Former National Guard Armory
Stilwell, Oklahoma

Remediation Final Report

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

...for a clean, attractive, prosperous Oklahoma

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

ASBESTOS REMEDIATION

DEQ and its contractors completed the following activities:

- Asbestos inspection, including:
  Asbestos containing Thermal System Insulation (TSI), floor tile, and transite panels.
- Asbestos Abatement, including:
  Removal and replacement of fire doors.
  Removal of TSI, floor tile, and transite panels.

TARGETED BROWNFIELD ASSESSMENT

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

LEAD REMEDIATION

DEQ and its contractors completed the following activities:

Lead-based paint (LBP) inspection
Lead dust wipe sampling
LBP abatement, including:
*Scraping and sealing door lintels, window lintels, overhead door frames, and wood ceiling areas with damaged paint.
*Removal and replacement of doors containing LBP
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

I-2011-001470 Book 0474 Pg: 531
06/30/2011 2:10 pm Pg 0531-0532
Fee: $ 15.00 Doc: $ 0.00
Carrie Philpott - Adair County Clerk
State of Oklahoma

I-2013-000010 Book 0489 Pg: 13
01/02/2013 10:41 am Pg 0010-0014
Fee: $ 21.00 Doc: $ 0.00
Danya Curtis - Adair 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 **City of Stilwell, Oklahoma** Grantee, the following described real property and premises lying and situated in the Adair County, State of Oklahoma, as follows:

The West half of Lot 2, and all of Lots 3 and 4 and the West half of Lot 5 of Block 17, and the West 150 feet of an alley way 20 feet wide extending East and West within Block 17, and a tract of land described as follows: Beginning at the Northwest corner of Lot 3 in Block 17 of the original town of Stilwell, Oklahoma; thence running in a Southerly direction along the West line of said Block 17, a distance of 300 feet to the North line of Pine Street; thence in a Westerly direction along the North line of Pine Street extended, a distance of 60 feet; thence in a Northeasterly direction parallel with the West line of said Block 17, a distance of 300 feet the South line of Popular Street; thence in an Easterly direction 60 feet to place of beginning, all in the original Town of Stilwell, Oklahoma, according to the U.S. Government Survey thereof,

SEAL OF COUNTY CLERK ADAIR COUNTY, OKLAHOMA SEAL

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.

RECEIVED
JUL 14 2011
CITY CLERK'S OFFICE
Stilwell, OK

STATE OF OKLAHOMA

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

STATE OF OKLAHOMA }ss
COUNTY OF ADAIR
I hereby certify that the within and foregoing instruments is a true and correct copy of the records as shown in the office of the County Clerk in and for Adair County.
Dated this 30 day of June 2011
Carrie Philpott County Clerk
By _____ Clerk

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

I-2011-001470 Book 0474 Pg: 532
06/30/2011 2:10 pm Pg 0531-0532
Fee: $ 15.00 Doc: $ 0.00
Carrie Philpott - Adair County Clerk
State of Oklahoma

I-2013-000010 Book 0489 Pg: 14
01/02/2013 10:41 am Pg 0010-0014
Fee: $ 21.00 Doc: $ 0.00
Danya Curtis - Adair 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

My Commission Expires:

1/23/12

My Commission Number:

04000685

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

SEAL OF COUNTY CLERK ADAIR COUNTY OKLAHOMA SEAL

NOTICE OF REMEDIATION FORMER STILWELL ARMORY STILWELL, OKLAHOMA

I-2013-000010 Book 0489 Pg: 10
01/02/2013 10:41 am Pg 0010-0014
Fee: $ 21.00 Doc: $ 0.00
Danya Curtis - Adair County Clerk
State of Oklahoma

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

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

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

REASON FOR NOTICE: The below described Affected Property was contaminated with materials that required remediation pursuant to state and federal environmental laws and regulations. Sampling performed by DEQ contractors, conducted on October 31, 2011, indicated that there was asbestos, lead-based paint, and lead dust in the building.

AFFECTED PROPERTY: The Affected Property is the former Stilwell Armory located at 412 West Pine Street, Stilwell, Adair County, Oklahoma.

The legal description is as follows:

The West half of Lot 2, and all of Lots 3 and 4 and the West half of Lot 5 of Block 17, and the West 150 feet of an alley way 20 feet wide extending East and West within block 17, and a tract of land described as follows: Beginning at the Northwest corner of Lot 3 in Block 17 of the original town of Stilwell, Oklahoma; thence running in a southerly direction along the West line of said Block 17, a distance of 300 feet to the North line of Pine Street; thence in a Westerly direction along the North line of Pine Street extended, a distance of 60 feet; thence in a Northeasterly direction parallel with the West line of said Block 17, a distance of 300 feet the South line of Popular Street; thence in an Easterly direction 60 feet to the place of beginning, all in the original Town of Stilwell, Adair County, Oklahoma, according to the U.S. Government Survey thereof.

REMEDY: Remediation activities (Remedy) at the Affected Property included abatement of asbestos, lead-based paint and dust. The remedy was completed on October 3, 2012.

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

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01/02/2013 10:41 am Pg 0010-0014
Fee: $ 21.00 Doc: $ 0.00
Danya Curtis - Adair County Clerk
State of Oklahoma

Oklahoma Department of Environmental Quality
Central Records

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

Physical Address
707 N Robinson
Oklahoma City, OK 73102

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

DISCLAIMER

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

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

CONTINUING OPERATION, MAINTENANCE AND MONITORING

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

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

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

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

CHANGING LAND USE RESTRICTIONS: Changes to land use restrictions must be approved by the DEQ or its successor agency. The person requesting the change in land use must demonstrate to the DEQ's satisfaction that contamination at the site has reached levels appropriate for the proposed new land uses and that further remediation is not necessary or that additional institutional or engineering controls are adequate to achieve levels protective of human health and the environment for the proposed uses.

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

The DEQ at its discretion may determine, based on the new information submitted, that contaminants are present at the Site at levels that will not pose a risk to human health or the

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01/02/2013 10:41 am Pg 0010-0014
Fee: $ 21.00 Doc: $ 0.00
Danya Curtis - Adair County Clerk
State of Oklahoma

environment if the new land use restrictions being requested are allowed. Upon making this determination, the DEQ will file a recordable notice of remediation pursuant to state law in the land records in the in the office of the county clerk where the Site is located designating the new land use restrictions.

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

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

10-24-12
Date

ACKNOWLEDGMENT

STATE OF OKLAHOMA
COUNTY OF OKLAHOMA

Before me, a Notary Public, in and for said County and State, on this 24th day of Oct., 2012, personally appeared Steven A. Thompson to me known to be the identical person who executed the within and foregoing instrument and acknowledged to me that executed the same as free and voluntary act and deed for the uses and purposed therein set forth.

In Testimony Whereof, I have hereunto set my hand and official seal the day and year above written.

My Commission expires:
January 17, 2016.

Notary Public

TERESA MCPHERSON
Notary Public
State of Oklahoma
Commission # 08000751 Expires 01/17/16

MAINTENANCE PLAN

MAINTENANCE PLAN
FORMER STILWELL ARMORY
STILWELL, OKLAHOMA

The Armory located at 412 West Pine Street, Stilwell, Oklahoma, was contaminated with materials that required remediation pursuant to State and Federal environmental laws and regulations. Please refer to Attachment 1 for land use restrictions. Sampling performed by DEQ contractors, conducted on August 24, 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 October 3, 2012. The following maintenance plan is to be completed by the owner of the Affected Property. DEQ recommends inspection of remediated areas every 5 years. During site inspections the owner should note any signs of disrepair or improper maintenance. Continuing operation, maintenance and monitoring should include:

1. All door lintels, window lintels, and overhead door frames 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.

2. All wood ceilings contain lead-based paint. Damaged areas were scrapped and encapsulated with lead-based paint encapsulant. Areas of the ceiling need to be encapsulated with lead-based paint encapsulant if existing paint shows signs of deterioration, damage, or flaking.

Note – A list of DEQ approved acrylic sealant and elastomeric encapsulants is attached (Attachment 2). DEQ did not test every painted surface and all building materials inside and outside of the building, therefore there is a potential for lead-based paint and asbestos at the affected property.

If you have any questions or concerns feel free to contact me at (405) 702-5115.

Sincerely,

Dustin Davidson

Dustin Davidson
Environmental Programs Specialist
DEQ Land Protection Division
Site Cleanup Assistance Program

ATTACHMENT 1

Land use Restrictions

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

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

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

ATTACHMENT 2

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

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ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY
412 WEST PINE STREET
STILWELL, OKLAHOMA 74960

Enercon Project Number – ENMISC2508

February 24, 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
412 WEST PINE STREET
STILWELL, OKLAHOMA 74960

Executive Summary

An asbestos survey of the Stilwell National Guard Armory, 412 West Pine Street, Stilwell, Oklahoma was conducted on October 31, 2011. The armory consisted of a single building with a large central drill room with offices and other rooms located along three sides of the drill room. During the survey, a total of 36 bulk samples were collected from 15 homogeneous areas. A summary of the asbestos-containing building materials (ACBM) is provided below.

Summary of Asbestos-Containing Building Materials

MATERIAL CATEGORY	MATERIAL DESCRIPTION	TOTAL APPROXIMATE AMOUNT
FRIABLE	Gray Insulation - Pipes and Fittings	400 LF
CATEGORY I NON-FRIABLE	Brown Floor Tile	160 SF
CATEGORY II NON-FRIABLE	Transite Soffit	150 SF

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

Recommended actions for planned renovation:

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

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

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

ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY
412 WEST PINE STREET
STILWELL, OKLAHOMA 74960

1.0 INTRODUCTION

An asbestos survey of the Stilwell National Guard Armory, 412 West Pine Street, Stilwell, Oklahoma was conducted on October 31, 2011. The armory consisted of a single building with a large central drill room with offices and other rooms located along three sides of the drill room. The inspection was performed by Richard Belcher, AHERA Inspector OK-159310. Appendix A contains a copy of his Inspector License.

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

2.0 SURVEY PROCEDURES

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

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

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

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

Rooms in the building were not all identified with room numbers, therefore an arbitrary number was assigned to each room for referencing the locations of samples and asbestos-containing materials

identified during the survey. These arbitrary room numbers are used throughout this report and the room locations are shown on the building layouts in Appendix B.

3.0 SURVEY RESULTS

A total of 36 bulk samples were collected from 15 homogeneous areas during the survey. Appendix B contains a site layout with sample and asbestos locations. Appendix C contains the laboratory reports of analyses/chains of custody.

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

Table 1
Summary of Asbestos Containing Building Materials

MATERIAL CATEGORY	MATERIAL DESCRIPTION	TOTAL APPROXIMATE AMOUNT
FRIABLE	Gray Insulation - Pipes and Fittings	400 LF
CATEGORY I NON-FRIABLE	Tan/Brown Floor Tile	160 SF
CATEGORY II NON-FRIABLE	Transite Soffit	150 SF

SF=Square Feet; LF=Linear Feet

Table 2
Bulk Material Samples & Laboratory Analytical Results

SAMPLE ID	DESCRIPTION & LOCATION	APPROX. AMOUNT	ASBESTOS TYPE/ PERCENT
SA-1-01,02	**Transite Soffit, Front Entrance Area**	**150 SF**	**20% Chrysotile**
SA-2-01,02	White Ceiling Tiles	NQ	None Detected
SA-3-01,02	Tan Carpet Adhesive	NQ	None Detected
SA-4-01,02	Yellow/Black Sheet Floor Covering	NQ	None Detected
SA-5-01,02	White Drywall	NQ	None Detected
SA-6-01,02,03	White Wall Texture	NQ	None Detected
SA-7-01,02,03	Drywall Joint Compound	NQ	None Detected
SA-8-01,02	**Tan/Brown 9x9 Floor Tiles, Room 13**	**160 LF**	**6% Chrysotile**
SA-8-01,02	Black Mastic	NQ	None Detected
SA-8-01,02	Gray Flooring	NQ	None Detected
SA-9-01,02	Cream 12x12 Floor Tiles/Adhesive	NQ	None Detected
SA-10-01,02,03	**Gray Pipe Insulation, Throughout**	**100 LF**	**30% Chrysotile**
SA-11-01,02	Window Glazing	NQ	None Detected
SA-12-01,02,03	**Cold Water Line Insulation, Throughout**	**100 LF**	**40% Chrysotile**
SA-13-01,02,03	**Hot Water Line Insulation, Throughout**	**100 LF**	**45% Chrysotile**
SA-14-01,02,03	**Hot Water Line Insulation, Throughout**	**100 LF**	**55% Chrysotile**
SA-15-01,02	Roofing Material	NQ	None Detected

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

4.0 CONCLUSIONS & RECOMMENDATIONS

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

Friable Asbestos-Containing Materials:

- Gray/Tan Pipe Insulation: Domestic hot and cold water line and fitting insulation. Approximately 400 LF of piping insulation was present throughout the building. The piping was exposed as well as located above ceilings and inside walls/chases.

Non-friable Asbestos-Containing Materials:

- Tan/Brown Floor Tiles: Approximately 160 SF of asbestos-containing floor tiles were present in Room 13.

- Transite® Soffit: The soffit at the main entrance on the north side of the building consisted approximately 150 SF of Transite®.

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 and project design for abatement that would be disturbed during renovation activities; solicit bids; award contract and complete abatement.

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

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

Recommendations for Non-friable Asbestos-containing Materials: Non-friable asbestos present were the tan/brown floor tiles located in Room 13 and the Transite® soffit located on the exterior of the north side of the building. These materials containing asbestos are not regulated unless they are disturbed in a manner that renders them friable; however, if they are to be removed, removal must be done by workers who are properly trained to remove them. The following actions are recommended for addressing non-friable materials:

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

2. Planned demolition: The Transite® soffit must be removed prior to demolition; however, the floor tiles may remain in place during demolition activities and may be disposed as ordinary demolition/construction waste.

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

APPENDIX A

FEE: $25.00

Oklahoma Department of Labor

Richard Belcher

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

AHERA INSPECTOR

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

Mark Costello

MARK COSTELLO
Commissioner of Labor

August 31, 2011
Date of Issuance

EXPIRES: August 31, 2012

FEE: $500.00

Oklahoma Department of Labor

Emmett Muenker

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

AHERA MANAGEMENT PLANNER

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

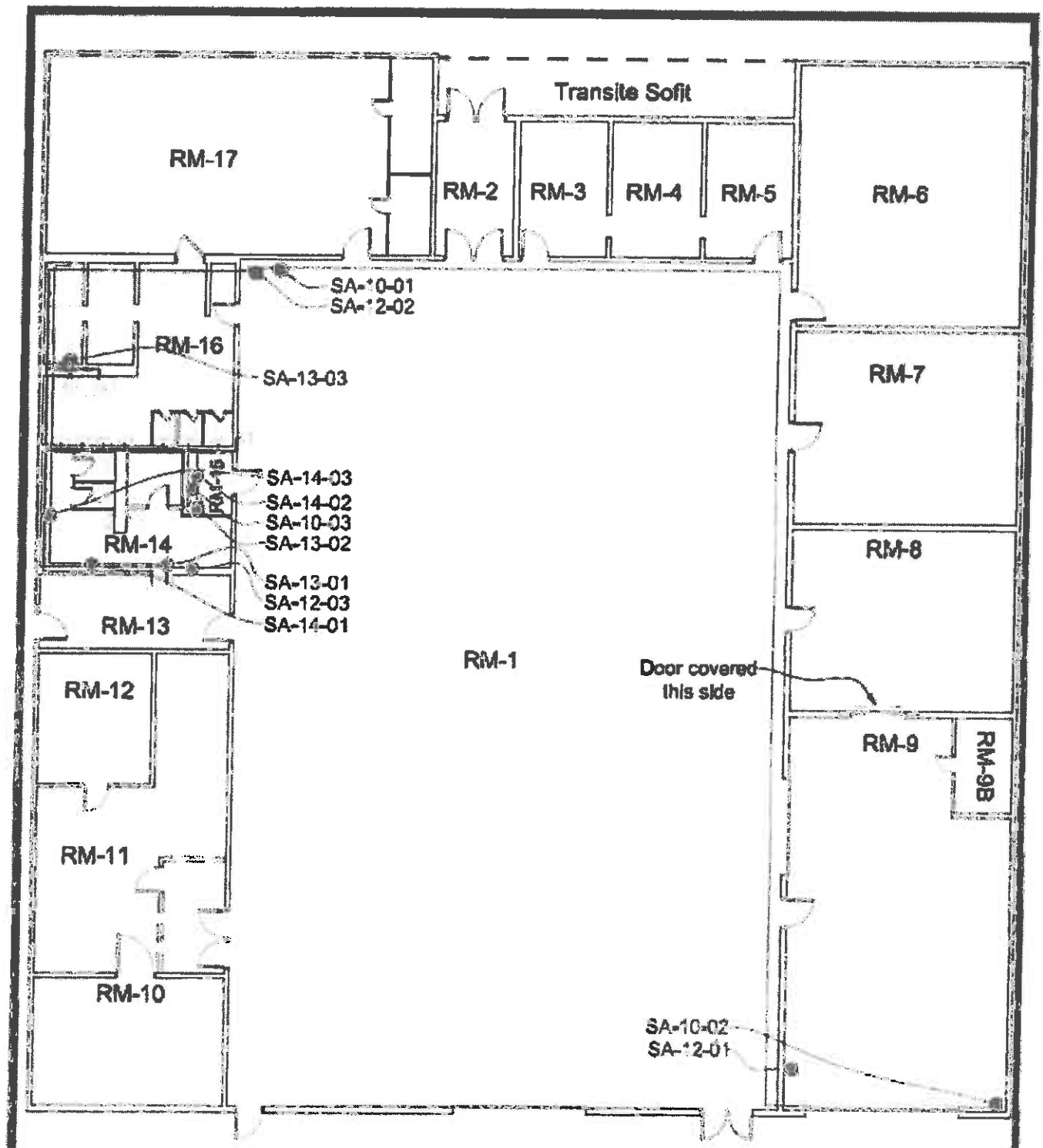
Mark Costello

MARK COSTELLO
Commissioner of Labor

March 14, 2011
Date of Issuance

EXPIRES: March 04, 2012

APPENDIX B



Oklahoma Department of Environmental Quality
National Guard Armory
412 West Pine Street
Stilwell, OK

Legend:

= Positive Sample Location
= Negative Sample Location
= Water Piping With ACM Insulation @ 400 LF

N

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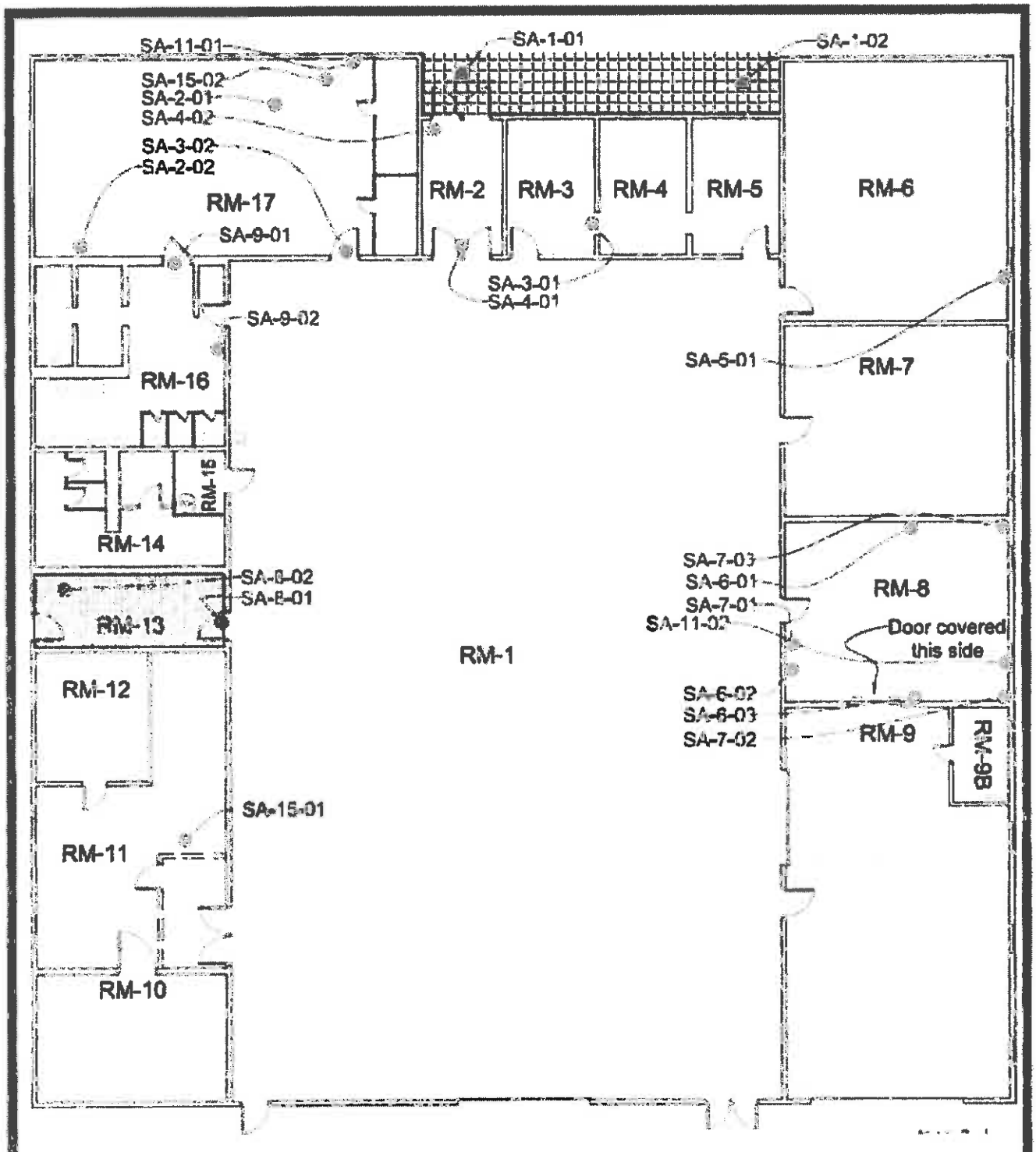
FIGURE 1
Asbestos Thermal Materials Samples and Locations

Project No: ENMISC2508



Oklahoma Department of Environmental Quality
National Guard Armory
412 West Pine Street
Stilwell, OK

Legend:

- = Positive Sample Location
- = Negative Sample Location
- = 9x9 Floor Tile@160 SF
- = Transite Soffit Panels @150 SF

N

ENERCON

FIGURE 2
Asbestos Miscellaneous and Surfacing Materials Samples and Locations

Project No: ENMISC2508

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. 201397
Account Number: A845

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

Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/03/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
001	SA-1-01	Homogeneous	Gray Transite	Asbestos Present Chrysotile 20	NA	CaCO3 Binder
002	SA-1-02	Homogeneous	Gray Transite	Asbestos Present Chrysotile 20	NA	CaCO3 Binder
003	SA-2-01	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose 30 Glass Fiber 30	Paint Perlite
004	SA-2-02	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose 30 Glass Fiber 30	Paint Perlite
005	SA-3-01	Homogeneous	Tan Carpet Mastic	Asbestos Not Present	Cellulose <1 Synthetic <1	Glue
006	SA-3-02	Homogeneous	Tan Carpet Mastic	Asbestos Not Present	Cellulose <1 Synthetic 2	Glue
007	SA-4-01	Homogeneous	Tan Flooring	Asbestos Not Present	NA	Vinyl Paint

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

QuanTEM is a NVLAP accredited TEM and PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201397
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/03/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

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

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
008	SA-4-02	Homogeneous	Tan Flooring	Asbestos Not Present	NA	Vinyl Paint
009	SA-5-01	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose 20	Gypsum
010	SA-5-02	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose 5	Gypsum
011	SA-6-01	Homogeneous	White Wall Texture	Asbestos Not Present	NA	CaCO3 Paint
012	SA-6-02	Homogeneous	White Wall Texture	Asbestos Not Present	Cellulose <1	CaCO3 Paint
013	SA-6-03	Homogeneous	White Wall Texture	Asbestos Not Present	NA	CaCO3 Paint
014	SA-7-01	Homogeneous	White Joint Compound	Asbestos Not Present	NA	CaCO3 Binder

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

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201397
Account Number: A845

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

Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/03/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
015	SA-7-02	Homogeneous	White Joint Compound	Asbestos Not Present	NA	CaCO3 Binder
016	SA-7-03	Homogeneous	White Joint Compound	Asbestos Not Present	NA	CaCO3 Binder
017	SA-8-01	Layered	Brown Floor Tile	Asbestos Present Chrysotile 6	NA	Vinyl CaCO3
017a		Layered	Black Mastic	Asbestos Not Present	NA	Tar
017b		Layered	Gray Flooring	Asbestos Not Present	NA	CaCO3 Binder
018	SA-8-02	Layered	Brown Floor Tile	Asbestos Present Chrysotile 5	NA	Vinyl CaCO3
018a		Layered	Black Mastic	Asbestos Not Present	NA	Tar

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. 201397
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/03/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

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

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
018b		Layered	Gray Flooring	Asbestos Not Present	NA	CaCO3 Binder
019	SA-9-01	Layered	Cream Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
019a		Layered	Yellow Mastic	Asbestos Not Present	NA	Glue
020	SA-9-02	Layered	Cream Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
020a		Layered	Yellow Mastic	Asbestos Not Present	NA	Glue
020b		Layered	Gray Flooring	Asbestos Not Present	NA	CaCO3 Binder
021	SA-10-01	Homogeneous	Gray Insulation	Asbestos Present Chrysotile 45	NA	Binder

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201397
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/03/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

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

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
022	SA-10-02	Layered	Gray Insulation	Asbestos Present Chrysotile 40	NA	Binder
022a		Layered	Tan Insulation	Asbestos Not Present	Cellulose 95	Binder
022b		Layered	Black Tar Paper	Asbestos Not Present	Cellulose 35	Tar
023	SA-10-03	Layered	Gray Insulation	Asbestos Present Chrysotile 45	NA	Binder
023a		Layered	Tan Insulation	Asbestos Not Present	Cellulose 95	Binder
024	SA-11-01	Homogeneous	White Window Glazing	Asbestos Not Present	NA	CaCO3 Binder
025	SA-11-02	Homogeneous	White Window Glazing	Asbestos Not Present	NA	CaCO3 Binder

