Former National Guard Armory
Seminole, Oklahoma

Remediation Final Report

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

The Oklahoma Department of Environmental Quality (DEQ) is pleased to present the American Legion with the Final Remediation Report for the former Seminole 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 Seminole 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, floor tile mastic, and window caulk
- Asbestos abatement, including:
  - Removal and replacement of TSI and windows with asbestos containing caulk
  - Removal of floor tile and floor tile mastic

TARGETED BROWNFIELD ASSESSMENT

In December 2010, DEQ provided a Phase I Targeted Brownfield Assessment to the American Legion. A copy of this report is available at http://www.deq.state.ok.us/lpdnew/scapIndex.htm

LEAD REMEDIATION

DEQ and its contractors completed the following activities:

- Lead-based paint (LBP) inspection
- Lead dust wipe sampling
- LBP abatement, including:
  - Removal and replacement of doors and frames containing LBP
  - Removal of LBP containing wood surrounding pass through windows
  - Scraping and sealing walls, downspouts, door lintels, and overhead doors and frames containing LBP
- Lead dust abatement, including:
  - HEPA vacuuming and wet washing of floors in the building
- Proper disposal of associated waste

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

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

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

DEEDS AND LEGAL DOCUMENTS

7792

143

At Wewoka, Seminole County, Oklahoma
I hereby certify that this instrument was filed for record in my office.

NOV 10 2010

at 11:50 o'clock a m, and is duly recorded in Book 1130 on page 143
TAHASHA WILCOTS, County Clerk
By M. Hall

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 **Porter-Kelly Post No. 204, Inc., The American Legion, Department of Oklahoma, Seminole, Oklahoma,** Grantee, the following described real property and premises lying and situated in the Northwest Quarter (NW/4) of the Northwest Quarter (NW/4) of the Section Twenty-Seven (27), Township Nine (9) North, Range Six (6) East, Seminole County, State of Oklahoma, as follows:

> **Beginning at a point that is One Thousand Seven Hundred Ninety-six Feet (1,796') East and Thirty-three Feet (33') South of the Northwest (NW) corner of the Section Twenty-Seven (27), Township Nine (9) North, Range Six (6) East, thence Two Hundred Twenty-five Feet (225') South, thence Three Hundred Twenty-five Feet (325') East, thence Two Hundred Twenty-five Feet (225') North, thence Three Hundred Twenty-five Feet (325') West to point of beginning**

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, free, clear and discharged of and from all former grants, charges and other encumbrances of whatsoever nature except for any easements of record.

Signed and delivered this 3 day of November 2010.

STATE OF OKLAHOMA

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

*Attn: Amber Corbin
Oklahoma Military Dept.
3501 Military Circle
Oklahoma City, OK
73111

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

V

15

ACKNOWLEDGMENT

STATE OF OKLAHOMA)
) ss
COUNTY OF OKLAHOMA)

Before me, Jennifer Meyer in and for this state, on this 3 day of November, 2010, 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.

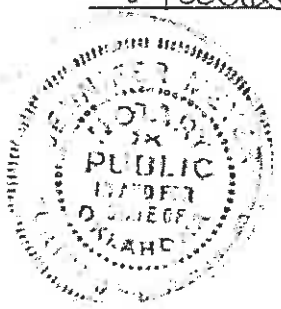
Jennifer Meyer
Notary Public

My Commission Expires:

1/23/12

My Commission Number:

04000485



This above and forgoing is a true and correct copy of the original on file in this office.

Johnna Wiles
County Clerk
Seminole County, OK

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

NOTICE OF REMEDIATION
FORMER SEMINOLE ARMORY
SEMINOLE, 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 January 27, 2011, indicated that there was asbestos, lead-based paint, and lead dust in the building.

AFFECTED PROPERTY: The Affected Property is the former Seminole Armory located at 600 East Strothers Avenue, Seminole, Seminole County, Oklahoma, 74868.

The legal description is as follows:

Beginning at a point that is One Thousand Seven Hundred Ninety-six Feet (1,796') East and Thirty-three Feet (33') South of the Northwest (NW) corner of the Section Twenty-Seven (27), Township Nine (9) North, Range Six (6) East, thence Two Hundred Twenty-five Feet (225') South, thence Three Hundred Twenty-five Feet (325') East, thence Two Hundred Twenty-five Feet (225') North, thence Three Hundred Twenty-five Feet (325') West to point of beginning.

REMEDY: Remediation activities (Remedy) at the Affected Property included abatement of asbestos, lead-based paint and dust. The remedy was completed on August 15, 2012.

Rebecca Marfurt
LPD/DEQ
707 N Robinson
OKC, OK 73101

17

I-2012-008997 Book 3513 Pg: 159
10/03/2012 1:31 pm Pg 0158-0160
Fee: $ 17.00 Doc: $ 0.00
Tahasha Wilcots - Seminole County
State of Oklahoma

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

Oklahoma Department of Environmental Quality
Central Records

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

Physical Address
707 N Robinson
Oklahoma City, OK 73102

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

DISCLAIMER

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

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

CONTINUING OPERATION, MAINTENANCE AND MONITORING

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

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

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

I-2012-008997 Book 3513 Pg: 160
10/03/2012 1:31 pm Pg 0158-0160
Fee: $ 17.00 Doc: $ 0.00
Tahasha Wilcots - Seminole County
State of Oklahoma

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

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

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

9-26-12
Date

ACKNOWLEDGMENT

STATE OF OKLAHOMA
COUNTY OF OKLAHOMA

Before me, a Notary Public, in and for said County and State, on this 26th day of Sept, 2012, personally appeared Steven A. Thompson to me known to be the identical person who executed the within and foregoing instrument and acknowledged to me that executed the same as free and voluntary act and deed for the uses and purposed therein set forth. In Testimony Whereof, I have hereunto set my hand and official seal the day and year above written.

My Commission expires:
8/7/14, 2014
#02011624

Notary Public

MAINTENANCE PLAN

MAINTENANCE PLAN
FORMER SEMINOLE ARMORY
SEMINOLE, OKLAHOMA

The Armory located at 600 East Strothers Avenue, Seminole, Oklahoma, was contaminated with materials that required remediation pursuant to State and Federal environmental laws and regulations. Please refer to Attachment 1 for land use restrictions. Sampling performed by DEQ contractors, conducted on October 19, 2010, indicated that there was asbestos, lead-based paint, and lead dust in the building. Remediation activities at the Affected Property included abatement of asbestos, lead-based paint, and lead dust. The remedy was completed on August 15, 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 overhead door frames of the armory building and the detached garage building 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 door lintels in the Drill Room and the interior overhead door of the armory building were scrapped and encapsulated with lead-based paint encapsulant. These surfaces need to be re-encapsulated if lead-based paint encapsulant shows signs of deterioration, damage, or flaking.
3. All wood roof decking of the armory building contains lead-based paint. These surfaces need to be encapsulated with lead-based paint encapsulant if lead-based paint shows signs of deterioration, damage, or flaking.
4. All down spouts and the north interior wall between the overhead doors of the detached garage building 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.

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 within one twenty four (24) hour period.

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

Excellence—Every project. Every day.

ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY
600 EAST STROTHERS AVENUE
SEMINOLE, OKLAHOMA

Enercon Project Number – ENMISC2111

January 27, 2011

Prepared for:

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

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

Inspected By:

Emmett W. Muenker
AHERA Asbestos Management Planner OK-MP130435

Reviewed By:

Richard D. Belcher
AHERA Asbestos Inspector OK-159310

Table of Contents

ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY
600 EAST STROTHERS AVENUE
SEMINOLE, OKLAHOMA

Executive Summary

An asbestos survey of the National Guard Armory, 600 East Strothers Avenue, Seminole, Oklahoma was conducted on October 19, 2010. The armory consisted of a main building (Building 1) with 19 rooms and a secondary building (Building 2) with 2 rooms. During the survey, a total of 25 bulk samples were collected from 10 homogeneous areas. A summary of the asbestos containing building materials (ACBMs) is provided below.

Summary of Asbestos Containing Building Materials in the Armory

MATERIAL CATEGORY	MATERIAL DESCRIPTION	TOTAL APPROXIMATE AMOUNT
FRIABLE	Black Backing-Brown Pipe Insulation White Insulation-Brown Pipe Insulation White/Brown Pipe Insulation	510 LF
CATEGORY I NON-FRIABLE	Gray Floor Tiles and Black Adhesive	450 SF
CATEGORY II NON-FRIABLE	Cream Caulk (Building 1 High-bay windows in Drill Room only) Gray Caulk (Building 2)	676 LF (Building 1) 616 LF (Building 2)

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

Recommended actions for planned renovation:

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

Recommended actions prior to planned demolition:

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

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

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

ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY
600 EAST STROTHERS AVENUE
SEMINOLE, OKLAHOMA

1.0 INTRODUCTION

An asbestos survey of the National Guard Armory, 600 East Strothers Avenue, Seminole, Oklahoma was conducted on October 19, 2010. The armory consisted of a main building (Building 1) with 19 rooms and a secondary building (Building 2) with 2 rooms. During the survey, a total of 25 bulk samples were collected from 10 homogeneous areas. The inspection was performed by Emmett W. Muenker, an AHERA Asbestos Inspector/Management Planner OK-MP130435. Appendix A contains a copy of his Inspector/Management Planner 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.

3.0 SURVEY RESULTS

A total of twenty-five (25) bulk samples were collected in ten (10) homogeneous areas during the survey. Appendix B contains site layouts with sample and asbestos locations. Appendix C contains the laboratory reports of analyses/chains of custody.

A summary of asbestos containing building materials, including categorization and quantities, is presented in Table 1. Table 2 provides a summary of the bulk material samples & laboratory analytical results for the National Guard Armory.

Table 1
Summary of Asbestos Containing Building Materials

MATERIAL CATEGORY	MATERIAL DESCRIPTION	TOTAL APPROXIMATE AMOUNT
FRIABLE	Line and Fitting Insulation	510 LF
CATEGORY I NON-FRIABLE	Gray Floor Tiles and Black Adhesive	450 SF
CATEGORY II NON-FRIABLE	Cream Caulk (Drill Room High Bay Windows Only) Gray Caulk	676 LF (Building 1) 616 LF (Building 2)

SF=Square Feet; LF=Linear Feet

Table 2
Bulk Material Samples & Laboratory Analytical Results

SAMPLE ID	DESCRIPTION& LOCATION	APPROX. AMOUNT	ASBESTOS TYPE/ PERCENT
SEM-01-01,01A,02,02A,03	**Pipe Insulation-Room 19 and Rooms15-18**	**510 LF**	**5%-20% Chrysotile**
SEM-02-01, 02	White Floor Tile and Yellow Mastic, Room 8	NQ	None Detected
SEM-03-01, 02	White Floor Tile and Yellow Mastic, Room 15	NQ	None Detected
SEM-04-01, 02	**Gray Floor Tile and Black Mastic, Rooms 10-11 and 13**	**450 SF**	**5%-8% Chrysotile**
SEM-05-01,02	2' x 4' White Ceiling Tile, Rooms 2 and 3	NQ	None Detected
SEM-06-01,02,03	White 2' x 2' Ceiling Tile, Rooms 10, 12, and 17	NQ	None Detected
SEM-07-01,02	White 2' x 4' Ceiling Tile, Rooms 14 and 15	NQ	None Detected
SEM-08-01,02	White Joint Compound, Rooms 13 and 17	NQ	None Detected
SEM-09-01,02,03	White Texture, Room 9	NQ	None Detected
SEM-10-01,02	**Cream Caulk, High Bay Windows-Room 19 Only**	**676 LF**	**3%-4% Chrysotile**
SE2-01-01,02	**Gray Caulk, Windows in Building 2**	**616 LF**	**3% Chrysotile**

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

4.0 CONCLUSIONS & RECOMMENDATIONS

The asbestos-containing building materials found in the National Guard Armory consisted of both friable and non-friable materials.

