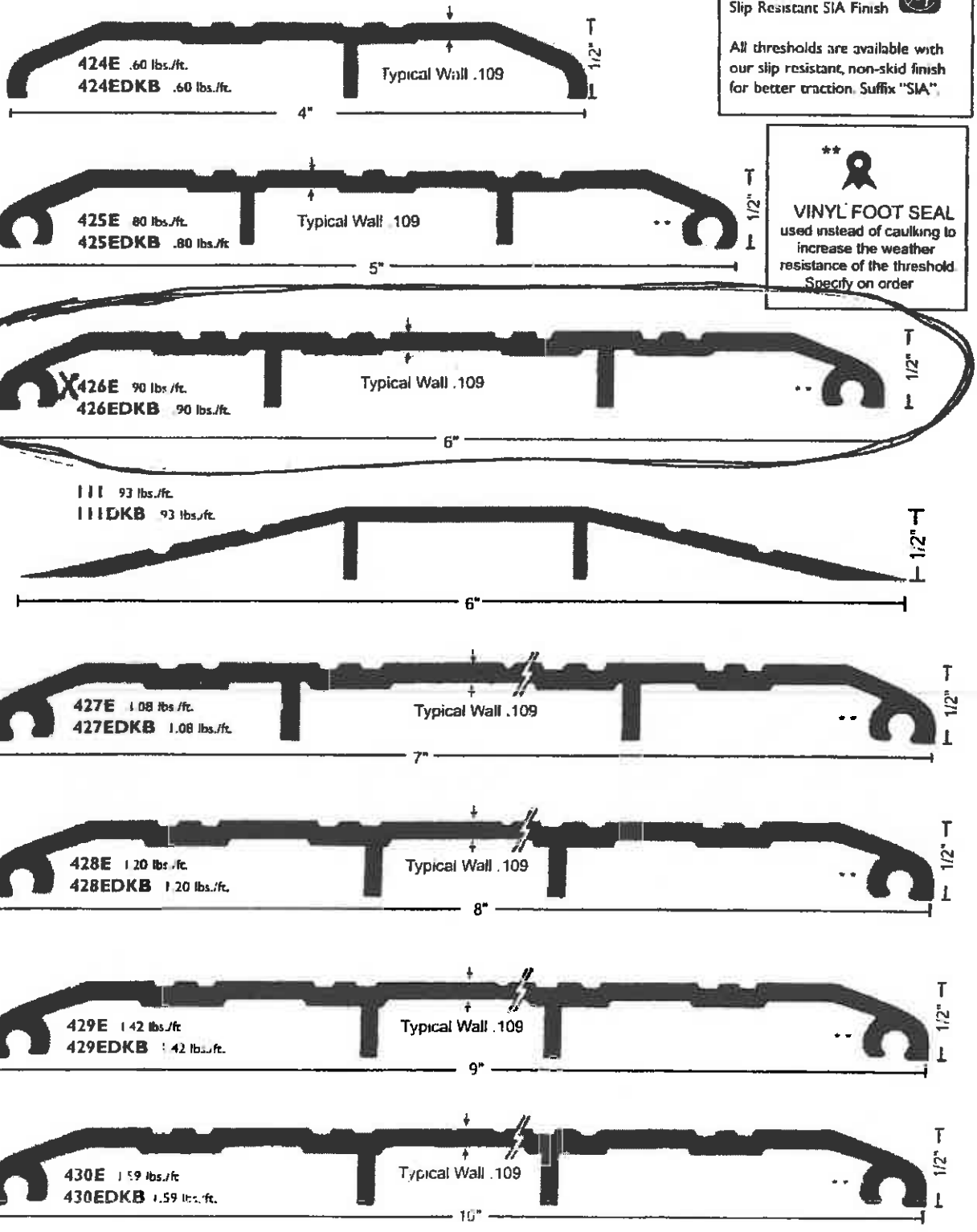
- Aluminum mill finish
- DKB - Aluminum dark bronze finish

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



Specifications

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

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

Backset:
2¾" (70 mm) standard. 2⅜", 3¾" and 5" (60 mm, 95 mm, 127 mm) 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" (19 mm) 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.

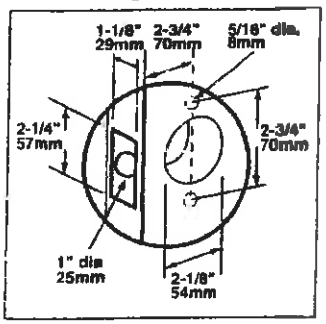
Cylinder & Keys:
6-pin Everest C123 keyway standard with two patented nickel silver keys per lock.

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.

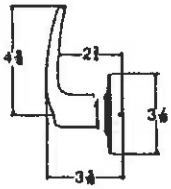
UL / cUL:
All locks listed for A label single doors, 4' x 8'.
Letter F and UL symbol on latch front indicate listing.
Electrified functions are UL19X Listed for single point locking applications.
UL437 Listed locking cylinder optional: specify Primus 20-500 Series cylinder.

Lever Designs & Finishes

ATHENS

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

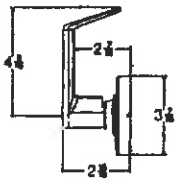
606



RHODES

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

612

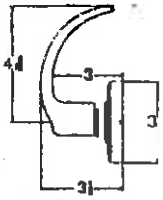


Lever Designs & Finishes

SPARTA

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

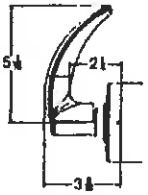
626



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

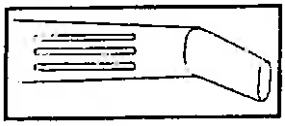
613
Oil Rubbed Bronze

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

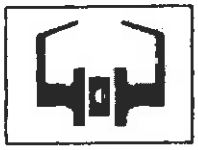
Non-Keyed Locks

SCHLAGE ANSI

ND10S F75

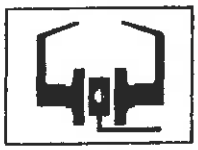
Passage Latch
Both levers always unlocked.

ND12D F89



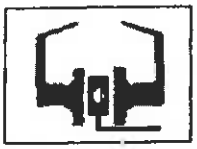
Exit Lock
Outside lever always fixed. Inside lever always unlocked.

ND12DEL



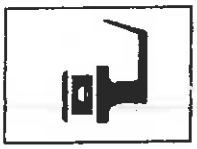
Electrically Locked (Fail Safe)
Outside lever continuously locked electrically. Unlocked by switch or power failure. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit.

ND12DEU



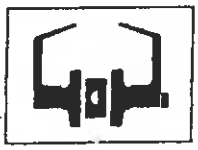
Electrically Unlocked (Fail Secure)
Outside lever continuously locked until unlocked by electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit.

ND25D



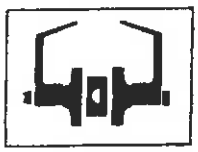
Exit Lock
Blank plate outside. Inside lever always unlocked.

ND40S F76



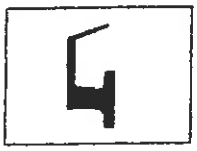
Bath/Bedroom Privacy Lock
Push-button locking. Can be opened from outside with small screwdriver. Turning inside lever or closing door releases button.

ND44S



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

ND170

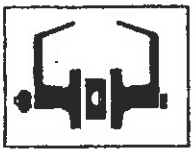


Single Dummy Trim
Dummy trim for one side of door. Used for door pull or as matching inactive trim.

Keyed Locks

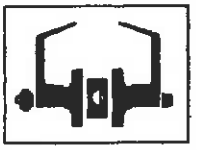
SCHLAGE ANSI

ND50PD F82



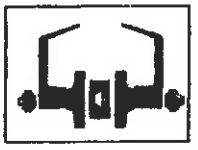
Entrance/Office Lock*
Push-button locking. Push-button locks outside lever until unlocked with key or by turning inside lever.

ND53PD F109



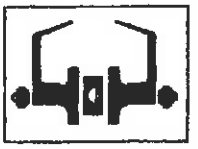
Entrance Lock*
Turn/push-button locking; pushing and turning button locks outside lever, requiring use of key until button is manually unlocked. Push-button locking; pushing button locks outside lever until unlocked by key or by turning inside lever.

ND60PD F88



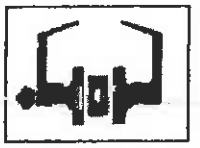
Vestibule/Classroom Security Lock*
Latch retracted by key from outside when outside lever is locked by key in inside lever. Inside lever is always unlocked.

ND66PD F91



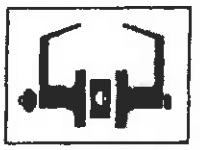
Store Lock*†
Key in either lever locks or unlocks both levers.

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 2¾" 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.

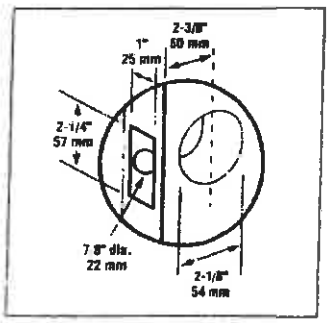
Strike:
T-strike 1⅛" x 2¾" (29 mm x 70 mm) x 1⅛" (29 mm) lip to center with box standard. Optional strikes, lip lengths and ANSI strike box available. See page 7.

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



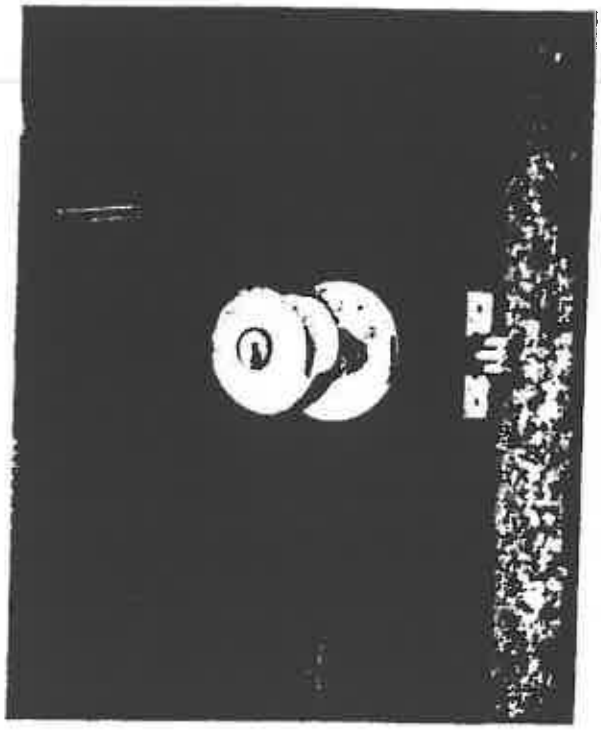
Certifications

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

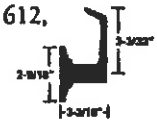
609

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

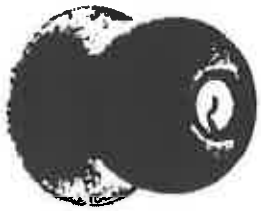
LEVON

605

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



ORBIT



613

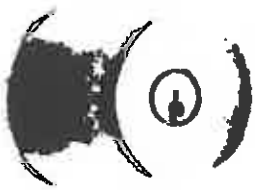
Symbol: ORB
Material: Wrought brass or bronze
Finishes: 605, 606, 609, 610, 611, 612, 613, 616, 625, 626

PLYMOUTH

605

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

TULIP



626

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

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

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

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

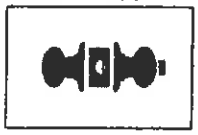
A10S F75 — **Passage Latch**

Both knobs always unlocked.