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201397
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/03/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

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

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
026	SA-12-01	Homogeneous	Gray Insulation	Asbestos Present Chrysotile 40	NA	Binder
027	SA-12-02	Homogeneous	Gray Insulation	Asbestos Present Chrysotile 40	NA	Binder
028	SA-12-03	Homogeneous	Gray Insulation	Asbestos Present Chrysotile 35	NA	Binder
029	SA-13-01	Homogeneous	Gray Insulation	Asbestos Present Chrysotile 40	NA	Binder
030	SA-13-02	Homogeneous	Gray Insulation	Asbestos Present Chrysotile 35	NA	Binder
031	SA-13-03	Homogeneous	Gray Insulation	Asbestos Present Chrysotile 45	NA	Binder
032	SA-14-01	Layered	Gray Insulation	Asbestos Present Chrysotile 55	NA	Binder

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201397
Account Number: A845

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

Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/03/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
032a		Layered	Tan Insulation	Asbestos Not Present	Cellulose 95	Binder
033	SA-14-02	Layered	Gray Insulation	Asbestos Present Chrysotile 45	NA	Binder
033a		Layered	Tan Insulation	Asbestos Not Present	Cellulose 95	Binder
033b		Layered	Black Tar Paper	Asbestos Not Present	Cellulose 35	Tar
034	SA-14-03	Layered	Gray Insulation	Asbestos Present Chrysotile 45	NA	Binder
034a		Layered	Tan Insulation	Asbestos Not Present	Cellulose 95	Binder
034b		Layered	Black Tar Paper	Asbestos Not Present	Cellulose 35	Tar

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

QuanTEM is a NVLAP accredited TEM and PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201397
Account Number: A845
Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/03/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

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

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
035	SA-15-01	Homogeneous	Black/Silver Roofing	Asbestos Not Present	NA	Tar Paint
036	SA-15-02	Homogeneous	Black/Silver Roofing	Asbestos Not Present	NA	Tar Paint

Gayle Ooten, Analyst

11/3/2011
Date of Report

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

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Asbestos Chain-of-Custody

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

This Box for Lab Use Only
Lab No. 201397
Accept Reject

Company Name: Envircon Services Inc. Acct.#: B Project Name: Stillwell Armory

Project Location: Stillwell OK Project Number: ____

Sample Number	To Be Analyzed	Color / Description	Volume / Area (if applicable)	Comments
SA-1-01		Gray Transite		Soil
02		"		
SA-[illegible]-01		White 2x4 CT		
02		"		
SA-[illegible]-01		TAN Carpet Glue		
02		"		
SA-[illegible]-01		Yellow/Black Floor Covering		
02		"		
SA-[illegible]-01		White Drywall		
02		"		
SA-[illegible]-01		Wall Tex		
02		"		
03		"		
SA-[illegible]-01		Joint Comp		
02		"		
03				
SA-[illegible]-01		Tan/Brown 9x9 FT		
02		"		
SA-[illegible]-01		1x1 FT CVtrm		
02		"		

LEGAL DOCUMENT
Please Print Legibly

PLM	
X	Bulk Analysis (Point Count)
	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 D6758
	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: [signature]
Phone: 2099637
Report Results VIA (CHOOSE ONE)
FAX
X QuanTEM WebSite
E-Mail

Relinquished By	Date/Time	Received By	Date/Time	Date Received	Received By:
[signature] 10/31/11 1900	H	M Branson 10-31-11 / 1902		10/31/11	RB
M Branson 11-3-11 / 1635	H	[signature] 10-31-11	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'

RECEIVED
MAR 27 2012
Department of Central Services
Construction & Properties

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Asbestos Chain-of-Custody

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www.quantem.com

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Lab No. 201397
Accept Reject

Company Name: Emerson Services Acct.#: B Project Name: Stilwell Runway

Project Location: Stilwell, OK Project Number:

Sample Number	To Be Analyzed	Color / Description	Volume / Area (if applicable)	Comments
SA-[redacted]-01		Asbestos Line Insul		Cold
-02		"		
-03		"		
SA-11-01		Window Caulking		
-02		"		
SA-12-01		Water Line Fitt		[redacted]
SA-12-02		"		Cold
-03		"		
SA-13-01		Water Line Fitt		Hot
-02		"		
-03		"		
SA-14-01		Water Line Insul		HOT
-02		"		
-03		"		
SA-15-01		Roofing Material		
-02		"		

LEGAL DOCUMENT
Please Print Legibly

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

PCM
- [ ] NIOSH 7400
- [ ] Other

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

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

CONTACT INFORMATION
Name: R
Phone: 2099637
Report Results VIA (CHOOSE ONE)
- [ ] FAX
- [X] QuanTEM WebSite
- [ ] E-Mail:

Relinquished By	Date/Time	Via	Received By	Date/Time	Date Received	Sampled By:
RB	10314 1900	H	[signature]	10-31-11-1900	10/31/11	RB
[signature]	11-3-11 1025		[signature]	11-3-11 1025		

Saturday FedEx Shipping - CALL TO SCHEDULE
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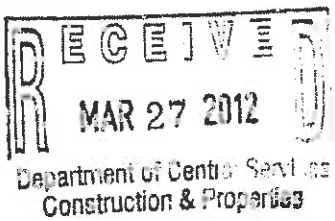
Mark Package "HOLD FOR SATURDAY PICKUP"

SURVEY AND ASSESSMENT FOR LEAD IN PAINT AND SETTLED DUST

NATIONAL GUARD ARMORY
412 WEST PINE STREET
STILWELL, OKLAHOMA 73651

ENERCON Project Number ENMISC2508
February 6, 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
Fax: (405) 722-7694

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 Stilwell National Guard Armory, 412 W. Pine Street, Stilwell, Oklahoma. The survey was conducted on October 31, 2011 by Mr. Marshall Branscum and Mr. Richard Belcher, both of ENERCON.

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

The results of XRF sampling indicated the following:

- Interior: The metal roof-support trusses in Room 1; the wood roof deck, roof support beams, and trim boards associated with the roof deck in Rooms 1-17; nine lintels associated with Rooms 2, 3, 7, 9, and 14-17; four doors in Rooms 6, 11, 15, and 17; and the wood walls on Sides A and C in Room 7 were coated with LBP.

- Exterior: All window frame and window lintels; the wood trim board associated with the overhang on Side A; all wood fascia; and the lintels above the doorway on Side A and the northwest roll-up door on Side C 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 eight rooms: Rooms 7, 9, 10, 11, 12, 13, 15 and 16.

1.0 INTRODUCTION

Enercon Services, Inc. (ENERCON) has completed a Survey and Assessment for Lead in Paint and Settled Dust (Survey) at the Stilwell National Guard Armory, 412 W. Pine Street, Stilwell, Oklahoma. The inspection was conducted on October 31, 2011 by Mr. Marshall Branscum of ENERCON. The individual Lead-Based Paint Inspector, Risk Assessor, and Firm Licenses are provided in Appendix F.

The Stilwell National Guard Armory was constructed on a concrete slab-on-grade foundation with flat roofs covered with tar and gravel over the office area and drill room. The walls were constructed of brick. The building contained a large central drill room with offices and other rooms located on the east, south, and west 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 painted surfaces for 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 based upon sampling according the 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 279 XRF samples were collected, including calibration and null readings. Figure 1 in Appendix A shows the location of the components with LBP. Tables 1, 2, and 3 provide a summary of building components with LBP as identified by XRF sampling along with their locations and sizes. The painted surfaces sampled during the survey ranged from intact to poor condition. Representative photographs were taken of components where positive readings (1.0 mg/cm^2 or greater) were obtained and are provided in Appendix B.

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

Interior Components:

- Metal roof trusses, Room 1
- Wood roof deck, support beams and trim boards, Rooms 1-17
- Metal lintels above doorways, Rooms 2, 3, 7, 9, and 14-17
- Doors, Rooms 6, 11, 15, and 17
- Wood walls, Room 7, Sides A and C

Exterior Components:

- All window frames and lintels
- Wood trim board associated with overhang, Side A
- Black and white painted wood fascia, Sides A, B, C and D
- Metal lintels above main entrance door,Side A, and northwest roll-up door, Side C

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

Identified Lead-Based Paint (Color/Description)	Lead Content (mg/cm^2)	Location	Size of Door/Frame
Red/Door	1.7	Room 6, Side D	36" x 84"
Red/Door	1.7	Room 11, Side B	60" x 84"
Yellow/Door	3.9	Room 15, Side B	36" x 84"
Red/Door	1.3	Room 17, Side C	36" x 84"

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
White/Window Frame	1.1	Exterior, Side A	84" x 48" (3)
White/Window Frame	1.4	Exterior, Side A	42" x 48" (5)
White-Gray/Window Frame	1.1	Exterior, Side B	42" x 36" (9)
White-Gray/Window Frame	1.8	Exterior, Side B	42" x 36" (9)
White/Window Frame	2.4	Exterior, Side D	44" x 36" (3)
White/Window Frame	*	Exterior, Side D	42" x 48" (3)
White/Window Frame	*	Exterior, Side D	84" x 36" (2)
White/High Bay Window Frame	1.1	Exterior, Side B	44" x 34" (13)

White/High Bay Window Frame	1.9	Exterior, Side D	44" x 34" (7)
White/High Bay Window Frame	1.0	Exterior, Side D	44" x 34" (6)

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

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

Identified Lead-Based Paint (Color)	Lead Content (mg/cm^2)	Location	Surface/Components
Brown	1.4	Room 2, Side C	Door Lintel (Metal)
Black	1.2	Room 3, Side C	Door Lintel (Metal)
White	1.3	Room 6	Roof Deck (Wood)
White	1.7	Room 6	Roof Support Beam (Wood)
White	1.2	Room 6	Roof Trim Board (Wood)
White	1.6	Room 7	Roof Trim Board (Wood)
White	2.2	Room 7	Roof Support Beam (Wood)
White	1.6	Room 7	Roof Deck (Wood)
Black	1.2	Room 7, Side D	Door Lintel (Metal)
Gray	1.2	Room 7, Side A	Wall Trim (Wood)
Gray	2.8	Room 7, Side A	Wall (Wood)
Gray	1.6	Room 7, Side C	Wall (Wood)
Gray	1.5	Room 8	Roof Deck (Wood)
Beige	1.1	Room 9, Side D	Roll-up Door Lintel (Metal)
Black	1.5	Room 9, Side D	Door Lintel (Metal)
Gray	1.1	Room 11	Roof Deck (Wood)
Black	1.2	Room 14, Side B	Door Lintel (Metal)
Black	1.1	Room 15, Side B	Door Lintel (Metal)

Black	1.0	Room 16, Side B	Door Lintel (Metal)
Black	1.1	Room 17, Side C	Door Lintel (Metal)
Gray	2.3	Room 1	Roof Trusses (Metal)
Gray	2.1	Room 1	Roof Trusses (Metal)
White Gray	*	Rooms 1-17	Roof Deck, Roof Support Beams, and Roof Trim Board (Wood)
Black	1.3	Exterior, Side A	Fascia (Wood)
White	1.9	Exterior, Side A	Overhang Trim Board (Wood)
White	2.6	Exterior, Side A	Window Lintel (Metal)
White	2.1	Exterior, Side A	Window Lintel (Metal)
White	1.8	Exterior, Side A	Window Lintel (Metal)
White	1.8	Exterior, Side A	Window Lintel (Metal)
White	2.1	Exterior, Side A	Window Lintel (Metal)
Red	1.2	Exterior, Side A	Door Lintel (Metal
White	1.6	Exterior, Side B	Window Lintel (Metal)
White	1.4	Exterior, Side B	Window Lintel (Metal)
White	1.9	Exterior, Side B	Window Lintel (Metal)
White	1.6	Exterior, Side B	Fascia (Wood)
White	1.0	Exterior, Side C	Roll-up Door Lintel (Metal)
White	1.3	Exterior, Side C	Fascia (Wood)
White	2.2	Exterior, Side D	Fascia (Wood)
White	1.7	Exterior, Side D	Window Lintel (Metal)
White	2.0	Exterior, Side D	Window Lintel (Metal)
White	1.3	Exterior, Side D	Window Lintel (Metal)
White	1.3	Exterior, Side D	Fascia (Wood)
White	1.3	Exterior, Side B	Fascia (Wood)
White	1.9	Exterior, Side B	High Bay Window Lintel (Metal)

White	2.1	Exterior, Side B	High Bay Window Lintel (Metal)
White	2.3	Exterior, Side D	High Bay Window Lintel (Metal)
White	1.9	Exterior, Side D	High Bay Window Lintel (Metal)

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

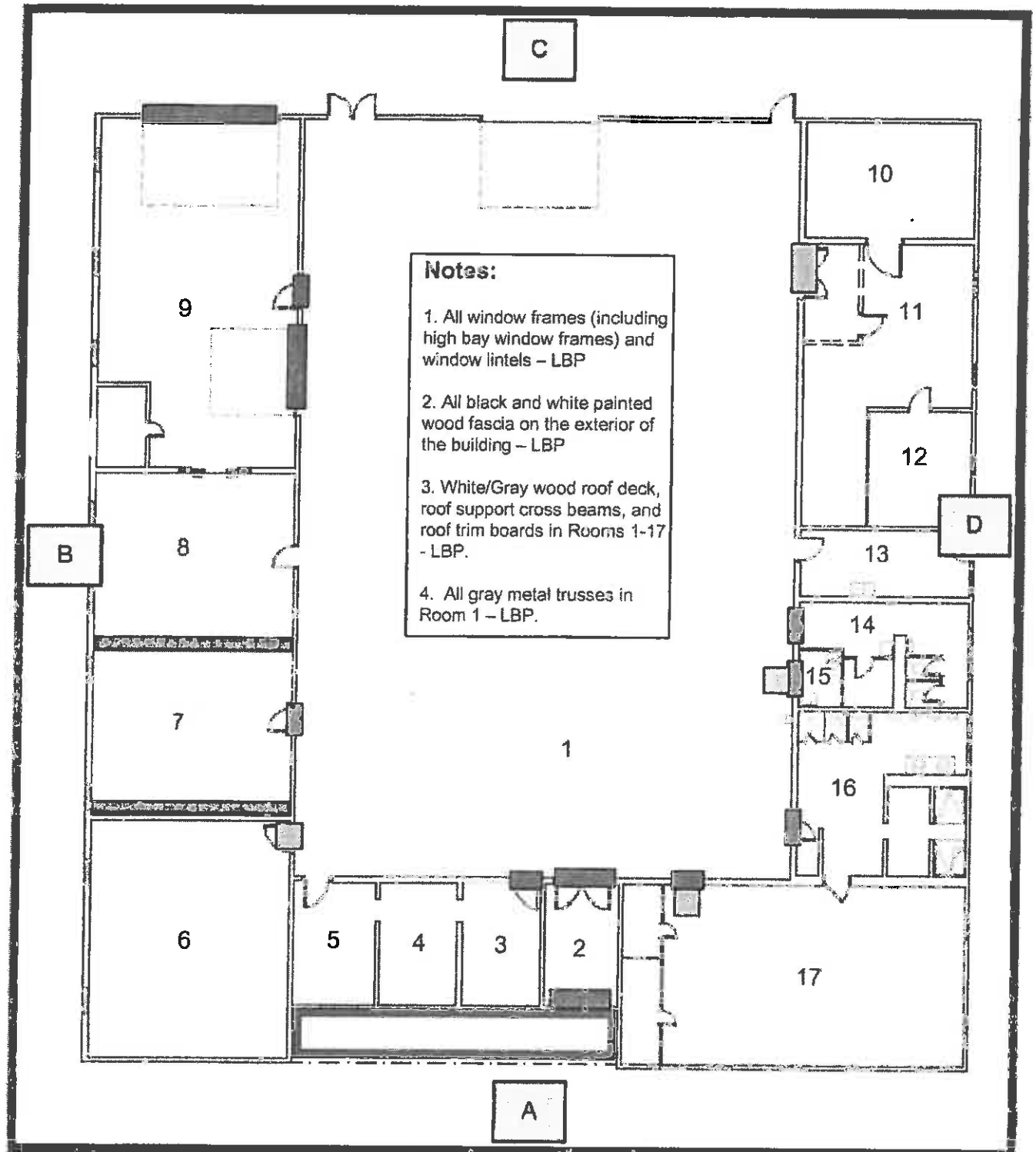
3.2 Dust Wipe Samples

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 19 wipe samples were collected. Laboratory results from the dust wipe samples are presented in Appendix C. Eight 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
SA-07	46.6	Room 7	483
SA-09	54.5	Room 9	940
SA-10	126	Room 10	260
SA-11	55.2	Room 11	515
SA-12	75.3	Room 12	170
SA-13	113	Room 13	175
SA-15	47.3	Room 15	40
SA-16	74.6	Room 16	400

APPENDIX A



Oklahoma Department of Environmental Quality
National Guard Armory
417 West Pine Street
Stilwell, OK

Legend:

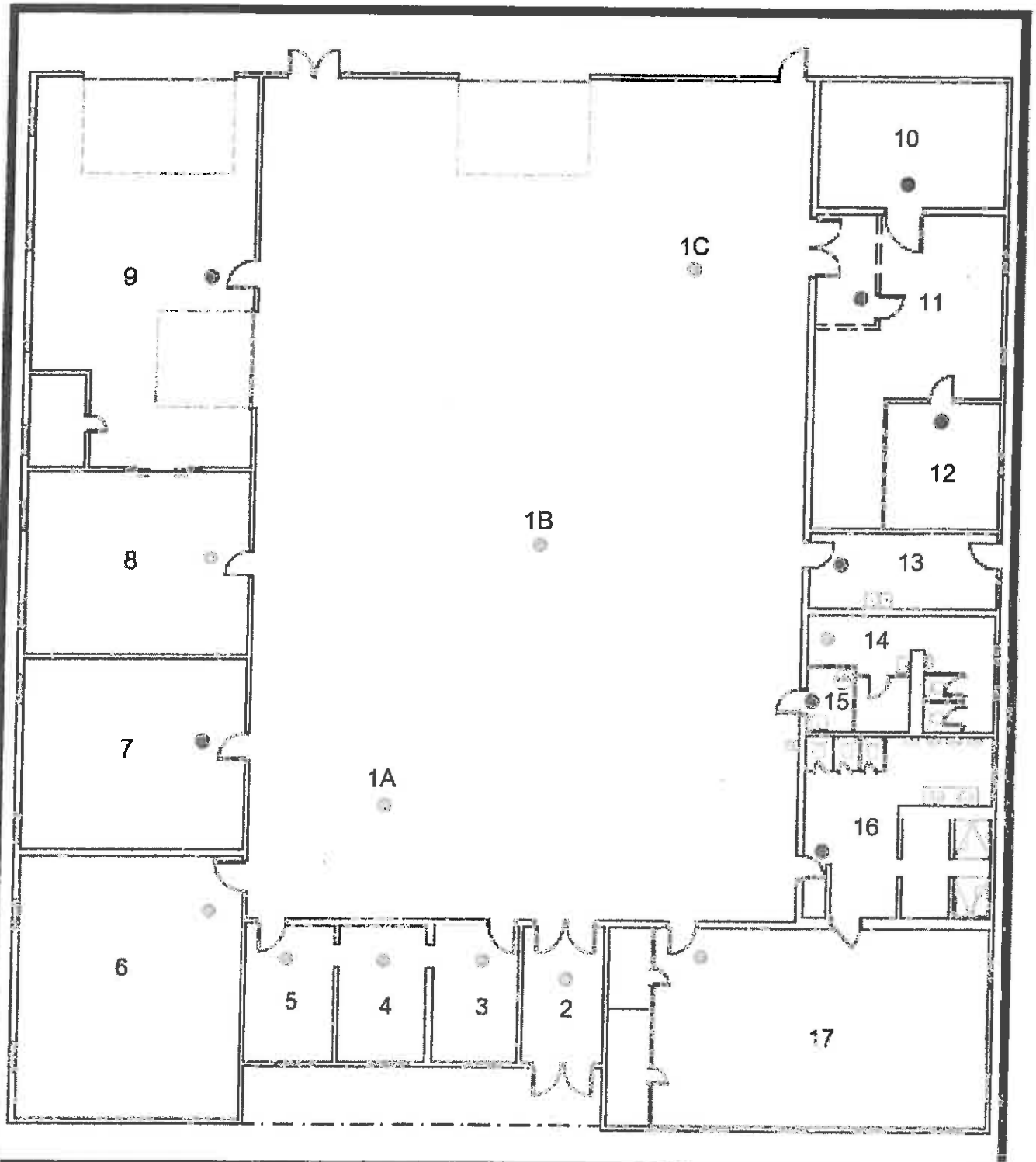
- Door Only - LBP
- Door Lintels - LBP
- Wood Trim Board - LBP
- Walls - LBP

N

ENERCON

FIGURE 1
Lead-Based Paint Locations

Project No: ENMISC2508



Oklahoma Department of Environmental Quality
National Guard Armory
412 West Pine Street
Stilwell, 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: ENMISC2508

APPENDIX B

APPENDIX B - PHOTOGRAPHIC RECORD

Project No: ENMISC2508

Project Name: Stilwell National Guard Armory

Photo #1: Stilwell National Guard Armory.

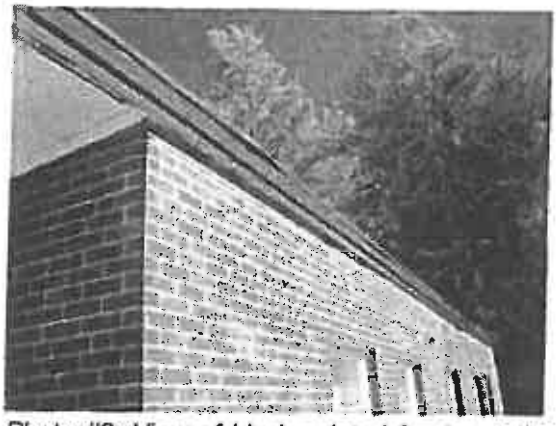


Photo #2: View of black painted fascia on the exterior of the armory building - LBP.

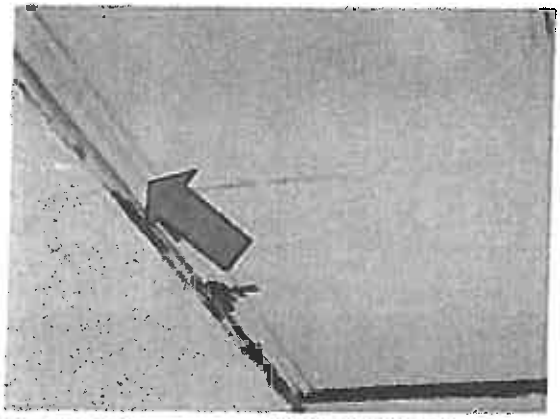


Photo #3: View of white painted wood trim board - LBP.

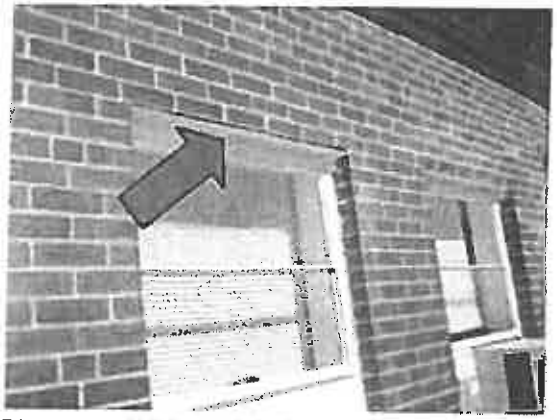


Photo #4: White painted metal window lintel – LBP.

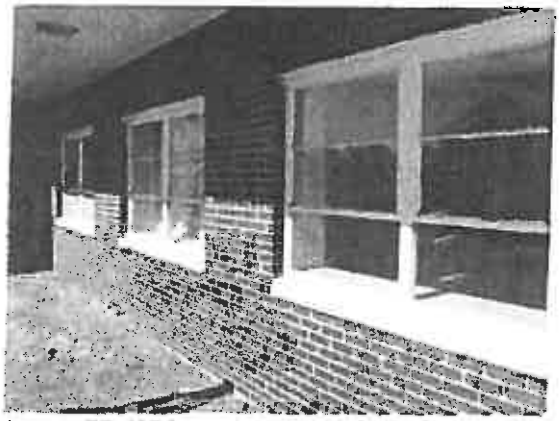


Photo #5: White painted metal window frames – LBP.

Photo #6: Red painted metal lintel - LBP.

APPENDIX B - PHOTOGRAPHIC RECORD

Project No: ENMISC2508

Project Name: Stilwell National Guard Armory

Photo #7: View of white painted window frame and lintel and fascia board on Side B - LBP.

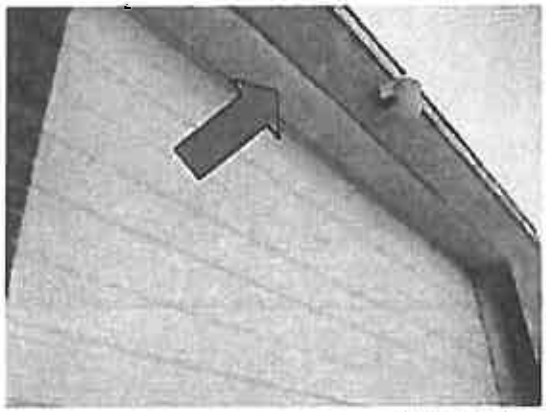


Photo #8: White painted roll-up door lintel on the exterior of the armory building - LBP.

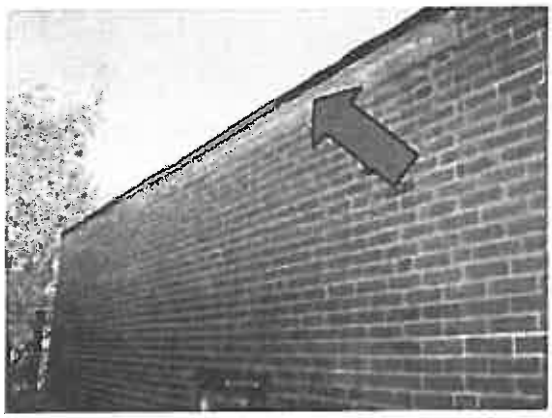


Photo #9: View of white painted wood fascia board - LBP.