Friable Asbestos-containing Materials:

- Piping Insulation (Lines, Risers, and Fittings): Friable insulation was present on piping systems in Rooms 15-19 in Building 1. The friable fitting insulation was observed to be in good condition. The estimated quantities and approximate locations of these materials are shown on Figure 1 of Appendix B and in Table 2.

Non-friable Asbestos-containing Materials:

- Floor Tiles and Mastic: There are 1'x1' gray floor tiles with black mastic that contain asbestos in Rooms 10, 11 and 13 in Building 1. There is a double layer of floor tiles located beneath carpeting in these rooms. The location of these materials is shown on Figure 1 in Appendix B.

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

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

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

3. Continued operation without abatement of 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.

Recommendations for Non-friable Asbestos-containing Materials: There was a mixture of floor tiles and mastic in the building, including those that contain asbestos and those that do not. These are not regulated unless they are disturbed in a manner that renders them friable; however, removal must be done by workers who are properly trained to remove these materials. The following actions are recommended for addressing non-friable materials:

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

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

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

APPENDIX A

Oklahoma Department of Labor

FEE: $25.00

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.

Lloyd L Fields

LLOYD L. FIELDS
Commissioner of Labor

September 07, 2010
Date of Issuance

EXPIRES: September 01, 2011

Oklahoma Department of Labor

FEE: $0.00

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.

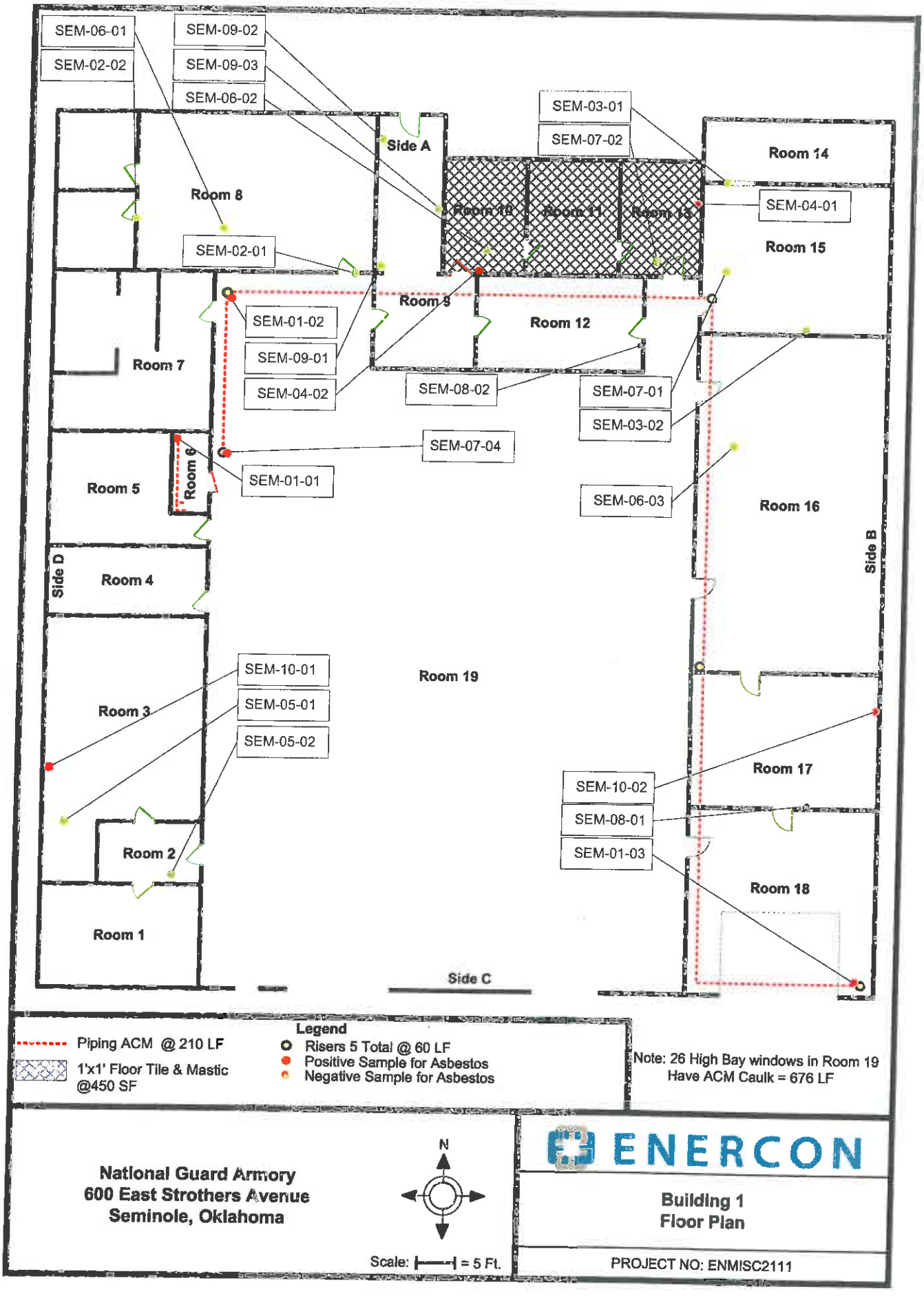
Lloyd L Fields

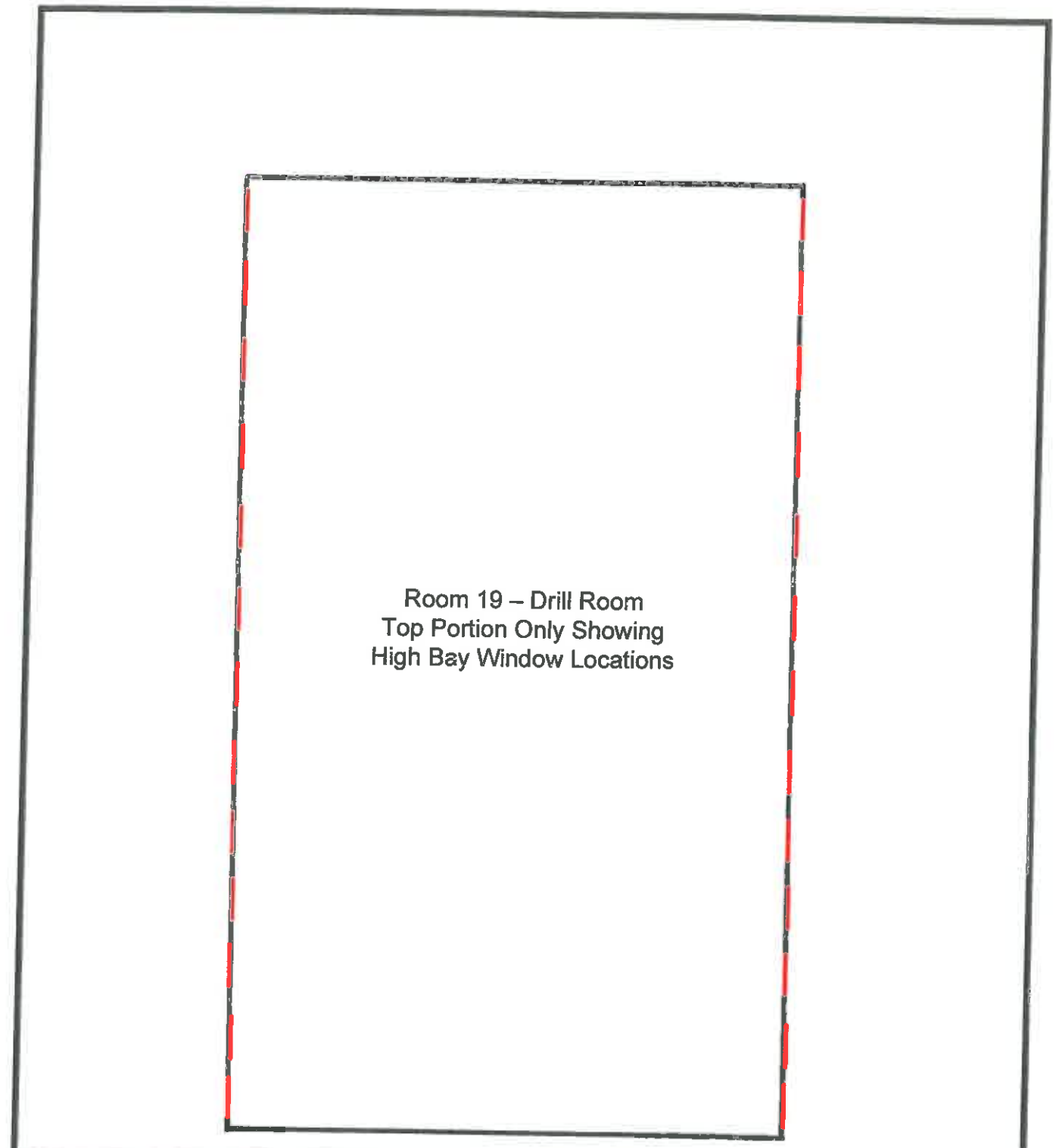
LLOYD L. FIELDS
Commissioner of Labor

March 24, 2010
Date of Issuance

EXPIRES: March 03, 2011

APPENDIX B


SEM-06-01
SEM-02-02
SEM-09-02
SEM-09-03
SEM-06-02
SEM-03-01
SEM-07-02
Side A
Room 14
Room 8
Room 10
Room 11
Room 13
SEM-04-01
Room 15
SEM-02-01
Room 9
Room 12
SEM-01-02
SEM-09-01
SEM-04-02
Room 7
SEM-08-02
SEM-07-01
SEM-03-02
SEM-07-04
Room 6
Room 5
SEM-01-01
SEM-06-03
Room 16
Side B
Side D
Room 4
SEM-10-01
SEM-05-01
SEM-05-02
Room 3
Room 19
Room 17
SEM-10-02
SEM-08-01
SEM-01-03
Room 2
Room 18
Room 1
Side C
Legend
Piping ACM @ 210 LF
1'x1' Floor Tile & Mastic @450 SF
Risers 5 Total @ 60 LF
Positive Sample for Asbestos
Negative Sample for Asbestos
Note: 26 High Bay windows in Room 19 Have ACM Caulk = 676 LF
National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma
N
Scale: = 5 Ft.
ENERCON
Building 1
Floor Plan
PROJECT NO: ENMISC2111