A25D — **Exit Lock**

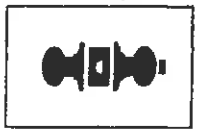
Blank plate outside. Inside knob always unlocked. Specify door thickness, 1⅜" or 1¾".

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.

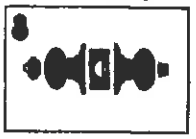
A170 — **Single Dummy Trim**

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.

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

Pemko Manufacturing Company
5535 Distribution Drive
Memphis, TN 38141
Phone: (800) 824-3018
Fax: (800) 243-3658
E-mail: pemkosales@pemko.com
www.pemko.com

SECTION 08710
DOOR HARDWARE
(CONTINUOUS GEARED DOOR HINGES)

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: Continuous Geared Door Hinges.

Specifier Note: Revise paragraph below to suit project requirements. If a reader of this section could reasonably expect to find a product or component specified in this section, but it is actually specified elsewhere, then the related section number(s) should be listed in the paragraph below. Add section numbers and titles per CSI *MasterFormat* and specifier's practice. In the absence of related sections, delete paragraph below.

B. Related Sections:

1. Division 6 Section(s): Wood Frames.
2. Division 8 Section(s): Steel Doors, Wood Doors, Sound Control Doors, Aluminum Frame Storefront Doors.
3. Division 10 Section(s): Compartments and Cubicles, Partitions.
4. Division 13 Section(s): Special Facilities, Integrated Construction, Special Structures, Special Purpose Rooms.

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain References Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. Conditions of the Contract or Division 1 References Section may establish the edition date of standards. This article does not require compliance with standard. It is a listing of all references used in this section.

1.02 REFERENCES

A. ASTM International:

1. ASTM E2074 Standard Test Method for Fire Tests of Door Assemblies, Including Positive Pressure Testing of Side-Hinged and Pivoted Swinging Door Assemblies.

B. American National Standards Institute/Builders Hardware Manufacturers Association (ANSI/BHMA):

1. ANSI/BHMA A156.18 Materials and Finishes.
2. ANSI/BHMA A156.26 Standards for Continuous Hinges.

C. American National Standards Institute/Steel Door Institute (ANSI/SDI):

1. ANSI A250.8/SDI-100 Recommended Specifications for Standard Steel Doors and Frames.

D. American National Standards Institute/Window and Door Manufacturers Association (ANSI/WDMA):

1. ANSI/WDMA I.S.1-A Architectural Wood Flush Doors.

E. Federal Government:

1. U.S. Architectural & Transportation Barriers Compliance Board. Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG), 1992.
2. Federal Standard FED-STD-795-1988 (Revised 1989) Uniform Federal Accessibility Standards.

F. Underwriters Laboratories, Inc. (UL):

1. UL 10B Fire Tests of Door Assemblies.

2. UL 10C Fire Tests of D[illegible] Assemblies.
3. UL 752 Bullet Resistant Equipment.

G. International Code Council (ICC):
1. UBC 7-2 Fire Test of Door Assemblies (Positive Pressure).
2. International Building Code (IBC) Code 2000 (Positive Pressure).
3. ICC/ANSI A117.1 Accessible and Usable Buildings and Facilities.

H. British Standards (BS):
1. BS 476 Fire Tests on Building Materials and Structures.

I. National Fire Protection Association (NFPA):
1. NFPA 1 Fire Prevention Code.

Specifier Note: Article below should be restricted to statements describing design or performance requirements and functional (not dimensional) tolerances of a complete system. Limit descriptions to composite and operational properties required to link components of a system together and to interface with other systems.

1.03 SYSTEM DESCRIPTION

A. Design Requirements: Provide continuous geared door hinges which have been manufactured, fabricated and installed to meet the following design criteria:
1. Continuous geared configuration, designed to distribute loads uniformly.
2. Identical operation in each leaf, designed to reduce door opening effort.
3. UL labeled for 3 hour fire classification.
4. Durability tested to ANSI/BHMA A156.26 Grade 1, 2, 3.

Specifier Note: Article below includes submittal of relevant data to be furnished by Contractor before, during or after construction. Coordinate this article with Architect's and Contractor's duties and responsibilities in Conditions of the Contract and Division 1 Submittal Procedures Section.

1.04 SUBMITTALS

A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.

B. Product Data: Submit manufacturer's product data and installation instructions.

C. Shop Drawings: Provide drawings indicating required component locations, installation interface with adjacent materials, anchorage, fastening and similar information.

D. Samples: Submit one each of manufacturer's standard selection samples.

E. Quality Assurance/Control Submittals: Submit the following:
1. Test Reports: Upon request, submit [Fire] [And] [Durability] test reports from recognized testing laboratory.
2. Certificates: Submit manufacturer's certificate that products meet or exceed specified requirements.

F. Closeout Submittals: Submit the following:
1. Warranty documents specified herein.

Specifier Note: Article below should include statements of prerequisites, standards, limitations and criteria that establish an overall level of quality for products and workmanship for this section. Coordinate article below with Division 1 Quality Assurance Section.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Utilize an installer having demonstrated experience on projects of similar size and complexity.

Specifier Note: Paragraph below should list obligations for compliance with specific code requirements particular to this section and authority having jurisdiction. General statements to comply with a particular code are typically addressed in Conditions of the Contract and Division 1 Regulatory Requirements Section. Repetitive statements should be avoided.

B. Regulatory Requirements and Approvals: [Specify applicable requirements of regulatory agencies.].

1. [Code agency name].
    a. [Report or approval number].

C. Certifications: [Specify requirement for certifications.].

D. Field Samples: [Specify requirement for field samples.].

E. Mock-Ups: [Specify requirements for mock-up.].

1. Subject to acceptance by owner, mock-up may be retained as part of finish work.
2. If mock-up is not retained, remove and properly dispose of mock-up.

Specifier Note: Retain paragraph below if preinstallation meeting is required.

F. Preinstallation Meetings: [Specify requirements for meeting.].

Specifier Note: Article below should include specific protection and environmental conditions required during storage. Coordinate article below with Division 1 Product Requirements Section.

1.06 DELIVERY, STORAGE & HANDLING

A. General: Comply with Division 1 Product Requirement Section.

B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

Specifier Note: Coordinate article below with Conditions of the Contract and with Division 1 Closeout Submittals (Warranty) Section. Use this article to require special or extended warranty or bond covering the work of this section.

1.07 WARRANTY

A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.

B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.

Specifier Note: Coordinate subparagraph below with manufacturer's warranty requirements.

1. Warranty Period: Warranty for life of door opening, beginning with date of substantial completion.

PART 2 PRODUCTS

Specifier Note: Retain article below for proprietary method specification. Add product attributes, performance characteristics, material standards and descriptions as applicable. Use of such phrases as "or equal" or "or approved equal" or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining "or equal" products.

2.01 CONTINUOUS GEARED DOOR HINGES

Specifier Note: Paragraph below is an addition to CSI *SectionFormat* and a supplement to MANU-SPEC. Retain, edit or delete paragraph below to suit project requirements and specifier practice.

A. Manufacturer: Pemko Manufacturing Company.

1. Contact: PO Box 3780, 4226 Transport Street, Ventura, CA 93003; Telephone: (800) 283-9988, (805) 642-2600; Fax: (805) 642-4109; E-mail: pemkosales@pemko.com; website: www.pemko.com.

B. Proprietary Products/Systems: Continuous Geared Door Hinges, including the following:

1. Continuous Geared PemkoHinges:
    a. Material: Extruded tempered aluminum.
    b. Material Standard: 6063-T6 alloy.
    c. Configuration: Three interlocking extrusions in pinless assembly, installed to full height of door frame.
    d. Finish (ANSI/BHMA A156.18): [Clear anodized] [Dark anodized] [Gold anodized].
    e. Type: [Full mortise] [Full surface] [Half surface] [Full mortise residential: 1 3/4 inches (45 mm)] [Full

mortise residential 3/8 inches (35 mm)] [Special full mortise] Je throw full mortise].

f. Length: [79 inches (2007 mm)] [83 inches (2108 mm)] [85 inches (2159 mm)] [95 inches (2413 mm)] [120 inches (3048 mm)].

g. Hinge Options: [Safety] [Short leaf flush] [Short leaf inset] [Standard] [Safety short leaf inset] [Center pivot].

h. Electrical Modifications: [Specify electrical modifications.].

i. Strength: [Standard Duty: 14 bearings each leaf for 83 inch (2108 mm) hinge, minimum door weight 280 lb (127 kg)] [Heavy Duty: 27 bearings each leaf for 83 inch (2108 mm) hinge, minimum door weight 540 lb (245 kg)].

j. Mortise Fasteners: TEK, #12 × 3/4 inch, FHUC, Phillips head screws.

k. Fire Label Certification: Comply with ASTM E2074, NFPA 1, UBC 7-2, BS 476, UL 10B, UL 10C, [90 minutes for wood doors] [3 hours for hollow metal doors].

l. Testing Standard: Tested according to ANSI/BHMA A156.26.

Specifier Note: Edit Article below to suit project requirements. If substitutions are permitted, edit text below. Add text to refer to Division 1 Project Requirements (Product Substitutions Procedures) Section.

2.02 PRODUCT SUBSTITUTIONS

A. Substitutions: No substitutions permitted.

PART 3 EXECUTION

Specifier Note: Article below is an addition to the CSI *SectionFormat* and a supplement to MANU-SPEC. Revise article below to suit project requirements and specifier's practice.

3.01 MANUFACTURER'S INSTRUCTIONS

A. Comply with the instructions and recommendations of the continuous geared door hinge manufacturer.

Specifier Note: Specify actions to physically determine that conditions are acceptable to receive primary products of the section.

3.02 EXAMINATION

A. Site Verification of Conditions:

1. Verify that site conditions are acceptable for installation of continuous geared door hinges.
   a. Examine doors and frames for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction and other conditions affecting performance.
   b. Ensure frame is square and plumb before installation.
   c. Examine roughing-in for electrical wiring connections.
2. Do not proceed with installation of continuous geared door hinges until unacceptable conditions are corrected.

Specifier Note: Specify actions required to physically prepare the surface, area or site or to incorporate the primary products of the section.

3.03 PREPARATION

A. Wood Door Preparation: Comply with ANSI/WDMA I.S.1-A.

B. Steel Door and Frame Preparation: Drill doors and frames for hardware per manufacturer's installation instructions. Comply with ANSI A250.8/SDI-100.

Specifier Note: Coordinate article below with manufacturer's recommended installation requirements.

3.04 INSTALLATION

A. Mounting Location: Comply with the following requirements, unless otherwise indicated:

1. Steel Doors and Frames:
   a. Comply with ANSI A250.8/SDI-100.
   b. Ensure frames are properly sized, plumb and square.

c. [Specify standard or specific requirements.].

2. Wood Doors:

a. Comply with ANSI/WDMA I.S.1-A.

b. Ensure doors are properly sized, plumb and square.

c. [Specify standard or specific requirements.].

B. Adjust and reinforce attachment substrates as necessary for proper installation and operation.

C. Space fasteners and anchors according to manufacturer's product instructions.

Specifier Note: Specify the final actions required to prepare installed equipment or other completed work to properly function or perform.

3.05 ADJUSTING

A. Perform adjustments required to ensure that continuous geared door hinges function in compliance with manufacturer's performance criteria prior to acceptance by Owner.

1. Adjust door control devices to compensate for final operation of HVAC system and to comply with accessibility requirements.

Specifier Note: Specify the final actions required to clean installed equipment or other completed work to properly function or perform. Coordinate article below with Division 1 Execution Requirements (Cleaning) Section.

3.06 CLEANING

A. Remove any protective films and clean components as necessary following manufacturer's recommended procedures.

Specifier Note: Specify provisions for protecting work after installation but prior to acceptance by Owner. Coordinate article below with Division 1 Execution Requirements Section.