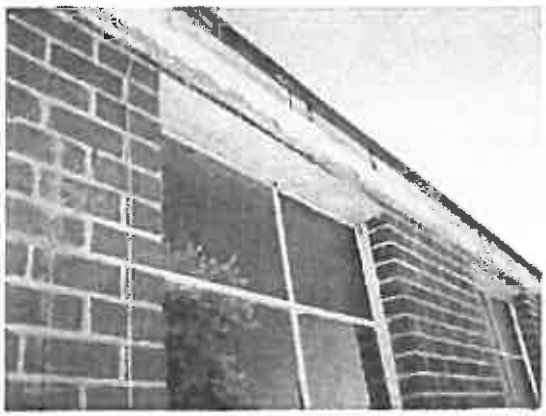


Photo #10: White painted highbay metal window frame and lintel – LBP.

Photo #11: White painted highbay metal window frame and lintel and white painted wood fascia – LBP.

Photo #12: Brown painted metal door lintel associated with Room 2 - LBP.

APPENDIX B - PHOTOGRAPHIC RECORD

Project No: ENMISC2508

Project Name: Stilwell National Guard Armory

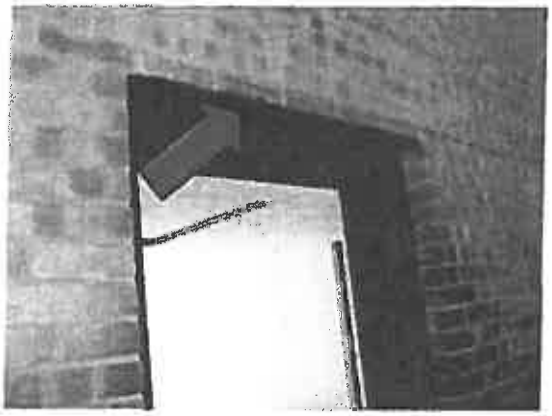


Photo #13: Black painted door lintel Room 3 - LBP.

Photo #14: View of red painted door Room 6 - LBP.

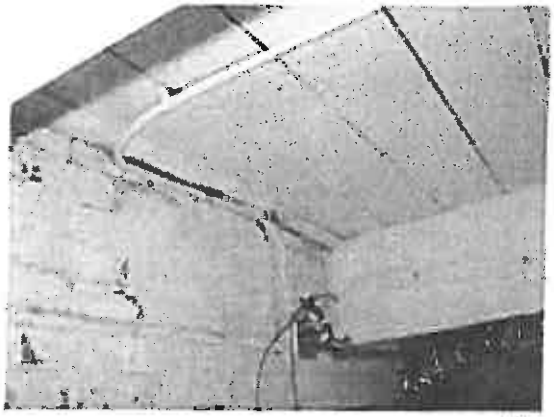


Photo #15: View of gray painted wood trim board, roof deck, and supports - LBP.

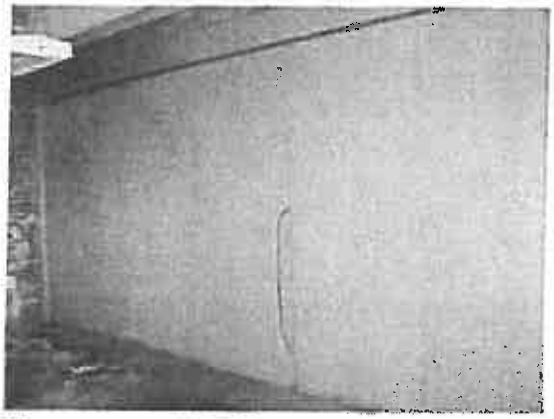


Photo #16: Gray painted wood wall in Room 7 – LBP.

Photo #17: Yellow painted wood door Room 15 – LBP.

Photo #18: Gray painted trusses in Room 1 - LBP.

APPENDIX C

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 201393
Date Received: 11/03/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 11/3/2011

AIHA ID: 101352

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

Acct. No.: A845

Project: Stilwell Armory
Location: Stilwell, Ok
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	SA-01A	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
002	SA-01B	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
003	SA-01C	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
004	SA-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
005	SA-03	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
006	SA-04	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
007	SA-05	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
008	SA-06	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
009	SA-07	Wipe	Lead	46.6	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
010	SA-08	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
011	SA-09	Wipe	Lead	54.5	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
012	SA-10	Wipe	Lead	126	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
013	SA-11	Wipe	Lead	55.2	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
014	SA-12	Wipe	Lead	75.3	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
015	SA-13	Wipe	Lead	113	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
016	SA-14	Wipe	Lead	22.2	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
017	SA-15	Wipe	Lead	47.3	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)

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

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

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

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

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

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

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 201393
Date Received: 11/03/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 11/3/2011

AIHA ID: 101352

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

Acct. No.: A845

Project: Stilwell Armory
Location: Stilwell, Ok
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	SA-16	Wipe	Lead	74.6	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)
019	SA-17	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/03/11 15:00	W EPA 7420 (1)

Authorized Signature: Rebecca Sparks

Rebecca Sparks, Analyst

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

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

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

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

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

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

Supplemental Report
QAQC Results

QA ID: 9340 **Date:** 11/3/2011 **Lab Number:** 201393
Test: Lead **Matrix:** Wipe **Approved By:** Rebecca Sparks
Date Approved: 11/3/2011

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5	5.5
FCV	4.5	5	5.5
ICV	0.8	1	1.2
RLVS	0.256	0.31	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	5.503	6.055	110.0	5.189	94.3	15.4
MS-W2	0.000	5.525	5.544	100.3	5.211	94.3	6.2
MS-W1	0.000	5.481	5.422	98.9	5.474	99.9	1.0

Authorized Signature: Rebecca Sparks
Rebecca Sparks, Analyst

Lead Chain-of-Custody

QUANTEM LABORATORIES

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 922-1630 (405) 755-7272 Fax: (405) 755-2058
www.quantem.com

This Box for Lab Use Only
Lab No. 201393
Accept / Reject

Company Name: Enercon Services, Inc. Acct.#: _____ Project Name: Stilwell Armory

Project Location: Stilwell, OK Project Number: _____

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

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

LEGAL DOCUMENT
Please Print Legibly

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

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

Relinquished By	Date/Time	Received By	Date/Time	Date Received	Sampled By:
Marshall Branscum	11/03-2011 1020	Shiftwick	11/3/11 10:20	10-31	MLB/RB

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

QUANTEM LABORATORIES

Lead Chain-of-Custody

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

This Box for Lab Use Only
Lab No. 201393
Accept Reject

Company Name: Enercon Acct.#: Project Name: Stilwell Armory

Project Location: Stilwell, OK Project Number:

	Sample Number	Sample Description	Volume or Area	Sample Matrix	Analysis: Pb	Units Requested: ppm	wt. %	mg/kg	mg/l	mg/sq. ft.	mg/cu. in.	mg/cm²
16.	SA-14		144 sf	C	X					X		
17.	-15											
18.	-16											
19.	-17											
20.	MB											

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: Marsha Il Branscum
Phone: 722-7693
Report Results VIA (CHOOSE ONE):
- FAX:
- X QuanTEM WebSite
- E-Mail:

Relinquished By	Date/Time	Received By	Date/Time	Date Received	Sampled By
Marsha I. Branscum	11-3-2011 / 1020	Shiftwise	11/3/11 10:20	10-31	MLB/RB

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

APPENDIX D

National Guard Armory
412 West Pine Street
Stilwell OK

Lead-Based Paint Inspection

Inspector Marshall L. Branscum
Date October 31, 2011

Reading No	Time	Room	Component	Substrate	Side	Condition	Color	Results	PbC	PbL	PbK
1	10/31/2011 12:24								2.52	0.51	0.02
2	10/31/2011 12:49	CALIBRATE						Positive	1	1	0.6
3	10/31/2011 12:49	CALIBRATE						Negative	0.9	0.9	0.7
4	10/31/2011 12:50	CALIBRATE						Negative	0.9	0.9	0.8
5	10/31/2011 14:05	EXTERIOR	FASCIA	WOOD	A	POOR	BLACK	Positive	1.3	1.3	1.8
6	10/31/2011 14:06	EXTERIOR	OVERHANG TRIM BOARD	WOOD	A	POOR	WHITE	Positive	1.9	1.9	< LOD
7	10/31/2011 14:07	EXTERIOR	OVERHANG	TRANSITE	A	FAIR	WHITE	Null	< LOD	< LOD	< LOD
8	10/31/2011 14:07	EXTERIOR	OVERHANG	TRANSITE	A	FAIR	WHITE	Null	< LOD	< LOD	< LOD
9	10/31/2011 14:07	EXTERIOR	OVERHANG	TRANSITE	A	FAIR	WHITE	Negative	< LOD	< LOD	< LOD
10	10/31/2011 14:14	EXTERIOR	WINDOW FRAME	METAL	A	FAIR	WHITE	Positive	1.1	1.1	1.1
11	10/31/2011 14:14	EXTERIOR	WINDOW LINTEL	METAL	A	INTACT	WHITE	Positive	2.6	2.6	< LOD
12	10/31/2011 14:15	EXTERIOR	WINDOW LINTEL	METAL	A	INTACT	WHITE	Positive	2.1	2.1	< LOD
13	10/31/2011 14:15	EXTERIOR	WINDOW LINTEL	METAL	A	INTACT	WHITE	Null	1.9	1.9	< LOD
14	10/31/2011 14:15	EXTERIOR	WINDOW LINTEL	METAL	A	INTACT	WHITE	Positive	1.8	1.8	< LOD
15	10/31/2011 14:16	EXTERIOR	WINDOW FRAME	METAL	A	FAIR	WHITE	Null	0.8	0.8	< LOD
16	10/31/2011 14:16	EXTERIOR	WINDOW FRAME	METAL	A	FAIR	WHITE	Positive	1.4	1.4	1.6
17	10/31/2011 14:17	EXTERIOR	WINDOW FRAME	METAL	A	POOR	WHITE	Null	0.9	0.9	< LOD
18	10/31/2011 14:17	EXTERIOR	WINDOW FRAME	METAL	A	POOR	WHITE	Null	0.9	0.9	< LOD
19	10/31/2011 14:17	EXTERIOR	WINDOW FRAME	METAL	A	POOR	WHITE	Negative	0.7	0.7	< LOD
20	10/31/2011 14:18	EXTERIOR	WINDOW FRAME	METAL	A	POOR	WHITE	Negative	< LOD	< LOD	< LOD
21	10/31/2011 14:18	EXTERIOR	WINDOW FRAME	METAL	A	POOR	WHITE	Null	< LOD	< LOD	< LOD
22	10/31/2011 14:18	EXTERIOR	WINDOW FRAME	METAL	A	POOR	WHITE	Negative	0.5	0.5	< LOD
23	10/31/2011 14:19	EXTERIOR	WINDOW FRAME	METAL	A	POOR	WHITE	Null	0.9	0.9	0.9
24	10/31/2011 14:20	EXTERIOR	WINDOW FRAME	METAL	A	POOR	WHITE	Null	0.8	0.8	< LOD
25	10/31/2011 14:20	EXTERIOR	WINDOW FRAME	METAL	A	POOR	WHITE	Null	< LOD	< LOD	< LOD
26	10/31/2011 14:20	EXTERIOR	WINDOW FRAME	METAL	A	POOR	WHITE	Negative	< LOD	< LOD	< LOD
27	10/31/2011 14:20	EXTERIOR	WINDOW LINTEL	METAL	A	POOR	WHITE	Null	1.7	1.7	< LOD
28	10/31/2011 14:21	EXTERIOR	WINDOW LINTEL	METAL	A	POOR	WHITE	Positive	1.8	1.8	< LOD
29	10/31/2011 14:21	EXTERIOR	WINDOW LINTEL	METAL	A	POOR	WHITE	Null	1.5	1.5	< LOD
30	10/31/2011 14:21	EXTERIOR	WINDOW LINTEL	METAL	A	POOR	WHITE	Null	1.9	1.9	< LOD
31	10/31/2011 14:21	EXTERIOR	WINDOW LINTEL	METAL	A	POOR	WHITE	Null	< LOD	< LOD	< LOD
32	10/31/2011 14:22	EXTERIOR	WINDOW LINTEL	METAL	A	POOR	WHITE	Positive	2.1	2.1	< LOD
33	10/31/2011 14:24	EXTERIOR	WINDOW SILL	CONCRETE	A	FAIR	WHITE	Negative	0.13	0.13	< LOD
34	10/31/2011 14:25	EXTERIOR	WINDOW SILL	CONCRETE	A	FAIR	WHITE	Negative	0.05	0.05	< LOD
35	10/31/2011 14:25	EXTERIOR	WINDOW SILL	CONCRETE	A	FAIR	WHITE	Null	< LOD	< LOD	< LOD
36	10/31/2011 14:25	EXTERIOR	WINDOW SILL	CONCRETE	A	FAIR	WHITE	Negative	0.08	0.08	< LOD
37	10/31/2011 14:26	EXTERIOR	WINDOW FRAME	METAL	A	POOR	GRAY	Negative	0.6	0.6	< LOD
38	10/31/2011 14:30	EXTERIOR	DOOR LINTEL	METAL	A	FAIR	RED	Null	1	1	1
39	10/31/2011 14:31	EXTERIOR	DOOR LINTEL	METAL	A	FAIR	RED	Positive	1.2	1.2	1.4
40	10/31/2011 14:38	EXTERIOR	FACADE	CONCRETE	A	POOR	RED_YELLOW	Negative	< LOD	< LOD	< LOD
41	10/31/2011 14:39	EXTERIOR	FACADE	CONCRETE	A	POOR	RED_YELLOW	Negative	< LOD	< LOD	1
42	10/31/2011 14:40	EXTERIOR	WINDOW LINTEL	METAL	B	POOR	WHITE	Positive	1.6	1.6	1.5
43	10/31/2011 14:41	EXTERIOR	WINDOW LINTEL	METAL	B	POOR	WHITE	Positive	1.4	1.4	1.9
44	10/31/2011 14:41	EXTERIOR	WINDOW LINTEL	METAL	B	POOR	WHITE	Positive	1.9	1.9	< LOD
45	10/31/2011 14:42	EXTERIOR	WINDOW FRAME	METAL	B	POOR	WHITE_GRAY	Negative	< LOD	< LOD	< LOD
46	10/31/2011 14:42	EXTERIOR	WINDOW FRAME	METAL	B	POOR	WHITE_GRAY	Negative	< LOD	< LOD	< LOD
47	10/31/2011 14:43	EXTERIOR	WINDOW FRAME	METAL	B	POOR	WHITE_GRAY	Negative	0.6	0.6	< LOD
48	10/31/2011 14:44	EXTERIOR	WINDOW FRAME	METAL	B	POOR	WHITE_GRAY	Negative	0.9	0.9	1

Reading No	Time	Room	Component	Substrate	Side	Condition	Color	Results	PbC	PbL	PbK
49	10/31/2011 14:45	EXTERIOR	WINDOW FRAME	METAL	B	POOR	WHITE_GRAY	Positive	1.1	1.1	1.3
50	10/31/2011 14:46	EXTERIOR	WINDOW FRAME	METAL	B	POOR	WHITE_GRAY	Negative	0.7	0.7	< LOD
51	10/31/2011 14:47	EXTERIOR	WINDOW FRAME	METAL	B	POOR	WHITE_GRAY	Negative	< LOD	< LOD	< LOD
52	10/31/2011 14:48	EXTERIOR	WINDOW FRAME	METAL	B	POOR	WHITE_GRAY	Negative	< LOD	< LOD	< LOD
53	10/31/2011 14:48	EXTERIOR	WINDOW FRAME	METAL	B	POOR	WHITE_GRAY	Positive	1.8	1.8	< LOD
54	10/31/2011 14:53	EXTERIOR	FASCIA	WOOD	B	POOR	WHITE	Null	< LOD	< LOD	< LOD
55	10/31/2011 14:53	EXTERIOR	FASCIA	WOOD	B	POOR	WHITE	Null	< LOD	< LOD	< LOD
56	10/31/2011 14:54	EXTERIOR	FASCIA	WOOD	B	POOR	WHITE	Null	< LOD	< LOD	< LOD
57	10/31/2011 14:54	EXTERIOR	FASCIA	WOOD	B	POOR	WHITE	Null	< LOD	< LOD	< LOD
58	10/31/2011 14:54	EXTERIOR	FASCIA	WOOD	B	POOR	WHITE	Positive	1.6	1.6	2.5
59	10/31/2011 15:03	EXTERIOR	DOOR LINTEL	METAL	C	POOR	WHITE	Negative	< LOD	< LOD	< LOD
60	10/31/2011 15:03	EXTERIOR	DOOR LINTEL	METAL	C	POOR	WHITE	Negative	< LOD	< LOD	< LOD
61	10/31/2011 15:03	EXTERIOR	DOOR LINTEL	METAL	C	POOR	WHITE	Negative	0.6	0.6	< LOD
62	10/31/2011 15:04	EXTERIOR	DOOR LINTEL	METAL	C	POOR	WHITE	Null	< LOD	< LOD	< LOD
63	10/31/2011 15:04	EXTERIOR	DOOR LINTEL	METAL	C	POOR	WHITE	Null	0.8	0.8	< LOD
64	10/31/2011 15:04	EXTERIOR	DOOR LINTEL	METAL	C	POOR	WHITE	Negative	0.7	0.7	< LOD
65	10/31/2011 15:08	EXTERIOR	DOOR ROLL_UP LINTEL	METAL	C	POOR	WHITE	Positive	1	1	0.8
66	10/31/2011 15:10	EXTERIOR	DOOR ROLL_UP LINTEL	METAL	C	POOR	WHITE	Negative	0.9	0.9	0.9
67	10/31/2011 15:11	EXTERIOR	DOOR ROLL_UP LINTEL	METAL	C	POOR	WHITE	Null	< LOD	< LOD	< LOD
68	10/31/2011 15:13	EXTERIOR	DOOR ROLL_UP FRAME	WOOD	C	POOR	WHITE	Negative	< LOD	< LOD	< LOD
69	10/31/2011 15:14	EXTERIOR	DOOR ROLL_UP FRAME	WOOD	C	POOR	WHITE	Null	0.23	0.23	< LOD
70	10/31/2011 15:15	EXTERIOR	DOOR FRAME	WOOD	C	POOR	WHITE	Negative	< LOD	< LOD	< LOD
71	10/31/2011 15:16	EXTERIOR	DOOR FRAME	WOOD	C	POOR	WHITE	Negative	< LOD	< LOD	< LOD
72	10/31/2011 15:16	EXTERIOR	DOOR	WOOD	C	POOR	WHITE	Negative	< LOD	< LOD	< LOD
73	10/31/2011 15:17	EXTERIOR	DOOR	WOOD	C	POOR	WHITE	Negative	< LOD	< LOD	< LOD
74	10/31/2011 15:17	EXTERIOR	DOOR	WOOD	C	POOR	WHITE	Negative	< LOD	< LOD	< LOD
75	10/31/2011 15:18	EXTERIOR	DOOR ROLL_UP	METAL	C	INTACT	WHITE	Negative	< LOD	< LOD	< LOD
76	10/31/2011 15:18	EXTERIOR	EDGE PROTECTOR	METAL	C	POOR	WHITE	Null	0.8	0.8	< LOD
77	10/31/2011 15:18	EXTERIOR	EDGE PROTECTOR	METAL	C	POOR	WHITE	Negative	0.8	0.8	< LOD
78	10/31/2011 15:19	EXTERIOR	EDGE PROTECTOR	METAL	C	POOR	WHITE	Negative	0.8	0.8	< LOD
79	10/31/2011 15:19	EXTERIOR	EDGE PROTECTOR	METAL	C	POOR	WHITE	Negative	0.6	0.6	< LOD
80	10/31/2011 15:19	EXTERIOR	EDGE PROTECTOR	METAL	C	POOR	WHITE	Negative	0.8	0.8	< LOD
81	10/31/2011 15:20	EXTERIOR	EDGE PROTECTOR	METAL	C	POOR	WHITE	Negative	0.8	0.8	0.9
82	10/31/2011 15:20	EXTERIOR	EDGE PROTECTOR	METAL	C	POOR	WHITE	Null	< LOD	< LOD	< LOD
83	10/31/2011 15:21	EXTERIOR	DOOR ROLL_UP FRAME	WOOD	C	POOR	WHITE	Negative	0.5	0.5	< LOD
84	10/31/2011 15:22	EXTERIOR	DOOR ROLL_UP FRAME	WOOD	C	POOR	WHITE	Negative	0.5	0.5	< LOD
85	10/31/2011 15:25	EXTERIOR	FASCIA	WOOD	C	POOR	WHITE	Positive	1.3	1.3	1.7
86	10/31/2011 15:27	EXTERIOR	FASCIA	WOOD	D	POOR	WHITE	Positive	2.2	2.2	3.2
87	10/31/2011 15:28	EXTERIOR	WINDOW LINTEL	METAL	D	POOR	WHITE	Positive	1.7	1.7	< LOD
88	10/31/2011 15:29	EXTERIOR	WINDOW LINTEL	METAL	D	POOR	WHITE	Null	1.8	1.8	< LOD
89	10/31/2011 15:29	EXTERIOR	WINDOW LINTEL	METAL	D	POOR	WHITE	Positive	2	2	2.4
90	10/31/2011 15:30	EXTERIOR	WINDOW LINTEL	METAL	D	POOR	WHITE	Positive	1.3	1.3	1.8
91	10/31/2011 15:31	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Negative	< LOD	< LOD	< LOD
92	10/31/2011 15:31	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Negative	0.7	0.7	1.7
93	10/31/2011 15:32	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Negative	< LOD	< LOD	< LOD
94	10/31/2011 15:33	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Negative	< LOD	< LOD	< LOD
95	10/31/2011 15:33	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Positive	2.4	0.5	2.4
96	10/31/2011 15:33	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Negative	0.6	0.6	< LOD

National Guard Armory
412 West Pine Street
Stilwell, OK

Lead-Based Paint Inspection

Inspector Marshall L. Branscum
Date October 31, 2011

Reading No	Time	Room	Component	Substrate	Side	Condition	Color	Results	PbC	Pbl.	PbK
97	10/31/2011 15:38	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Null	0.8	0.8	< LOD
98	10/31/2011 15:38	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Negative	0.7	0.7	< LOD
99	10/31/2011 15:39	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Negative	0.6	0.6	< LOD
100	10/31/2011 15:39	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Negative	0.8	0.8	1.3
101	10/31/2011 15:40	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Negative	0.9	0.9	1.4
102	10/31/2011 15:41	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Null	0.7	0.7	< LOD
103	10/31/2011 15:41	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Negative	0.6	0.6	< LOD
104	10/31/2011 15:42	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Negative	0.6	0.6	< LOD
105	10/31/2011 15:42	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Negative	0.4	0.4	< LOD
106	10/31/2011 15:43	EXTERIOR	WINDOW FRAME	METAL	D	POOR	WHITE	Negative	0.04	0.04	< LOD
107	10/31/2011 15:43	EXTERIOR	WINDOW FRAME DIVIDER	METAL	D	POOR	WHITE	Negative	0.7	0.7	< LOD
108	10/31/2011 15:45	EXTERIOR	WINDOW FRAME DIVIDER	METAL	D	POOR	WHITE	Negative	0.9	0.9	1
109	10/31/2011 15:46	EXTERIOR	FASCIA	WOOD	D	POOR	WHITE	Positive	1.3	1.3	1.6
110	10/31/2011 15:46	EXTERIOR	DOOR	WOOD	D	POOR	WHITE	Negative	< LOD	< LOD	< LOD
111	10/31/2011 15:46	EXTERIOR	DOOR FRAME	WOOD	D	POOR	WHITE	Negative	< LOD	< LOD	< LOD
112	10/31/2011 15:47	EXTERIOR	DOOR FRAME	WOOD	D	POOR	WHITE	Negative	< LOD	< LOD	< LOD
113	10/31/2011 15:52	EXTERIOR	WINDOW FRAME	METAL	A	POOR	WHITE	Negative	0.7	0.7	< LOD
114	10/31/2011 15:53	EXTERIOR	WINDOW FRAME	METAL	A	POOR	WHITE	Negative	0.6	0.6	< LOD
115	10/31/2011 15:57	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	D	POOR	WHITE	Negative	0.8	0.8	< LOD
116	10/31/2011 15:58	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	D	POOR	WHITE	Negative	0.8	0.8	< LOD
117	10/31/2011 15:58	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	D	POOR	WHITE	Positive	1.9	1	1.9
118	10/31/2011 16:00	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	D	POOR	WHITE	Positive	1	1	1.4
119	10/31/2011 16:01	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	D	POOR	WHITE	Null	0.9	0.9	1.2
120	10/31/2011 16:01	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	D	POOR	WHITE	Negative	< LOD	< LOD	< LOD
121	10/31/2011 16:09	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	B	POOR	WHITE	Negative	0.5	0.5	< LOD
122	10/31/2011 16:10	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	B	POOR	WHITE	Negative	0.9	0.9	< LOD
123	10/31/2011 16:11	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	B	POOR	WHITE	Null	0.9	0.9	< LOD
124	10/31/2011 16:11	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	B	POOR	WHITE	Negative	0.4	0.4	< LOD
125	10/31/2011 16:12	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	B	POOR	WHITE	Null	0.7	0.7	< LOD
126	10/31/2011 16:12	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	B	POOR	WHITE	Negative	0.8	0.8	< LOD
127	10/31/2011 16:13	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	B	POOR	WHITE	Positive	1.1	1.1	1.3
128	10/31/2011 16:15	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	B	POOR	WHITE	Negative	0.9	0.9	0.9
129	10/31/2011 16:15	EXTERIOR	WINDOW HIGH BAY FRAME	METAL	B	POOR	WHITE	Negative	0.9	0.9	1
130	10/31/2011 16:17	EXTERIOR	FASCIA	WOOD	B	POOR	WHITE	Positive	1.3	1.3	1.8
131	10/31/2011 16:20	EXTERIOR	HIGH BAY WINDOW LINTEL	METAL	B	POOR	WHITE	Positive	1.9	1.9	< LOD
132	10/31/2011 16:20	EXTERIOR	HIGH BAY WINDOW LINTEL	METAL	B	POOR	WHITE	Null	1.4	1.4	< LOD
133	10/31/2011 16:20	EXTERIOR	HIGH BAY WINDOW LINTEL	METAL	B	POOR	WHITE	Positive	2.1	2.1	< LOD
134	10/31/2011 16:20	EXTERIOR	HIGH BAY WINDOW LINTEL	METAL	D	POOR	WHITE	Positive	2.3	2.3	< LOD
135	10/31/2011 16:21	EXTERIOR	HIGH BAY WINDOW LINTEL	METAL	D	POOR	WHITE	Positive	1.9	1.9	< LOD
136	10/31/2011 16:31	CALIBRATE						Negative	0.9	0.9	0.8
137	10/31/2011 16:31	CALIBRATE						Negative	0.9	0.9	0.8
138	10/31/2011 16:32	CALIBRATE						Positive	1	1	0.8
139	10/31/2011 16:48	ROOM 2	DOOR	WOOD	C	FAIR	RED	Negative	< LOD	< LOD	< LOD
140	10/31/2011 16:48	ROOM 2	DOOR FRAME	WOOD	C	FAIR	BROWN	Negative	< LOD	< LOD	< LOD
141	10/31/2011 16:49	ROOM 2	DOOR LINTEL	METAL	C	FAIR	BROWN	Null	< LOD	< LOD	< LOD
142	10/31/2011 16:49	ROOM 2	DOOR LINTEL	METAL	C	FAIR	BROWN	Null	0.8	0.8	< LOD
143	10/31/2011 16:49	ROOM 2	DOOR LINTEL	METAL	C	FAIR	BROWN	Null	0.9	0.9	< LOD
144	10/31/2011 16:50	ROOM 2	DOOR LINTEL	METAL	C	FAIR	BROWN	Null	0.9	0.9	< LOD