Legend

Windows with Asbestos Caulk 26 @ 26 LF = 676 LF

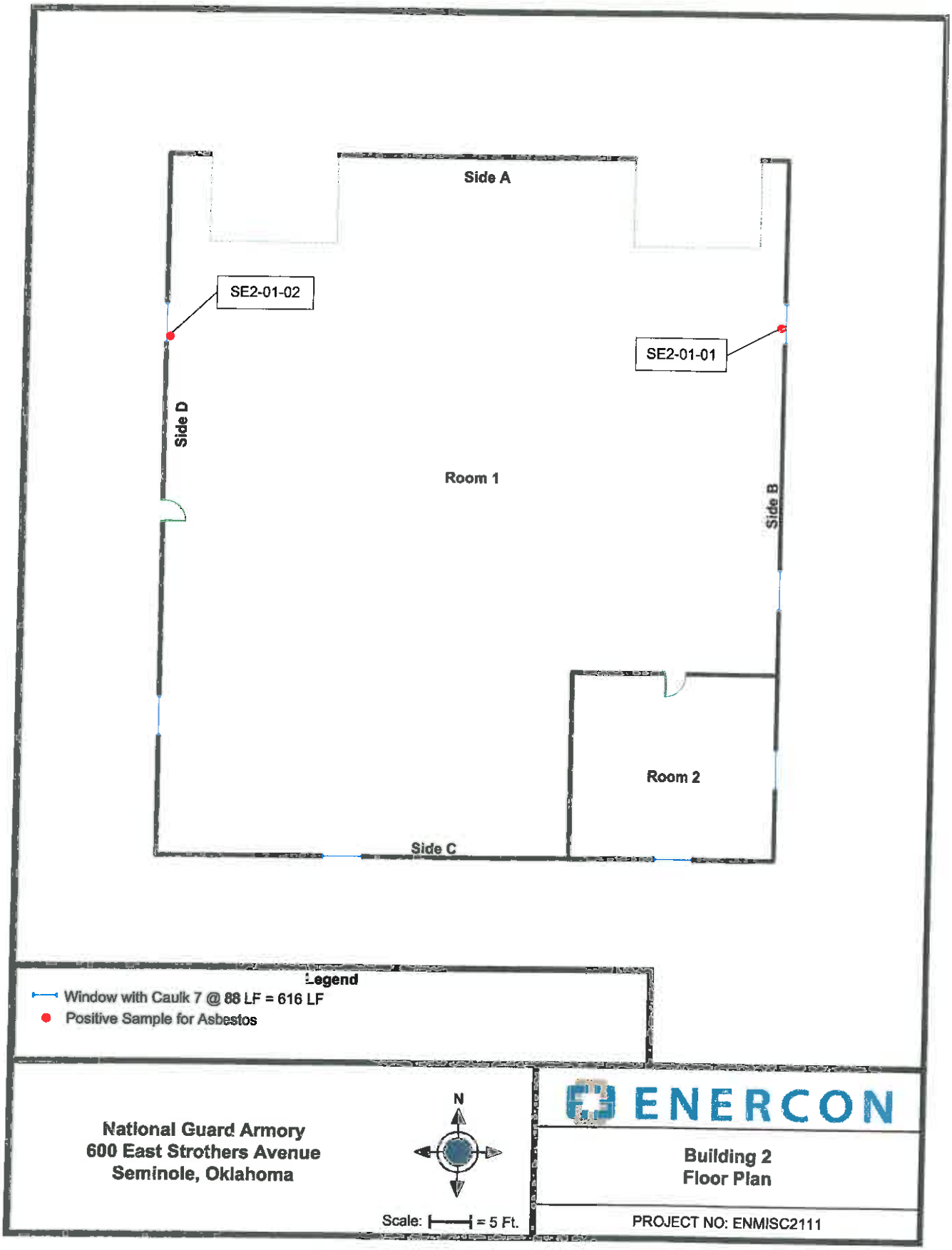
National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma

N

ENERCON

Building 1
Room 19 – High Bay Windows

PROJECT NO: ENMISC2111


Side A
SE2-01-02
SE2-01-01
Side D
Room 1
Side B
Room 2
Side C
Legend
Window with Caulk 7 @ 88 LF = 616 LF
Positive Sample for Asbestos
National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma
N
Scale: = 5 Ft.
ENERCON
Building 2
Floor Plan
PROJECT NO: ENMISC2111

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. 188438
Account Number: A845
Date Received: 10/20/2010
Received By: Sherrie Leftwich
Date Analyzed: 10/28/2010
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

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

Project: Seminole Armory
Project Location: Seminole, OK
Project Number: ASB-SEM

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
001	SEM-01-01	Layered	Brown Pipe Insulation	Asbestos Not Present	Cellulose 35	Inert
001a		Layered	Black Backing	Asbestos Present Chrysotile 20	Cellulose <1	Tar
002	SEM-01-02	Layered	Brown Pipe Insulation	Asbestos Not Present	Cellulose 35	Inert
002a		Layered	White Insulation	Asbestos Present Chrysotile 5	Cellulose 10	Inert
003	SEM-01-03	Homogeneous	White/Brown Pipe Insulation	Asbestos Present Chrysotile 10	Cellulose 10	Inert
004	SEM-02-01	Layered	White Floor Tile	Asbestos Not Present	Cellulose <1	Vinyl CaCO3
004a		Layered	Yellow Mastic	Asbestos Not Present	Cellulose 2	Glue

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

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 188438
Account Number: A845
Date Received: 10/20/2010
Received By: Sherrie Leftwich
Date Analyzed: 10/28/2010
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

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

Project: Seminole Armory
Project Location: Seminole, OK
Project Number: ASB-SEM

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
005	SEM-02-02	Layered	White Floor Tile	Asbestos Not Present	Cellulose	<1	Vinyl CaCO3
005a		Layered	Yellow Mastic	Asbestos Not Present	Cellulose	<1	Glue
006	SEM-03-01	Layered	White Floor Tile	Asbestos Not Present	Cellulose	<1	Vinyl CaCO3
006a		Layered	Yellow Mastic	Asbestos Not Present	Cellulose	<1	Glue
007	SEM-03-02	Layered	Yellow Mastic	Asbestos Not Present	Cellulose	2	Glue
007a		Layered	White Floor Tile	Asbestos Not Present	Cellulose	<1	Vinyl CaCO3

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

QUANTEM® LABORATORIES

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 188438
Account Number: A845
Date Received: 10/20/2010
Received By: Sherrie Leftwich
Date Analyzed: 10/28/2010
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

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

Project: Seminole Armory
Project Location: Seminole, OK
Project Number: ASB-SEM

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
007b		Layered	Yellow Mastic	Asbestos Not Present	Cellulose <1	Glue
008	SEM-04-01	Layered	Black Mastic	Asbestos Present Chrysotile 5	Cellulose <1	Tar
008a		Layered	Gray Floor Tile	Asbestos Present Chrysotile 8	Cellulose <1	Vinyl CaCO3
008b		Layered	Black Mastic	Asbestos Present Chrysotile 7	NA	Tar
008c		Layered	Green Floor Tile	Asbestos Not Present	Cellulose <1	Vinyl
008d		Layered	Yellow Mastic	Asbestos Not Present	Cellulose <1	Glue
009	SEM-04-02	Layered	White Floor Tile	Asbestos Not Present	Cellulose <1	Vinyl CaCO3

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

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 188438
Account Number: A845
Date Received: 10/20/2010
Received By: Sherrie Leftwich
Date Analyzed: 10/28/2010
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

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

Project: Seminole Armory
Project Location: Seminole, OK
Project Number: ASB-SEM

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
009a		Layered	Yellow Mastic	Asbestos Not Present	Cellulose 2	Glue
009b		Layered	Black Mastic	Asbestos Present Chrysotile 6	NA	Tar
009c		Layered	Green Floor Tile	Asbestos Not Present	Cellulose <1	Vinyl
009d		Layered	Yellow Mastic	Asbestos Not Present	Cellulose <1	Glue
010	SEM-05-01	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose 25 Glass Fiber 30	Perlite Binder
011	SEM-05-02	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose 30 Glass Fiber 30	Perlite 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. 188438
Account Number: A845
Date Received: 10/20/2010
Received By: Sherrie Leftwich
Date Analyzed: 10/28/2010
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

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

Project: Seminole Armory
Project Location: Seminole, OK
Project Number: ASB-SEM

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
012	SEM-06-01	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose 25 Glass Fiber 30	Perlite Binder
013	SEM-06-02	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose 25 Glass Fiber 30	Perlite Binder
014	SEM-06-03	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose 25 Glass Fiber 35	Perlite Binder
015	SEM-07-01	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose 30 Glass Fiber 30	Perlite Binder
016	SEM-07-02*	Homogeneous	White/Brown Pipe Insulation	Asbestos Present Chrysotile 15	Cellulose 10	Inert
017	SEM-08-01	Homogeneous	White Joint Compound	Asbestos Not Present	Cellulose <1	$CaCO_3$

* Sample number mis-labeled - should have been SEM-01-04.

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

QUANTEM® LABORATORIES

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 188438
Account Number: A845
Date Received: 10/20/2010
Received By: Sherrie Leftwich
Date Analyzed: 10/28/2010
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

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

Project: Seminole Armory
Project Location: Seminole, OK
Project Number: ASB-SEM

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
018	SEM-08-02	Homogeneous	White Joint Compound	Asbestos Not Present	Cellulose 2	CaCO3 Paint
019	SEM-09-01	Homogeneous	White Texture	Asbestos Not Present	Cellulose <1	CaCO3 Paint
020	SEM-09-02	Homogeneous	White Texture	Asbestos Not Present	Cellulose 2	CaCO3 Paint
021	SEM-09-03	Homogeneous	White Texture	Asbestos Not Present	Cellulose <1	CaCO3
022	SEM-10-01	Homogeneous	Cream Caulk	Asbestos Present Chrysotile 4	NA	CaCO3
023	SEM-10-2	Homogeneous	Cream Caulk	Asbestos Present Chrysotile 3	NA	CaCO3
024	SE2-01-01	Homogeneous	Gray Caulk	Asbestos Present Chrysotile 3	NA	CaCO3

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. 188438
Account Number: A845
Date Received: 10/20/2010
Received By: Sherrie Leftwich
Date Analyzed: 10/28/2010
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

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

Project: Seminole Armory
Project Location: Seminole, OK
Project Number: ASB-SEM

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
025	SE2-01-02	Layered	Gray Caulk	Asbestos Present Chrysotile 3	NA	CaCO3

Stacey Holder, Analyst

10/28/2010
Date of Report

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

Asbestos Chain-of-Custody

QUANTEM LABORATORIES

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Page 1 of 2

This Box for Lab Use Only
Lab No. 188438
Accept Reject

Company Name: ENERCON SERVICES INC Acct.#: 4845 Project Name: SEMINOLE ARMORY

Project Location: SEMINOLE OK Project Number: KSB-SEM

	Sample Number	To Be Analyzed	Color / Description	Volume / Area (if applicable)	Comments
1	SEM-01-01	X	PIPE INSULATION		RM 19
2	01-02				RM 19
3	01-03				RM 18
4	02-01		12X12 WHITE FLOOR TILE		RM 8
5	02-02				RM 9
6	03-01		12X12 WHITE FLOOR TILE		RM 15
7	03-02				RM 15
8	04-01		ORAN / GREEN FLR TILE		RM 12
9	04-02		WHITE/GREEN FLR TILE		RM 10
10	05-01		2X4 WHITE CEILING TILE		RM 3
11	05-02				RM 2
12	06-01		2X2 WHITE CEILING TILE		RM 10
13	06-02				RM 12
14	06-03				RM 17
15	07-01		2X4 WHITE CEILING TILE		RM 15
16	07-02				RM 14
17	08-01		DRYWALL JOINT COMPD		RM 17
18	08-02				RM 13
19	09-01		WALL TEXTURE		RM 9
20	09-02				RM 9

LEGAL DOCUMENT
Please Print Legibly

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

PCM	
	NIOSH 7400
	Other

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

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

CONTACT INFORMATION

Name: BM Muerka

Phone:

Report Results VIA (CHOOSE ONE).

	FAX:
X	QuanTEM WebSite
	E-Mail:

Relinquished By	Date/Time	VIA	Received By	Date/Time	Date Sampled	Sampled By:
BM Muerka	10/28/10 0825	Hand	[illegible]	8257 10-29-10	10/19/10	BM Muerka

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

Revision: May 2003

QUANTEM LABORATORIES

Asbestos Chain-of-Custody

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Lab No. 188438
Accept Reject

Company Name: _____ Acct.#: B Project Name: _____

Project Location: _____ Project Number: _____

	Sample Number	To Be Analyzed	Color / Description	Volume / Area (if applicable)	Comments
21	SEM-09-03	X	WIN TEXTURE		RMG
22	" 10-01	"	WINDOW CAULK		RMGW
23	" 10-02	"	"		RMGW
24	SE2-01-01	"	WINDOW CAULK		RM19 E
25	SE2-01-02	"	"		BLDG 2

LEGAL DOCUMENT
Please Print Legibly

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

PCM	
	NIOSH 7400
	Other

TEM	
	Air - AHERA
	Air - NIOSH 7402
	Bulk - Qualitative [Yes / No] - EPA 600/R-93/116
	Bulk - Quantitative [weight %] - Chatfield
	Dust - Qualitative [Yes / No]
	Dust - Quantitative [fibers/sq.cm] - ASTM D6758
	Drinking Water - EPA 100.0
	Waste Water - EPA 600/4-83-043
	Other

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

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

Relinquished By	Date/Time	VIA	Received By	Date/Time	Date Sampled	Sampled By:
Bill Meador	10/20/10	Fed Ex	[illegible] 825	10-20-10	10/19/10	Bill Meador
Relinquished By	Date/Time		Received By	Date/Time		

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
600 EAST STROTHERS AVENUE
SEMINOLE, OKLAHOMA 74868

ENERCON Project Number ENMISC2111
January 27, 2011

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

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

Prepared By :

Marshall L. Branscum
Environmental Scientist
LBP Inspector, OKINSR13415

Reviewed By :

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

TABLE OF CONTENTS

APPENDICES

EXECUTIVE SUMMARY

Enercon Services, Inc. (ENERCON) has completed a Survey and Assessment for Lead in Paint and Settled Dust (Survey) at the Seminole National Guard Armory located at 600 East Strothers Avenue, Seminole, Oklahoma on October 19 and November 13, 2010. The inspection was conducted by Mr. Justin Scott, Mr. Marshall Branscum, and Mr. Bill Muenker, all of ENERCON.