3.07 PROTECTION

A. Protect installed work from damage due to subsequent construction activity on the site.

END OF SECTION

PEMKO

ASSA ABLOY

PEMKOHINGE™ CONTINUOUS GEARED HINGES:
HALF SURFACE SAFETY HINGES:
STANDARD

TITLE:
PREPARED FOR:
PREPARED BY:
DATE:
COMMENTS:

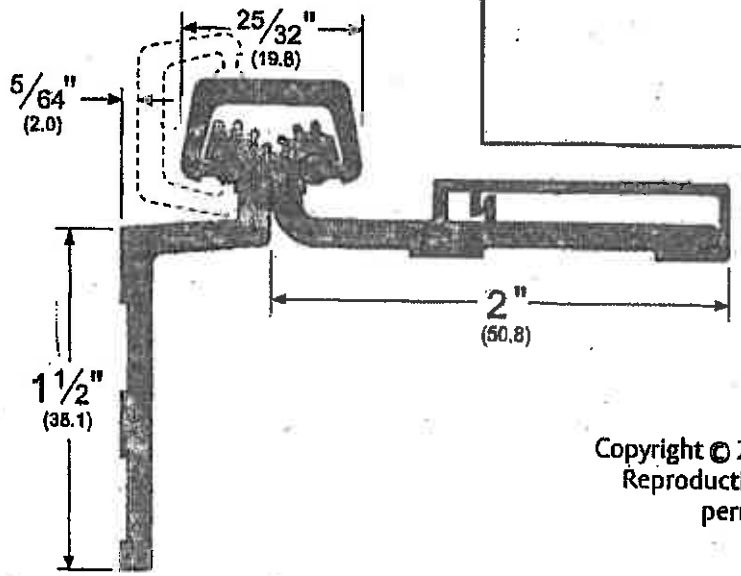
_HS_SF BHMA

AVAILABLE FINISHES: BL, C, D, PW, SN

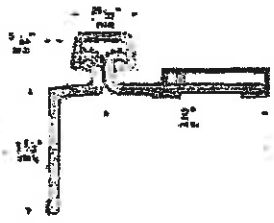
WIDTH: 2" (50.8 mm)
(between frame leaf and door leaf edge)

CAP WIDTH: 25/32" (19.8 mm)

HEIGHT: 1-1/2" (38.1 mm)
(frame edge side - leaf)



BL (Black Anodized) - special request only
C (Clear Anodized)
D (Dark Bronze Anodized)
PW (Painted White) - special request only
SN (Satin Nickel Anodized)



Enlarge Image

_HS_SF

Pemko's standard duty anodized aluminum Half Surface Safety continuous geared hinges are designed mainly for retrofit work in child care and nursing facilities and are applied to the exposed surface of the frame rabbet. Also available in heavy duty models.

- Designed for use with hollow metal frames, where the inset conforms to S.D.I specifications for aligning doors and frames.
- Allows for adjustments in order to properly align the edge of the door to the frame.
- BL (Black Anodized) and PW (Painted White) are special finishes available upon request.
- Fasteners - Frame Portion - All fasteners are #12-24 x 7/16" FHUC, Type C, threadforming.
- Standard model: 16 fasteners required for each leaf.
- Wood screws available on request (specify on order).
- Fasteners - Door Portion - a. Thru-bolt - 1/4-20 x 1-5/8". - Standard Duty Hinges - 4 required. - b. Shoulder Bolt - 1/4-20 x 1" PCH. - Standard Duty Hinges - 4 required. - c. Pan Head Self Drilling #12 x 3/4". - Standard Duty Hinges - 6 required.
- Standard duty hinge. 6" between bearing centers.
- Standard duty hinges conform to Grade 3-150 and Grade 3-300 cycle requirements per BHMA standard ANSI/BHMA A156.26-2006.
- Aluminum continuous hinge for use on swinging type fire doors of the hollow metal, tin-clad, sheet metal and steel covered composite type rated up to 3 hours, wood covered composite type rated up to and including 1-1/2 hours. Also wood core rated up to and including 20 minutes without hose stream.
- PemkoHinge products are guaranteed for the life of the opening against defects in material or workmanship with the exception of AL, RS, standard duty and Grade 3 hinges, which carry a 10 year warranty.
- Weight bearing (per BHMA standard ANSI/BHMA A156.26-2006) for standard models: 83" and 85" = 14 bearings, door weight = 280 lbs.; 95" = 16 bearings, door weight = 320 lbs.; 120" = 20 bearings, door weight = 400 lbs.
- Width: 2" (50.8 mm) (between frame leaf and door leaf edge).
- Cap Width: 25/32" (19.8 mm).
- Height: 1-1/2" (38.1 mm) (frame edge side - leaf).

BHMA

Ratings Explained | View Finishes

CHSSF	C - Clear Anodized Aluminum
DHSSF	D - Dark Bronze Anodized Aluminum
GHSSF	G - Gold Anodized Aluminum, (Special Order Finish)
BLHSSF	BL - Black Anodized Aluminum, (Special Order Finish)
PWHSSF	PW - Painted White Aluminum, (Special Order Finish)
SNHSSF	SN - Satin Nickel Anodized Aluminum, (Special Order Finish)

FINAL ABATEMENT REPORTS

Oklahoma Department of Labor

☑ **Initial Notification** ☐ **Emergency Notification**

☐ **Revised Notification**

Mark Costello
COMMISSIONER

ASBESTOS PROJECT CHECKLIST

NAME	ADDRESS	CITY	PHONE
Job Site: Former Walters Armory	608 West Missouri	Walters Oklahoma	N/A
Contractor: ENVIRONMENTAL ACTION	PO BOX 1029	JENKS OK	918-298-4080
Site Owner: OMES CAP 2401 N. Lincoln Blvd., Suite 106, Oklahoma City, OK 73105			405-522-6762
Gen. Contractor N/A			
Project Designer: ENVIRONMENTAL ACTION	PO BOX 1029	JENKS OK	918-298-4080
Air Monitoring Firm: Earth Tech 3336 E 32nd Street		Tulsa, OK	918 712-9163
Air Monitoring Firm: N/A			
Landfill: WASTE CONNECTIONS	7600 SW 15TH	OKC OK	405-745-3002
Hauler: Lowder Transportation	PO Box 307	Shawnee, OK	405 275-8538

MOBILIZATION DATE: 1/6/2014 SCHEDULED DATE OF ASBESTOS REMOVAL: 1/9/2014
PROJECT COMPLETION DATE: 1/27/2014 RENOVATION: X DEMOLITION : EMER:

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

AMOUNT OF ASBESTOS TO BE ABATED: 255 LF of TSI including 25 fittings

ABATEMENT TECHNIQUES: Detailed in Marshall Environmental Management Project Design

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

_____Variances

N/ANESHAPS Notification (Copy)

___Project specifications

___Bonds and/or Insurance Certificates

___Plans for Decontamination Facilities

___Respirator Program

___Employee Physicals

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

___# of Mini-containments

TBD# of Glovebags

_1_# of Containments

_1_# of Phases

FEES

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

Comments:

12/17/2013

Contractor/Responsible Party Signature **Date**

H:\ACCESS\508\AsbestosProjectChecklist.wpd

218585 CD ✓ #c 1 c/o LY

Notice of Inspection

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

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

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

1. INVESTIGATION IDENTIFICATION			2. TIME	3. COMPANY NAME
DATE	INSPECTOR NO.	DAILY SEQ NO.		
1-03-11	19	001	1344	[illegible] Solon
3. INSPECTOR ADDRESS				4. COMPANY ADDRESS
3014 N. Stiles OKC, OK 73105				P.O. Box 1137 Tulsa, OK

REASON FOR INSPECTION

Under the authority of Section 11 of the Toxic Substances Control Act:

☑ For the purpose of inspecting (including taking samples, photographs, statements and other inspection activities) an establishment, facility or other premises in which chemical substances or mixtures or articles containing same are manufactured, processed or stored, or held before or after their distribution in commerce (including records, files, papers, processes, controls, and facilities) and any conveyance being used to transport chemical substances, mixtures or articles containing same in connection with their distribution in commerce (including records, files, papers, processes, controls and facilities) bearing on whether the requirements of the Act applicable to the chemical substances, mixtures or articles within or associated with such premises or conveyance have been complied with.

☑ In addition, this inspection extends to (*check appropriate boxes*):

- ☐ A. Financial data
- ☐ B. Sales data
- ☐ C. Pricing data
- ☑ D. Personnel data (40 CFR Part 763 Subpart E)
- ☐ E. Research data

The nature and extent of inspection of such data specified in A through E above is as follows:

To verify licensure of asbestos workers, supervisors and air technicians on the [illegible] Armory Abatement project

CERTIFICATION

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

INSPECTOR SIGNATURE		RECIPIENT SIGNATURE	
NAME		NAME	
Clark Boswell		[illegible]	
TITLE	DATE SIGNED	TITLE	DATE SIGNED
Inspector	1-03-11	[illegible]	1/3/11

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

Oklahoma City
3017 N Stiles, Suite 100
Oklahoma City, OK. 73105
405-521-6100 / 888-269-5353
Fax 405-521-6025

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

Oklahoma Accreditation Plan (OAP) Inspection Form

Name of Facility: Farmer Walters Brewery
Facility Address: 605 West Missouri
City: [illegible] Zip:
DOL Project Numb, if applicable:
Owner name: ODMES OAP
Owner address: 2401 N. Lincoln OKC OK
Owner phone: (405) 522-6902
Contact person:

Date: 1-05-14 Time: 1250
Reason for Inspection: ☒ Routine ☐ Citizen Complaint ☐ Response Action ☐ Other
Contractor: 591
Contractor address: P.O. Box 1122
City: Tulsa Zip:
Contractor office phone: (918) 872-4050
Contact person: Paul Trass

Abatement Project Description (size of project, type of material, methods used, etc.)

OPENING CONFERENCE

Personnel present and interviewed:

Name	Title
Paul Trass	Supervisor

ODOL inspector accompanied by other State or Federal employee(s)
Yes ☐ No ☒

Name	Title

Credentials presented to:

Name	Title
Paul Trass	Supervisor

Notice of inspection signed and a copy provided to official?
Yes ☐ No ☐

INSPECTION

Was the building initially inspected for asbestos?
Yes ☒ No ☐
Name of inspector: Richard Belcher
License #: 157210 Exp. Date:
Date of Inspection: 1/1/2011

AIR MONITORING DATA

Name of Laboratory: Enercon
Address: 6525 N. Meridian
City: OKC Zip:
License #: 401041 Exp. Date: 4/30/14
On-Site air tech contract: [illegible] Phone: (405) [illegible]
Type of analysis: TEM ☐ PCM ☐

ACCREDITATION OF CONTRACTORS & WORKERS

Contractors/Supervisors:

Name	Issue date	License #	Exp. Date
Paul Trass	5/09/13	351532	5/09/14

ACCREDITATION OF CONTRACTORS & WORKERS, cont.

Workers:

Name	Issue date	License #	Exp. Date
[illegible] Beltran	3/6/13	393436	3/6/14
[illegible] Tirado	5/30/13	342553	5/30/14
Robert Roland	2/6/13	401013	2/6/14
Samuel Ramsey	5/6/13	[illegible]	5/6/14
Rogelio [illegible]	3/20/13	401830	3/20/14
Antonio Rivera	3/06/13	[illegible]	3/06/14
[illegible] Sanchez Nieto	3/6/13	[illegible]	3/6/14
Ruben Gonzalez	5/6/13	400514	5/6/14

Definition of Public and Commercial Building:

The interior space of any building, excluding residential apartment buildings of fewer than four (4) units or detached single-family homes. The term includes, but is not limited to industrial and office buildings, residential apartment buildings and condominiums of four (4) or more dwelling units, government-owned buildings, colleges, school buildings, museums, airports, hospitals, churches, preschools, stores, warehouse, and factories. Interior space includes interior hallways connecting buildings, porticos, and mechanical systems used to condition interior space.