Reading No	Time	Room	Component	Substrate	Side	Condition	Color	Results	PbC	PbL	PbK
145	10/31/2011 16:50	ROOM 2	DOOR LINTEL	METAL	C	FAIR	BROWN	Positive	1.4	1.4	< LOD
146	10/31/2011 16:52	ROOM 1	DOOR FRAME	WOOD	C	FAIR	BLACK	Negative	< LOD	< LOD	< LOD
147	10/31/2011 16:52	ROOM 1	DOOR FRAME	WOOD	C	FAIR	BLACK	Negative	< LOD	< LOD	< LOD
148	10/31/2011 16:53	ROOM 1	DOOR	WOOD	C	POOR	RED	Negative	0.3	0.3	< LOD
149	10/31/2011 16:53	ROOM 1	DOOR	WOOD	C	POOR	RED	Negative	0.3	0.3	< LOD
150	10/31/2011 16:54	ROOM 1	DOOR ROLL_UP FRAME	WOOD	C	FAIR	GRAY	Negative	0.5	0.5	< LOD
151	10/31/2011 16:54	ROOM 1	DOOR ROLL_UP FRAME	WOOD	C	FAIR	GRAY	Negative	< LOD	< LOD	< LOD
152	10/31/2011 16:55	ROOM 1	WALL	BRICK	D	INTACT	RED	Negative	0.04	0.04	1
153	10/31/2011 16:56	ROOM 1	FLOOR STRIPE	CONCRETE	D	FAIR	RED	Negative	< LOD	< LOD	< LOD
154	10/31/2011 16:57	ROOM 1	FLOOR STRIPE	CONCRETE	D	FAIR	BLACK	Negative	< LOD	< LOD	< LOD
155	10/31/2011 16:57	ROOM 1	FLOOR STRIPE	CONCRETE	D	FAIR	WHITE	Negative	< LOD	< LOD	< LOD
156	10/31/2011 16:58	ROOM 1	FLOOR STRIPE	CONCRETE	D	FAIR	YELLOW	Negative	< LOD	< LOD	< LOD
157	10/31/2011 17:01	ROOM 2	DOOR FRAME	WOOD	A	FAIR	BROWN	Negative	< LOD	< LOD	< LOD
158	10/31/2011 17:02	ROOM 3	WINDOW PASS THROUGH	WOOD	D	FAIR	BROWN	Negative	< LOD	< LOD	< LOD
159	10/31/2011 17:03	ROOM 3	WINDOW FRAME	METAL	A	POOR	WHITE	Negative	< LOD	< LOD	< LOD
160	10/31/2011 17:03	ROOM 3	WINDOW FRAME	METAL	A	POOR	WHITE	Negative	< LOD	< LOD	< LOD
161	10/31/2011 17:04	ROOM 3	DOOR	WOOD	C	POOR	BROWN	Negative	< LOD	< LOD	< LOD
162	10/31/2011 17:04	ROOM 3	DOOR FRAME	WOOD	C	FAIR	BLACK	Negative	< LOD	< LOD	< LOD
163	10/31/2011 17:05	ROOM 3	DOOR LINTEL	METAL	C	FAIR	BLACK	Positive	1.2	1.2	< LOD
164	10/31/2011 17:06	ROOM 4	DOOR FRAME	WOOD	D	FAIR	BROWN	Negative	< LOD	< LOD	< LOD
165	10/31/2011 17:06	ROOM 4	DOOR FRAME	WOOD	B	FAIR	BROWN	Negative	< LOD	< LOD	< LOD
166	10/31/2011 17:06	ROOM 4	DOOR	WOOD	B	FAIR	BROWN	Negative	< LOD	< LOD	< LOD
167	10/31/2011 17:07	ROOM 5	DOOR	WOOD	C	FAIR	BROWN	Negative	< LOD	< LOD	< LOD
168	10/31/2011 17:07	ROOM 5	DOOR FRAME	WOOD	C	FAIR	BROWN	Negative	< LOD	< LOD	< LOD
169	10/31/2011 17:08	ROOM 5	DOOR LINTEL	METAL	C	FAIR	BLACK	Null	0.9	0.9	1.6
170	10/31/2011 17:09	ROOM 5	DOOR LINTEL	METAL	C	FAIR	BLACK	Negative	0.8	0.8	< LOD
171	10/31/2011 17:09	ROOM 5	DOOR LINTEL	METAL	C	FAIR	BLACK	Negative	0.7	0.7	< LOD
172	10/31/2011 17:10	ROOM 6	DOOR LINTEL	METAL	D	FAIR	BLACK	Negative	0.7	0.7	< LOD
173	10/31/2011 17:10	ROOM 6	DOOR FRAME	WOOD	D	FAIR	BLACK	Negative	< LOD	< LOD	< LOD
174	10/31/2011 17:11	ROOM 6	DOOR	WOOD	D	FAIR	RED	Positive	1.7	1.7	< LOD
175	10/31/2011 17:15	ROOM 6	WINDOW BARS	METAL	B	POOR	WHITE	Negative	< LOD	< LOD	< LOD
176	10/31/2011 17:15	ROOM 6	WINDOW BARS	METAL	B	POOR	WHITE	Negative	< LOD	< LOD	< LOD
177	10/31/2011 17:16	ROOM 6	WINDOW SILL	CONCRETE	B	POOR	WHITE	Negative	0.1	0.1	1
178	10/31/2011 17:17	ROOM 6	FLOOR	CONCRETE	B	POOR	RED	Negative	< LOD	< LOD	< LOD
179	10/31/2011 17:17	ROOM 6	WALL	CONCRETE BLOCK	A	INTACT	WHITE	Negative	< LOD	< LOD	< LOD
180	10/31/2011 17:18	ROOM 6	WALL	CONCRETE BLOCK	D	INTACT	WHITE	Negative	< LOD	< LOD	< LOD
181	10/31/2011 17:18	ROOM 6	WALL	WOOD	C	INTACT	WHITE	Negative	< LOD	< LOD	< LOD
182	10/31/2011 17:19	ROOM 6	WALL	BRICK	D	POOR	WHITE	Negative	< LOD	< LOD	< LOD
183	10/31/2011 17:19	ROOM 6	WALL	BRICK	D	POOR	WHITE	Negative	< LOD	< LOD	< LOD
184	10/31/2011 17:21	ROOM 6	WALL	BRICK	D	POOR	WHITE	Negative	< LOD	< LOD	< LOD
185	10/31/2011 17:22	ROOM 6	ROOF DECK	WOOD		FAIR	WHITE	Positive	1.3	1	1.3
186	10/31/2011 17:23	ROOM 6	ROOF SUPPORT BEAM	WOOD		FAIR	WHITE	Null	1	1	1.3
187	10/31/2011 17:24	ROOM 6	ROOF SUPPORT BEAM	WOOD		FAIR	WHITE	Null	1	1	1.3
188	10/31/2011 17:24	ROOM 6	ROOF SUPPORT BEAM	WOOD		FAIR	WHITE	Null	0.9	0.9	1.4
189	10/31/2011 17:25	ROOM 6	ROOF SUPPORT BEAM	WOOD		FAIR	WHITE	Null	1	1	1.3
190	10/31/2011 17:26	ROOM 6	ROOF SUPPORT BEAM	WOOD		FAIR	WHITE	Positive	1.7	1.1	1.7
191	10/31/2011 17:27	ROOM 6	ROOF TRIM BOARD	WOOD		POOR	WHITE	Positive	1.2	1.2	1.9
192	10/31/2011 17:34	ROOM 7	ROOF TRIM BOARD	WOOD		POOR	WHITE	Positive	1.6	1.6	2.1

National Guard Armory
412 West Pine Street
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Lead-Based Paint Inspection

Inspector: Marshall L. Branscum
Date: October 31, 2011

Reading No	Time	Room	Component	Substrate	Side	Condition	Color	Results	PbC	PbL	PbK
193	10/31/2011 17:35	ROOM 7	ROOF BEAM	WOOD		FAIR	WHITE	Positive	2.2	2.2	< LOD
194	10/31/2011 17:35	ROOM 7	ROOF DECK	WOOD		POOR	WHITE	Positive	1.6	1.6	< LOD
195	10/31/2011 17:36	ROOM 7	DOOR LINTEL	METAL	D	INTACT	BLACK	Null	1.1	1.1	< LOD
196	10/31/2011 17:37	ROOM 7	DOOR LINTEL	METAL	D	INTACT	BLACK	Positive	1.2	1.2	< LOD
197	10/31/2011 17:38	ROOM 7	DOOR FRAME	WOOD	D	FAIR	BLACK	Negative	< LOD	< LOD	< LOD
198	10/31/2011 17:39	ROOM 7	DOOR	METAL	D	FAIR	RED	Negative	< LOD	< LOD	< LOD
199	10/31/2011 17:39	ROOM 7	DOOR	METAL	D	FAIR	YELLOW	Negative	< LOD	< LOD	< LOD
200	10/31/2011 17:40	ROOM 7	DOOR FRAME	WOOD	D	POOR	GRAY	Negative	< LOD	< LOD	< LOD
201	10/31/2011 17:41	ROOM 7	TRIM	WOOD	A	POOR	GRAY	Positive	1.2	1.2	1.6
202	10/31/2011 17:43	ROOM 7	WALL	WOOD	A	POOR	GRAY	Positive	2.8	2.8	< LOD
203	10/31/2011 17:43	ROOM 7	WALL	CONCRETE BLOCK	B	POOR	GREEN	Null	< LOD	< LOD	< LOD
204	10/31/2011 17:44	ROOM 7	WALL	WOOD	C	FAIR	GRAY	Positive	1.6	1.6	1.9
205	10/31/2011 17:49	ROOM 7	WINDOW FRAME	METAL	B	POOR	WHITE	Null	1.1	1.1	< LOD
206	10/31/2011 17:50	ROOM 7	WINDOW FRAME	METAL	B	POOR	WHITE	Null	1	1	1
207	10/31/2011 17:51	ROOM 7	WINDOW BARS	METAL	B	POOR	WHITE	Negative	< LOD	< LOD	< LOD
208	10/31/2011 17:51	ROOM 7	WINDOW SILL	CONCRETE	B	POOR	BEIGE	Negative	< LOD	< LOD	< LOD
209	10/31/2011 17:53	ROOM 8	DOOR LINTEL	METAL	D	INTACT	BLACK	Negative	0.5	0.5	< LOD
210	10/31/2011 17:53	ROOM 8	DOOR FRAME	WOOD	D	INTACT	BROWN	Negative	< LOD	< LOD	< LOD
211	10/31/2011 17:55	ROOM 8	ROOF DECK	WOOD		INTACT	GRAY	Positive	1.5	1.1	1.5
212	10/31/2011 17:55	ROOM 8	WALL	DRYWALL	D	INTACT	WHITE	Negative	< LOD	< LOD	< LOD
213	10/31/2011 17:56	ROOM 8	WALL	DRYWALL	C	INTACT	WHITE	Negative	< LOD	< LOD	< LOD
214	10/31/2011 18:01	ROOM 9	DOOR ROLL_UP LINTEL	METAL	D	POOR	BEIGE	Positive	1.1	1.1	< LOD
215	10/31/2011 18:01	ROOM 9	DOOR ROLL_UP	METAL	D	POOR	BEIGE	Negative	< LOD	< LOD	< LOD
216	10/31/2011 18:01	ROOM 9	DOOR ROLL_UP	METAL	D	POOR	GRAY	Negative	< LOD	< LOD	< LOD
217	10/31/2011 18:02	ROOM 9	DOOR ROLL_UP FRAME	WOOD	D	POOR	GRAY	Negative	< LOD	< LOD	< LOD
218	10/31/2011 18:03	ROOM 9	DOOR FRAME	WOOD	D	POOR	BLACK	Negative	< LOD	< LOD	< LOD
219	10/31/2011 18:03	ROOM 9	DOOR	WOOD	D	POOR	RED	Negative	< LOD	< LOD	< LOD
220	10/31/2011 18:03	ROOM 9	DOOR LINTEL	METAL	D	INTACT	BLACK	Null	1.1	1.1	< LOD
221	10/31/2011 18:03	ROOM 9	DOOR LINTEL	METAL	D	INTACT	BLACK	Positive	1.5	1.5	< LOD
222	10/31/2011 18:05	ROOM 9	DOOR FRAME	WOOD	A	FAIR	GRAY	Negative	< LOD	< LOD	< LOD
223	10/31/2011 18:05	ROOM 9	DOOR	WOOD	A	FAIR	GRAY	Negative	< LOD	< LOD	< LOD
224	10/31/2011 18:09	ROOM 10	SHELF	WOOD	B	POOR	GRAY	Negative	< LOD	< LOD	< LOD
225	10/31/2011 18:10	ROOM 10	WALL	BRICK	B	INTACT	GRAY	Negative	< LOD	< LOD	< LOD
226	10/31/2011 18:10	ROOM 10	WALL	BRICK	C	POOR	WHITE	Negative	< LOD	< LOD	< LOD
227	10/31/2011 18:11	ROOM 10	DOOR FRAME	METAL	A	POOR	GRAY	Negative	< LOD	< LOD	< LOD
228	10/31/2011 18:12	ROOM 10	DOOR	METAL	A	POOR	RED	Negative	0.26	0.26	< LOD
229	10/31/2011 18:12	ROOM 11	DOOR	METAL	B	FAIR	RED	Positive	1.7	1.7	< LOD
230	10/31/2011 18:13	ROOM 11	DOOR FRAME	WOOD	B	FAIR	BLACK	Negative	< LOD	< LOD	< LOD
231	10/31/2011 18:13	ROOM 11	DOOR LINTEL	METAL	B	FAIR	BLACK	Negative	0.7	0.7	< LOD
232	10/31/2011 18:17	ROOM 11	ROOF DECK	WOOD		FAIR	GRAY	Positive	1.1	1.1	1.5
233	10/31/2011 18:18	ROOM 11	COUNTER TOP	WOOD	B	POOR	BLACK	Negative	< LOD	< LOD	< LOD
234	10/31/2011 18:18	ROOM 11	COUNTER	WOOD	B	POOR	GREEN	Negative	< LOD	< LOD	< LOD
235	10/31/2011 18:18	ROOM 11	DOOR	WOOD	B	FAIR	RED	Negative	< LOD	< LOD	< LOD
236	10/31/2011 18:19	ROOM 11	WALL	CONCRETE BLOCK	A	FAIR	GREEN	Negative	< LOD	< LOD	< LOD
237	10/31/2011 18:20	ROOM 11	WALL	CONCRETE BLOCK	D	FAIR	GREEN	Negative	< LOD	< LOD	< LOD
238	10/31/2011 18:21	ROOM 11	FLOOR	CONCRETE	D	POOR	RED	Negative	0.18	0.18	< LOD
239	10/31/2011 18:21	ROOM 12	FLOOR	CONCRETE	D	POOR	GRAY	Negative	0.06	0.06	< LOD
240	10/31/2011 18:27	ROOM 13	DOOR LINTEL	METAL	B	POOR	BLACK	Null	0.9	0.9	< LOD

Reading No	Time	Room	Component	Substrate	Side	Condition	Color	Results	PbC	PbL	PbK
241	10/31/2011 18:27	ROOM 13	DOOR LINTEL	METAL	B	POOR	BLACK	Negative	0.6	0.6	< LOD
242	10/31/2011 18:28	ROOM 13	DOOR FRAME	WOOD	B	POOR	BLACK	Negative	< LOD	< LOD	< LOD
243	10/31/2011 18:28	ROOM 13	DOOR	WOOD	B	POOR	RED	Negative	< LOD	< LOD	< LOD
244	10/31/2011 18:29	ROOM 13	DOOR	WOOD	D	FAIR	WHITE	Negative	< LOD	< LOD	< LOD
245	10/31/2011 18:29	ROOM 13	DOOR FRAME	WOOD	D	FAIR	WHITE	Negative	< LOD	< LOD	< LOD
246	10/31/2011 18:29	ROOM 13	WINDOW FRAME	METAL	D	POOR	WHITE	Negative	< LOD	< LOD	< LOD
247	10/31/2011 18:30	ROOM 13	WALL	CONCRETE BLOCK	A	INTACT	WHITE	Negative	< LOD	< LOD	< LOD
248	10/31/2011 18:31	ROOM 14	DOOR LINTEL	METAL	B	INTACT	BLACK	Null	1.1	1.1	1.3
249	10/31/2011 18:32	ROOM 14	DOOR LINTEL	METAL	B	INTACT	BLACK	Positive	1.2	1.2	1.2
250	10/31/2011 18:32	ROOM 14	DOOR FRAME	WOOD	B	INTACT	BLACK	Negative	< LOD	< LOD	< LOD
251	10/31/2011 18:33	ROOM 14	DOOR	WOOD	B	INTACT	RED	Negative	0.2	0.2	< LOD
252	10/31/2011 18:33	ROOM 14	AIR DUCT	METAL	B	INTACT	GRAY	Negative	< LOD	< LOD	< LOD
253	10/31/2011 18:34	ROOM 14	STALL WALL	METAL	A	INTACT	GRAY	Negative	< LOD	< LOD	< LOD
254	10/31/2011 18:35	ROOM 14	WINDOW FRAME	METAL	D	POOR	GRAY	Negative	< LOD	< LOD	< LOD
255	10/31/2011 18:37	ROOM 15	DOOR LINTEL	METAL	B	INTACT	BLACK	Positive	1.1	1.1	1.2
256	10/31/2011 18:38	ROOM 15	DOOR FRAME	WOOD	B	INTACT	BLACK	Negative	< LOD	< LOD	< LOD
257	10/31/2011 18:38	ROOM 15	DOOR	WOOD	B	INTACT	YELLOW	Positive	3.9	3.9	< LOD
258	10/31/2011 18:39	ROOM 15	FLOOR	CONCRETE	B	POOR	RED	Negative	0.11	0.11	< LOD
259	10/31/2011 18:42	ROOM 16	DOOR LINTEL	METAL	B	INTACT	BLACK	Null	1.1	1.1	< LOD
260	10/31/2011 18:42	ROOM 16	DOOR LINTEL	METAL	B	INTACT	BLACK	Null	< LOD	< LOD	< LOD
261	10/31/2011 18:43	ROOM 16	DOOR LINTEL	METAL	B	INTACT	BLACK	Positive	1	1	1.1
262	10/31/2011 18:43	ROOM 16	DOOR FRAME	WOOD	B	INTACT	BLACK	Negative	< LOD	< LOD	< LOD
263	10/31/2011 18:43	ROOM 16	DOOR	WOOD	B	FAIR	RED	Negative	< LOD	< LOD	< LOD
264	10/31/2011 18:44	ROOM 16	DOOR	WOOD	A	FAIR	GRAY	Negative	< LOD	< LOD	< LOD
265	10/31/2011 18:45	ROOM 16	DOOR FRAME	WOOD	A	FAIR	BLACK	Negative	< LOD	< LOD	< LOD
266	10/31/2011 18:46	ROOM 17	DOOR FRAME	WOOD	C	POOR	BLACK	Negative	< LOD	< LOD	< LOD
267	10/31/2011 18:47	ROOM 17	DOOR LINTEL	METAL	C	INTACT	BLACK	Positive	1.1	1.1	< LOD
268	10/31/2011 18:48	ROOM 17	DOOR	WOOD	C	POOR	RED	Positive	1.3	1.3	2.1
269	10/31/2011 18:49	ROOM 17	WINDOW FRAME	METAL	A	FAIR	WHITE	Negative	< LOD	< LOD	< LOD
270	10/31/2011 18:50	ROOM 17	WINDOW FRAME	METAL	A	FAIR	WHITE	Negative	< LOD	< LOD	< LOD
271	10/31/2011 18:50	ROOM 17	WINDOW FRAME	METAL	D	FAIR	WHITE	Negative	< LOD	< LOD	< LOD
272	10/31/2011 18:51	ROOM 17	WALL	CONCRETE BLOCK	A	POOR	WHITE	Negative	< LOD	< LOD	< LOD
273	10/31/2011 18:51	ROOM 17	WALL	CONCRETE BLOCK	C	INTACT	WHITE	Negative	< LOD	< LOD	< LOD
274	10/31/2011 18:52	ROOM 1	TRUSSES	METAL		FAIR	GRAY	Positive	2.3	2.3	< LOD
275	10/31/2011 18:52	ROOM 1	TRUSSES	METAL		FAIR	GRAY	Null	1.3	1.3	< LOD
276	10/31/2011 18:53	ROOM 1	TRUSSES	METAL		FAIR	GRAY	Positive	2.1	2.1	< LOD
277	10/31/2011 18:54	CALIBRATE						Positive	1	1	< LOD
278	10/31/2011 18:56	CALIBRATE						Positive	1	1	< LOD
279	10/31/2011 18:56	CALIBRATE						Negative	0.9	0.9	< LOD

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	25th Percentile	Median	75th 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	15	22	15	13	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

Randall E. Ward

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

pursuant to the specifications of the Oklahoma Lead-based Paint Management Act
and is certified as Lead Based Paint

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR11260

This certificate is valid from the issuance date specified below

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

SCOPES OF WORK

STATEMENT OF WORK
For
Remediation of Lead and Asbestos Contamination at Stilwell Armory

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

The building is located at 412 West Pine Street, Stilwell, Oklahoma 74960. 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. The contractor shall perform this work in such a manner as to cause a minimum of interruption to normal work being performed in the contract area.
    c. Contractor shall not cause damage to building structures, property, walls, fixtures, etc. during remediation/abatement process. If damage is caused to these items, contractor is responsible for repairing the damage.
    d. Coordination of work areas shall be scheduled with DEQ.
    e. Disposal of Removed Materials: All materials removed by the Contractor under this contract shall be disposed of in accordance with State and Federal regulations. DEQ will sign as generator, if necessary.

CONTRACTOR SHALL:

- Attend mandatory pre-bid meeting and site walk through;
- Posses a current lead-based paint firm license and have a certified lead-based paint supervisor in order to perform lead-based paint abatement;
- Posses a current Oklahoma Department of Labor (ODOL) Asbestos Abatement Contractor License or have a licensed sub-contractor in order to perform asbestos abatement;
- Follow all appropriate OSHA requirements;
- Follow OSHA Lead in Construction Interim Final Standard (29 CFR 1926.62) for lead-based paint abatement, indoor firing range remediation, and lead dust remediation;

Submit With Bid:

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

Submit After Contract Award:

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

SEQUENCE OF EVENTS

The remediation of the building shall be as follows:

1. First – The asbestos and lead-based paint abatement shall be completed.

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

ASBESTOS ABATEMENT INSTRUCTIONS

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

- Below is a list of non-friable and/or non-regulated ACM along with instruction to remove or leave in place:
    - **Remove** 160 SF of Tan/Brown Floor Tile.
    - **Remove** 150 SF of transite panels on soffit at main entrance to building. Transite panels shall be replaced with like material (white fiber cement panel siding) and shall be painted with white exterior paint once installed. Installation of new panels shall meet or exceed the quality of the existing panels. All joints must be flush and sealed with exterior caulk.

- Friable and regulated ACM shall be removed as described in the attached Asbestos Abatement Project Design (**Attachment 2**).
    - All pipes with asbestos containing pipe wrap removed shall be re-insulated.
        - Pipes shall be reinsulated with appropriate size of polyethylene foam pipe insulation.

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

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

LEAD-BASED PAINT ABATEMENT INSTRUCTIONS

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

1. Non-Friction and Non-Impact Surfaces

- All items listed below shall be wet scraped, painted with a neutral colored primer, and encapsulated with DEQ approved elastomeric encapsulant. A list of DEQ approved elastomeric encapsulants is attached **(Attachment 4)**. Encapsulant shall be a minimum of 20 mils thick. The Lead-Based Paint and Settled Dust Sampling Report with floor plan maps detailing the locations of the lead-based paint is attached for review **(Attachment 5)**;
    - All Drill Floor door lintels
    - All door lintels in Room 2 including exterior door lintel
    - All overhead door frames
    - All window lintels
    - The wood ceilings in Room 6, 7, 8, and 17
- The North and South walls in Room 7 shall be removed, wrapped in 6 mil poly sheeting and properly disposed.
- The fire doors in Room 9 shall be removed, wrapped in 6 mil poly sheeting and properly disposed.
- The cabinets and shelves in Room 10 and Room 11 shall be removed, wrapped in 6 mil poly sheeting and properly disposed.
- The wood trim under fascia on exterior side A of building shall be removed, wrapped in 6 mil poly sheeting and properly disposed. Once asbestos abatement is complete and concrete board is installed, the trim shall be replaced around edges. Trim board shall be replaced with white PVC or plastic trim that is similar in size, shape and appearance to what was removed.
- Deteriorated paint removed from building surface will be properly disposed.