The Survey and Assessment included non-destructive sampling of representative paint surfaces in the two buildings located on the site using X-ray Fluorescence (XRF) Analyzers and dust wipe samples. Two site visits were necessary due to several samples within the inconclusive range of the analyzer used during the initial sampling. 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:

- Main Building: Nineteen interior door frames, six metal lintels above these doors and the underside of the roof deck above the rooms on the east and west sides of the main building had LBP.
- Ancillary Building: LBP was present on a portion of the north interior wall.
- No LBP was found on the exterior of either building.

The results of wipe samples collected from the floors revealed:

- Main Building: Lead contamination was present in six rooms.
- Ancillary Building: Lead contamination was present.

1.0 INTRODUCTION

Enercon Services, Inc. (ENERCON) has completed a Survey and Assessment for Lead in Paint and Settled Dust (Survey) at the Seminole National Guard Armory located at 600 East Strothers Avenue, Seminole, Oklahoma. The inspection was conducted on October 19 and November 13, 2010. The inspection was conducted by Mr. Justin Scott, Mr. Marshall Branscum, and Mr. Bill Muenker, all of ENERCON.

The Seminole National Guard Armory (Armory) was constructed in 1953 and consisted of two buildings constructed on concrete slab-on-grade foundations with flat roofs covered with tar and gravel. The walls of both buildings are constructed of brick and concrete block. The main building, designated as Building 1, located on the western portion of the property, contained a large central drill room with 18 additional rooms located on the west, north, and east sides. The ancillary building, designated as Building 2, located on the eastern portion of the property, contained a single large room with a smaller wood-framed room located in the southeast corner. Layouts of Buildings 1 and 2 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

Areas included in the scope of work were described and visually confirmed by Mr. Dustin Davidson of ODEQ. Visual inspection was performed in all rooms and of the exteriors of both buildings. The purpose of the visual inspection was to identify similar painted surfaces so that representative XRF readings could be taken. These surfaces were determined by differentiating them by color, component, room, and building. Readings of painted surfaces were then obtained.

The survey included visual observations, photographic documentation (Appendix B), dust wipe samples (Appendix C), and x-ray fluorescence (XRF) measurements of suspect Lead-Based Paint (LBP) (Appendix D). XRF readings were obtained for each building component type in each room and on each side of the building exterior for both buildings. One dust wipe sample was obtained in each room in Building 1 except for the drill room, where three samples were obtained. Two dust wipe samples were collected in Building 2.

The criteria 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).

The criteria used for dust wipe samples based upon sampling according the thte 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 ($\mu g/ft^2$).

XRF samples were collected using the following protocols:

- The presence of LBP was determined on a room by room basis using an Innov-X Model LBP4000, with an X-ray tube source. This instrument was calibrated prior to beginning the survey. The XRF instrument was used to determine the presence or absence of lead. This instrument has an inconclusive range of 0.6 to 1.1 mg/cm^2. 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 Innov-X LBP4000 is provided as an attachment to 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. Some corrections of the downloaded data were made due to obvious keypad entry errors.
- Additionally, some re-sampling was conducted at the Seminole Armory on November 13, 2010. The additional re-sampling included locations from the previous inspection to determine the presence or absence of LBP for specific sampling locations. The re-sampling was conducted because the Innov-X Alpha instrument has an inconclusive range of 0.6 to 1.1 mg/cm^2 for LBP. Areas that were re-sampled fell into this range. During the re-sampling, the presence of LBP was then determined using a Niton Model XLp-703A XRF (X-Ray Fluorescence) Analyzer, Serial Number 10713. The Niton Model used for re-sampling does not have an inconclusive range. 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. 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.
- With the exception of the brown window sills on the east side of Building 1 and the white painted walls in Room 13 of Building 1 that were originally in the inconclusive range, all locations that were re-sampled were determined to be LBP

as previously determined. Three additional sample readings were taken on the exterior of Building 1 at the time of the re-sampling. Two of the samples were taken from Side B and one sample was taken from Side C. The additional three samples were not LBP.

Each room in Buildings 1 and 2 was numbered on a floor plan that is provided in Appendix B of this report. Room 8 included the two small offices west of the large office labeled as Room 8. The street address side of each building was categorized as "Side A," with the remaining sides categorized as sides 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 will return a positive reading even through layers of non-lead paint that have been applied, if a layer of LBP exists beneath the surface.

The condition of painted surfaces sampled was determined during the Survey. The general condition and location of identified components with LBP are noted on the spreadsheets in Appendix D of this report.

3.0 RESULTS

3.1 Lead-Based Paint

A total of 124 samples were collected during the initial site visit and an additional 14 samples were collected during the second site visit. The floor plans contained in Appendix A indicate the locations of the painted components with LBP. Tables 1, 2, and 3 provide a summary of building components with LBP as identified by XRF sampling and their locations and sizes in Building 1. Representative photographs were taken of components where positive readings (1.0 mg/cm^2 or greater) were obtained and are provided in Appendix B.

No LBP was present on doors, frames or windows in Building 2.

Table 1
Building 1 - Lead-Based Paint Locations
Doors and Door Frames

Identified Lead-Based Paint (Color/Description)	Lead Content (mg/cm^2)	Location	Size of Door/Frame
Yellow/Door Frame	5.0 (2.5)*	Room 2, Side A; Room 3, Side C	32" x 80"
Yellow/Door Frame	5.0	Room 3, Side C	32" x 80"
Brown/Door Frame	1.96 (4.1)*	Room 4, Side B	36" x 84"
Brown/Door Frame	2.23	Room 5, Side B	36" x 84"
Brown/Door Frame	2.27	Room 6, Side B	36" x 84"
Brown/Door Frame	1.99	Room 7, Side B	36" x 84"
Brown/Door Frame	1.52	Room 8, Side C	36" x 84"
Yellow/Door Frames (2)	3.73	Room 8, Side D	32" x 80"
Brown/Door Frames	1.99 & 2.01	Room 9, Side A & Side B	36" x 84" & 36" x 80"
Brown/Door Frame	1.82	Room 12, Side B	36" x 80"
Brown/Door Frame	3.29	Room 13, Side C	36" x 84"
Brown/Door Frame	3.19	Room 15, Side D	36" x 84"
Brown/Door Frames (2)	4.16 & 1.39	Room 16, Side D	36" x 84"
Yellow/Door Frame	2.83	Room 17, Side C	36" x 80"
White/Overhead Door	1.38	Room 17, Side D	N/A
Yellow/Door Frame	2.11	Room 18, Side A	36" x 80"
Blue/Door Frame	3.83	Room 18, Side D	36" x 84"

()*Confirmation sample using a Niton XRF.

Table 2
Building 1 - Lead-Based Paint Locations
Window Frames

Identified Lead-Based Paint (Color/Description)	Lead Content (mg/cm^2)	Location	Size of Window
Yellow/Pass Through Window Frame Trim	5.0	Room 2, Side D	36" x 48"
Brown/ Pass Through Window Frame	1.96 (4.1)*	Room 4, Side B	36" x 48"
White/ Pass Through Window Frame	1.9	Room 10, Side D	34" x 52"

()* Confirmation Sample using a Niton XRF.

Table 3
Building 1 and Building 2 – Lead-Based Paint
Other Surfaces/Components

Identified Lead-Based Paint (Color)	Lead Content (mg/cm^2)	Location	Surface/Components
Gray	2.11	West Rooms	Roof Deck/Beams
Gray	2.83	East Rooms	Roof Deck/Beams
Gray	2.8	Room 14	Roof Deck/Beams
Brown	2.77	Room 19, Side A	Door Lintel (Metal)
Brown	1.57	Room 19, Side B	Door Lintel (Metal)
Brown	1.72	Room 19, Side D	Door Lintel (Metal)
Brown	1.38	Room 19, Side D	Door Lintel (Metal)
Brown	1.86	Room 19, Side D	Door Lintel (Metal)
Yellow	1.89	Room 19, Side D	Door Lintel (Metal)
Gray	3.01 (3.00)*	Building 2-Room 1, Side A	Wall

()* Confirmation Sample using a Niton XRF.