Recommendations & Remarks:

Orders

Inspector: [signature]

Contractor or Representative: [signature]

ENVIRONMENTAL ACTION INC.

April 11, 2014

Oklahoma Department of Labor
3017 N. Stiles, Suite 100
Oklahoma City, OK 73105

RE: 12-6980 Walter Armory

The following documents are enclosed for your records:

- Air monitoring results
- Waste disposal manifest

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

Sincerely,
ENVIRONMENTAL ACTION, INC.

Darwin Chesnut
Oklahoma City Operations Manager

COPY

ENCLOSURES

WASTE CONNECTIONS INC.
Connect with the Future®

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

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

No. 0059306

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

a. Generator Name: National Guard Armory
b. Generating Location:
c. Address: Guy St.
Walters, OK 73572
d. Address:
e. Phone No.:
f. Phone No.:

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

g. Owner's Name:
h. Purchase Order No.:

i. WC WASTE CODE: OKP 13-424

j. Description of Waste: RQ, Asbestos, 9, NA2212, PGIII

k. Quantity: 10 | Units: Y³ | Containers No.: | TYPE: T

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

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

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

Paul Iness — Generator Authorized Agent Name
Paul Iness — Signature
1/10/14 — Shipment Date

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

TRANSPORTER I

a. Name: Lowder Transportation Co., Inc.
b. Address: P.O. Box 367
Shawnee, OK 74802
c. Driver Name/Title: D. Lowder, Driver
d. Phone No.: 405-615-4075 e. Truck No.: 108
f. Vehicle License No./State: I219740X
Acknowledgment of Receipt of Materials:
g. Driver Signature — Shipment Date: 1/10/14

TRANSPORTER II

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

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

a. Site Name: **WASTE CONNECTIONS**
c. Phone No.: **(405) 745-3091**
b. Physical Address: **Oklahoma City Landfill**
d. Fax No.: **(405) 745-3611**
7600 S.W. 15th • Oklahoma City, OK 73128

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. [illegible] — Name of Authorized Agent
Signature
01/15/14 — Receipt Date
02/

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

a. Shipper's* Name: Environmental Action, Inc.
b. Shipper's* Phone No.: 918-298-4080
c. Shipper's* Address: P.O.Box 1029, Jenks, OK 74037
d. Shipper's* Special Handling Instructions and additional information:

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

e. Shipper's* Name & Title: Paul Iness, Super.
b. Shipper's* Phone No.:
Date:
f. Name and Address of Responsible Agency: ODEQ, 707 N. Robinson, OKC, OK 73101
g. ☑ Friable; ☐ Non-friable; ☐ Both _____% friable _____% nonfriable

*Shipper refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation, or both.

WC1000 (Rev. 6/12)

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

ENERCON

Project: Former Walters Armory

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	T Y P	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
-	1	1/6/14 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
-	2	1/6/14 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
661	3	1/6/14 -	1:30 PM 4:45 PM		SAM HENNESSEY (400865) PIPING INSULATION REMOVAL		<0.01	2.10	2.00	2.05	4.0	100	195	399.8	5.096	BDL	0.009	0.003	0.009
662	4	1/6/14 -	1:30 PM 4:45 PM		GERARDO SALGADO (279553) PIPING INSULATION REMOVAL	P	<0.01	2.10	2.10	2.10	3.0	100	195	409.5	3.822	BDL	0.008	0.002	0.008
648	5	1/6/14 -	1:35 PM 4:50 PM	- -	INSIDE AREA PIPING INSULATION REMOVAL	A		2.10	1.90	2.00	5.0	100	195	390.0	6.369	BDL	0.009	0.004	0.009
538	6	1/6/14 -	1:37 PM 4:52 PM	- -	DECON EXIT EXTERIOR	A		2.10	1.90	2.00	2.0	100	195	390.0	2.548	BDL	0.009	0.002	0.009
3648	7	1/6/14 -	1:40 PM 4:55 PM	- -	NEG AIR EXHAUST EXTERIOR	A		2.10	2.00	2.05	1.0	100	195	399.8	1.274	BDL	0.009	0.001	0.009
HV1012	8	1/6/14 -	1:45 PM 5:00 PM	- -	LOAD OUT EXTERIOR	A		2.10	2.10	2.10	2.0	100	195	409.5	2.548	BDL	0.008	0.001	0.008

Cass. Dia = 25 mm | PF = 10 | Field of View = 0.00785 | Pg. 1 OF 1

ANALYST PARTICIPATING IN LAB AIHA-151368 — NIOSH 7400 METHOD — 7/1/2010 REV 1

NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter

Rotometer Number: 507

Calibration Date: 11/14/13

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

AM Technician: Vincent Colbert
Location: Former Walters Armory
Contractor: Environmental Action Inc.
Project Number: ASBTS1287

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

ENERCON

Project: Former Walters Armory

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
-	9	1/7/14 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
-	10	1/7/14 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
HV376	11	1/7/14 -	7:00 AM 9:00 AM		CLEARANCE AREA #1	A		10.00	10.00	10.00	3.0	100	120	1200.0	3.822	BDL	0.003	0.001	0.003
HV377	12	1/7/14 -	7:05 AM 9:05 AM		CLEARANCE AREA #2	A		10.00	10.00	10.00	2.0	100	120	1200.0	2.548	BDL	0.003	0.001	0.003
HV1012	13	1/7/14 -	7:10 AM 9:10 AM	- -	CLEARANCE AREA #3	A		10.00	10.00	10.00	5.0	100	120	1200.0	6.369	BDL	0.003	0.001	0.003
HV1	14	1/7/14 -	7:15 AM 9:15 AM	- -	CLEARANCE AREA #4	A		10.00	10.00	10.00	7.0	100	120	1200.0	8.917	BDL	0.003	0.002	0.003
HV2	15	1/7/14 -	7:20 AM 9:20 AM	- -	CLEARANCE AREA #5	A		10.00	10.00	10.00	2.0	100	120	1200.0	2.548	BDL	0.003	0.001	0.003

Cass. Dia = 25 mm | PF = 10 | Field of View = 0.00785 | Pg. 1 OF 1

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

ANALYST PARTICIPATING IN LAB AIHA-151368 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: 507
Calibration Date: 11/14/13

AM Technician: Vincent Colbert
Location: Former Walters Armory
Contractor: Environmental Action Inc.
Project Number: ASBTS1287

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

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

ENTERED

Abatement Preparation Inspection Form

Abatement Project: Former Walters Armory
Project No.: 12-6980
Project Address/Location: 608 West Missouri
Contractor: EAI
Project Phone No.:
Project Owner: OMES CAP

Date: 1 - 06 - 14 Time: 13 : 05
Phase: I - Glovebagging
City: Walters Zip:
Contact Person: Paul Ingss
Contractor's Home/Office Phone No.: (405)642-3151
Owner's Rep.:

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

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

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

29 ☐ # OF GLOVEBAGS ☐ # OF FULL CONTAINMENTS ☐ # OF MINI CONTAINMENTS

Recommendation & Remarks: Prep Accepted For Glovebagging

Orders:

Inspector's Signature

Contractor's or Representative's Signature

Revised 04-2013

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

Oklahoma Department of Labor

Mark Costello, Commissioner

Asbestos Division

ENTERED

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

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

Visual/Final Inspection Form

DOL Project #: 12-6960 | 1 (Month) | 01 (Day) | 14 (Year) | 1320 (Time)

Facility: Former Walters Armory | County #: 17 | FY #: 2014

Contractor #: 110170 | Address City: Walters

Address/Location: 608 West Missouri | Contractor: EAI

Owner/Occupant: OMES CAP | Contractor's Rep.: Paul Ingss

Contact Name: | Contractor's Phone #: 642-3151

Facility Phone #:

1. Description of Area: Vacant armory requiring the glovebagging of TSI from abandoned steam line

2. Areas requiring further cleaning: None

3. Air Counts (PCM/TEM) On-Site?: Yes Clearances all acceptable.

4. DOL Recommendations: Remove all poly and tape and dispose of as ACM.

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

6. Notes: Visual and Final Accepted
This project is complete.

7. Note any violations cited: 380:50-

8. Contractor's Comments:

Inspector's Signature

Contractor's Signature

Revised 1/2011

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

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DAILY FIELD ACTIVITY LOG

SUPERVISOR: Paul Iness	DATE: 1/2/14	Page 1 of 1
PROJECT NAME: Walters Armory		PROJECT NO. 5424
FIELD ACTIVITY SUBJECT: Prep work for asbestos Pipe		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

9:00 Crew of 10 onsite did Job walk with Darwin Chestnut
10:00 started unload Trailer an started 3 men
to Remove ceiling Tile to uncover Pipe
11:00 started 3 more men to Install Glove bags on Pipe
11:30 lunch
12:30 all Back continue to Install Glovebags
+ critical Barriers over windows + Doors
2:00 all Pipe has been uncovered
2:30 called Lowder Transportation for wast dumpster
3:30 Talked to overhead doors about
Schedule will be by 1/3/14
4:30 crew to clean up shut down lights
5:00 lock up left for the day

VISITORS ON SITE: None	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS: None
WEATHER CONDITIONS: Cool / windy 40°	IMPORTANT TELEPHONE CALLS: Overhead Doors
IH PERSONNEL ON SITE:	
SIGNATURE: Paul Iness	DATE: 1/2/14

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DAILY FIELD ACTIVITY LOG

SUPERVISOR: Paul Ines S	DATE: 1/6/14	Page 1 of 1
PROJECT NAME: Withers Armory Asbestos Removal		PROJECT NO. 5424
FIELD ACTIVITY SUBJECT:		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

7:00 CREW size 9 workers / supervisor onsite
CREW to Finish Decon & loadout 5 men
4 workers to Install Equipment
9:00 ground level men to prep waste Trailer
9:30 Vincent Calber onsite with ENERCON
10:00 CREW to Install Barrier Tape & Danger Signs
11:30 lunch 12:30 all BACK
12:40 Clark Boswell onsite for prep INSP
1:00 all OK to start Removal 8 workers to setup
to Remove Pipe · 29 Glovebags
2:00 all Bags have been Removed CREW to Double bag
4:15 2 men to loadout
4:35 loadout Completed ENCON to Pull air Pumps
Crew to Shower out
5:10 left for the Day

VISITORS ON SITE: Vincent Calber -- ENERCON	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS: None
WEATHER CONDITIONS: Warm / windy 50°	IMPORTANT TELEPHONE CALLS: None

IH PERSONNEL ON SITE:

SIGNATURE: [signature] DATE: 1/6/14

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DAILY FIELD ACTIVITY LOG

SUPERVISOR: Paul Iness | DATE: 1/7/14 | Page 1 of 1

PROJECT NAME: Walters Armory | PROJECT NO. 5424

FIELD ACTIVITY SUBJECT: Floor tile + Demo

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

7:00 9 workers 1 supervisor onsite 5 workers to start Floor tile + Mastic Removal crew to Pull Carpet 4 men to start Demo Drill Room offices
9:30 all carpet + Tile Completed crew to start Mastic
10:30 Lawdel Transportation onsite with 30 yd Dumpster
11:30 lunch 12:30 all Back Handrails have been Removed crew to Hepa VAC all Plywood on top of offices. 1:00 DOL onsite all good Teardown
2:00 Pre Clean of offices + all Floors Drill Room Finished crew to start Removal Plywood above offices
2:30 mastic in 2 Rms 2 coats 1 more need
3:00 3 coat Back 2 Rms OK
4:30 Cleanup shut down lock up
5:00 left For the Day