2. Friction and Impact Surfaces

A. Doors

- A Door-Scope of Work with map, door measurements, and specific details on abatement requirements for each door is attached **(Attachment 6)**;
- Doors will be replaced with pre-hung Steelcraft Commercial Replacement Door Units (Specifications Attached) or equivalent;
- Doors will be replaced with UL listed 90 minute standard metal doors;
- Doors will be replaced with Steelcraft L18 and L16 – Series Honeycomb Doors (Specifications Attached) or equivalent;
- Contractor must submit product data for approval if different from doors or door frames in bid package;
- Replacement doors and frames must meet all compliance and fire rating requirements in the attached specifications;

a. Exterior Doors

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

b. Interior Doors

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

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.

FINAL REPORT

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

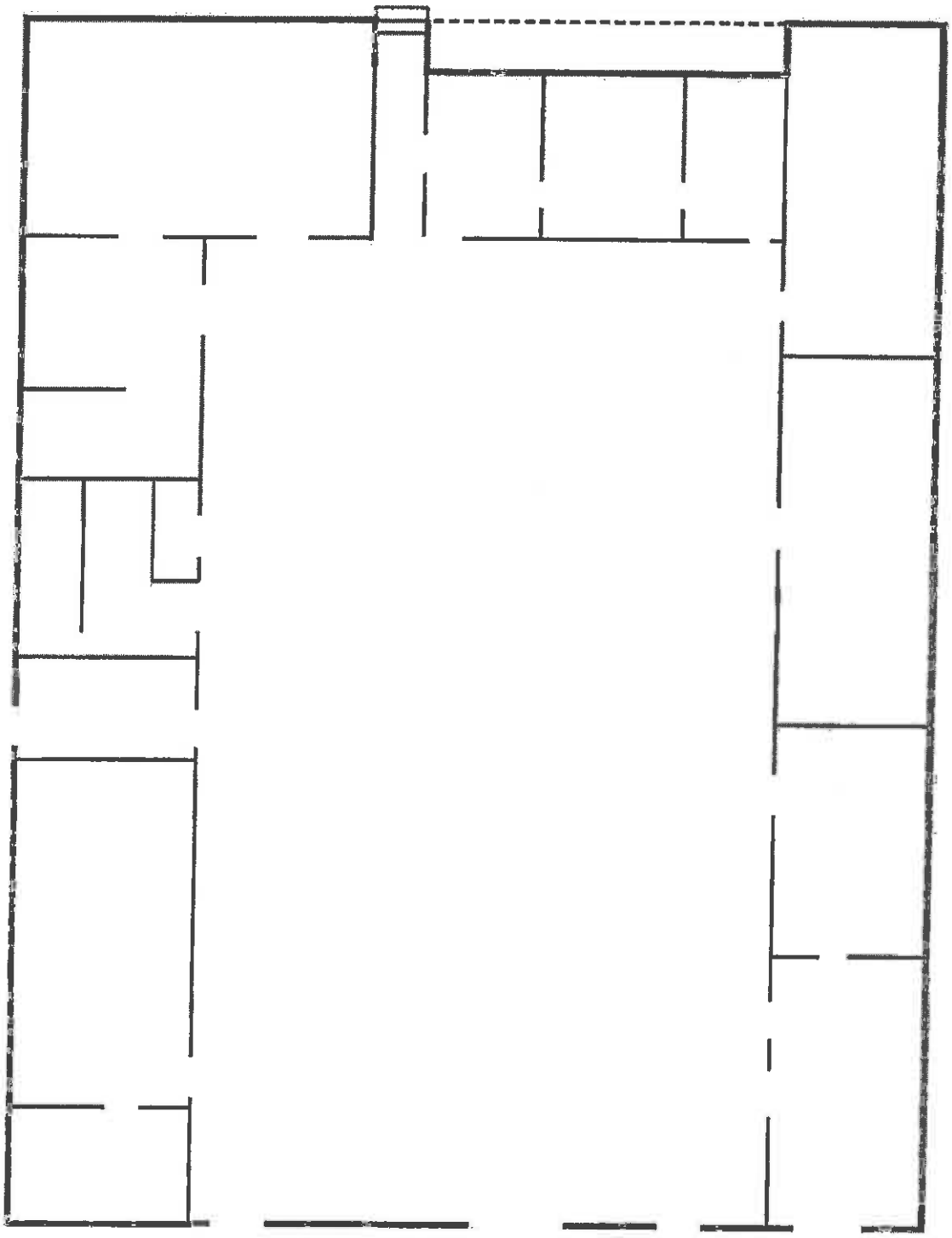
OWNER REPRESTATIVE

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

ATTACHMENT 1

Stilwell Armory Floor Plan Map

STILWELL ARMORY



Not to scale
Floor plan approximate

ATTACHMENT 2

Stilwell Armory Asbestos Project Design

Stilwell Armory Asbestos Inspection Report

Stilwell Non-Friable Asbestos General Abatement Instructions

ASBESTOS ABATEMENT PROJECT DESIGN
STILWELL ARMORY
STILWELL, 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 Stilwell 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, Stilwell Armory
2. Description of Work/Occupancy: The work addressed herein involves glove-bagging of line and fitting insulation on piping in the Stilwell 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 Stilwell Armory is to be done in one task. The work is to be scheduled by the abatement contractor in coordination with Enercon Services and the Department of Environmental Quality. The work is expected to be planned for 10-hour work shifts on weekdays during normal work hours.

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

F. MATERIALS TO BE ABATED (4):

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

2. Amount, Location and Type of Asbestos-Containing Materials (ACM): There is approximately 480 linear feet of piping insulation with fittings to be abated. The piping and fitting insulation contains from 35-55% Chrysotile. The laboratory report is attached.

G. ASBESTOS ABATEMENT METHODS (5):

Line and fitting insulation will be removed within critical barriers using glove-bag procedures with an attached decon and load-out. Removal of ceiling tiles for piping access may be necessary in some areas prior to prep and hanging of glove-bags. Demolition of portions of the restroom chase wall and walls with piping inside will be necessary for access to piping serving fixtures in the restrooms. Demolition will be done during prep with care taken not to disturb the piping. 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 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.

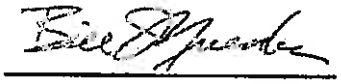
L. **SOIL CONTAMINATION (11):** No contaminated soils are to be abated in this project.

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.

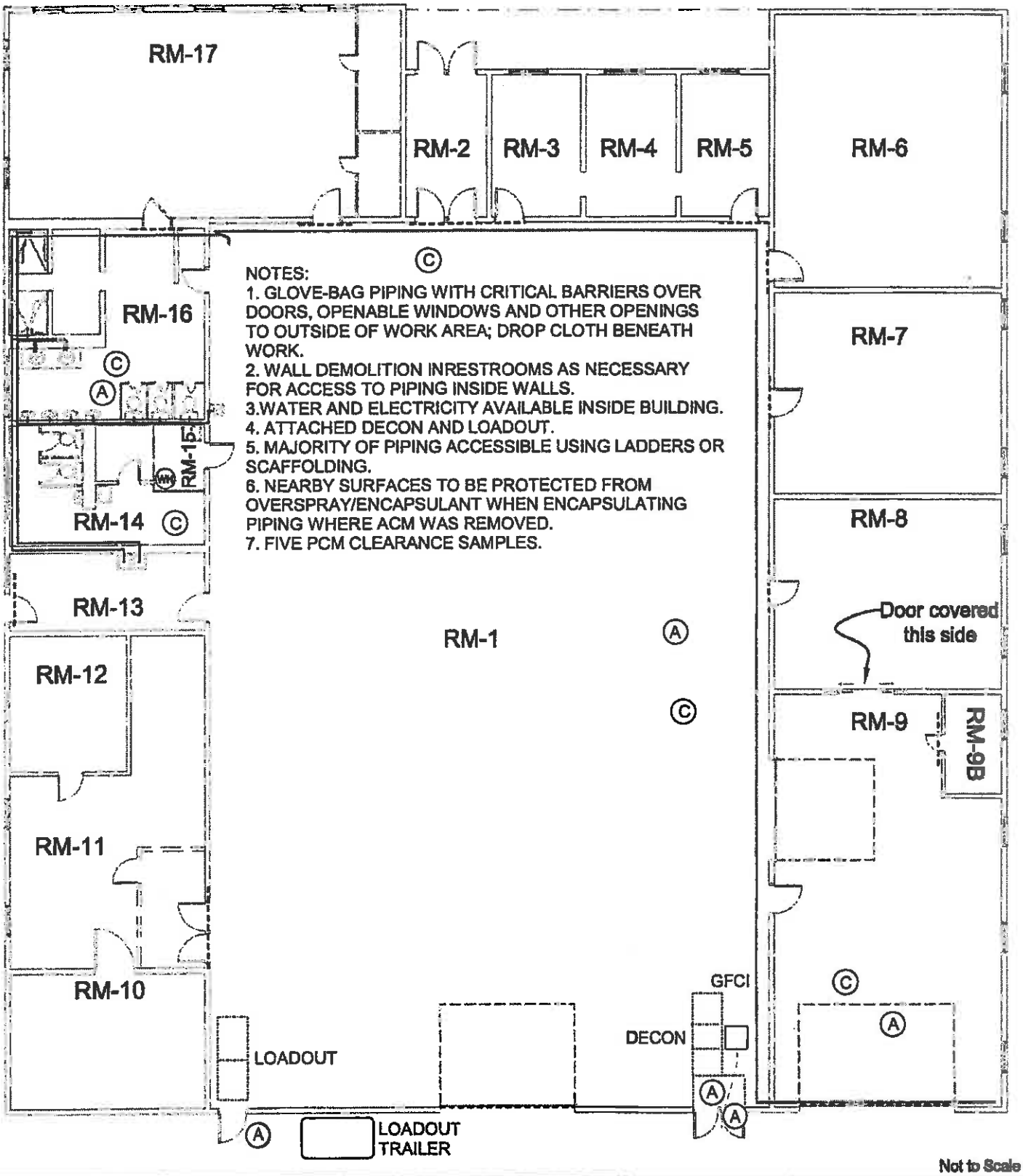
O. **INSPECTIONS:** ODOL is expected to conduct routine prep, in-progress, visual and final inspections for this project.

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



2/14/2012

Bill Muenker — Date
Asbestos Project Designer, OKPD-140007



Not to Scale

Stilwell Armory
Stilwell, Ok.

Legend:

- ACM-INSULATED PIPING @ 400 LF
- CRITICAL BARRIERS
- (A) AREA AIR SAMPLE
- (C) PCM CLEARANCE AIR SAMPLE

ENERCON

WORK AREA DETAILS
GLOVE-BAG PIPING

PROJECT NO. ENMISC2508

QUANTEM® LABORATORIES

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 201397
Account Number: A845

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

Date Received: 11/03/2011
Received By: Barbara Holder
Date Analyzed: 11/03/2011
Analyzed By: Gayle Ooten
Methodology: EPA/600/R-93/116

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

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
026	SA-12-01	Homogeneous	Gray Insulation	Asbestos Present Chrysotile 40	NA	Binder
027	SA-12-02	Homogeneous	Gray Insulation	Asbestos Present Chrysotile 40	NA	Binder
028	SA-12-03	Homogeneous	Gray Insulation	Asbestos Present Chrysotile 35	NA	Binder
029	SA-13-01	Homogeneous	Gray Insulation	Asbestos Present Chrysotile 40	NA	Binder
030	SA-13-02	Homogeneous	Gray Insulation	Asbestos Present Chrysotile 35	NA	Binder
031	SA-13-03	Homogeneous	Gray Insulation	Asbestos Present Chrysotile 45	NA	Binder
032	SA-14-01	Layered	Gray Insulation	Asbestos Present Chrysotile 55	NA	Binder

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

QuanTEM is a NVLAP accredited TEM and PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

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

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
032a		Layered	Tan Insulation	Asbestos Not Present	Cellulose 95	Binder
033	SA-14-02	Layered	Gray Insulation	Asbestos Present Chrysotile 45	NA	Binder
033a		Layered	Tan Insulation	Asbestos Not Present	Cellulose 95	Binder
033b		Layered	Black Tar Paper	Asbestos Not Present	Cellulose 35	Tar
034	SA-14-03	Layered	Gray Insulation	Asbestos Present Chrysotile 45	NA	Binder
034a		Layered	Tan Insulation	Asbestos Not Present	Cellulose 95	Binder
034b		Layered	Black Tar Paper	Asbestos Not Present	Cellulose 35	Tar

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

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SPECIFICATION FOR

REMOVAL OF NON-FRIABLE ASBESTOS

STILWELL ARMORY

Table of Contents

Approvals

Project Designer

Emmett W. Muenker
OK-PD140007

PART 1-GENERAL

1.1 SCOPE OF WORK

The work identified herein includes the removal and disposal of non-friable asbestos-containing materials (ACM) by means that do not render them friable. The work noted in this Section is the special controls required by regulatory agencies having jurisdiction over such work. Most of the controls pertain to Contractor employees and site visitors' personal health and safety from exposure to asbestos fibers. The requirements will be monitored throughout each job by the asbestos project designer or his representative functioning as the Owner's Technical Representative.

A. Procedures for floor tiles and adhesive removal are stated in Paragraph 3.6. Their locations are shown on Figure 1. There is approximately 160 square feet of ACM floor tiles to be removed. The black adhesive does not contain asbestos.

B. Procedures for Transite removal are stated in Paragraph 3.7. The ceiling above the front entrance consists of approximately 150 square feet of Transite panels with the location shown on Figure 1.

1.2 SEQUENCE OF WORK

A. The work shall be conducted in a single phase. The work should be done prior to or following completion abatement of friable asbestos materials in the building. This work is not subject to inspections by the Oklahoma Department of Labor nor is it subject to the federal NESHAP regulations when manual removal procedures are used.

1.3 REGULATORY COMPLIANCE

A. U.S. Department of Labor, OSHA Asbestos Regulations, Code of Federal Regulations Title 29, Part 1926, Section 1101. (29 CFR 1926.1101)

B. U.S. EPA regulations for Asbestos-containing Materials in Schools, Code of Federal Regulations Title 40 Part 763. (40 CFR 763)

C. The Contractor will keep copies of the above regulations available for reference at the work site.

D. Other state and local ordinances, regulations, or rules pertaining to asbestos including its storage, transportation, and disposal.

E. Where any conflicts exist between these specifications and regulations published by federal or state agencies which govern abatement, transportation and disposal of non-friable asbestos-containing materials, the more restrictive shall govern.

1.4 NOTIFICATIONS

No regulatory notifications are required. The Contractor is to coordinate the work with the Owner's Asbestos Consultant. The Contractor shall notify The Owner's Asbestos Consultant a minimum of five working days in advance of mobilization on site.

1.5 SUBMITTALS

A. Pre-work submittals: At least five (5) days prior to beginning asbestos abatement work, the contractor shall submit copies of the following information to the Owner's Technical Representative.
   1. The name of the asbestos supervisor to be used on the project.
   2. A statement signed by an officer of the Contractor's firm, that all workers employed for the abatement of non-friable asbestos materials:

a. Have completed AHERA worker or supervisor training or 8-OSHA training on removal of resilient floor coverings and adhesives.
b. Have had a medical examination within the previous year and are medically qualified to wear a respirator.
c. Have been fitted for the model and size respirator they will use on the job within the previous year.

3. A project schedule indicating planned work hours, work days and project start and completion dates.
4. Documentation of an initial or negative exposure assessment indicating the breathing area fiber concentrations expected during removal of the materials and the PPE required during the work. Personal air monitoring will be required for two full work shifts if such assessment is not provided.

C. During-work submittals:
1. If an exposure assessment is not provided, the Contractor shall conduct an initial exposure assessment and provide personal air monitoring results identifying worker name, work activity, PPE use, and TWA exposure level, in accordance with OSHA regulation 29 CRF 1926.1101.
2. Copies of any inspection reports, consultation reports or other written project correspondence with any regulatory agency or The Owner's Asbestos Consultant.

C. Post-work submittals: Within 15 days of completion of asbestos abatement, the contractor shall submit copies of the following documents to The Owner's Asbestos Consultant.
1. Copies of the waste disposal manifests confirming disposal at an authorized waste disposal facility.
2. Any outstanding during-work submittals.

D. Final payment to the contractor will not be authorized until all work is satisfactorily completed and the submittals have been provided to The Owner's Asbestos Consultant.

1.6 DEFINITIONS

The following definitions are adopted by reference. If statutory definitions are duplicated, the more stringent definition will apply.

A. 29 CFR 1926.1101 (b)

B. 40 CFR 61.141

PART 2-PRODUCTS

Not used.

PART 3-EXECUTION

3.1 WORKER PROTECTION

A. Provide workers with personally issued and marked respiratory equipment approved by NIOSH and suitable for the asbestos exposure level in the work area, according to OSHA Standard 29 CFR 1926.1101. Where respirators with disposable filters are employed, provide sufficient filters for replacement as required by the worker or applicable regulation. Full beards, "mutton chop" sideburns, or any other facial hair that interferes with proper fit or use of respirators will not be allowed. Removal of non-friable asbestos shall begin with air-purifying respirators and their use will be continued until a statistically-significant negative exposure assessment is produced.

B. Provide workers exposed to airborne concentrations of asbestos which exceed the levels prescribed in OSHA standard CFR 1926.1101 with sufficient sets of protective full-body clothing. Such clothing shall consist of full-body coveralls and headgear.

C. Pursuant to OSHA requirements, the Contractor will provide an annual medical examination for each worker assigned to a project under this contract.
   1. The medical examinations will include, at a minimum, a posterior and anterior chest x-ray, pulmonary function tests (FVC and FEV), and a general health history.
   2. No medical additional examination is required of any employee, if adequate records show that an employee has been examined in accordance with this paragraph within the past one year period.
   3. Any employee found to have been exposed without proper protection at any time to airborne concentrations of asbestos fibers in excess of the limits prescribed in OSHA Standard 29 CFR 1926.1101 shall be notified in writing of the exposure as soon as practical but not later that five days of the finding. The employee shall also be timely notified of the corrective action being taken.
   4. The Contractor shall maintain records of these examinations for each worker, and upon request, provide them for review by the employee, Owner, Owner's Representative, OSHA officials, and State Inspectors as appropriate.

3.2 EQUIPMENT REMOVAL PROCEDURES

A. Clean external surfaces of contaminated containers and equipment thoroughly by wet wiping before moving such items to uncontaminated areas.

3.3 DECONTAMINATION ENCLOSURE SYSTEMS:

A. Not Required

3.4 CONTAINMENT FACILTIES

A. Unless otherwise specified, ventilated isolation barriers and decontamination facilities will not be required for all separate work areas where only non-friable asbestos-containing materials are removed or encapsulated, as long as these materials are removed essentially-intact using wet procedures. Where portions of the building are occupied during the work, critical barriers shall be installed between the work areas and the occupied portions of the building.

B. The Contractor will post warning signs or install asbestos barrier tape around the perimeter of the entire work area, specifically at any entrance to the work area, and at any other location specified by The Owner's Asbestos Consultant. The signs shall meet the specifications outlined in OSHA Standard 29 CFR 1926.200 and 29 CFR 1926.1101(k)(7).

C. The Contractor will restrict access to the work area to authorized individuals only. The work area will be secured at all times when contractor personnel are not present to control entry.

3.5 PREPARATION OF ASBESTOS ABATEMENT WORK AREA

A. Remove movable objects from work areas to a temporary location within the building. Where carpeting is installed over floor coverings, the carpeting may be removed prior to or concurrently with the removal of the floor tiles.

B. For removal of adhesive, protect walls and fixed objects within the work area and enclose with minimum 4-mil plastic sheeting sealed with tape, or protect with 36-inch high splash guards.

C. Maintain emergency and fire exits from the work areas, or establish alternative exits in compliance with applicable fire codes.

3.6 ASBESTOS FLOOR TILES AND ADHESIVE REMOVAL

A. Floor tiles shall be removed using the following procedures:

1. The entire floor surface shall be wetted with surfactant-amended water. Floor tiles may not be removed dry.
2. The tiles shall be removed by manual methods using a scraper or spade. Power chippers or grinders are not permitted.
3. The tile shall be placed in minimum of 6-mil unlabeled plastic bags, preferably black opaque. They shall not be placed in asbestos disposal bags. The bags shall not be overfilled which promotes the tile tearing through the plastic.
4. The bagged tiles shall be disposed in a sanitary landfill or construction debris landfill that accepts non-friable asbestos waste. Landfill disposal receipts are required in paragraph 1.5 C1 of this section.
5. Clearance air sampling is not required following removal of non-friable floor tiles.

B. Floor tile adhesive shall be removed by the following procedures:

1. A low-odor, non-flammable, non-toxic mastic/adhesive remover shall be mopped onto the floor. Using a broom, squeegee or scrub brush, the solvent shall be agitated into the mastic/adhesive. The material may be worked onto additional areas until it reaches a tarry consistency at which point it shall be scraped up and bagged.
2. Repeat as necessary until the mastic/adhesive is removed.
3. A final cleaning with wiping rags shall be conducted. Used rags shall be placed in 6-mil unmarked plastic bags and disposed as non-friable asbestos waste.
4. No sanding, grinding or abrading of floors where asbestos-containing mastic/adhesive remains shall be permitted.
5. Clearance air sampling is not required following removal of non-friable adhesive.

3.7 ASBESTOS-CEMENT (TRANSITE) MATERIAL REMOVAL

Transite materials shall be removed using the following procedures:

A. Asbestos barrier tape is to be installed around the area of work to demarcate the regulated area.
B. The Contractor shall place a drop cloth on the surface beneath the panels to catch any breakage that may occur during removal of the panels.
C. The Contractor shall use ladders or scaffolding to access the ceiling panels for removal. The material is to be wetted prior to removal, removed from the structural members essentially intact, lowered to the ground and placed in a poly-lined dumpster or trailer for transport to the disposal landfill.
D. Care is to be taken to prevent breakage of the panels during removal and handling, as the panels are to be removed essentially intact to maintain their classification as non-friable material.
E. The Contractor shall ensure that the area is left clean and tidy following removal of the panels.
F. Clearance air sampling is not required for wet removal of Transite outdoors.

3.8 ASBESTOS-CONTAINING CAULK AND WINDOW GLAZING

A. Caulk and window glazing shall be removed using the following procedures:

1. A poly drop cloth shall be placed beneath the area where the caulk/glazing is to be removed. Critical barriers (double poly flaps) are to be installed over doorways to areas outside of the immediate work area when more than three linear feet of caulk of window glazing is being removed.
2. Loose caulk/glazing shall be removed using a HEPA-filtered vacuum.
3. The caulk/glazing that is not loose shall be wetted and removed using manual means. The material is to be kept wet while scraping or brushing. The area of removal is to be damp wiped following removal.
4. The removed material shall be placed in a 6-mil minimum unlabeled opaque plastic contractor trash bags and sealed with duct tape for disposal. The bagged material shall be disposed in a sanitary landfill or construction debris landfill that accepts non-

friable asbestos waste. Landfill disposal receipts are required in paragraph 1.5 C1 of this section.

5. The Owner's Asbestos Consultant shall inspect the areas of removal following completion of the work.
6. The work area is to be left clean and tidy following removal of the caulk/glazing.
7. Clearance sampling is not required for removal of three linear feet or less of this material indoors or any amount outdoors.

3.9 PERSONAL PROTECTIVE EQUIPMENT/AIR MONITORING

A. Air sampling for OSHA compliance is the Contractor's responsibility by statute. This section deals only with the air monitoring requirements of the Contractor in performing employee exposure assessments. Industrial hygiene samples for quality assurance and clearance tests are not required to be done by the contractor, but will be conducted by the Owner's Asbestos Consultant as deemed appropriate.

B. Samples of airborne asbestos concentrations shall be collected with air sampling pumps on 25-mm cellulose ester membrane filters of 0.8 micrometer porosity mounted in an open-face filter holder. Pumps shall be calibrated before each sampling period and a record of this calibration entered in the air sampling log.

C. Unless a negative exposure assessment (NEA) has been performed and is available on site, work shall commence in full-body suits and half-face air purifying respirators, and continuous breathing zone air monitoring shall be conducted from start to completion of the non-friable material removal, disturbance, or repair operation. Twenty-five percent (25%) of the workers, with a minimum of two workers, shall be monitored each work shift. Any sampling device shall not exceed eight (8) hours (real time) of operation with any one filter. At times, a lesser real time may be required for a particular cassette. Sampling may be discontinued at such time as an NEA is completed for the work task and work may proceed without full-body suits and respirators. A minimum of two full work shifts is considered sufficient for an exposure assessment.

D. Sampling devices shall be located within the breathing zone of personnel, including those removing, bagging, and loading-out bagged waste.

E. All laboratory determinations of airborne concentrations of asbestos fibers shall be made by the membrane filter method using phase contrast illumination and 400-450x magnification, according to NIOSH 7400. Analysts shall be successful participants in the AIHA Proficiency Analytical Testing program or be individually registered and proficient participants through the AIHA Asbestos Analyst Registry.

F. If any air sample collected in the breathing zone exceeds 0.1 fibers/cc, the Contractor will immediately discontinue all work until the cause is identified and corrected. Work will resume in air purifying respirators and full-body protective coveralls.

3.10 CLEAN-UP

A. After completing the asbestos work the areas shall be cleaned up as follows:

B. Remove waste containers, and equipment from the work area.

C. When a visual inspection by the Owner's Asbestos Consultant determines that the areas are free of visible accumulations of asbestos material and debris, the contractor shall remove the splash guards and his equipment, signs, barrier tape, etc., from the area and PCM clearance sampling will be conducted by the Owner's Asbestos Consultant.

D. Following receipt of satisfactory clearance sample results, the work area released for unrestricted worker access.

3.11 CLEARANCE TESTING

A. The Owner's Asbestos Consultant will collect and analyze five 1,200 liter PCM air samples where non-friable asbestos has been removed unless otherwise stated in Paragraphs 3.6 -3.8.

3.12 DISPOSAL OF NON-FRIABLE ASBESTOS WASTE/CONTAMINATED MATERIALS

A. As the work progresses, and to prevent exceeding available storage capacity on site, remove sealed bags of waste/contaminated materials and dispose of such bags at a disposal site meeting EPA and state requirements for non-regulated ACM.