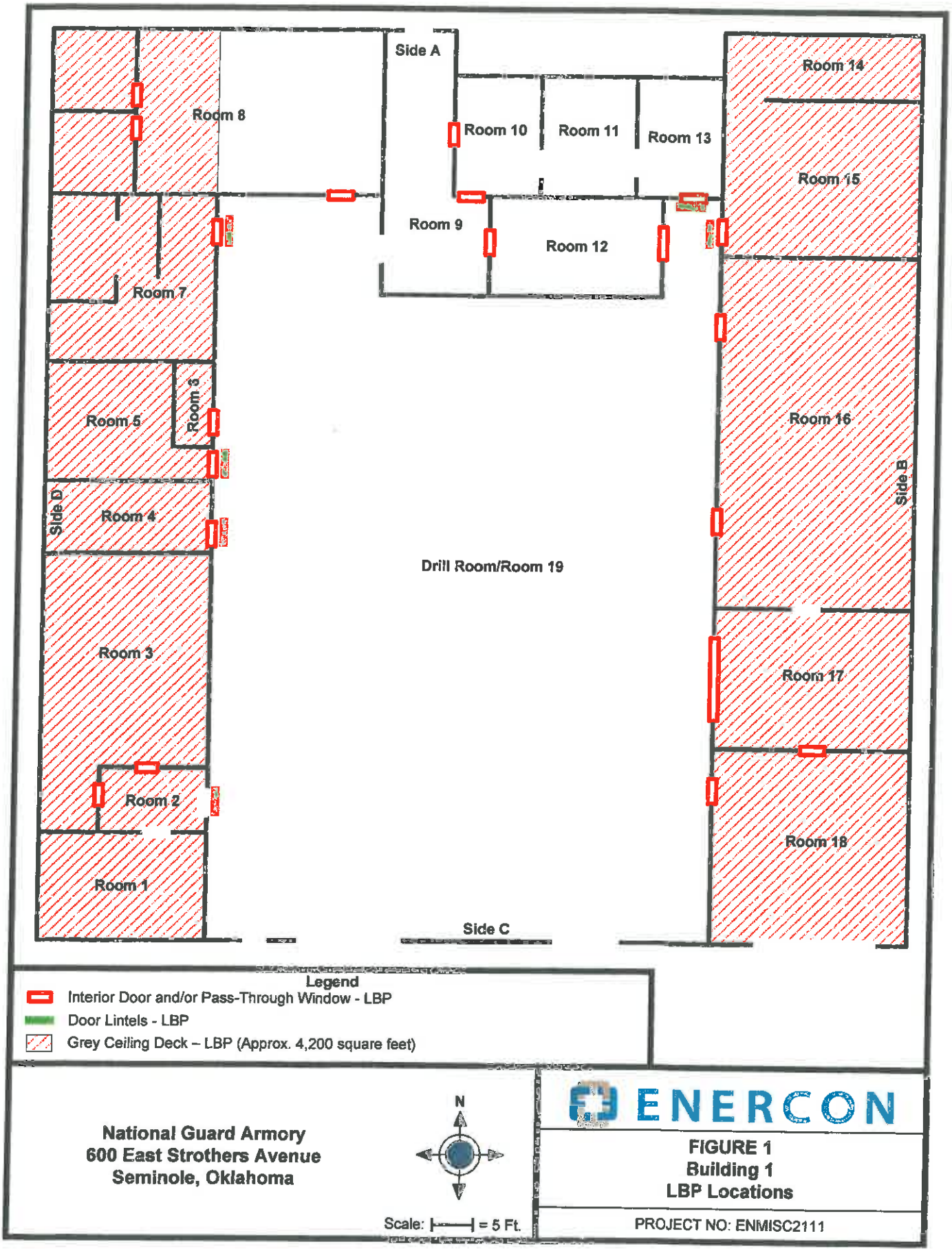
3.2 Dust Wipe Samples

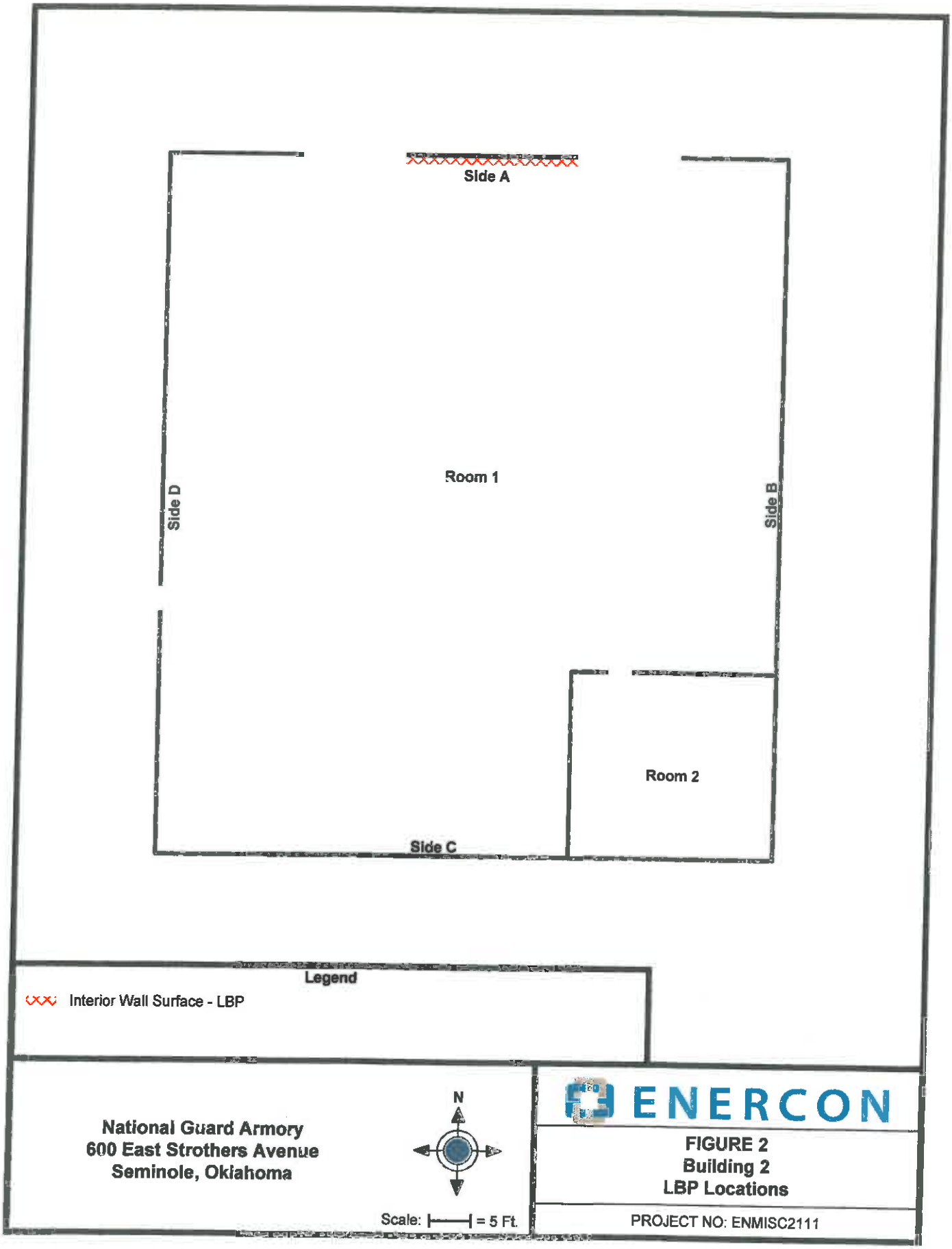
Dust wipe samples were obtained following the EPA/HUD protocol. A template measuring one square foot was used to provide a known sampling area. Concentrations of 40.0 $\mu g/ft^2$ or greater are considered contaminated, in accordance with HUD and EPA guidelines. One dust wipe sample was obtained in each room in Building 1 except for the drill room, where three samples were collected. A total of 21 wipe samples were collected in Building 1. Two dust wipe samples were obtained in Building 2. Laboratory results from the dust wipe samples are presented in Appendix C. The locations determined by laboratory analysis to be contaminated by lead dust are summarized in Table 4.

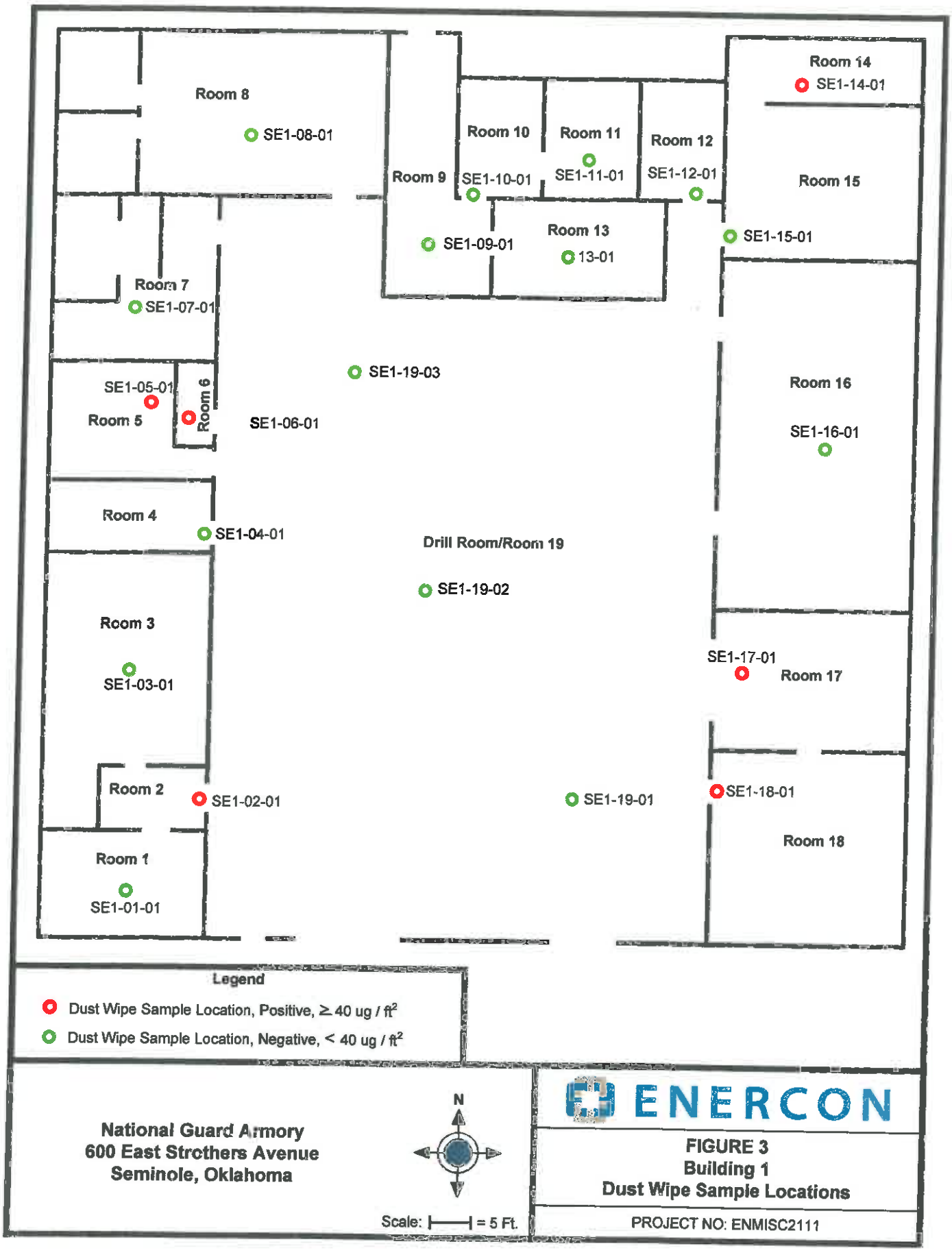
Table 4
Building 1 and Building 2
Positive Dust Wipe Locations

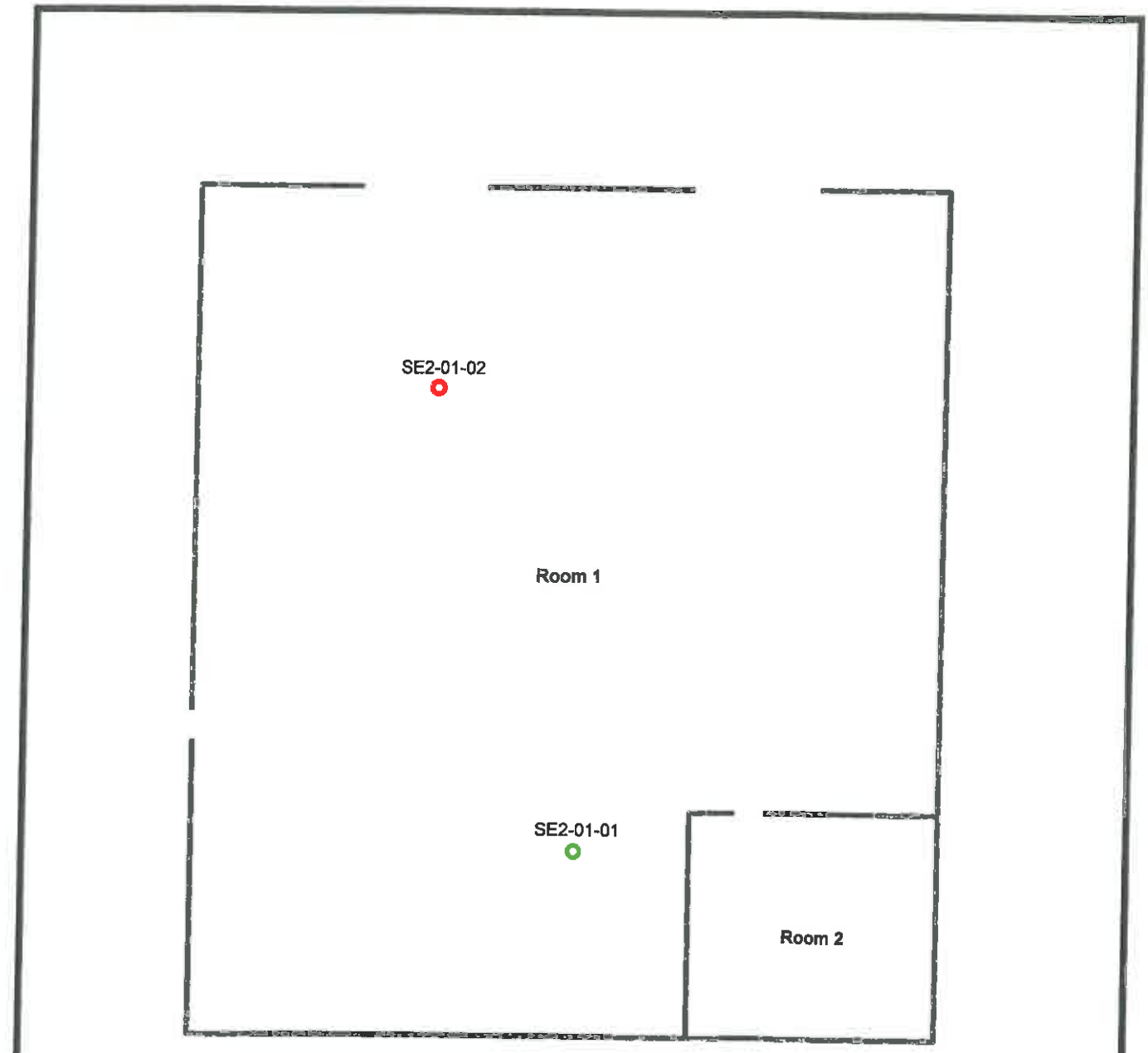
Sample Number	Lead Content ($\mu g/ft^2$)	Location	Square Footage of Positive Location
SE1-02-01	52.14	Building 1, Room 2	90 SF
SE1-05-01	44.28	Building 1, Room 5	190 SF
SE1-06-01	55.40	Building 1, Room 6	50 SF
SE1-14-01	59.84	Building 1, Room 14	192 SF
SE1-17-01	108.86	Building 1, Room 17	396 SF
SE1-18-01	74.49	Building 1, Room 18	564 SF
SE2-01-02	93.36	Building 2, Room 1	4,500 SF