VISITORS ON SITE:
None

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS
None

WEATHER CONDITIONS:

IMPORTANT TELEPHONE CALLS:
Darwin Chestnut — EAI

IH PERSONNEL ON SITE:

SIGNATURE: [signature] | DATE: 1/7/14

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DAILY FIELD ACTIVITY LOG

SUPERVISOR: Paul Iness	DATE: 1/8/14	Page 1 of 1
PROJECT NAME: Walters Armory		PROJECT NO. 5424
FIELD ACTIVITY SUBJECT: Floor Tile & Demo		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

7:00 9 men walls / supervisor onsite 4 men to Finish mastic Rm 11 5 men to Continue Demo Drill Rm
9:00 called Lowder Trans about Dumpster Swap 2:00 1/9
11:00 Mastic all Clean moved 4 men to Demo
11:30 lunch 12:30 all Back
all 9 men working Demo
8:30 all SheatRock & Plywood Insulation down & out crew to work on 2x6 Ceiling Joist
4:00 all 2x6 Down crew Removing 2x4 wall studs
4:30 Clean up all Demo
5:00 Shut down For the Day

VISITORS ON SITE: None	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS: None
WEATHER CONDITIONS: Cold/windy 48°	IMPORTANT TELEPHONE CALLS: Lowder Transportation
IH PERSONNEL ON SITE:	
SIGNATURE: [signature]	DATE: 1/9/14

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DAILY FIELD ACTIVITY LOG

SUPERVISOR: Paul Iness | DATE: 1/9/14 | Page 1 of 1

PROJECT NAME: Walters Armory | PROJECT NO. 5424

FIELD ACTIVITY SUBJECT: Demo & Prep work For lead Paint Removal

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

9 workers 1 supervisor onsite at 7:00 all workers
Demo last 2x4 walls
10:30 all Demo Done crew to Final clean Floor
11:00 called Thomas with united Rentals
about 2 scissor lifts 26ft will deliver monday 8:30
11:30 lunch 12:30 all Back crew of 3 to Install
4mill Poly on walls in Drill Rm 5 men to lay
6 mill Ref Poly on Floors
1:20 Overhead Doors to Remove windows in Rm 23,24,25
3:00 wall Poly up on 3 sides Drop Cloth ½ way
windows must come out From inside Frame ~~[illegible]~~
Reset in side Brick ¼ to ½ in
4:00 2 men to Install Poly Flaps + small
Change Rm For lead Paint Removal
5:00 shutdown For the week

VISITORS ON SITE:
Overhead Doors

CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS:
none

WEATHER CONDITIONS:
warm 50°
windy

IMPORTANT TELEPHONE CALLS:
united Rental
Darwin Chesnut - EAI

IH PERSONNEL ON SITE:

SIGNATURE: [signature] | DATE: 1/9/14

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DAILY FIELD ACTIVITY LOG

SUPERVISOR: Paul Ingess	DATE: 1/13/14	Page 1 of 1
PROJECT NAME: Walters Armory		PROJECT NO. 5424
FIELD ACTIVITY SUBJECT: lead Paint wet Scrap		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

2:00 crew of 9 works /supervisor onsite 6 men to Finish Prep work + INSTall Negair
3 men to start Removal of lead Paint on 2 door frames
8:00 united Rental onsite with 2 Scissor lifts
9:00 suited 6 men up for wet Scrap Paint
11:30 lunch 12:30 all Back some work Areas
2:30 wet Scrap Paint going well
lead Paint Door frames Have lots of Paint
(3:30 Some tile around Front Door Coming up)
4:30 crew to Cleanup + wet wipe Door frames
5:00 left for the Day

VISITORS ON SITE:	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS
[redacted] United Rental	None
WEATHER CONDITIONS: warm 45° windy	IMPORTANT TELEPHONE CALLS: None
IH PERSONNEL ON SITE:	
SIGNATURE:	DATE:

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DAILY FIELD ACTIVITY LOG

SUPERVISOR: Paul Iness	DATE: 9/14/14	Page 1 of 1
PROJECT NAME: Walters Armory	PROJECT NO. 5424	
FIELD ACTIVITY SUBJECT: lead Paint wet Scrap		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

7:00 9 workers 1 supervisor onsite 6 men to Continue wet Scrap Drill Rm 3 men Continue 2 Door Frames lead Paint Removal
9:30 Crew getting close to Peak Ye have Paint
10:30 called Darwin about ordering Tempulet paint 5-5 gal
11:30 lunch 12:30 all BACK Some work
2:15 1 Door Fram Rm 15 Competed after Rm 17 1 more Coat
3:30 Talk To Darwin Said he would like to see Beams Drill Rm + Paint would Be here 9/15
5:00 Shut down For the Day

VISITORS ON SITE: None	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS: None
WEATHER CONDITIONS: Warm 55°	IMPORTANT TELEPHONE CALLS: Darwin Chesnutt — EAI

IH PERSONNEL ON SITE:

SIGNATURE: DATE:

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DAILY FIELD ACTIVITY LOG

SUPERVISOR: Paul INESS	DATE: 1/15/14	Page 1 of 1
PROJECT NAME: WATTERS Armory		PROJECT NO. 5424
FIELD ACTIVITY SUBJECT: lead Paint WET Scrap		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

7:00 9 workers | supervisor onsite 6 workers to Set up For lead Scrap 2 men to Finish door FRAME paint Removal Rm 15 + 17
15 needs cleaned Soap + water
10:00 Door FRAME Rm 17 needs cleaned
11:00 Doors + FRAME Rm 15 17 Completed
manual crew do Door FRAME 26
11:30 lunch 12:30 all Back
CREW on WET SCRAP has move past Front
1:15 overhead doors will Remove High Bay windows in paint Rm
3:30 Loader Truck to pick up Asbestos waste Trailer
5:00 shut down For the Day

VISITORS ON SITE: Loader Transportation	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS: None
WEATHER CONDITIONS: Warm 60°	IMPORTANT TELEPHONE CALLS: none

IH PERSONNEL ON SITE:

SIGNATURE: [signature] DATE: 1/15/14

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DAILY FIELD ACTIVITY LOG

SUPERVISOR: Paul Ingess	DATE: 1/16/14	Page 1 of 1
PROJECT NAME: Walters Armory		PROJECT NO. 5474
FIELD ACTIVITY SUBJECT: wet Scrap		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

7:00 9 workers 1 supervisor onsite to mob to work on wet scrap Drill Rm Beams
8:30 Darwin Chesnut onsite with Encapsulat/Paint Job looks good
9:30 started 1 man left to spray Exc. Paint
11:00 all door Frame cleaned moved 3 men to Install Poly walls & Floors Rms 23 24 25
11:30 lunch 12:30 all back same work areas
2:00 wet Scrap Completed Drill Rm started other man left on Paint Sprayer
3:30 all windows on South Side out Drill Rm
4:30 cleanup lockup
5:00 shutdown for the week

VISITORS ON SITE: Darwin Chesnut - EAI	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS: None
WEATHER CONDITIONS: warm 56°	IMPORTANT TELEPHONE CALLS:

IH PERSONNEL ON SITE:

SIGNATURE: [signature] DATE: 1/16/14

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DAILY FIELD ACTIVITY LOG

SUPERVISOR: Paul Iness	DATE: 1/20/14	Page 1 of 1
PROJECT NAME: Walters Armory		PROJECT NO. 5424
FIELD ACTIVITY SUBJECT:		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

7:00 9 workers 1 supervisor onsite crew of
4 to Finish Painting Beams Drill Rm started
2 airless sprayers 5 workers to start hepvac
all Floors in offices + hallways
10:30 all offices with carpet cleaned
crew to vac hall way + Bathrooms
11:30 lunch 12:30 all Back
1:00 moved 2 work From vac to start
mopping Floors
2:30 all Painting Completed crew to cleanup
clean out airless
4:00 crew to start Tear down poly walls +
Floors
5:00 lock shutdown For the Day

VISITORS ON SITE: None	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS: None
WEATHER CONDITIONS: Cold 33°	IMPORTANT TELEPHONE CALLS: none

IH PERSONNEL ON SITE:

SIGNATURE: Paul Iness DATE: 1/20/14

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DAILY FIELD ACTIVITY LOG

SUPERVISOR: Powlness	DATE: 1/21/14	Page 1 of 1
PROJECT NAME: Walter Armory		PROJECT NO. 5424
FIELD ACTIVITY SUBJECT: Clean up lead Paint		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

7:00 9 workers 1 supervisor on site
5 workers to Finish teardown Poly Drill Room
4 workers to mop Floors in office
10:00 all Poly down Drill Rm crew
to Hepa Vac Floor + start mop
11:30 lunch 12:30 all BACK
Same work
3:00 Crew Finished VAC crew to start
Cleaning mop with Floor scrupper
5:00 Shut down For the Day

VISITORS ON SITE: none	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS: none
WEATHER CONDITIONS: Cold 38° Windy	IMPORTANT TELEPHONE CALLS: none

IH PERSONNEL ON SITE:

SIGNATURE: [signature] DATE: 1/21/14

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DAILY FIELD ACTIVITY LOG

SUPERVISOR: Dave Jaess	DATE: 1/22/14	Page 1 of 1
PROJECT NAME: Waters Armory	PROJECT NO. 5424	
FIELD ACTIVITY SUBJECT: Clean Floors		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

7:00 crew size 9 workers 1 supervisor
5 men to continue Clean Drill Floors
4 men to clean Hallway 2nd time
9:30 Drill rm Was First mop completed
Crew to VAC 1 more time
11:30 lunch 12:30 all BACK
Crew to Finish VAC all CRACK along walls
2:30 Drillrm to get 2nd mop
4:30 start Clean up & Bag all Hep Vac Filters & Bags
5:00 backup Left For the Day

VISITORS ON SITE: Overhead Door. Completed all measurements	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS: none
WEATHER CONDITIONS: Cold 22°	IMPORTANT TELEPHONE CALLS: Darwin Chesnut

IH PERSONNEL ON SITE:

SIGNATURE: [signature] DATE: 1/22/14

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DAILY FIELD ACTIVITY LOG

SUPERVISOR: Paul Ines	DATE: 1/23/14	Page 1 of 1
PROJECT NAME: Walters Armory	PROJECT NO. 5421	
FIELD ACTIVITY SUBJECT: Clean up + load Trailer		

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

7:00 Crew size 4 workers Supervisor
Crew of 5 to Finish Drill Rm Floor
Large area 4 workers to mop Hallway
2nd Time + Bath Rm Kitchen
11:00 4 workers to load Trailer need
to leave cleaning supplies
12:00 lunch Sent 2 workers home
4 men to Finish mop Drill Rm
1:30 all cleanup Finished
shut down For the Day
crew will Return when Door to window
come in

VISITORS ON SITE: None	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS: None
WEATHER CONDITIONS: Cold 20°	IMPORTANT TELEPHONE CALLS: None

IH PERSONNEL ON SITE:

SIGNATURE: Paul Ines DATE: 1/23/14

ENVIRONMENTAL ACTION, INC.

DAILY SIGN IN SHEET
PAGE 1 OF _____.