FIGURE 1 – NON-FRIABLE MATERIAL LOCATIONS - SEE FOLLOWING PAGE

ATTACHMENT 3

Health & Safety Aspects to Consider

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

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

Health and Medical Aspects

Health Effects

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

Medical Surveillance for occupational Exposure to Lead

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

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

Personal Protective Equipment

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

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

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

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

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

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

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

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

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

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

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

Worker Education

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

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

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

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

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

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

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

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

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

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

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

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

REFERENCES

Section 1 Required Publications

There are no entries in this section

Section II Related Publications

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

AR 11-34
The Respiratory Protection Program

AR 40-5
Preventive Medicine

DODI 6055.5
Industrial Hygiene and Occupational Health

DOD 6055.5-M
Occupational Medical Surveillance Manual

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

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

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

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

NGR 420-10
Construction and Facilities Management Office Operations

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

ATTACHMENT 4

DEQ Approved Lead-Based Paint Encapsulants List

Lead-Based Paint Encapsulants approved by DEQ

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

ATTACHMENT 5

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

Attachment 6

Door Scope of Work Including Measurements and Specifications

Stilwell Armory Door Measurements
And
Scope of Work

- **Door measurements are listed as approximate Width X Height; Contractor to field verify.**
- **All removed doors will be properly disposed.**
- **Pre-hung door units will be installed into existing wood door frames.**
- **Attached is an armory Floor Plan with designated door numbers that correspond with the numbers on this Scope of Work.**
- **Specifications for replacement doors are attached.**

1. Remove door. Replace door with pre-hung door unit.
   Door Measurements – 3' X 7'

2. Remove door. Replace door with pre-hung door unit.
   Door Measurements – 3' X 7'

3. Remove door. Replace door with pre-hung door unit.
   Door Measurements – 3' X 7'

4. Remove door. Replace door with pre-hung door unit.
   Door Measurements – 3' X 7'

5. Remove doors. Replace double doors with pre-hung door unit.
   Door Measurements – 5' X 7'

6. Remove door. Replace door with pre-hung door unit.
   Door Measurements – 3' X 7'

7. Remove doors. Replace double doors with pre-hung door unit.
   Door Measurements – 5' X 7'

8. Remove door. Replace door with pre-hung door unit.
   Door Measurements – 3' X 7'

9. Remove door. Replace door with pre-hung door unit.
   Door Measurements – 3' X 7'

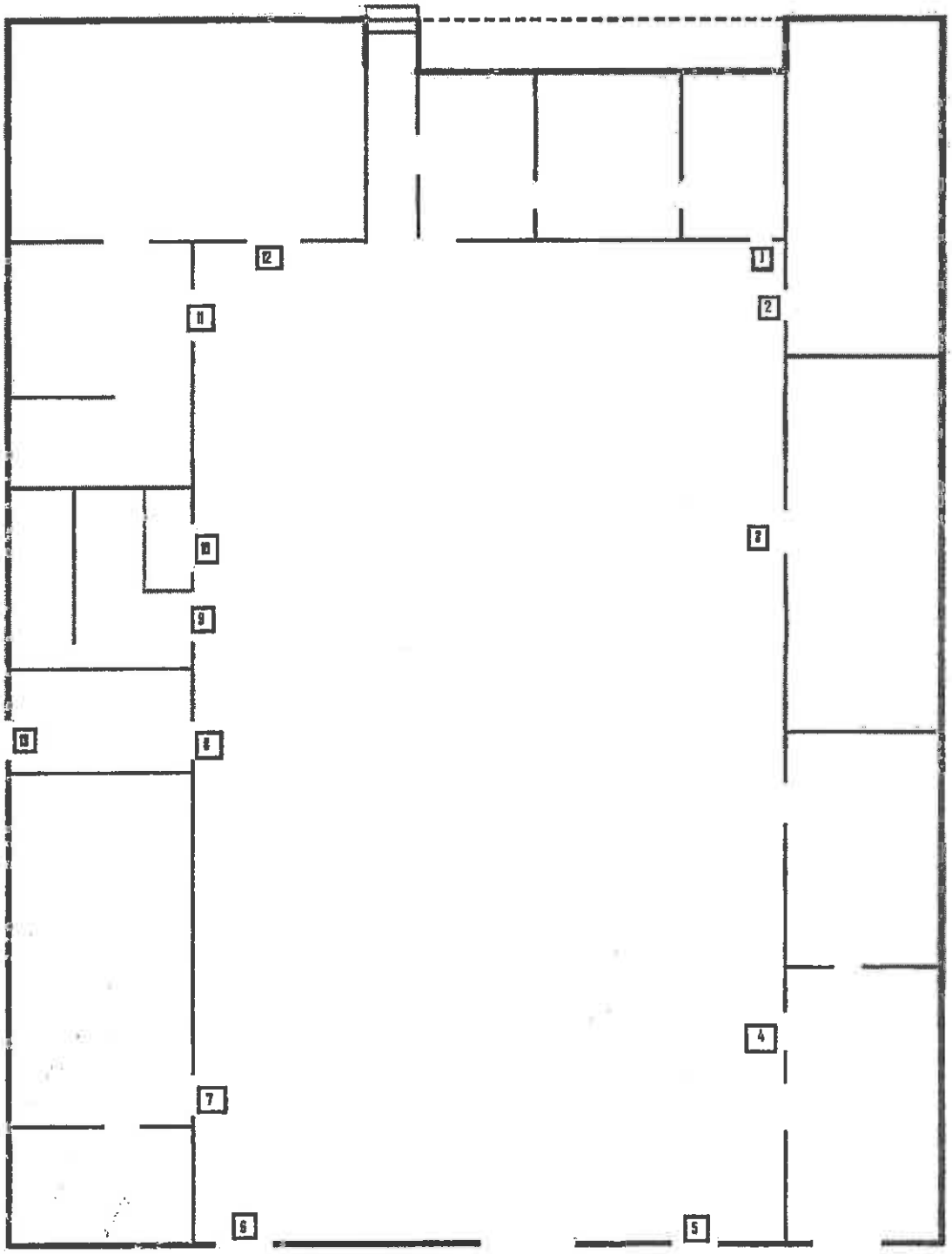
10. Remove door. Replace door with pre-hung door unit.
    Door Measurements – 3' X 7'

11. Remove door. Replace door with pre-hung door unit.
    Door Measurements – 3' X 7'

12. Remove door. Replace door with pre-hung door unit.
    Door Measurements – 3' X 7'

13. Remove door. Replace door with pre-hung door unit.
    Door Measurements – 3' X 7'

STILWELL ARMORY



Not to scale
Floor plan approximate

SECTION 07920 - JOINT SEALANTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submittals: Product Data.

B. Warranty: Warranty materials and workmanship of sealing against leaks, adhesion, and cohesive failure for a period of two years from the date of substantial completion.

C. References:

1. American Society for Testing and Materials
   a) ASTM C790 – Recommended practices for use of latex sealing compounds.
   b) ASTM C920 – Elastomer Joint Sealants.
2. Federal Specifications
   a) FS TT-S-00230C (2), Sealing Compound, Elastomeric Type, Single Component (for caulking, sealing and glazing in buildings and other structures).
   b) FS TT-S-00227E (3), Sealing Compound, Elastomeric Type, Multi-component (for caulking, sealing and glazing in buildings and other structures).

PART 2 - PRODUCTS

2.1 JOINT SEALANTS

A. Compatibility: Provide joint sealants, joint fillers, and other related materials that have been tested and found compatible with one another and with joint substrates under service and application conditions.

B. Interior Sealant: Provide ASTM C 834. If no color is specified, use Gray. Location(s) of sealant for the following:
1. Small voids between walls or partitions and adjacent door frames, and similar items.
2. Perimeter of frames at doors, windows, and access panels which adjoin exposed interior concrete and masonry surfaces.

C. Exterior Sealant: Provide ASTM C 920, polyurethane or polysulfide, Type M, Grade NS, Class 25, Shore A hardness of 20-40. If no color is specified, use Gray. Location(s) of sealant for the following:
1. Joints and recesses formed where frames and vents adjoin masonry, concrete, or metal frames. Use sealant at both exterior and interior surfaces of exterior wall penetrations. Color to match adjacent surface.

2.2 ACCESSORIES

A. Primers: Provide a nonstaining, quick-drying type and consistency recommended by the sealant manufacturer for the particular application.

B. Bond Breakers: Provide the type and consistency recommended by the sealant manufacturer to prevent adhesion of the sealant to backing or to bottom of the joint.

C. Cleaning Solvents: Provide type(s) recommended by the sealant manufacturer, except for aluminum and bronze surfaces that will be in contact with sealant.

PART 3 - EXECUTION

3.1 PREPARATION

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

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

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

3.2 INSTALLATION

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

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

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

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

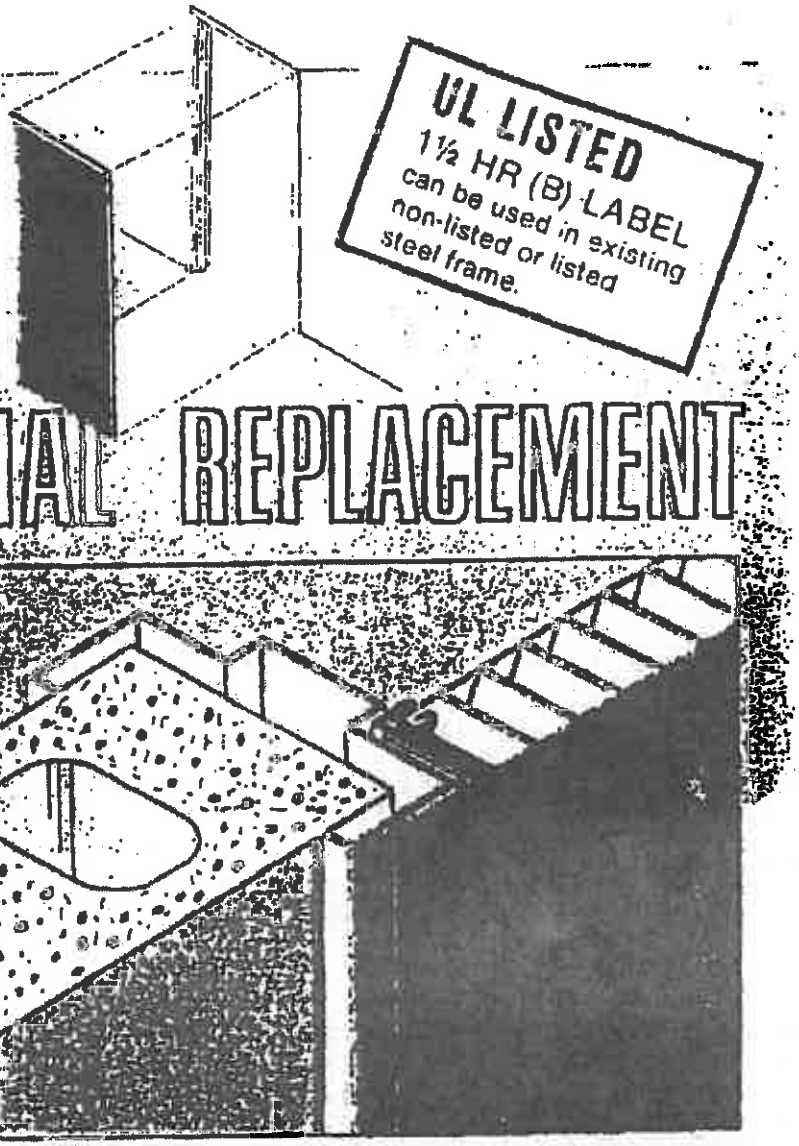
C. Immediately prime prior to application of the sealant, clean out loose particles from joints. Where recommended by sealant manufacturer, apply primer to joints in concrete masonry units, wood, and other porous surfaces in accordance with sealant manufacturer's instructions. Do not apply primer to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

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

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

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

END OF SECTION 07920



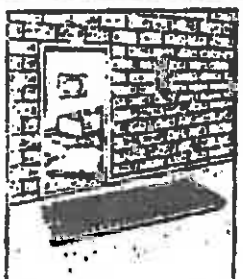
UL LISTED
1½ HR (B) LABEL
can be used in existing non-listed or listed steel frame.

Install a pre-hung
Steelcraft
COMMERCIAL REPLACEMENT DOOR UNIT

New beauty and security for worn out doors.

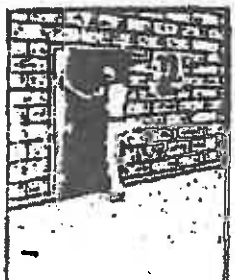
The Steelcraft Commercial Replacement Unit is the only product of its kind specifically designed for the rehab market. Fits these nominal sizes: 2868, 3068, 3668, 3868, 4068, 2870, 3070, 3670, 3870, 4070 single, and 5468, 5068, 5470 and 6070 double doors.

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



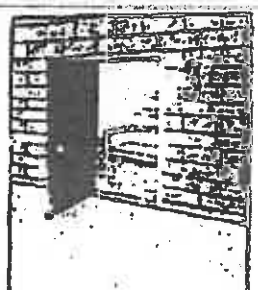
QUICK

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



'N EASY

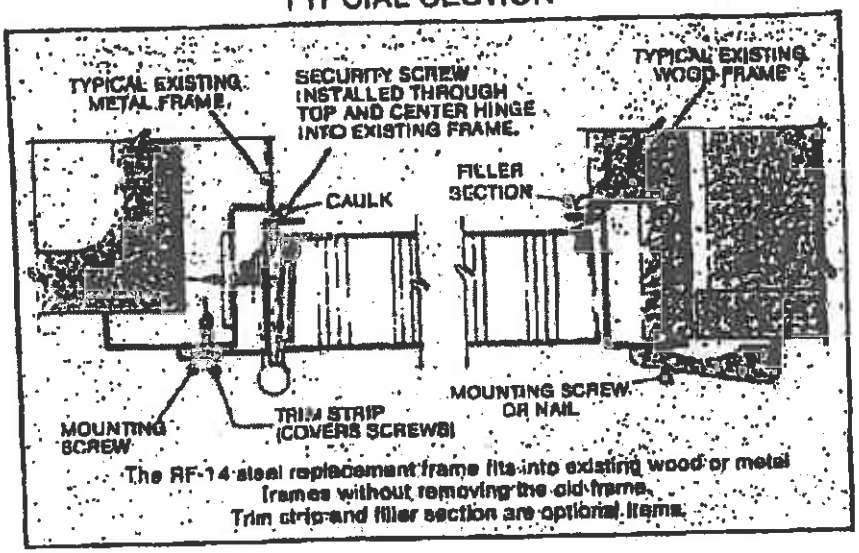
2. Set pre-hung unit into frame opening. Install mounting screws through face, cut banding and install security screws.



INSTALLATION

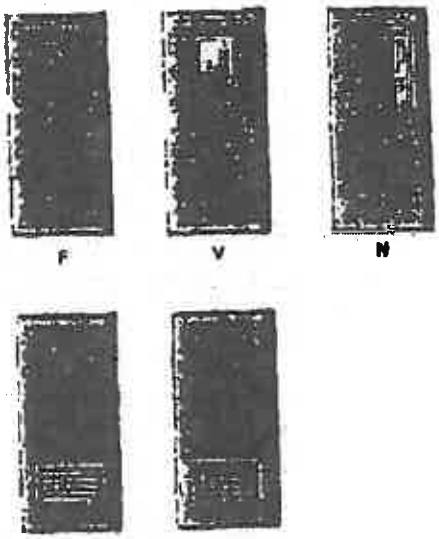
3. Mount hardware as required. Paint.

TYPCIAL SECTION

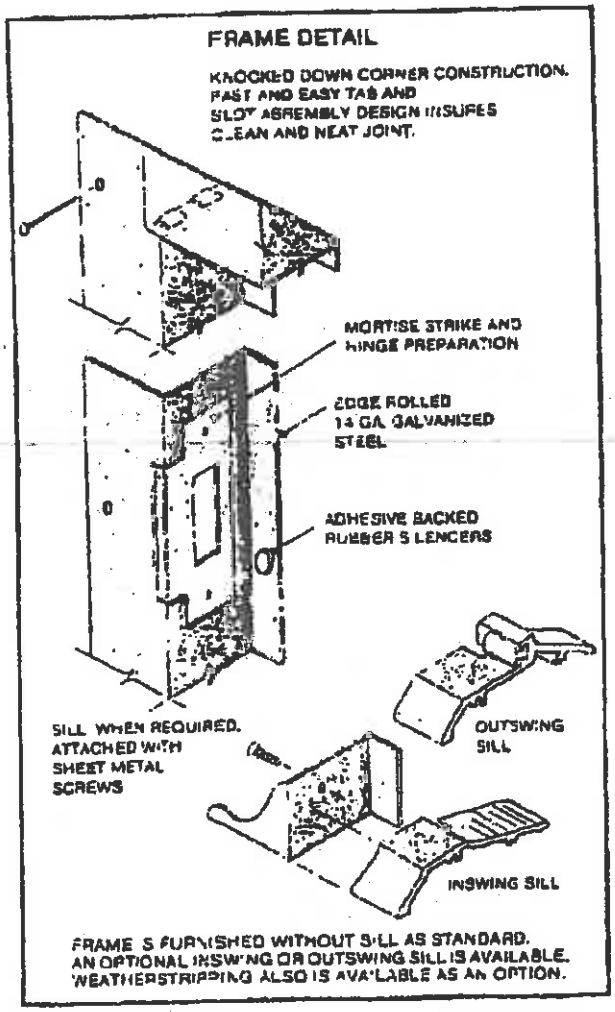


The RF-14 steel replacement frame fits into existing wood or metal frames without removing the old frame. Trim strip and filler section are optional items.

DESIGNS AND FINISHES AVA



FRAME DETAIL



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

©1999 By Steelcraft

SPECIFICATIONS

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

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

Doors shall conform to the following:

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

Frames shall conform to the following:

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

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

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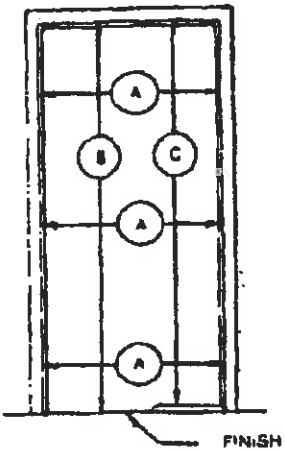
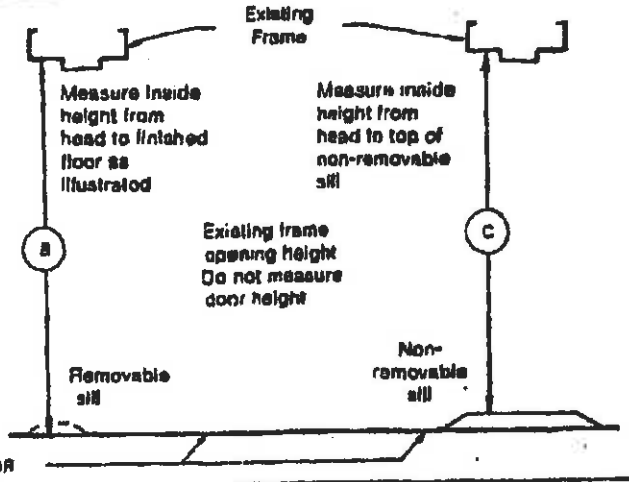
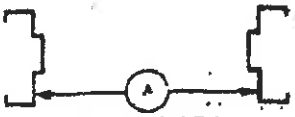
HOW TO DETERMINE SIZE OF EXISTING FRAME







FRAME WIDTH

Measure in 3 places. Use narrowest dimension for ordering

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

SIZE (Nominal)	FITS THESE EXISTING OPENINGS			
	A WIDTHS		B C HEIGHTS	
	MIN.	MAX.	MIN.	MAX.
2'8" x 6'8"	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"	63⅛"	64⅛"	79⅛"	80⅛"
6'0" x 6'8"	71⅛"	72⅛"	79⅛"	80⅛"
5'4" x 7'0"	63⅛"	64⅛"	83⅛"	84⅛"
6'0" x 7'0"	71⅛"	72⅛"	83⅛"	84⅛"

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

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

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

Steelcraft®

8017 Blue Ash Road Cincinnati, Ohio 45242 513/745-8400

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.

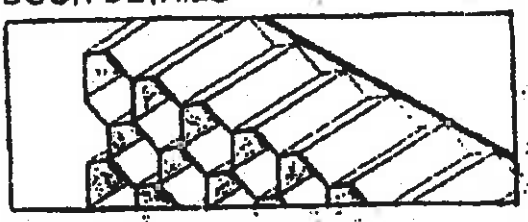
Consult distributor for other hardware preparations.

	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	33"		34-13/16"	
	3868	41"		40-13/16"	
	3868	43"		42-13/16"	
	4068	47"		46-13/16"	
	2870	31"	83¼"	30-13/16"	82¼"
	3070	33"		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"	

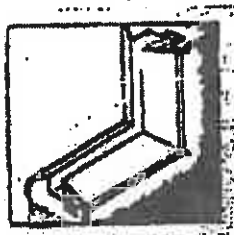
*FOR PAIRS OF DOORS INACTIVE LEAF IS 1" WIDER THAN ACTIVE LEAF

CONSULT DISTRIBUTOR FOR OTHER SIZES.

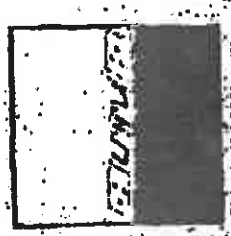
DOOR DETAILS



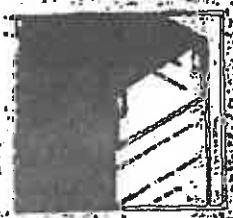
Full honeycomb core of phenolic resin-impregnated kraft paper reinforces the door every 1-inch, providing superior resistance to impact and assuring a flat surface.



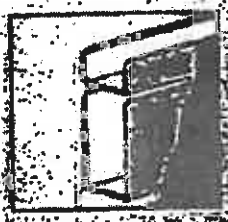
Aluminum glass trim (snap-in).



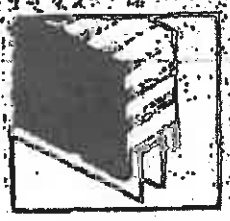
8-gage mick hinge reinforcement.



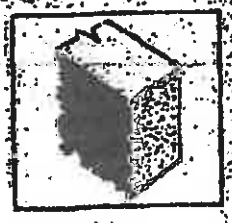
Sill protector (on cap for exterior openings).



Stile top and bottom reinforcing channels (14-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.

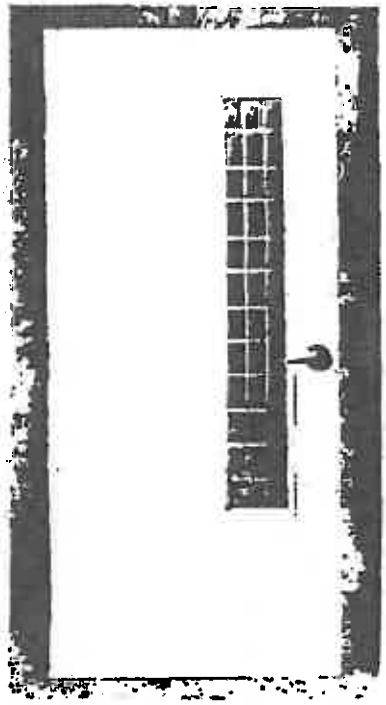
Pairs of doors consist of two leaves and a 14 ga. steel "Z" astragal field mounted to inactive leaf of pair. Inactive leaf may be secured with flush bolts or surface bolts.

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[2]	Mainly Interior	• Typical building conditions	
Galvannealed[2]	Mainly Exterior	• Used in locations with high humidity and/or weather exposure	

MATERIAL:

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

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

OCT 24 2008

IR Security & Safety

Details are subject to change without prior notice.