APPENDIX A


Side A
Room 8
Room 10
Room 11
Room 13
Room 14
Room 15
Room 9
Room 12
Room 7
Room 5
Room 6
Room 16
Side B
Side D
Room 4
Drill Room/Room 19
Room 3
Room 17
Room 2
Room 18
Room 1
Side C
Legend
Interior Door and/or Pass-Through Window - LBP
Door Lintels - LBP
Grey Ceiling Deck – LBP (Approx. 4,200 square feet)
National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma
N
Scale: = 5 Ft.
ENERCON
FIGURE 1
Building 1
LBP Locations
PROJECT NO: ENMISC2111


Side A
Side D
Room 1
Side B
Room 2
Side C
Legend
Interior Wall Surface - LBP
National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma
N
Scale: = 5 Ft.
ENERCON
FIGURE 2
Building 2
LBP Locations
PROJECT NO: ENMISC2111


Room 8
SE1-08-01
Room 10
Room 11
Room 12
Room 14
SE1-14-01
Room 9
SE1-10-01
SE1-11-01
SE1-12-01
Room 15
Room 13
SE1-09-01
13-01
SE1-15-01
Room 7
SE1-07-01
SE1-19-03
SE1-05-01
Room 6
Room 5
SE1-06-01
Room 16
SE1-16-01
Room 4
SE1-04-01
Drill Room/Room 19
SE1-19-02
Room 3
SE1-03-01
SE1-17-01
Room 17
Room 2
SE1-02-01
SE1-19-01
SE1-18-01
Room 18
Room 1
SE1-01-01
Legend
Dust Wipe Sample Location, Positive, ≥ 40 ug / ft²
Dust Wipe Sample Location, Negative, < 40 ug / ft²
National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma
N
Scale: = 5 Ft.
ENERCON
FIGURE 3
Building 1
Dust Wipe Sample Locations
PROJECT NO: ENMISC2111



Legend

- Dust Wipe Sample Location-Positive- ≥40 ug / ft^2
- Dust Wipe Sample Location-Negative- < 40 ug / ft^2

National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma

N

Scale: |—| = 5 Ft.

ENERCON

FIGURE 4
Building 2
Dust Wipe Sample Locations

PROJECT NO: ENMISC2111

APPENDIX B

Photographic Record – National Guard Armory – Seminole, OK

Photo #1: Yellow door frame – LBP.

Photo #2: Brown pass-through window – LBP.

Photo #3: Brown door frame – LBP.

Photo #4: Gray ceiling deck – LBP.

Photo #5: A roll-up door opening from Room 19 to Room 17 – LBP.

Photo #6: A blue door frame in Room 18– LBP.

Photographic Record – National Guard Armory – Seminole, OK

Photo #7: Yellow lintel in Room 19 –LBP

Photo #8: A gray portion of interior concrete wall on the north side of Building 2 –LBP.

Photo #9: Yellow window frame trim in Room 2 –LBP

Photo #10: White pass through window in Room 10 –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: 188439
Date Received: 10/20/10
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 10/27/2010

AIHA ID: 101352

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

Acct. No.: A845

Project: Seminole Armory
Location: Seminole, OK
Project No.: ASB-SEM

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	SE1-01-01	Wipe	Lead	30.95	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
002	SE1-02-01	Wipe	Lead	52.14	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
003	SE1-03-01	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
004	SE1-04-01	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
005	SE1-05-01	Wipe	Lead	44.28	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
006	SE1-06-01	Wipe	Lead	55.40	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
007	SE1-07-01	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
008	SE1-08-01	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
009	SE1-09-01	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
010	SE1-10-01	Wipe	Lead	34.88	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
011	SE1-11-01	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100

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

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

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

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 188439
Date Received: 10/20/10
Received By: Sherrie Leftwich
Date Sampled:
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Analyst: BM
Date of Report: 10/27/2010

AIHA ID: 101352

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

Acct. No.: A845

Project: Seminole Armory
Location: Seminole, OK
Project No.: ASB-SEM

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
012	SE1-12-01	Wipe	Lead	26.01	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
013	SE1-13-01	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
014	SE1-14-01	Wipe	Lead	59.84	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
015	SE1-15-01	Wipe	Lead	20.59	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
016	SE1-16-01	Wipe	Lead	<16.00	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
017	SE1-17-01	Wipe	Lead	108.86	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
018	SE1-18-01	Wipe	Lead	74.49	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
019	SE1-19-01	Wipe	Lead	36.03	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
020	SE1-19-02	Wipe	Lead	18.86	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
021	SE1-19-03	Wipe	Lead	28.27	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100
022	SE2-01-01	Wipe	Lead	32.31	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100

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

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

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

QUANTEM® LABORATORIES

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 188439
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Time Sampled:
Analyst: BM
Date of Report: 10/27/2010

AIHA ID: 101352

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

Acct. No.: A845

Project: Seminole Armory
Location: Seminole, OK
Project No.: ASB-SEM

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
023	SE2-01-02	Wipe	Lead	93.36	16.00	ug/sq. Ft.	10/27/10 13:50	EPA 3051 / NIOSH 9100

Authorized Signature: _____
Benton Miller, Analyst

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

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

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

Supplemental Report
QAQC Results

QA ID: 8044
Test: Lead

Date: 10/27/2010
Matrix: Wipe

Lab Number: 188439
Approved By: Benton Miller
Date Approved: 10/27/2010

Notes:

Blank Data:

Type of Blank	Blank Value
Initial	0
Continuing	0
Final	0

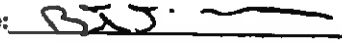
Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	225	239	275
FCV	225	228	275
ICV	22.5	23.6	27.5
RLVS	12.8	18.2	19.2

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MSW-1	0.000	5369.000	5064.700	94.3	5163.100	96.2	1.9
MSW 3	0.000	5369.000	4743.900	88.4	4817.000	89.7	1.5
MSW 1	0.000	5369.000	4597.400	85.6	4646.000	86.5	1.1

Authorized Signature: 

Benton Miller, Analyst

Lead Chain-of-Custody

QUANTEM LABORATORIES

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

This Box for Lab Use Only
Lab No. 188439
Accept / Reject

Company Name: EMERCOM SERVICES INC Acct.#: A845 Project Name: SEMINOLE ARMORY

Project Location: SEMINOLE OK Project Number: KB-SEM

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt %	mg/kg	mg/l	ug/sq. ft.	ug/cu. M.	mg/cm²
1	SE1-01-01	RM1 - CTR	144ft²	C	X					X		
2	SE1-02-01	RM2 - DOOR										
3	SE1-03-01	RM3 - CTR										
4	SE1-04-01	RM4 - DOOR										
5	SE1-05-01	RM5 - CTR										
6	SE1-06-01	RM6 - DOOR										
7	SE1-07-01	RM7 - CTR										
8	SE1-08-01	RM8 - CTR										
9	SE1-09-01	RM 9 - CTR										
10	SE1-10-01	RM10 - DOOR										
11	SE1-11-01	RM 11 - CTR										
12	SE1-12-01	RM 12 - DOOR										
13	SE1-13-01	RM 13 - CTR										
14	SE1-14-01	RM14 - CTR										
15	SE1-15-01	RM15 - DOOR	✓	✓	✓					✓		

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
- 24 Hour
- 3-Day
- X 5-day

CONTACT INFORMATION

Name: Brian Muenker
Phone: 286-4500
Report Results VIA (CHOOSE ONE):
- FAX:
- X QuanTEM WebSite
- E-Mail:

Relinquished By	Date/Time	VIA	Received By	Date/Time	Date Sampled	Sampled By
Brian Muenker	10/20/10 0515	Hand	[illegible]	8:29 10-20-10	10/19/10	Justin Scott for Brian Muenker

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

Lead Chain-of-Custody

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 622-1650 (405) 755-7272 Fax: (405) 755-2058
www.quantem.com

This Box for Lab Use Only
Lab No. 188439
Accept Reject

Company Name: _____ Acct.#: _____ Project Name: _____

Project Location: _____ Project Number: _____

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt. %	mg / kg	mg / l	ug / sq. ft.	ug / cu. M.	mg / cm²
16	SE1-16-01	RM16 - CTR	144 in²	C	X					X		
17	SE1-17-01	RM17 - DOOR										
18	SE1-18-01	RM18 - DOOR										
19	SE1-19-01	RM19 - SE										
20	SE1-19-02	RM19 - CTR										
21	SE1-19-03	RM19 - NW										
22	SE2-01-01	RM1 - NE										
23	SE2-01-02	RM1 - SW										

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

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

Relinquished By	Date/Time	VIA	Received By	Date/Time	Date Sampled	Sampled By
Bill Muenks	10/20/10			10-20-10	10/19/10	Justin Scott & Bill Muenks