Job Name WALTERS ARMORY Job No. 5424

Day 1/2/14 Date

Name Nombre	Start Time Tiempo de Principio	Ending Time Final de Tiempo	Start Time Tiempo de Principio	Ending Time Final de Tiempo	Total Hours Horas Totales
PAUL INESS	9:00	11:30	12:30	5:00	
W Bottom					
SAMUEL HENNESY					
Ahurdio Beltran					
Gerardo Salgado					
VALERIO SANCHEZ					
Edwin Rivera					
Kevin Gonzalez					
Ramsey Rabanal					
1/3/14	7:00	11:30	12:30	5:00	
PAUL INESS					
Samuel Hennesy					
GERARDO SALGADO					
VALERIO SANCHEZ					
Ramsey Rabanal					
WILLIAM Bottom					
Edwin Rivera					
Ahurdio Beltran					
KEVIN GONZALEZ					

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DAILY FIELD ACTIVITY LOG

SUPERVISOR: Paul Iness | DATE: 1/3/14 | Page 1 of 1

PROJECT NAME: Walters Armory | PROJECT NO. 5424

FIELD ACTIVITY SUBJECT: Prep work For Asbestos AA

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

7:00 crew of 9 workers 1 supervisor onsite
Crew to Continue work Installing Glove bags
9:00 Called DOL Talked to Clark Boswell
Set Prep Inspection For 1/6 at 1:00
10:00 Envcon Bill set air monitoring
11:00 called Darwin Found Pipe IN Chase
between Restrooms OK to Demo
11:30 Lunch
12:30 all Back
2:00 talk to Lowder about Roll off Dumpster For
Demo of offices in Drill Room
2:30 started 4 men to build 2x4ers walls
For Decon/Loadout
4:00 2 men to lay drop cloth under Pipe
also Lowder onsite with Asbestos wast Trailer
4:50 crew to Clean up left for the day

VISITORS ON SITE:

None

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

None

WEATHER CONDITIONS:

Cold 38°

IMPORTANT TELEPHONE CALLS:

DOL-Clark Boswell
Envcon-Bill Mulder

IH PERSONNEL ON SITE:

SIGNATURE: [signature] | DATE: 1/3/14

ENVIRONMENTAL ACTION, INC.

DAILY SIGN IN SHEET
PAGE 1 OF _____

Job Name Walters Amenity Job No. 5424

Day _____ Date _____

Name Nombre 1/6	Start Time Tiempo de Principio	Ending Time Final de Tiempo	Start Time Tiempo de Principio	Ending Time Final de Tiempo	Total Hours Horas Totales
PAUL INESS	7:00	11:30	12:30	5:00	
William Bottom					
Abundio Beltran					
Gerardo Salgado					
Valeria Sanchez					
Edwin Riviera					
Kevin Gonzalez					
Rodney Roland					
David Ceasar					
1/7					
PAUL INESS	7:00	11:30	12:30	5:00	
Kevin Gonzalez					
Edwin Riviera					
Gerardo Salgado					
Rodney Roland					
Abundio Beltran					
William Bottom					
David Ceasar					
Valeria Sanchez					

ENVIRONMENTAL ACTION, INC.

DAILY SIGN IN SHEET
PAGE 1 OF _____

Job Name Walters Amendry Job No. 5424

Day _____ Date _____

Name Nombre	Start Time Tiempo de Principio	Ending Time Final de Tiempo	Start Time Tiempo de Principio	Ending Time Final de Tiempo	Total Hours Horas Totales
1/8					
PAUL INESS	7:00	11:30	12:30	5:00	
William Bottom					
Abundio Beltran					
Gerardo Salgado					
Valeria Sanchez					
Edwin Rivera					
Kevin Gonzalez					
Rodney Roland					
David Geasar					
1/9					
PAUL INESS	7:00	11:30	12:30	5:00	
Kevin Gonzalez					
Edwin Rivera					
Gerardo Salgado					
Rodney Roland					
Abundio Beltran					
William Bottom					
David Geasar					
Valeria Sanchez					

ENVIRONMENTAL ACTION, INC.

DAILY SIGN IN SHEET
PAGE 1 OF _____

Job Name Walters Amendy Job No. 5424

Day _____ Date _____

Name Nombre	Start Time Tiempo de Principio	Ending Time Final de Tiempo	Start Time Tiempo de Principio	Ending Time Final de Tiempo	Total Hours Horas Totales
1/13					
PAUL INESS	7:00	11:30	12:30	5:00	
William Botton					
Abundio Beltran					
Gerardo Salgado					
Valeria Sanchez					
Edwin Rivera					
Kevin Gonzalez					
Rodney Roland					
David Geasar					
1/14					
PAUL INESS	7:00	11:30	12:30	5:00	
Kevin Gonzalez					
Edwin Rivera					
Gerardo Salgado					
Rodney Roland					
Abundio Beltran					
William Botton					
David Geasar					
Valeria Sanchez					

ENVIRONMENTAL ACTION, INC.

DAILY SIGN IN SHEET
PAGE 1 OF _____

Job Name Walters Ancmory Job No. 5424

Day _____ Date _____

Name Nombre 1/15	Start Time Tiempo de Principio	Ending Time Final de Tiempo	Start Time Tiempo de Principio	Ending Time Final de Tiempo	Total Hours Horas Totales
PAUL INESS	7:00	11:30	12:30	5:00	
William Bottom					
Abundio Beltran					
Gerardo Salgado					
Valeria Sanchez					
Edwin Rivera					
Kevin Gonzalez					
Rodney Roland					
David Geasar					
1/16					
PAUL INESS	7:00	11:30	12:30	5:00	
Kevin Gonzalez					
Edwin Rivera					
Gerardo Salgado					
Rodney Roland					
Abundio Beltran					
William Bottom					
David Geasar					
Valeria Sanchez					

ENVIRONMENTAL ACTION, INC.

DAILY SIGN IN SHEET
PAGE 1 OF _____

Job Name Walters Amenity Job No. 5424

Day _____ Date _____

Name Nombre	Start Time Tiempo de Principio	Ending Time Final de Tiempo	Start Time Tiempo de Principio	Ending Time Final de Tiempo	Total Hours Horas Totales
1/20					
PAUL INESS	7:00	11:30	12:30	5:00	
William Botham					
Abundio Beltran					
Gerardo Salgado					
Valeria Sanchez					
Edwin Rivera					
Kevin Gonzalez					
Rodney Roland					
David Geasar					
1/21					
PAUL INESS	7:00	11:30	12:30	5:00	
Kevin Gonzalez					
Edwin Rivera					
Gerardo Salgado					
Rodney Roland					
Abundio Beltran					
William Botham					
David Geasar					
Valeria Sanchez					

ENVIRONMENTAL ACTION, INC.

DAILY SIGN IN SHEET
PAGE 1 OF _____

Job Name Walter's Agency Job No. 5424

Day _____ Date _____

Name Nombre	Start Time Tiempo de Principio	Ending Time Final de Tiempo	Start Time Tiempo de Principio	Ending Time Final de Tiempo	Total Hours Horas Totales
Paul Ines S	7:00	11:30	12:30	5:00	
Abundio Beltran					
William Bathom					
David Ceasar					
Kevin Gonzalez					
Edwin Rivera					
Valeria Sanchez					
Rodney Rolnud					
Gerardo Salgado					
Paul Ines S	7:00	11:30	12:30	3:30	
Abundio Beltran	7:00	11:30			
William Bathom	7:00	11:30			
[redacted]					
Kevin Gonzalez	7:00	11:30			
[redacted]					

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: [illegible]	2. Page 1 of 1	3. Emergency Response Phone: 918-5[illegible]-2071	4. Manifest Tracking Number: 005042971 FLE

5. Generator's Name and Mailing Address
Environmental Action Inc.
1644 NW 5th Street
Oklahoma City, Oklahoma 73106

Generator's Phone: 405-262-6745

Generator's Site Address (if different than mailing address)
WAlters Armory
Walters Ok.

6. Transporter 1 Company Name: FEM, INC. — U.S. EPA ID Number: [illegible]00003459

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

8. Designated Facility Name and Site Address
Systech Environmental Corp.
1420 S. Cement Road
Fredonia, KS 66736

Facility's Phone: 800-778-7224

U.S. EPA ID Number: KSD980633259

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. (RQ1000) UN1993, Waste Flammable Liquid, N.O.S. 3, PGIII, (D001,F003,F005)(ERG#128)	1	DM	[illegible]	[illegible]	D001	F003	F005
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information

9.a.

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: [illegible] — Signature: [illegible] — Month / Day / Year: [illegible]

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: [illegible] — Signature: [illegible] — Month / Day / Year: [illegible]
Transporter 2 Printed/Typed Name: — Signature: — Month / Day / Year:

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

GENERATOR | TRANSPORTER | INT'L | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

FER, INC.

5055 S. Eastern • Oklahoma City, OK 73129
Phone: (405) 677-4992 or (405) 495-6336 • Fax: (405) 677-4959

INVOICE

39353

DATE: 5-16-2014 5/16/2014

SOLD TO
Environmental Action Inc.
1644 NW 5th Street
Oklahoma City, Oklahoma 73106
Darwin 405-990-0070

SHIP TO
Environmental Action Inc.
1644 NW 5th Street
Oklahoma City, Oklahoma 73106
5042971

CUSTOMER ORDER NO.	CHECK	VISA	MASTERCARD

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
2	Open Top Drum	$45.00 each	$90.00
1	Lead Paint Chips	$350.00 each	$350.00
	Walters Armory		
	Walters Okla.		
	Darwin Chesnut		
			$440.00









































CERTIFICATE OF INSPECTION
WALTERS ARMORY
April 15, 2014
Walters, OK

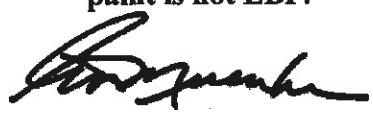
At the request of the Oklahoma Department of Environmental Quality, a site inspection was conducted on April 15, 2014, at the Walters Armory to assess the completeness of the floor tile mastic removal and to evaluate the lead content of yellow paint located behind the range in the kitchen. This inspection was performed by Emmett Muenker, an Oklahoma-licensed Inspector/Management Planner, OKMP-130435 and Lead-Based Paint Risk Assessor, OKRASR11260.

FLOOR TILE MASTIC: A visual inspection of the areas of floor tile and mastic removal was conducted in the three rooms where the floor tiles and mastic were to be removed. The floor tiles were completely removed; however, some mastic remained on the surface as well as heavy mastic stains on the concrete. The (embedded) mastic stains may not be removable, but the mastic remnants on the surface can be readily removed with an application of mastic remover. Allowing the remover to "soak" for a few hours may also remove some of the mastic stains. Photographs of the floor of these rooms are attached.

PAINT BEHIND RANGE: A paint chip sample was collected from the peeling yellow paint behind the range in the kitchen and a 1 SF wipe sample was collected from the floor in front of the range. These samples were submitted under chain of custody to QuanTEM Laboratories of Oklahoma City for analysis. The lead content of the paint was 0.353 %. Lead-based Paint (LBP) is defined as paint containing 0.5% or greater lead content. The wipe sample from the floor contained 18.7 $\mu g/ft^2$, with the threshold for LBP contamination at 40 $\mu g/ft^2$. Photographs of the paint and wipe sample location are attached.