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INSTALLATION:

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

DOOR EDGE APPLICATIONS:

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

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

CONVERSION CHART

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

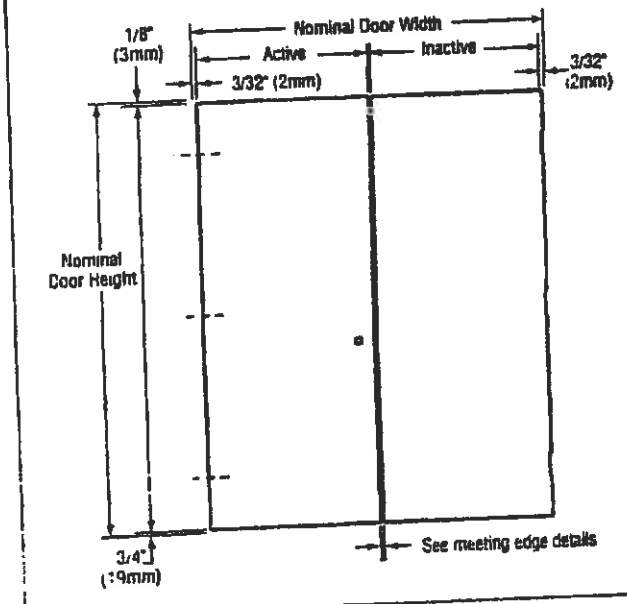
Series	Level	Model	Description	Edge Construction
L18	2	1	Full Flush	Full height, visible mechanical interlocked edge
LF18	2	2	Seamless	L-Series with epoxy filled edge seams
LW18	2	2	Seamless	L-Series with welded edge seams
L16	3	1	Full Flush	Full height, visible mechanical interlocked edge
LF16	3	2	Seamless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

DOUBLE DOOR APPLICATIONS:

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

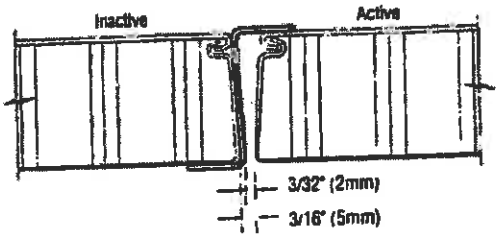
- **Standard operating clearances** *(installed in frame)*:
  - Head = ⅛" (3mm) to bottom of head or transom panel
  - Hinge side = 3/32" (2mm) to rabbet on jamb
  - Meeting edges = 3/32" (2mm) with or without astragal. For openings without an astragal, a wide inactive leaf is used.
  - Bottom = ¾" (19mm)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

Double Door Elevation

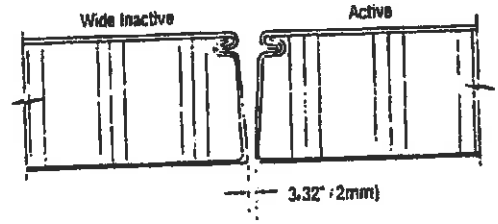


MEETING EDGE DETAILS:

Typical Astragal 14 Gage



Pairs without Astragal



Five Knuckle

Plain Bearing - Standard Weight

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

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

1279 Steel with Steel pin - ANSI A8133

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

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

Five Knuckle

Plain Bearing - Standard Weight - Wide Throw

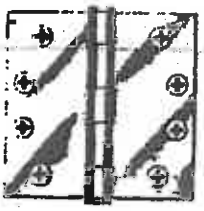
For use on medium weight doors or doors requiring low frequency service

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

1279 Wide Throw
Steel with Steel pin - ANSI A8133

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

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



Concealed Bearing - Standard Weight

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

CB1191 Stainless Steel with Stainless Steel pin - ANSI A5112

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

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

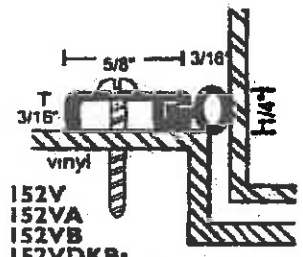
Vinyl Seals

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

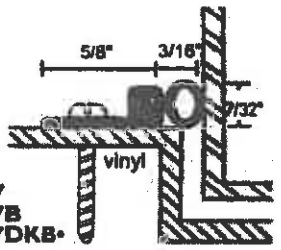
#6 x 3/4" Stainless Steel Sheet Metal Screws furnished
Screw holes slotted for adjustment

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*



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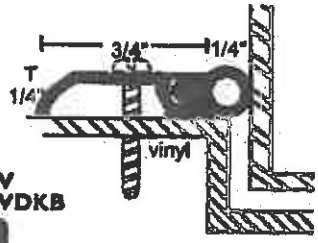
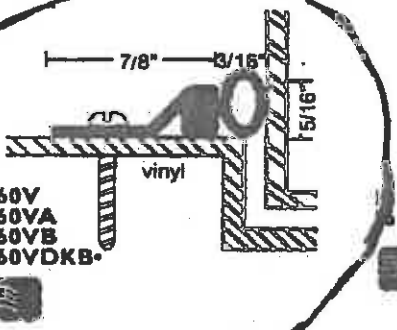
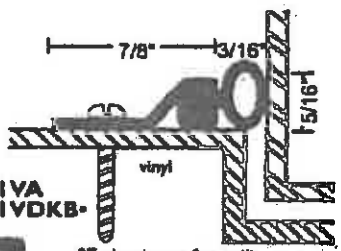
155VB
155VDKB*



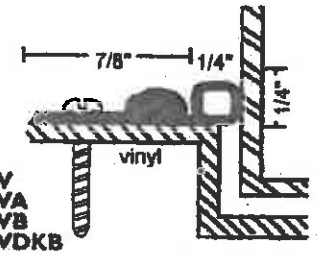
156V
156VDKB



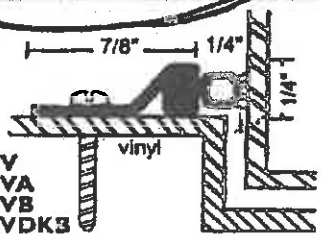
160V
160VA
160VB
160VDKB*



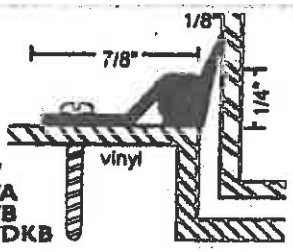
VA
VDKB*
.07 aluminum for military specs



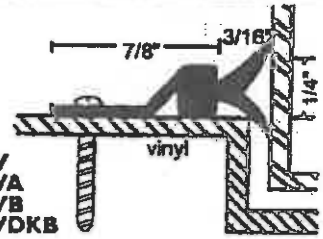
162V
162VA
162VB
162VDKB



164V
164VA
164VB
164VDK3

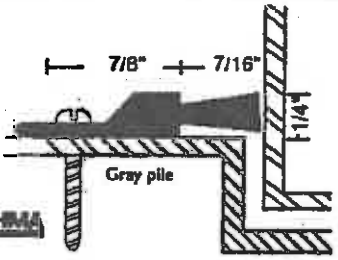


188V
188VA
188VB
188VDKB

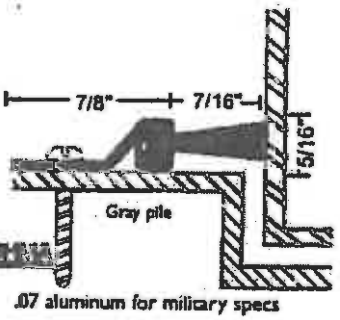


190V
190VA
190VB
190VDKB

Pile Seals



185P
185PA
185PB
185PDKB



161PA
161PDKB
.07 aluminum for military specs

Phone: 800-647-7874
Fax: 800-255-7874
www.ngp.com

Saddle Thresholds

All thresholds this page

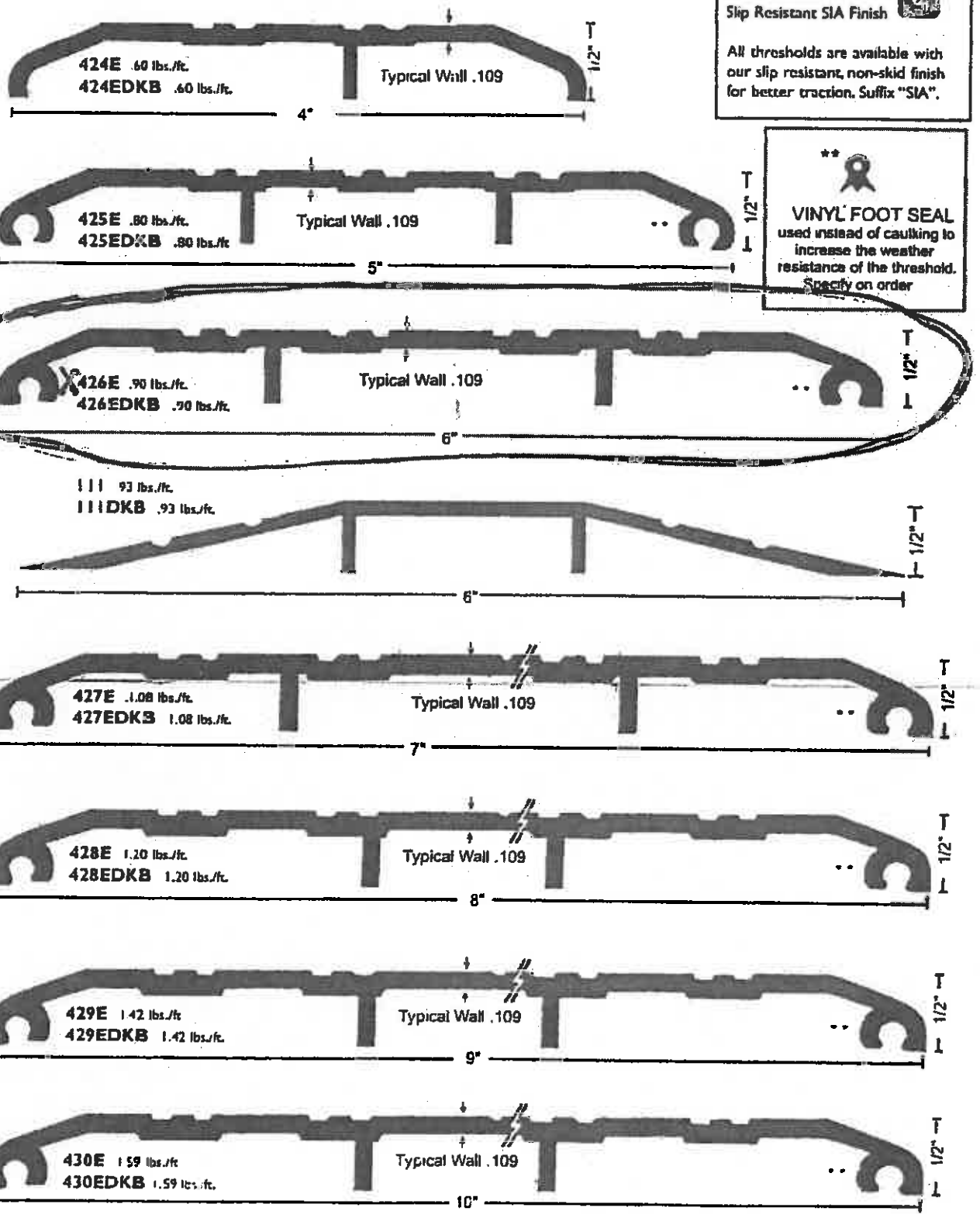
MATERIALS & FINISHES

- 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:
1⅜" 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.

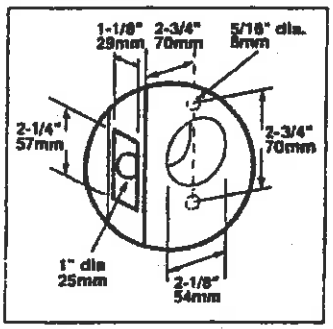
Cylinder & Keys:
6-pin Everest C123 keyway standard with two patented nickel silver keys per lock.

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



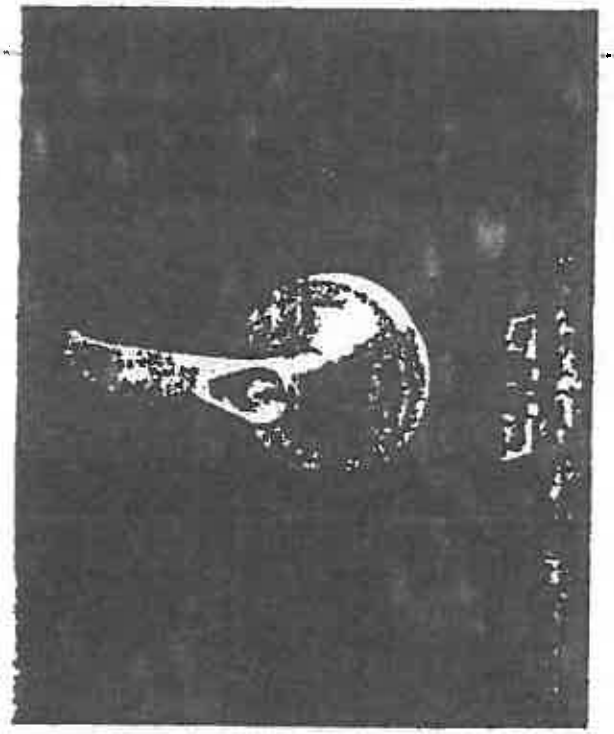
Certifications

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.

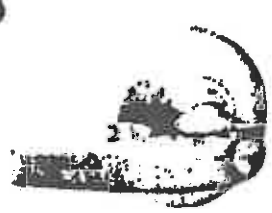
UL / cUL:
All locks listed for A label single doors, 4' x 8'.
Letter F and UL symbol on latch front indicate listing.
Electrified functions are UL19X Listed for single point locking applications.
UL437 Listed locking cylinder optional; specify Primus 20-500 Series cylinder.



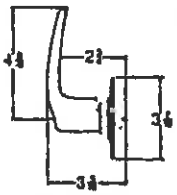
Lever Designs & Finishes

ATHENS

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



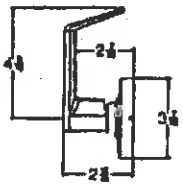
608



RHODES

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

612

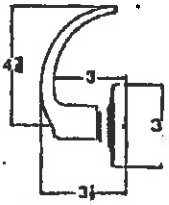


Lever Designs & Finishes

SPARTA

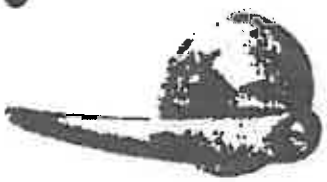
Symbol: SPA (17)
Material: Pressure cast zinc lever; wrought brass rose
Finishes:
605, 606, 612, 613, 619, 625, 626

628

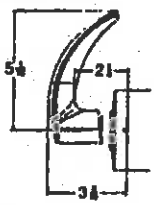


OMEGA

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



619

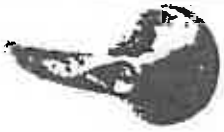


605
Bright Brass

606
Satin Brass

612
Satin Bronze

613
Oil Rubbed Bronze

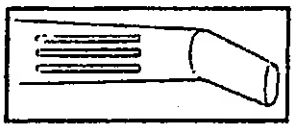


619
Satin Nickel

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

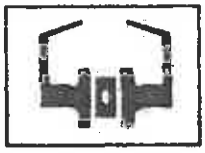
Functions

Non-Keyed Locks

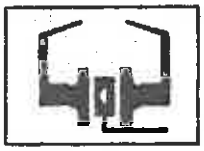
SCHLAGE ANSI

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

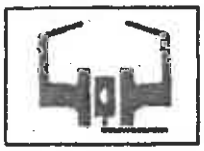
ND12D F89 — **Exit Lock**
Outside lever always fixed. Inside lever always unlocked.



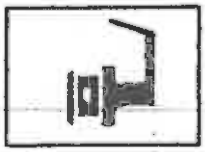
ND12DEL — **Electrically Locked (Fail Safe)**
Outside lever continuously locked electrically. Unlocked by switch or power failure. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit.



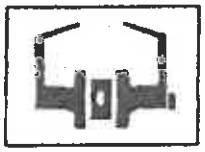
ND12DEU — **Electrically Unlocked (Fail Secure)**
Outside lever continuously locked until unlocked by electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit.



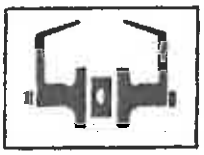
ND25D — **Exit Lock**
Blank plate outside. Inside lever always unlocked.



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.

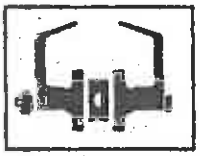


ND170 — **Single Dummy Trim**
Dummy trim for one side of door. Used for door pull or as matching inactive trim.

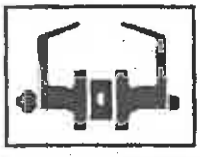
Keyed Locks

SCHLAGE ANSI

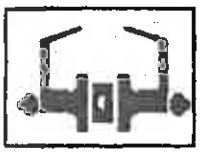
ND50PD F82 — **Entrance/Office Lock***
Push-button locking. Push-button locks outside lever until unlocked with key or by turning inside lever.



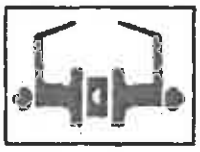
ND53PD F109 — **Entrance Lock***
Turn/push-button locking; pushing and turning button locks outside lever, requiring use of key until button is manually unlocked. Push-button locking; pushing button locks outside lever until unlocked by key or by turning inside lever.



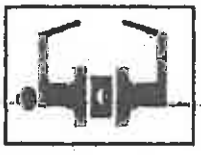
ND60PD F88 — **Vestibule/Classroom Security Lock***
Latch retracted by key from outside when outside lever is locked by key in inside lever. Inside lever is always unlocked.



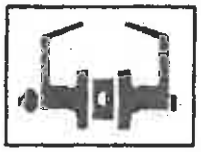
ND66PD F91 — **Store Lock*†**
Key in either lever locks or unlocks both levers.



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



ND73PD F80 — **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.



OCT 24 2008

* *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:
1⅜" 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.

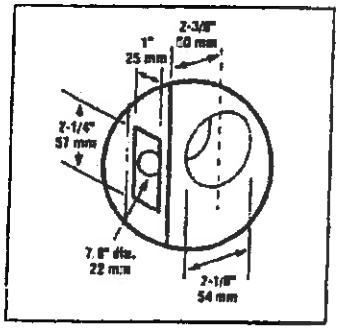
Strike:
T-strike 1⅛" x 2¾" (29 mm x 70 mm) x 1⅛" (29 mm) lip to center with box standard. Optional strikes, lip lengths and ANSI strike box available. See page 7.

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

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

609

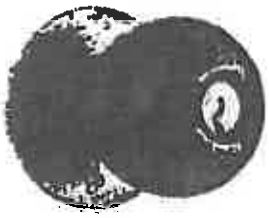
LEVON

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

605

ORBIT

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



613

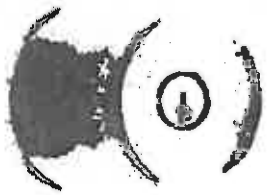
PLYMOUTH

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

605

TULIP

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



626

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

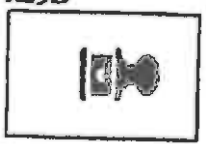
ANSI A156.2 Series 4000 Grade 2

Non-Keyed Functions

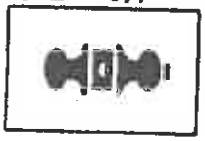
SCHLAGE ANSI

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.

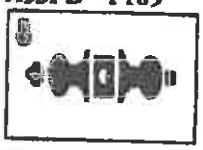
A43D F79 — **Communicating Lock**
Turn-button in outer knob locks and unlocks knob and inside thumbturn.

A170 — **Single Dummy Trim**
Dummy trim for one side of door. Used for door pull or as matching inactive trim.

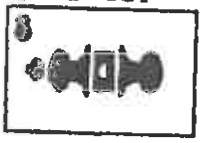
Keyed Functions

SCHLAGE ANSI

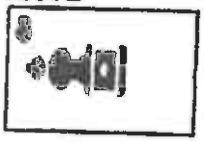
A53PD F109 — **Entrance Lock**
Turn/push-button locking: pushing and turning button locks outside knob requiring use of key until button is manually unlocked. Push-button locking: pushing button locks outside knob until unlocked by key or by turning inside knob.



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.

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

FINAL ABATEMENT REPORTS

FINAL REPORT

FOR

LEAD-PAINT & ASBESTOS REMEDIATION
STILLWELL ARMORY
412 W. Pine St.
STILLWELL, OK 74960

BY

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

INDEX

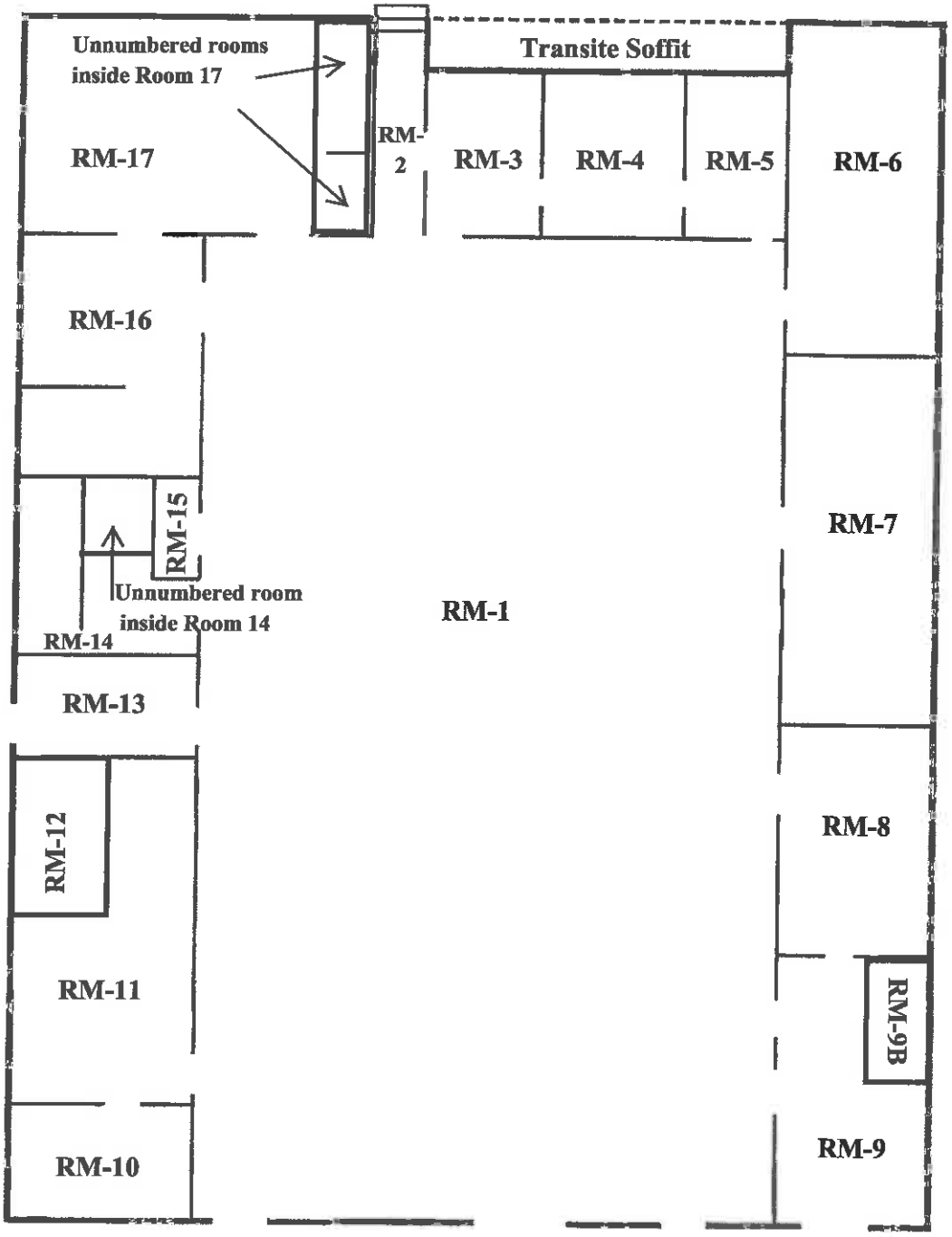
SUMMARY OF WORK – STILWELL ARMORY

Prepared abatement area(s) and began asbestos abatement in accordance with the contract. Floor tile and mastic was abated followed by the pipe insulation. The loose debris and remnants of transite panels and wood trim on ground and remaining pieces of soffit were removed. Wood ceilings where loose, peeling, or damaged paint was present were wet scraped and encapsulated. Lead dust and lead-based paint chips were abated. Window and door lintels were abated and encapsulated. New doors with hardware were installed in existing jambs.

Asbestos wastes were removed and properly disposed. Lead contaminated wastes were removed and stored securely for proper disposal when full drum quantity is achieved.

Floor plan for

STILWELL ARMORY



Modified floor plan with numbering in accord with ENERCON numbering.

Not to scale
Floor plan approximate

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

ENERCON
Excellence—Every project. Every day.

Project: Stilwell Armory, Stilwell, OK

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

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Fiber Count	Field Count	Tll. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
-	1	8/6/12 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
-	2	8/6/12 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
290	3	8/6/12 -	12:45 PM 5:00 PM	- -	Mark Stevenson FFAPR 278357 Glove Bag	P	<0.01	1.50	1.50	1.50	0.5	100	255	382.5	0.637	BDL	0.009	0.000	0.009
103	4	8/6/12 -	12:45 PM 5:00 PM	- -	Mark Walker FFAPR 279558 Glove Bag	P	<0.01	1.50	1.50	1.50	2.0	100	255	382.5	2.348	BDL	0.009	0.002	0.009
134	5	8/6/12 -	12:45 PM 5:00 PM	- -	Area : Inside Work Area Glove Bag	A		1.50	1.50	1.50	0.5	100	255	382.5	0.637	BDL	0.009	0.000	0.009
16	6	8/6/12 -	12:45 PM 5:00 PM	- -	Area : Outside Clean Room Glove Bag	A		1.50	1.50	1.50	0.5	100	255	382.5	0.637	BDL	0.009	0.000	0.009
485	7	8/6/12 -	12:45 PM 5:00 PM	- -	Area : Decon Neg Air Glove Bag	A		1.50	1.50	1.50	0.5	100	255	382.5	0.637	BDL	0.009	0.000	0.009

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

AM Technician:
Location: 412 W Pine St Stilwell, Ok
Contractor: ASI
Project Number: Stilwell Armoory

ANALYST PARTICIPATING IN LAB AIHA-151368
NC = Not Counted. Reasons: 1. Overload 2. Damaged Filter, 3. Pump Failure, 4. Missing Filter
Rotometer Number: 507
Calibration Date: 8/1/11

NIOSH 7400 METHOD 7/1/2010 REV 1

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

ENERCON
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Project: Stilwell Armory, Stilwell, OK

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	T Y P	Cass. Dia = 25 mm Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	PF = 10 Fiber Count	Field Count	Field of View = 0.00785 Tt. Time (Min.)	Volume (Liters)	Fiber Density	Pg. 1 Fibers Per CC	Det. Limit	OF LCL	1 UCL
-	8	8/7/12	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
-	9	8/7/12	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
250	10	8/7/12 -	7:15 AM 5:00 PM	- -	Ivan Colon FFAPR 400143 Glove Bag	P	<0.01	1.50	1.50	1.50	0.5	100	585	877.5	0.637	BDL	0.004	0.000	0.004
102	11	8/7/12 -	7:15 AM 5:00 PM	- -	Braulio Gonzalez FFAPR 400023 Glove Bag	P	<0.01	1.50	1.50	1.50	0.5	100	585	877.5	0.637	BDL	0.004	0.000	0.004
134	12	8/7/12 -	7:15 AM 5:00 PM	- -	Area : Inside Work Area Glove Bag	A		1.50	1.50	1.50	0.5	100	585	877.5	0.637	BDL	0.004	0.000	0.004
16	13	8/7/12 -	7:15 AM 5:00 PM	- -	Area : Outside Clean Room Glove Bag	A		1.50	1.50	1.50	0.5	100	585	877.5	0.637	BDL	0.004	0.000	0.004
465	14	8/7/12 -	7:15 AM 5:00 PM	- -	Area : Decon Neg Air Glove Bag	A		1.50	1.50	1.50	0.5	100	585	877.5	0.637	BDL	0.004	0.000	0.004
20	15	8/7/12 -	4:30 PM 5:00 PM	- -	Area : Loadout Path Glove Bag	A		1.50	1.50	1.50	0.5	100	90	45.0	0.637	BDL	0.076	0.000	0.076

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

AM Technician:
Location: 412 W Pine St Stilwell, Ok.
Contractor: ASI
Project Number: Stilwell Armoory

ANALYST PARTICIPATING IN LAB AIHA-151388
NC = Not Counted Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure, 4. Missing Filter
Rotometer Number: 507
Calibration Date: 8/1/11

NIOSH 7400 METHOD 7/1/2010 REV 1

Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116
Phone: 405-722-7692
Fax: 405-722-7694
www.enercon.com

ENERCON
Excellence—Every project. Every day.