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

Seminole Armory
600 East Strothers Avenue

LEAD-BASED PAINT INSPECTION

Inspector: Marshall Branscum
December 7, 2010

Date	Reading	Mode	LiveTime	Pass/Fail/Standard/Pb		Room	Side	Component	Substrate	Color	Condition	Time
19-Oct-10	6	Standardization	52.13	PASS								9:28:43
19-Oct-10	7	Lead Paint Inspection	5.53	Negative	0	Calibrate						9:30:37
19-Oct-10	8	Lead Paint Inspection	9.22	Positive	1.07	Calibrate						9:30:56
19-Oct-10	9	Lead Paint Inspection	9.22	Positive	1.06	Calibrate						9:31:20
19-Oct-10	10	Lead Paint Inspection	7.99	Positive	1.15	Calibrate						9:31:42
19-Oct-10	11	Lead Paint Inspection	5.64	Negative	0	Room 1	A	Wall	Brick	White	Intact	9:34:31
19-Oct-10	12	Lead Paint Inspection	5.69	Negative	0	Room 1	B	Wall	Brick	White	Intact	9:35:08
19-Oct-10	13	Lead Paint Inspection	5.64	Negative	0	Room 1	C	Wall	Brick	White	Intact	9:35:27
19-Oct-10	14	Lead Paint Inspection	5.63	Negative	0	Room 1	D	Wall	Brick	White	Intact	9:35:47
19-Oct-10	15	Lead Paint Inspection	5.72	Negative	0	Room 1	D	Ceiling	Concrete	White	Intact	9:38:04
19-Oct-10	16	Lead Paint Inspection	5.65	Negative	0.04	Room 2	B	Wall	Brick	White	Intact	9:39:03
19-Oct-10	17	Lead Paint Inspection	5.69	Negative	0.03	Room 2	C	Wall	Brick	White	Intact	9:39:30
19-Oct-10	18	Lead Paint Inspection	5.5	Negative	0.01	Room 2	C	Wall	Brick	Red	Intact	9:40:45
19-Oct-10	19	Lead Paint Inspection	5.69	Negative	0	Room 2	D	Window Counter	Wood	Red	Intact	9:41:55
19-Oct-10	20	Lead Paint Inspection	5.68	Positive	5	Room 2	D	Window Trim	Wood	Yellow	Intact	9:42:19
19-Oct-10	21	Lead Paint Inspection	2.85	Positive	5	Room 2	A	Door Frame	Wood	Yellow	Intact	9:43:05
19-Oct-10	22	Lead Paint Inspection	5.54	Negative	0	Room 3	A	Wall	Concrete	Yellow	Intact	9:43:28
19-Oct-10	23	Lead Paint Inspection	5.35	Negative	0.03	Room 3	B	Wall	Brick	Yellow	Intact	9:44:12
19-Oct-10	24	Lead Paint Inspection	2.85	Positive	5	Room 3	C	Door Jamb	Wood	Yellow	Intact	9:44:50
19-Oct-10	25	Lead Paint Inspection	5.33	Negative	0.05	Room 3	C	Door Frame	Wood	White	Intact	9:45:38
19-Oct-10	26	Lead Paint Inspection	2.75	Negative	0.02	Room 3	D	Wall	Concrete	Yellow	Intact	9:46:09
19-Oct-10	27	Lead Paint Inspection	2.75	Negative	0	Room 4	A	Wall	Concrete	White	Intact	9:47:15
19-Oct-10	28	Lead Paint Inspection	5.64	Negative	0	Room 4	B	Wall	Brick	White	Intact	9:47:33
19-Oct-10	29	Lead Paint Inspection	5.71	Negative	0	Room 4	C	Wall	Concrete	White	Intact	9:48:01
19-Oct-10	30	Lead Paint Inspection	5.67	Negative	0	Room 4	D	Wall	Concrete	White	Intact	9:48:37
19-Oct-10	31	Lead Paint Inspection	2.75	Positive	1.96	Room 4	B	Door Frame and Window	Wood	Brown	Intact	9:51:13
19-Oct-10	32	Lead Paint Inspection	5.62	Negative	0	Room 4	B	Door	Wood	Beige	Intact	9:52:31
19-Oct-10	33	Lead Paint Inspection	2.85	Negative	0.21	Room 5	B	Door	Wood	Red	Intact	9:53:06
19-Oct-10	34	Lead Paint Inspection	2.91	Positive	2.23	Room 5	B	Door Frame	Wood	Brown	Intact	9:53:24
19-Oct-10	35	Lead Paint Inspection	5.74	Negative	0	Room 5	A	Restroom Stalls	Metal	Gray	Intact	9:54:01
19-Oct-10	36	Lead Paint Inspection	5.48	Positive	2.11	Room 5	A	Ceiling	Wood	Gray	Intact	9:54:33
19-Oct-10	37	Lead Paint Inspection	5.48	Negative	0	Room 6	A	Wall	Brick	Gray	Intact	9:55:31
19-Oct-10	38	Lead Paint Inspection	5.7	Negative	0	Room 6	B	Wall	Brick	Gray	Intact	9:56:39
19-Oct-10	39	Lead Paint Inspection	5.49	Negative	0	Room 6	C	Wall	Brick	Gray	Intact	9:56:58
19-Oct-10	40	Lead Paint Inspection	5.65	Negative	0	Room 6	D	Wall	Brick	Gray	Intact	9:57:18
19-Oct-10	41	Lead Paint Inspection	2.93	Positive	2.27	Room 6	B	Door Frame	Wood	Brown	Intact	9:57:44
19-Oct-10	42	Lead Paint Inspection	5.48	Negative	0	Room 6	B	Door	Wood	Beige	Intact	9:58:19
19-Oct-10	43	Lead Paint Inspection	2.89	Positive	1.99	Room 7	B	Door Frame	Wood	Brown	Intact	9:58:46
19-Oct-10	44	Lead Paint Inspection	5.76	Negative	0	Room 7	B	Door	Wood	Beige	Intact	9:59:22
19-Oct-10	45	Lead Paint Inspection	5.63	Negative	0	Room 7	C	Restroom Stalls	Metal	Gray	Intact	9:59:53
19-Oct-10	46	Lead Paint Inspection	2.85	Negative	0	Room 7	C	Restroom Stalls	Metal	Yellow	Intact	10:00:38
19-Oct-10	47	Lead Paint Inspection	2.91	Positive	1.52	Room 8	C	Door Frame	Wood	Brown	Intact	10:01:23
19-Oct-10	48	Lead Paint Inspection	2.64	Positive	3.73	Room 8	D	Door Frame X 2	Wood	Yellow	Intact	10:01:58
19-Oct-10	49	Lead Paint Inspection	5.81	Negative	0	Room 8	C	Door	Wood	Beige	Intact	10:02:42
19-Oct-10	50	Lead Paint Inspection	5.44	Negative	0.04	Room 8	D	Door	Wood	Brown	Intact	10:04:58
19-Oct-10	51	Lead Paint Inspection	2.93	Negative	0	Room 9	A	Wall	Drywall	White	Intact	10:06:52
19-Oct-10	52	Lead Paint Inspection	5.37	Negative	0.06	Room 9	B	Wall	Drywall	White	Intact	10:07:34
19-Oct-10	53	Lead Paint Inspection	5.75	Negative	0	Room 9	C	Wall	Drywall	White	Intact	10:08:21

Seminole Armory
600 East Strothers Avenue

LEAD-BASED PAINT INSPECTION

Inspector: Marshall Branscum
December 7, 2010

Date	Reading	Mode	LineTime	Pass/Fail	Standard	Pb	Room	Side	Component	Substrate	Color	Condition	Time
19-Oct-10	54	Lead Paint Inspection	5.5	Negative		0	Room 9	D	Wall	Drywall	White	Intact	10:08:48
19-Oct-10	55	Lead Paint Inspection	5.84	Negative		0	Room 9	A	Pass Through Walk	Wood	White	Intact	10:09:28
19-Oct-10	56	Lead Paint Inspection	2.89	Positive		1.99	Room 9	B	Door Frame	Wood	Brown	Intact	10:10:27
19-Oct-10	57	Lead Paint Inspection	2.88	Positive		2.01	Room 9	A	Door Frame	Wood	Brown	Intact	10:11:16
19-Oct-10	58	Lead Paint Inspection	5.68	Negative		0	Room 9	D	Door	Wood	White	Intact	10:12:36
19-Oct-10	59	Lead Paint Inspection	5.68	Negative		0	Room 9	D	Door Frame	Wood	White	Intact	10:12:54
19-Oct-10	60	Lead Paint Inspection	5.58	Negative		0	Room 9	B	Door	Wood	Beige	Intact	10:13:12
19-Oct-10	61	Lead Paint Inspection	5.64	Negative		0	Room 9	C	Baseboard	Wood	White	Intact	10:13:31
19-Oct-10	62	Lead Paint Inspection	5.44	Negative		0	Room 10	B	Door Frame	Wood	White	Intact	10:14:03
19-Oct-10	63	Lead Paint Inspection	2.64	Negative		0.02	Room 10	C	Door Frame	Wood	White	Intact	10:14:37
19-Oct-10	64	Lead Paint Inspection	5.27	Negative		0	Room 10	C	Door	Wood	Beige	Intact	10:15:45
19-Oct-10	65	Lead Paint Inspection	2.88	Positive		1.9	Room 10	D	Pass Through Window	Wood	White	Intact	10:17:19
19-Oct-10	66	Lead Paint Inspection	5.26	Negative		0.02	Room 11	B	Door Frame	Wood	White	Intact	10:18:50
19-Oct-10	67	Lead Paint Inspection	5.4	Negative		0.05	Room 11	B	Door	Wood	White	Intact	10:19:08
19-Oct-10	68	Lead Paint Inspection	5.41	Negative		0	Room 11	D	Door Frame	Wood	White	Intact	10:19:41
19-Oct-10	69	Lead Paint Inspection	5.96	Negative		0.03	Room 12	A	Wall	Brick	White	Intact	10:20:03
19-Oct-10	70	Lead Paint Inspection	2.84	Negative		0	Room 12	A	Wall	Brick	Red/Yellow	Intact	10:20:39
19-Oct-10	71	Lead Paint Inspection	2.94	Positive		0	Room 12	B	Wall	Drywall	White	Intact	10:21:25
19-Oct-10	72	Lead Paint Inspection	5.46	Negative		0.05	Room 12	C	Wall	Drywall	White	Intact	10:21:56
19-Oct-10	73	Lead Paint Inspection	2.91	Negative		0.01	Room 12	D	Wall	Drywall	White	Intact	10:22:36
19-Oct-10	74	Lead Paint Inspection	2.91	Positive		1.82	Room 12	B	Door Frame	Wood	Brown	Intact	10:24:31
19-Oct-10	75	Lead Paint Inspection	5.56	Negative		0	Room 12	D	Door Frame	Wood	White	Intact	10:26:08
19-Oct-10	76	Lead Paint Inspection	2.85	Positive		3.29	Room 13	C	Door Frame	Wood	Brown	Intact	10:26:49
19-Oct-10	77	Lead Paint Inspection	2.84	Negative		0.06	Room 13	C	Door	Wood	Beige	Intact	10:28:26
19-Oct-10	78	Lead Paint Inspection	5.38	Negative		0	Room 13	C	Wall	Concrete	White	Intact	10:28:50
19-Oct-10	79	Lead Paint Inspection	5.4	Negative		0.02	Room 13	D	Wall	Concrete	White	Intact	10:29:36
19-Oct-10	80	Lead Paint Inspection	5.79	Negative		0.37	Room 14	A	Wall	Concrete	White	Intact	10:30:51
19-Oct-10	81	Lead Paint Inspection	5.53	Negative		0.34	Room 14	A	Shelves	Wood	White	Intact	10:33:26
19-Oct-10	82	Lead Paint Inspection	5.69	Negative		0	Room 14	A	Shelves	Metal	Green	Intact	10:34:16
19-Oct-10	83	Lead Paint Inspection	5.67	Negative		0	Room 14	A	Wall	Concrete	Gray	Intact	10:34:33
19-Oct-10	84	Lead Paint Inspection	2.96	Positive		2.83	Room 14	A	Ceiling	Wood	Gray	Intact	10:34:53
19-Oct-10	85	Lead Paint Inspection	5.68	Negative		0	Room 14	B	Wall	Concrete	White	Intact	10:35:15
19-Oct-10	86	Lead Paint Inspection	5.19	Negative		0	Room 14	D	Wall	Concrete	White	Intact	10:35:49
19-Oct-10	87	Lead Paint Inspection	5.55	Negative		0	Room 15	B	Wall	Concrete	White	Intact	10:36:12
19-Oct-10	88	Lead Paint Inspection	5.6	Negative		0	Room 15	D	Wall	Concrete	White	Intact	10:36:47
19-Oct-10	89	Lead Paint Inspection	5.61	Negative		0	Room 15	B	Window Sill	Concrete	White	Intact	10:37:36
19-Oct-10	90	Lead Paint Inspection	5.72	Negative		0	Room 15	D	Door	Wood	Beige	Intact	10:38:42
19-Oct-10	91	Lead Paint Inspection	2.84	Positive		3.19	Room 15	D	Door Frame	Wood	Brown	Intact	10:39:32
19-Oct-10	92	Lead Paint Inspection	2.86	Positive		4.6	Room 16	D	Door Frame	Wood	Brown	Intact	10:40:20
19-Oct-10	93	Lead Paint Inspection	2.84	Positive		1.39	Room 16	D	Door Frame	Wood	Brown	Intact	10:40:55
19-Oct-10	94	Lead Paint Inspection	5.55	Negative		0.05	Room 16	D	Door	Wood	Beige	Intact	10:41:34
19-Oct-10	95	Lead Paint Inspection	5.3	Negative		0.13	Room 16	D	Door	Wood	Beige	Intact	10:42:04
19-Oct-10	96	Lead Paint Inspection	2.86	Negative		0.55	Room 16	A	Floor	Concrete	White	Fair	10:42:55
19-Oct-10	97	Lead Paint Inspection	5.6	Negative		0.11	Room 16	A	Floor	Concrete	Red	Fair	10:44:00
19-Oct-10	98	Lead Paint Inspection	5.59	Negative		0	Room 17	A	Wall	Concrete	Yellow	Intact	10:44:49
19-Oct-10	99	Lead Paint Inspection	5.43	Negative		0.13	Room 17	B	Wall	Concrete	Yellow/White	Intact	10:45:27
19-Oct-10	100	Lead Paint Inspection	5.46	Negative		0.45	Room 17	C	Wall	Drywall	White	Intact	10:45:58
19-Oct-10	101	Lead Paint Inspection	5.42	Negative		0	Room 17	D	Wall	Brick	White	Intact	10:47:25