RECOMMENDATIONS:

1) **Additional mastic removal is recommended in order to remove the remaining surface remnants of the mastic present in the three rooms, with an effort made to remove the deeper mastic stains by allowing the remover to remain on the floor for several hours before final cleaning. It may or may not be possible to remove these embedded stains.**
2) **No action is recommended with regard to the yellow paint behind the range, as the paint is not LBP.**



Emmett W. Muenker
Oklahoma AHERA-licensed Inspector/Management Planner, OKMP-130435
Oklahoma Lead-Based Paint Risk Assessor, OKRASR11260
Date of Inspection: April 15, 2014
Date of Sample Analyses: April 16, 2014

Attachments:
Photographs
Laboratory Report/Chain of Custody

PHOTOGRAPHIC RECORD

Project No: ENMISC2509

Project Name: Walters Armory, Floor Tile/Mastic

Photo #1: Mastic Removal Remnants

Photo #2: Mastic Removal Remnants

Photo #3: Mastic Removal Remnants

Photo #4: Mastic Removal Remnants

Photo #5: Mastic Removal Remnants

Photo #6: Mastic Removal Remnants

PHOTOGRAPHIC RECORD

Project No: ENMISC2509

Project Name: Walters Armory, Yellow Paint

Photo #1: Yellow Paint Behind Range

Photo #2: Wipe Sample Location by Range

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 234294
Date Received: 04/16/14
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 4/16/2014

AIHA ID: 101352

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

Acct. No.: A845

Project: Walters Armory
Location: Walters, OK
Project No.: ENMISC-WAL

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	WAL-01	Paint	Lead	0.353	0.00479	%	04/16/14 13:30	P EPA 7000B (1)
002	WAL-02	Wipe	Lead	18.7	9	ug/sq. Ft.	04/16/14 13:30	W NIOSH 9100

Authorized Signature: _____
Benton Miller, Analyst

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

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

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

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

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

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

Supplemental Report
QAQC Results

QA ID: 11982
Test: Lead

Date: 4/16/2014
Matrix: Paint

Lab Number: 234294
Approved By: Benton Miller
Date Approved: 4/16/2014

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.9	5.5
FCV	4.5	5	5.5
ICV	0.9	1.1	1.1
RLVS	0.08	0.117	0.12

Duplicate Data:

Sample Number	Result	Duplicate	% RPD
234188-002	4.225	4.320	2.2

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
LCS-P1	0.000	1.880	2.014	107.1	1.911	101.7	5.2
234188-002	4.225	2.000	6.743	125.9			

Supplemental Report
QAQC Results

QA ID: 11983
Test: Lead
Date: 4/16/2014
Matrix: Wipe
Lab Number: 234294
Approved By: Benton Miller
Date Approved: 4/16/2014

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.9	5.5
FCV	4.5	5	5.5
ICV	0.9	1.1	1.1
RLVS	0.144	0.202	0.216

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W1	0.000	5.010	4.561	91.0	4.903	97.9	7.2

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. 234294 (Accept) Reject

Company Name: ENERCON SERVICES INC Acct.#: A845 Project Name: WALTERS ARMORY
Project Location: WALTERS, OK Project Number: EMMISC-WAL

	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.	WAL-01	YELLOW PAINT		B	X					X					
2.	WAL-02	WIPE SAMPLE	1 SF	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: BILL MUENKER
Phone: 204-4700
Report Results VIA (CHOOSE ONE):
- [ ] FAX:
- [X] QuanTEM WebSite
- [ ] E-Mail:

Relinquished By	Date/Time	VIA	Received By	Date/Time	Date Sampled	Sampled By
Bill Muenker	4/16/14 0800	[illegible]	S Pftwich	4/16/14 8:15	4/15/14	BILL MUENKER
Relinquished By	Date/Time	VIA	Received By	Date/Time		

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 2008

CERTIFICATE OF INSPECTION
WALTERS ARMORY
April 28, 2014
Walters, OK

At the request of the Oklahoma Department of Environmental Quality, a follow-up site inspection was conducted on April 28, 2014, at the Walters Armory to assess the completeness of the floor tile mastic removal following an inspection on April 15 indicating that additional mastic removal was needed to complete the abatement work. This inspection was performed by Emmett Muenker, an Oklahoma-licensed Inspector/Management Planner, OKMP-130435.

A visual inspection of the areas of floor tile and mastic removal was conducted in the three rooms where the floor tiles and mastic had been removed. The mastic remaining on the surface at the time of the April 15 inspection had been removed. The contractor had completed final cleaning and the remnants present earlier had been removed. The surface mastic has now been removed, but some imbedded stains remain. This is not unusual on porous concrete floors. Photographs of the floors of these rooms are attached.

RECOMMENDATIONS:

It is our opinion that the mastic removal has now been completed satisfactorily.

Emmett W. Muenker
Oklahoma AHERA-licensed Inspector/Management Planner, OKMP-130435
Date of Inspection: April 28, 2014

Attachment:
Photographs, 4-28-14

PHOTOGRAPHIC RECORD

Project No: ENMISC2509

Project Name: Walters Armory, Floor Tile/Mastic

Photo #1: Following Re-cleaning

Photo #2: Following Re-cleaning

Photo #3: Following Re-cleaning

Photo #4: Following Re-cleaning

Photo #5: Following Re-cleaning

Photo #6: Following Re-cleaning

CONFIRMATION SAMPLING

CONFIRMATION SAMPLING RESULTS

Walters Armory

The Department of Environmental Quality (DEQ) personnel sampled the Walters Armory for lead dust to confirm room floors were below the Housing and Urban Development (HUD) standard of 40 micrograms per square foot ($\mu g/ft^2$) for child occupied facilities after all lead-based paint and lead dust abatement was complete. Below is a summary of the sample events and results.

On **February 7, 2014**, after all floors of the building had been cleaned by a DEQ contractor, DEQ personnel sampled the floors of the building in locations that had previously reported elevated levels of lead and areas where there was a potential for lead dust to be tracked to confirm these areas were below the HUD standard of 40 $\mu g/ft^2$. Below is a summary of the results. Sample results are attached **(Attachment 1).**

- Twenty-five (25) samples were taken on the floor of the armory and six (6) samples were above 40 $\mu g/ft^2$.
    - Sample #9 – Result = 124 $\mu g/ft^2$
    - Sample #12 – Result = 56.8 $\mu g/ft^2$
    - Sample #13 – Result = 53.1 $\mu g/ft^2$
    - Sample #14 – Result = 60.5 $\mu g/ft^2$
    - Sample #20 – Result = 183 $\mu g/ft^2$
    - Sample #22 – Result = 194 $\mu g/ft^2$

On **April 3, 2014**, after the areas were re-cleaned by a DEQ contractor, DEQ personnel sampled the floor locations where the previous samples had failed to confirm these areas were below the HUD standard of 40 $\mu g/ft^2$ for lead. Below is a summary of the results. Sample results are attached **(Attachment 2).**

- Sixteen (16) samples were taken on the floor of the armory and two (2) samples were above 40 $\mu g/ft^2$.

- Sample #7 – Result = 56.4 µg/ft^2
- Sample #8 – Result = 301 µg/ft^2

On **April 9, 2014**, after the areas were re-cleaned by a DEQ contractor, DEQ personnel sampled the floor locations where the previous samples had failed to confirm these areas were below the HUD standard of 40 µg/ft^2 for lead. Below is a summary of the results. Sample results are attached **(Attachment 3).**

- Two (2) samples were taken on the floor of the armory; all samples returned results lower than 40 µg/ft^2 for lead.

ATTACHMENT 1

February 7, 2014 SAMPLE RESULTS

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

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

Re: QuanTEM ID 231650

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

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

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

Respectfully,
QuanTEM Laboratories, LLC.

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 231650
Date Received: 02/07/14
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: CC
Date of Report: 2/10/2014

AIHA ID: 101352

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

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

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	1	Wipe	Lead	<9.00	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
002	2	Wipe	Lead	10.1	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
003	3	Wipe	Lead	<9.00	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
004	4	Wipe	Lead	<9.00	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
005	5	Wipe	Lead	<9.00	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
006	6	Wipe	Lead	12.4	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
007	7	Wipe	Lead	19.1	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
008	8	Wipe	Lead	<9.00	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
009	9	Wipe	Lead	124	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
010	10	Wipe	Lead	19.1	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
011	11	Wipe	Lead	12.0	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
012	12	Wipe	Lead	56.8	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
013	13	Wipe	Lead	53.1	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
014	14	Wipe	Lead	60.5	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
015	15	Wipe	Lead	21.7	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
016	16	Wipe	Lead	14.1	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
017	17	Wipe	Lead	<9.00	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100

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

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

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

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

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

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 231650
Date Received: 02/07/14
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: CC
Date of Report: 2/10/2014

AIHA ID: 101352

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

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

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	18	Wipe	Lead	<9.00	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
019	19	Wipe	Lead	27.7	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
020	20	Wipe	Lead	183	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
021	21	Wipe	Lead	30.8	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
022	22	Wipe	Lead	194	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
023	23	Wipe	Lead	35.9	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
024	24	Wipe	Lead	<9.00	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
025	25	Wipe	Lead	<9.00	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
026	26	Wipe	Lead	24.5	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
027	27	Wipe	Lead	<9.00	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100
028	28	Wipe	Lead	<9.00	9	ug/sq. Ft.	02/10/14 10:15	W NIOSH 9100

Authorized Signature: _____

Benton Miller, Analyst

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

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

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

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

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

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

Supplemental Report
QAQC Results

QA ID: 11778
Test: Lead

Date: 2/10/2014
Matrix: Wipe

Lab Number: 231650
Approved By: Benton Miller
Date Approved: 2/10/2014

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5	5.5
FCV	4.5	5.1	5.5
ICV	0.9	1.03	1.1
RLVS	0.144	0.195	0.216

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W1	0.000	5.050	5.205	103.1	5.015	99.3	3.7

Authorized Signature: _____

Benton Miller. 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

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 231650
Accept Reject

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

Contact Information		Project Information	
Company: DEQ	Phone: 405-702-5112	Project Name: Walters Armory	
Contact: Brittany Downs	Cell Phone: 479-363-4589	Project Location: Walters, Ok	
Account #:	E-mail: brittany.downs@deq.ok.gov	Project ID:	

Sampled By: Name: Brittany Downs Date: 2/7/14

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
	2/7/14 1412	drop off		2/7/14 2:16

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
1-28	1	1-28			12"x12"	C	X			X		
	2											
	3											
	4											
	5											
	6											
	7											
	8											
	9											
	10											
	11											
	12											