Project: Stilwell Armory, Stilwell, OK

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	T Y P	Class. Dia = 25 mm Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	PF = 10 Fiber Count	Field Count	Field of View = 0.00785 Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Pg. 1 Fibers Per CC	Det. Limit	OF LCL	UCL
-	16	8/8/12 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
-	17	8/8/12 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
13	18	8/8/12 -	7:30 AM 10:05 AM	- -	Final Air Room 14 Glove Bag	A		10.00	10.00	10.00	0.5	100	155	1550.0	0.637	BDL	0.002	0.000	0.002
23	19	8/8/12 -	7:30 AM 10:05 AM	- -	Final Air Room 16 Glove Bag	A		10.00	10.00	10.00	0.5	100	155	1550.0	0.637	BDL	0.002	0.000	0.002
386	20	8/8/12 -	7:30 AM 10:05 AM	- -	Final Air Room 5 Glove Bag	A		10.00	10.00	10.00	0.5	100	155	1550.0	0.637	BDL	0.002	0.000	0.002
485	21	8/8/12 -	7:30 AM 10:05 AM	- -	Final Air Room 1 Mid South Glove Bag	A		8.40	8.40	8.40	0.5	100	155	1302.0	0.637	BDL	0.003	0.000	0.003
486	22	8/8/12 -	7:30 AM 10:05 AM	- -	Final Air Room 1 Mid West Glove Bag	A		8.70	8.70	8.70	0.5	100	155	1348.5	0.637	BDL	0.003	0.000	0.003

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

AM Technician:
Location: 412 W Pine St. Stilwell, Ok
Contractor: ASI
Project Number: Stilwell Armoury

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: 8/1/11

Subj: **Stilwell Armory**
Date: 10/3/2012 3:31:13 P.M. Central Daylight Time
From: Dustin.Davidson@deq.ok.gov
To: cityofstilwell@windstream.net, Abatement2@aol.com
Both samples cleared. That means we are done with the building.

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

Do not staple!

WASTE MANAGEMENT

Manifest NO: _____
(For Generator Use)

Quarry Landfill
13720 E 46th STREET NORTH
Tulsa, OK 74116
FAX: (918) 437-7305
Phone: (918) 438-7833

NESHAP ADMINISTRATOR
Air Quality Control (405) 702-4100
Oklahoma Dept of Environmental Quality
707 N. Robinson
Oklahoma City, OK 73101

Profile # NO- 16580

NON- HAZARDOUS SPECIAL WASTE MANIFEST

Generator: State of OK DCS for DEQ Job Name: Same National Guard Armory

Address: 2401 N. Lincoln Blvd Address: 412 W. Pine

Oklahoma City, OK 73105 Cushell, OK 74651

Phone: (405) 522-0050 Phone: _____

Proper Shipping Name: Asb. pipe wrap QUANTITY AND DESCRIPTION Quantity: 6 yds

DOT Hazard Class: N/A

Identification Number: N/A

Reportable Quantity: N/A

DRUM ☐ BAG ☐ CARTON ☐ TRUCK ☐ TONS ☐ CUBIC YARDS ☐ OTHER _____

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

Nancy Vacin Nancy Vacin _____

Generator Authorized Agent Signature Shipment Date

Transporter: Abatement Systems

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

Driver: Alan Stevenson Truck No: 15 Tag # /State: 224627 OK

[signature] 8-9-2013 [signature] 8-9-2013

Signature Shipment Date Driver Signature Delivery Date

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

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

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

Signed: [signature] Ticket: 137774

Date: 8/9/13

WASTE SHIPMENT RECORD

GENERATOR

1. Work Site Name & Mailing Address (Generator)	Owner's Name	Owner's Telephone
National Guard Armory (Stillwell) 2401 N. Lincoln Blvd, Oklahoma City, OK 73152	State of OK DCS, for DE&G	(405) 522-0050

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

3. Waste Disposal Site (WDS)	WDS's Telephone
Quarry Landfill 4041 N. 141st E. Ave Tulsa, OK 74116	(918) 437-7773

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

5. HM	Desc. Of Material	Hazard Class	ID Number	Packing Group #	6. Containers No.	Type	7. Total Quantity
	Ash. pipe ins.					Bag	6 yds

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

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

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

TRANSPORTER

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

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

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

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

12. Problems with Containment or Packaging	Rejected Yes/No

DISPOSAL

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

Print/Type Name & Title	Signature	Date
Quarry Landfill Scale Clerk		8/9/18

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

Lead waste (lead dust, lead-based paint chips, rags, etc. used in lead abatement) has been placed in sealed drum and stored securely awaiting pickup.

Install weather-strip on new doors

Install weather-strip

New double door unit

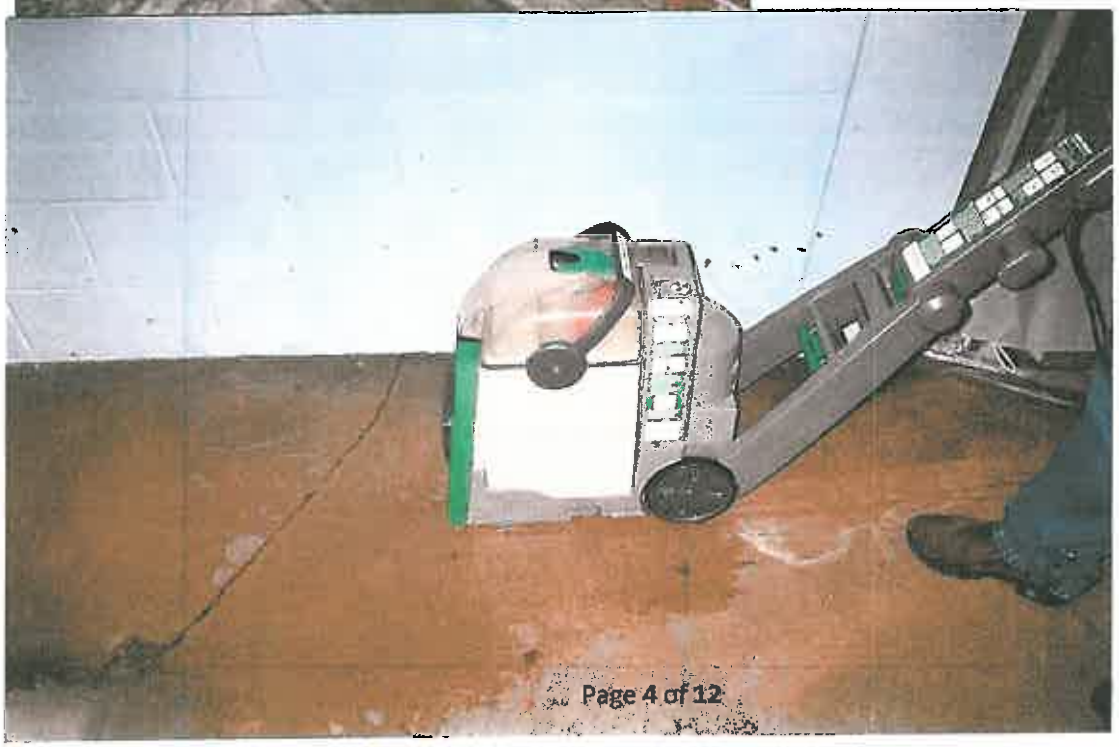
New door with lever

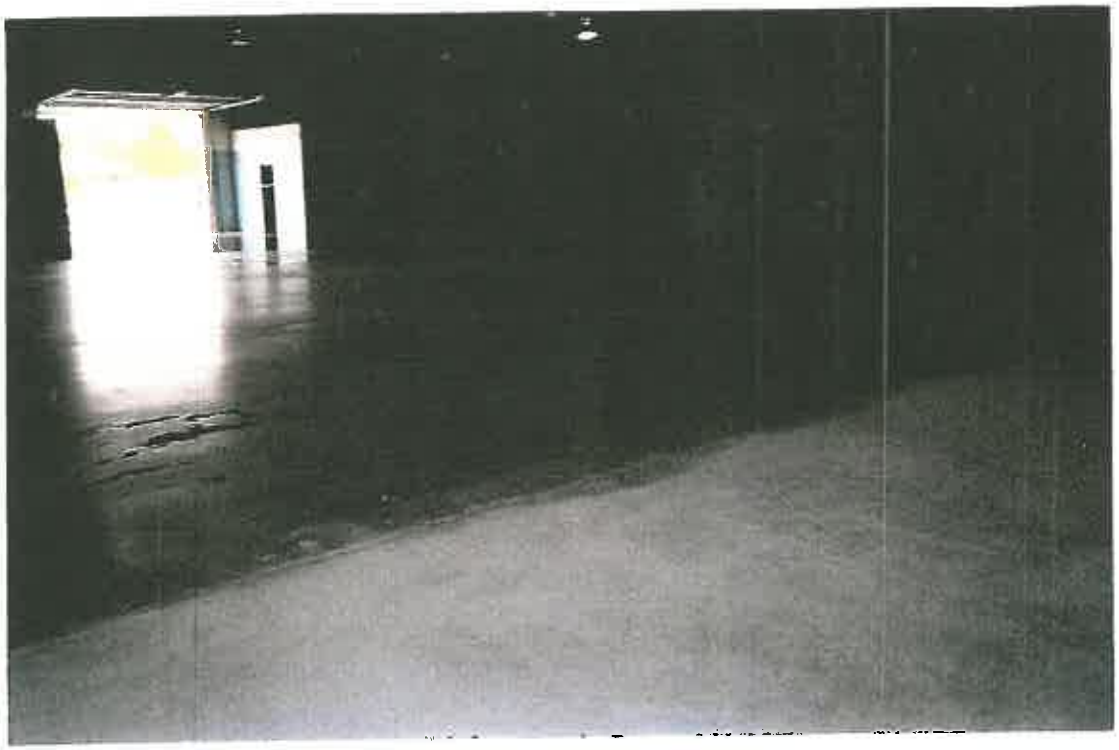
New door with handle and closer

New door with push plate

New door with butt hinges

Lead dust abatement





Floors after cleaning

Floors after cleaning

Exterior window lintels - post abatement

Exterior window lintels

Inside window lintels - post abatement

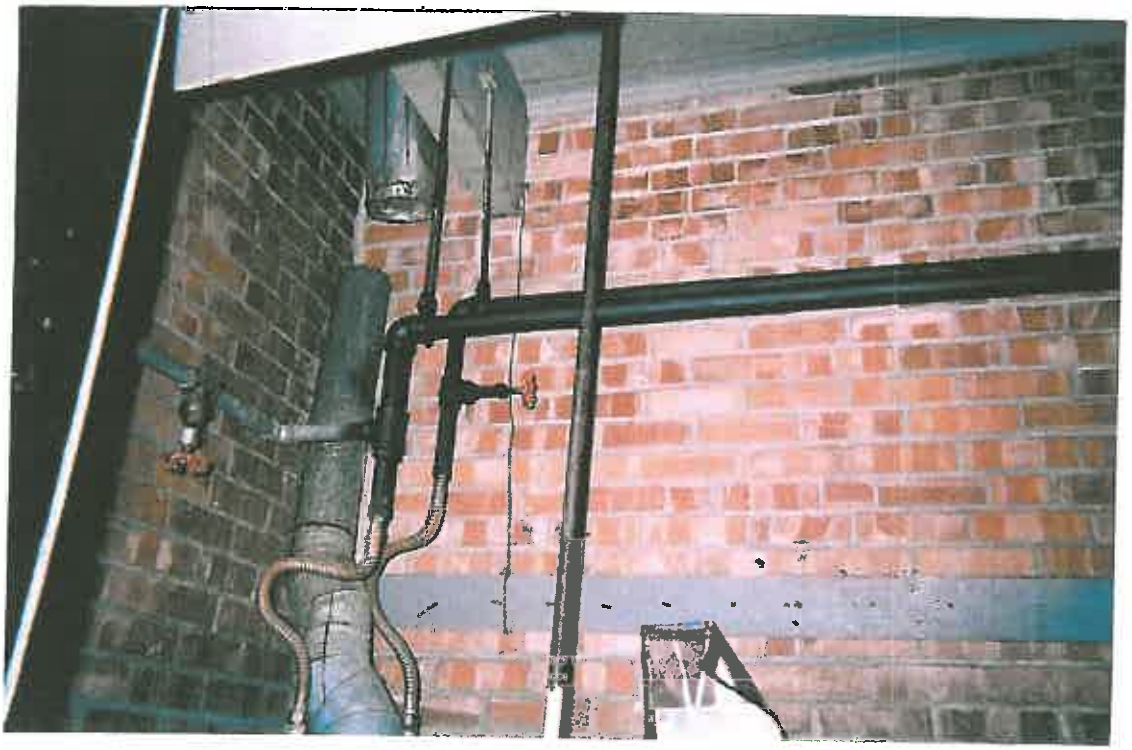
Glovebag asbestos abatement of piping

Abated piping

Glovebag abatement

Post abatement of piping

Piping post abatement



Piping post abatement

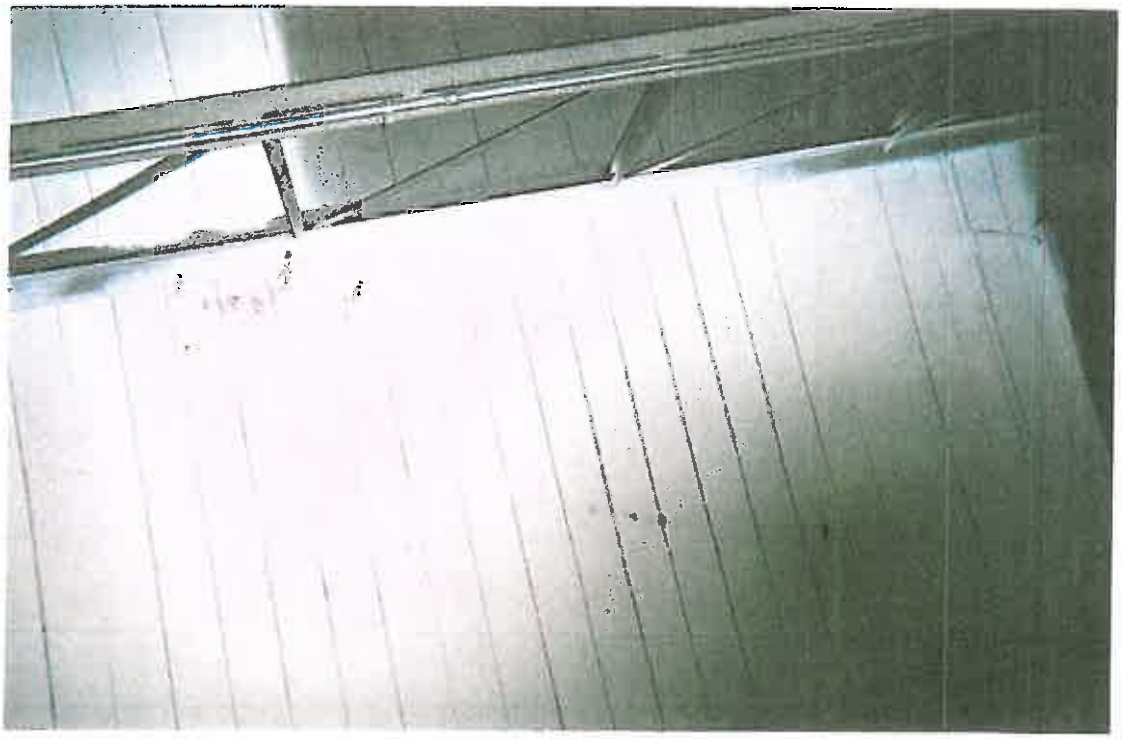
Abatement of floor tile and mastic

Abatement of floor tile and mastic

Post abatement of floor tile and mastic

Ceiling - loose/peeling paint prior to abatement

Ceiling - post removal of loose and peeling paint with Lead Block applied



CONFIRMATION SAMPLING

CONFIRMATION SAMPLING RESULTS

Stilwell Armory

The Department of Environmental Quality (DEQ) personnel sampled the Stilwell 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 September 24, 2012, DEQ personnel sampled the floors of the building, where lead dust was elevated before abatement was performed and areas where there was a potential for lead dust to be tracked from elevated areas, 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).**

- Two samples were above 40 µg/ft2.
    - Sample #18 – Result = 40.7 $\mu g/ft^2$
    - Sample #43 – Result = 56.2 $\mu g/ft^2$

On October 1, 2012, DEQ personnel sampled the floors of the building, where two previous samples for lead dust had failed, to confirm these surfaces were below the HUD standard of 40 $\mu g/ft^2$ for lead dust. Below is a summary of the results. Sample results are attached **(Attachment 2).**

- Both samples were below 40 $\mu g/ft^2$.

ATTACHMENT 1

SEPTEMBER 24, 2012 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 213045

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: 213045
Date Received: 09/25/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BA
Date of Report: 9/26/2012

AIHA ID: 101352

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

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

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	1	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
002	2	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
003	3	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
004	4	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
005	5	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
006	6	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
007	7	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
008	8	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
009	9	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
010	10	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
011	11	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
012	12	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
013	13	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
014	14	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
015	15	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
016	16	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
017	17	Wipe	Lead	39.6	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100

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

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

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

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: 213045
Date Received: 09/25/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BA
Date of Report: 9/26/2012

AIHA ID: 101352

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

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

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	18	Wipe	Lead	40.7	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
019	19	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
020	20	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
021	21	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
022	22	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
023	23	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
024	24	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
025	25	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
026	26	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
027	27	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
028	28	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
029	29	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
030	30	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
031	31	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
032	32	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
033	33	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
034	34	Wipe	Lead	25.1	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100

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

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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: 213045
Date Received: 09/25/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BA
Date of Report: 9/26/2012

AIHA ID: 101352

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

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

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
035	35	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
036	3	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
037	37	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
038	38	Wipe	Lead	30.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
039	39	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
040	40	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
041	41	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
042	42	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
043	43	Wipe	Lead	56.2	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
044	44	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
045	45	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
046	46	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
047	47	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
048	50	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
049	51	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
050	52	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100
051	53	Wipe	Lead	<16.0	16	ug/sq. Ft.	09/25/12 16:20	W NIOSH 9100

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

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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:	213045
Date Received:	09/25/12
Received By:	Sherrie Leftwich
Date Sampled:	
Time Sampled:	
Analyst:	BA
Date of Report:	9/26/2012

AIHA ID: 101352

Client:	State of Oklahoma DEQ Land Protection Attn: Dustin Davidson 707 N. Robinson Oklahoma City, OK 73102
Acct. No.:	B486
Project:	Stilwell Armory
Location:	Stilwell, OK
Project No.:	N/A

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

Authorized Signature: Bonnie Allen

Bonnie Allen, Analyst

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

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

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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: 10390
Test: Lead
Date: 9/25/2012
Matrix: Wipe
Lab Number: 213045
Approved By: Bonnie Allen
Date Approved: 9/25/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
FCV	4.5	5.1	5.5
CCV	4.5	5.1	5.5
ICV	0.9	1.1	1.1
RLVS	0.256	0.368	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W4	0.000	5.188	5.380	103.7	5.372	103.5	0.2
MS-W3	0.000	5.136	4.921	95.8	4.882	95.1	0.8
MS-W2	0.000	5.136	5.044	98.2	4.971	96.8	1.5
MS-W1	0.000	5.219	5.335	102.2	5.286	101.3	0.9

Authorized Signature: Bonnie Allen

Bonnie Allen, Analyst

LEAD CHAIN OF CUSTODY

QUANTEM LABORATORIES
www.QuanTEM.com

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

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Page 1 of 1

For Lab Use Only	
Lab No.	213045
Accept / Reject	Accept

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

Contact Information		Project Information	
Company: DEQ	Phone: 405-702-5115	Project Name: Stilwell Armory	
Contact: Dustin Davidson	Cell Phone: 405-317-4292	Project Location: Stilwell, OK	
Account #:	E-mail: dustin.davidson@deq.ok.gov	Project ID:	

Sampled By: Name: Dustin Davidson Date: 9/24/12

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Dustin Davidson	9/25/12 9:38		J. Mueller	9/25/12 9:40

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis: Pb			Units (☑ ONE box only): PPM	Wt %	mg / l	µg /ft²	µg / m³	mg / cm²
1-47	1	1-47			12"X12"	C	X					X		
48-51	2	50-53			12"X12"	C	X					X		
	3													
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	5													
	6													
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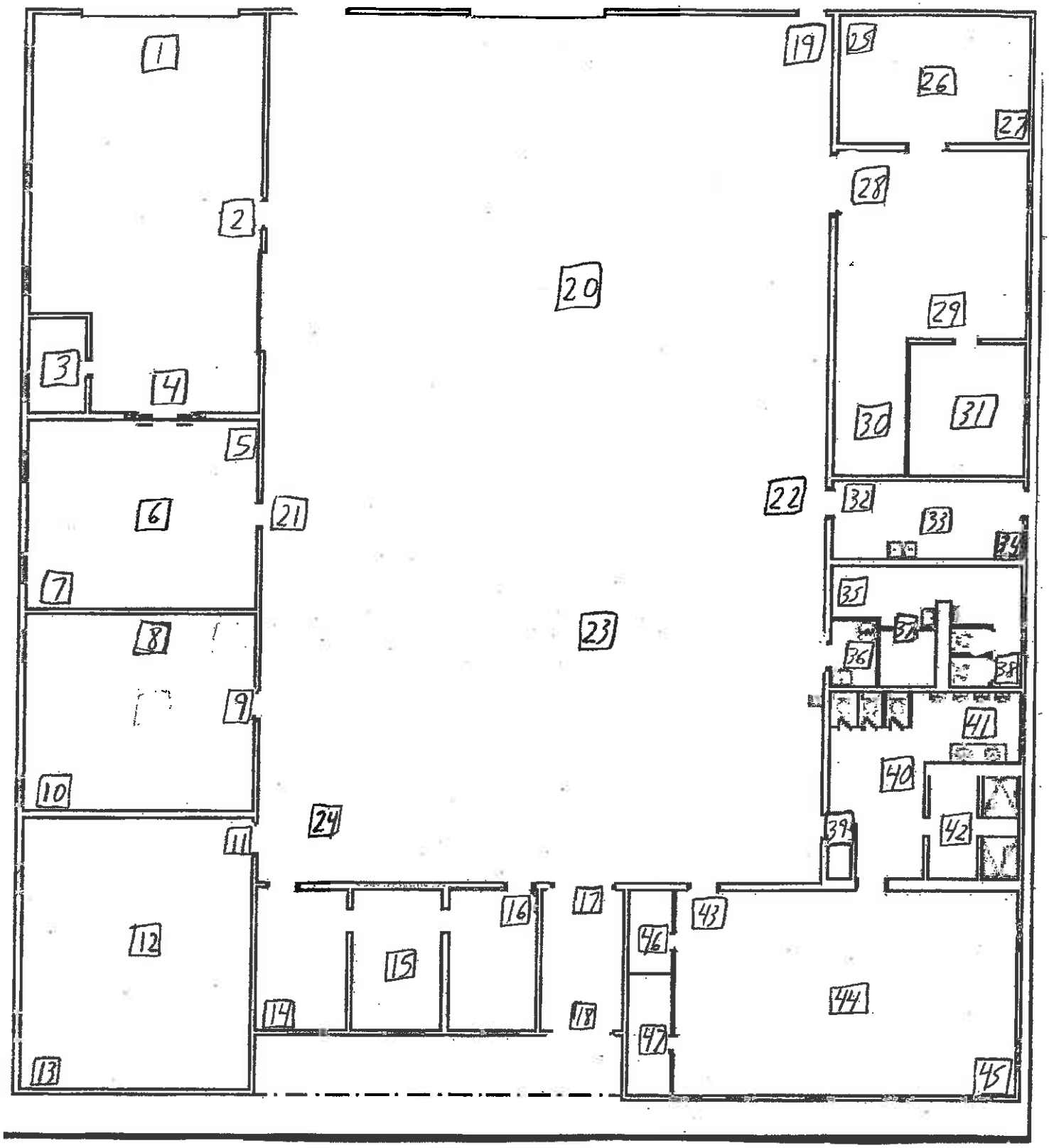
	9													
	10													
	11													
	12													

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"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ATTACHMENT 2

OCTOBER 1, 2012 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 213360

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

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

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

Respectfully,
QuanTEM Laboratories, LLC.

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 213360
Date Received: 10/02/12
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 10/3/2012

AIHA ID: 101352

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

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

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	18-B	Wipe	Lead	<16.0	16	ug/sq. Ft.	10/03/12 13:30	W NIOSH 9100
002	43-B	Wipe	Lead	<16.0	16	ug/sq. Ft.	10/03/12 13:30	W NIOSH 9100

Authorized Signature: _____
Benton Miller, Analyst

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

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

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

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

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

Supplemental Report
QAQC Results

QA ID: 10414 **Date:** 10/3/2012 **Lab Number:** 213360
Test: Lead **Matrix:** Wipe **Approved By:** Benton Miller
Date Approved: 10/3/2012

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5.2	5.5
FCV	4.5	5.2	5.5
ICV	0.9	1.1	1.1
RLVS	0.256	0.329	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W1	0.000	5.178	5.926	114.4	5.983	115.5	1.0

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

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For Lab Use Only
Lab No. 213360
Accept Reject

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

Contact Information		Project Information	
Company: DEQ	Phone: 405-702-5115	Project Name: Stilwell Armory	
Contact: Dustin Davidson	Cell Phone: 317-4292	Project Location: Stilwell, OK	
Account #:	E-mail: dustin.davidson@deq.OK.gov	Project ID:	

Sampled By: Name: Dustin Davidson Date: 10/1/12

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Dustin Davidson	10/2/12 1:23		J. Mueller	10/2/12 1:26

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	Sample Matrix (see matrix code box)	Analysis			Units (☑ ONE box only)					
						Pb			PPM	Wt %	mg / l	µg /ft²	µg / m³	mg / cm²
1	18-B			12" X 12"	C	X						X		
2	43-B			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
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"