Sample Matrix Codes

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

TURNAROUND TIME

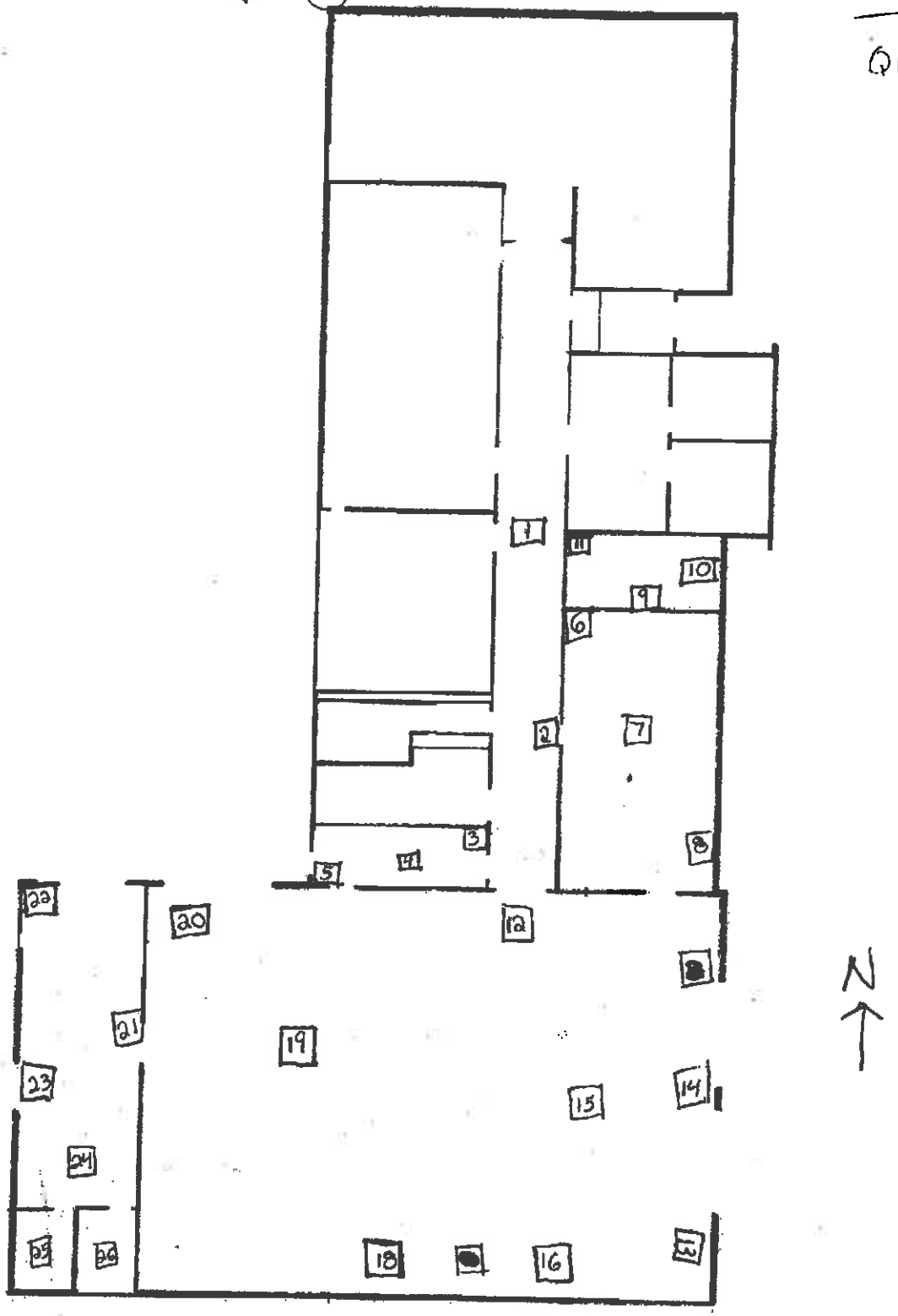
	Same Day
X	24 - Hour
	3 - Day
	5 - Day

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

Walters Armory Lead Wipe Confirmation Sampling Plan

2/7/2014

Q#231650



26 samples

ATTACHMENT 2

April 3, 2014 SAMPLE RESULTS

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

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

Re: QuanTEM ID 233781

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

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

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

Respectfully,
QuanTEM Laboratories, LLC.

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 233781
Date Received: 04/03/14
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 4/4/2014

AIHA ID: 101352

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

Project: Walters Armory Confirmation Sampling
Location: Walters, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	1	Wipe	Lead	<9.00	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
002	2	Wipe	Lead	<9.00	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
003	3	Wipe	Lead	<9.00	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
004	4	Wipe	Lead	18.9	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
005	5	Wipe	Lead	<9.00	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
006	6	Wipe	Lead	37.5	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
007	7	Wipe	Lead	56.4	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
008	8	Wipe	Lead	301	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
009	9	Wipe	Lead	9.01	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
010	10	Wipe	Lead	31.9	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
011	11	Wipe	Lead	<9.00	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
012	12	Wipe	Lead	<9.00	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
013	13	Wipe	Lead	<9.00	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
014	14	Wipe	Lead	<9.00	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
015	15	Wipe	Lead	<9.00	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100
016	16	Wipe	Lead	21.1	9	ug/sq. Ft.	04/04/14 14:15	W NIOSH 9100

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

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

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

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

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

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

Environmental Chemistry Analysis Report

QuanTEM Set ID:	233781
Date Received:	04/03/14
Received By:	Sherrie Leftwich
Date Sampled:	
Time Sampled:	
Analyst:	BM
Date of Report:	4/4/2014

AIHA ID: 101352

Client:	State of Oklahoma DEQ Land Protection Attn: Dustin Davidson 707 N. Robinson Oklahoma City, OK 73102
Acct. No.:	B486
Project:	Walters Armory Confirmation Sampling
Location:	Walters, OK
Project No.:	N/A

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

Authorized Signature: _____

Benton Miller, Analyst

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

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

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

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

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

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

Supplemental Report
QAQC Results

QA ID: 11935
Test: Lead

Date: 4/4/2014
Matrix: Wipe

Lab Number: 233781
Approved By: Benton Miller
Date Approved: 4/4/2014

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5.2	5.5
FCV	4.5	5.2	5.5
ICV	0.9	0.96	1.1
RLVS	0.144	0.209	0.216

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W2	0.000	5.000	5.021	100.4	4.640	92.8	7.9
MS-W1	0.000	5.010	4.774	95.3	4.918	98.2	3.0

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. 233781
Accept / Reject

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

Contact Information		Project Information	
Company: OK DEQ	Phone: 405 702 5112	Project Name: Walters Armory Confirmation Sampling	
Contact: Brittany Downs	Cell Phone: 405 543 4092	Project Location: Walters Ok	
Account #:	E-mail: brittany.downs@deq.ok.gov	Project ID:	

Sampled By: Name: Brittany Downs Date: 4/3/14

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Brittany Downs	4/3/14 @ 1430	drop-off		4/3/14 2:40

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis: Pb	Units (☑ ONE box only): PPM	Wt %	mg / l	µg /ft²	µg / m³	mg / cm²
1	1	Lead Wipe		12"x12"	C	X				X		
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											

Sample Matrix Codes

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

TURNAROUND TIME

☐	Same Day
☒	24 - Hour
☐	3 - Day
☐	5 - Day

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

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

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For Lab Use Only
Lab No. _____
Accept Reject

Report Results (☑ one box)	
	QuanTEM Website
	Other _____

Contact Information		Project Information	
Company:	Phone:	Project Name:	
Contact:	Cell Phone:	Project Location:	
Account #:	E-mail:	Project ID:	

Sampled By: Name: Date:

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
	4/3/14 1438			4/3/14 2:44

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

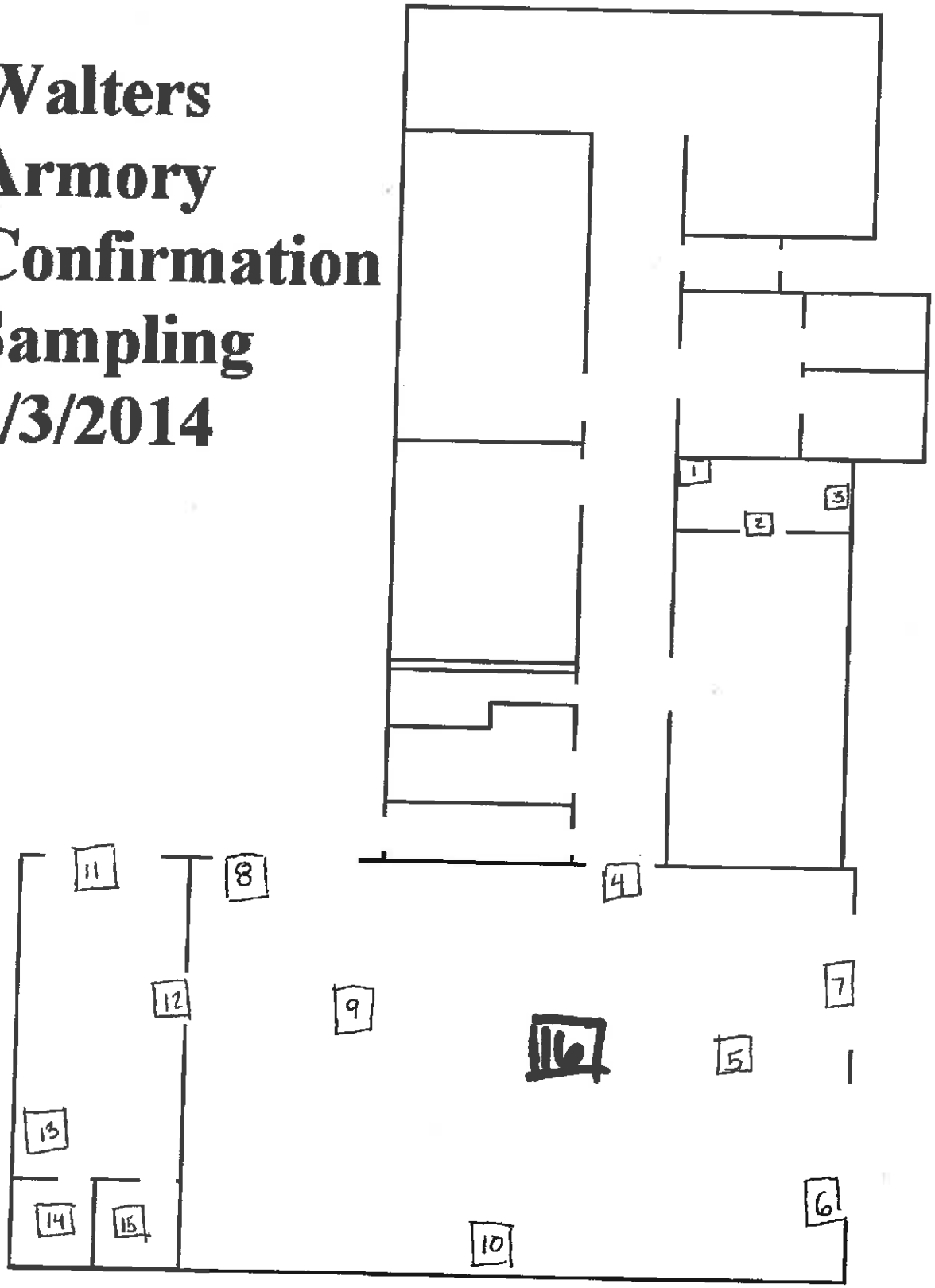
No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis: Pb	Units (☑ ONE box only): PPM	Wt %	mg / l	µg /ft²	µg / m³	mg / cm²
13 1	13	Lead wipe		12"x12"	C	X				X		
14 2	14											
15 3	15											
16 4	16											
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"

Walters Armory Confirmation Sampling 4/3/2014



ATTACHMENT 3

April 9, 2014 SAMPLE RESULTS

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

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

Re: QuanTEM ID 233997

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

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

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

Respectfully,
QuanTEM Laboratories, LLC.

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 233997
Date Received: 04/09/14
Received By: Joanna Mueller
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 4/10/2014

AIHA ID: 101352

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

Project: Walters Armory Resample 2
Location: Walter, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	1	Wipe	Lead	<9.00	9	ug/sq. Ft.	04/10/14 9:00	W NIOSH 9100
002	2	Wipe	Lead	<9.00	9	ug/sq. Ft.	04/10/14 9:00	W NIOSH 9100

Authorized Signature: _____
Benton Miller, Analyst

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

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

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

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

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

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

Supplemental Report
QAQC Results

QA ID: 11950
Test: Lead

Date: 4/10/2014
Matrix: Wipe

Lab Number: 233997
Approved By: Benton Miller
Date Approved: 4/10/2014

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5.1	5.5
FCV	4.5	5	5.5
ICV	0.9	1	1.1
RLVS	0.144	0.159	0.216

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W1	0.000	5.010	4.846	96.7	5.182	103.4	6.7

Authorized Signature: _____

Benton Miller, Analyst

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LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 233997
Accept / Reject

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

Contact Information

Company: OK DEQ
Contact: Brittany Downs
Account #:
Phone: (405) 702-5112
Cell Phone: (405) 543-4092
E-mail: brittany.downs@deq.ok.gov

Project Information

Project Name: Wallers Army Resample 2
Project Location: Wallers, OK
Project ID:

Sampled By: Name: Brittany Downs Date: 4/9/14

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
[signature]	4/9/14 1254	drop off	[signature]	4/9/14 12:07

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis: Pb			Units (☑ ONE box only): PPM	Wt %	mg / l	µg /ft²	µg / m³	mg / cm²
1	1	Lead wipe		12" x 12"	C	X						X		
2	2	Lead wipe		12" x 12"	C	X						X		
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

Sample Matrix Codes

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

TURNAROUND TIME

- ☐ Same Day
- ☒ 24 - Hour
- ☐ 3 - Day
- ☐ 5 - Day

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

#233997

Walters Armory Confirmation Sampling 4/9/2014