Seminole Armory
600 East Strothers Avenue

LEAD-BASED PAINT INSPECTION

Inspector: Marshall Branscum
December 7, 2010

Date	Reading	Mode	LeadTime	Pass Fail Standard Pb		Room	Side	Component	Substrate	Color	Condition	Time
19-Oct-10	102	Lead Paint Inspection	5.43	Negative	0	Room 17	A	Wall	Wood	Gray/White	Intact	10:47:48
19-Oct-10	103	Lead Paint Inspection	2.96	Positive	2.83	Room 17	C	Door Frame	Wood	Yellow	Intact	10:48:17
19-Oct-10	104	Lead Paint Inspection	5.26	Positive	1.38	Room 17	D	Overhead Door	Metal	White	Intact	10:48:35
19-Oct-10	105	Lead Paint Inspection	2.96	Negative	0	Room 18	A	Wall	Drywall	White	Intact	10:49:00
19-Oct-10	106	Lead Paint Inspection	5.61	Negative	0	Room 18	B	Wall	Concrete	Red/Yellow	Intact	10:49:36
19-Oct-10	107	Lead Paint Inspection	5.34	Negative	0	Room 18	C	Wall	Concrete	Red	Intact	10:50:17
19-Oct-10	108	Lead Paint Inspection	5.64	Negative	0	Room 18	C	Wall	Wood	White	Intact	10:50:57
19-Oct-10	109	Lead Paint Inspection	3.16	Negative	0.1	Room 18	D	Wall	Brick	Red	Intact	10:53:54
19-Oct-10	110	Lead Paint Inspection	3.13	Negative	0.01	Room 18	A	Door	Wood	Red	Intact	10:54:19
19-Oct-10	111	Lead Paint Inspection	4.44	Negative	0	Room 18	A	Door Trim	Wood	Blue	Intact	10:54:43
19-Oct-10	112	Lead Paint Inspection	3.11	Positive	2.11	Room 18	A	Door Frame	Wood	Yellow	Intact	10:55:28
19-Oct-10	113	Lead Paint Inspection	5.57	Negative	0	Room 18	C	Door	Wood	Red	Intact	10:56:42
19-Oct-10	114	Lead Paint Inspection	5.45	Negative	0.15	Room 18	C	Door Trim	Wood	Blue	Intact	10:57:55
19-Oct-10	115	Lead Paint Inspection	5.49	Negative	0.15	Room 18	D	Door	Wood	Beige	Intact	10:58:19
19-Oct-10	116	Lead Paint Inspection	5.5	Positive	3.83	Room 18	D	Door Trim	Wood	Blue	Intact	10:58:45
19-Oct-10	117	Lead Paint Inspection	5.45	Negative	0.03	Room 19	A	Wall	Drywall	Brown	Intact	10:59:08
19-Oct-10	118	Lead Paint Inspection	2.88	Positive	2.77	Room 19	A	Door Lintel-RM12	Metal	Brown	Intact	11:00:25
19-Oct-10	119	Lead Paint Inspection	9.43	Positive	1.57	Room 19	B	Door Lintel-RM13	Metal	Brown	Intact	11:00:51
19-Oct-10	120	Lead Paint Inspection	9.39	Positive	1.72	Room 19	D	Door Lintel-RM15	Metal	Brown	Intact	11:01:10
19-Oct-10	121	Lead Paint Inspection	5.49	Positive	1.38	Room 19	D	Door Lintel-RM6	Metal	Brown	Intact	11:04:26
19-Oct-10	122	Lead Paint Inspection	5.62	Positive	1.86	Room 19	D	Door Lintel-RM5	Metal	Brown	Intact	11:05:00
19-Oct-10	123	Lead Paint Inspection	2.83	Positive	1.89	Room 19	D	Door Lintel-RM2	Metal	Yellow	Intact	11:05:42
19-Oct-10	124	Lead Paint Inspection	5.31	Negative	0	Room 19	A	Wall Fire	Brick	Red	Intact	11:06:00
19-Oct-10	125	Lead Paint Inspection	5.26	Negative	0.24	Room 19	A	Floor	Concrete	White	Fair	11:07:15
19-Oct-10	126	Lead Paint Inspection	5.37	Negative	0	Room 19	A	Floor	Concrete	Red	Fair	11:08:06
19-Oct-10	127	Lead Paint Inspection	5.42	Negative	0	Room 19	A	Floor	Concrete	Gray	Fair	11:08:39
19-Oct-10	128	Lead Paint Inspection	5.39	Negative	0	Room 19	A	Floor-Thunderbird	Concrete	Red/White	Intact	11:09:10
19-Oct-10	129	Lead Paint Inspection	2.89	Negative	0	Room 19	C	Door Frame	Wood	Brown	Intact	11:09:55
19-Oct-10	130	Lead Paint Inspection	5.48	Negative	0.05	Room 19	C	Door	Wood	Red	Intact	11:10:21
19-Oct-10	131	Lead Paint Inspection	5.52	Negative	0	Room 19	C	Door Frame	Metal	Gray	Intact	11:11:10
19-Oct-10	132	Lead Paint Inspection	6.19	Negative	0.01	Room 19	D	Ceiling	Wood	Grey	Intact	11:14:26
19-Oct-10	133	Lead Paint Inspection	5.37	Negative	0.02	Room 19	B	Window Sill	Metal	Grey	Intact	11:15:27
19-Oct-10	134	Lead Paint Inspection	5.31	Negative	0.03	Room 19	D	Window Sill	Metal	White	Poor	11:16:16
19-Oct-10	135	Standardization	52.32	PASS								11:32:02
19-Oct-10	136	Lead Paint Inspection	5.49	Negative	0	Calibrate						11:33:27
19-Oct-10	137	Lead Paint Inspection	9.24	Positive	1.03	Calibrate						11:33:47
19-Oct-10	138	Lead Paint Inspection	5.4	Negative	0	Calibrate						11:35:21
19-Oct-10	139	Lead Paint Inspection	9.22	Positive	1.04	Calibrate						11:35:39
19-Oct-10	140	Lead Paint Inspection	9.25	Positive	1.05	Calibrate						11:37:37
19-Oct-10	141	Lead Paint Inspection	9.15	Positive	1.09	Calibrate						11:38:43
19-Oct-10	142	Lead Paint Inspection	9.18	Positive	1.04	Calibrate						12:47:39
19-Oct-10	143	Lead Paint Inspection	5.5	Positive	1.2	Calibrate						12:50:23
19-Oct-10	144	Lead Paint Inspection	9.21	Positive	1.09	Calibrate						12:50:40
19-Oct-10	145	Standardization	52.36	PASS								14:00:49
19-Oct-10	146	Lead Paint Inspection	5.61	Negative	0	Calibrate						14:02:05
19-Oct-10	147	Lead Paint Inspection	5.54	Negative	0	Calibrate						14:02:18
19-Oct-10	148	Lead Paint Inspection	9.14	Positive	1.04	Calibrate						14:02:32
19-Oct-10	149	Lead Paint Inspection	9.3	Positive	1.05	Calibrate						14:04:14

Seminole Armory
600 East Strothers Avenue

LEAD-BASED PAINT INSPECTION

Inspector: Marshall Branscum
December 7, 2010

Date	Reading	Mode	Test Time	Pass Fail Standard	Pb	Room	Side	Component	Substrate	Color	Condition	Time
19-Oct-10	150	Lead Paint Inspection	9.19	Positive	1.07	Calibrate						14:06:16
19-Oct-10	151	Lead Paint Inspection	9.27	Positive	1.04	Calibrate						14:07:18
19-Oct-10	152	Lead Paint Inspection	9.26	Positive	1.11	Calibrate						14:08:20
19-Oct-10	153	Lead Paint Inspection	5.19	Positive	3.01	Building 2-RM1	A	Wall	Concrete	Gray	Intact	14:15:28
19-Oct-10	154	Lead Paint Inspection	5.71	Negative	0.1	Building 2-RM1	A	Wall	Concrete	White	Intact	14:18:26
19-Oct-10	155	Lead Paint Inspection	5.53	Negative	0.05	Building 2-RM1	A	Wall	Concrete	Red	Intact	14:18:57
19-Oct-10	156	Lead Paint Inspection	5.34	Negative	0.01	Building 2-RM2	A	Wall	Wood	White	Intact	14:19:16
19-Oct-10	157	Lead Paint Inspection	5.65	Negative	0	Building 2-RM2	D	Wall	Wood	White	Intact	14:26:45
19-Oct-10	158	Lead Paint Inspection	5.69	Negative	0.08	Building 2-RM1	A	Roll Up Door	Metal	White	Intact	14:28:19
19-Oct-10	159	Lead Paint Inspection	5.81	Negative	0.35	Building 2-RM1	A	Roll Up Door	Metal	White	Intact	14:28:36
19-Oct-10	160	Lead Paint Inspection	3.12	Positive	1	Calibrate						14:38:57
19-Oct-10	161	Lead Paint Inspection	2.9	Positive	1	Calibrate						14:39:53
19-Oct-10	162	Lead Paint Inspection	5.67	Positive	1	Calibrate						14:40:25
19-Oct-10	163	Lead Paint Inspection	5.2	Negative	0	Exterior	B	Window Sill	Concrete	Brown	Fair	16:36:21
19-Oct-10	164	Lead Paint Inspection	5.76	Negative	0.15	Exterior	B	Window Sill	Concrete	Brown	Fair	16:37:04
19-Oct-10	165	Lead Paint Inspection	5.52	Negative	0.82	Exterior	B	Window Sill	Concrete	Brown	Fair	16:38:02
19-Oct-10	166	Lead Paint Inspection	5.43	Negative	0.07	Exterior	D	Window Sill	Concrete	Brown	Fair	16:39:00
19-Oct-10	167	Lead Paint Inspection	5.4	Negative	0	Exterior	D	Window Sill	Concrete	Brown	Fair	16:39:19
19-Oct-10	168	Lead Paint Inspection	5.67	Negative	0	Exterior	D	Window Sill	Concrete	Brown	Fair	16:39:43
19-Oct-10	169	Lead Paint Inspection	5.72	Negative	0.12	Exterior	C	Roll Up Door	Metal	White	Intact	16:40:02
19-Oct-10	170	Lead Paint Inspection	5.39	Negative	0	Exterior	A	Roll Up Door	Metal	White	Intact	16:40:49
19-Oct-10	171	Lead Paint Inspection	5.41	Negative	0	Exterior	A	Roll Up Door	Metal	White	Intact	16:41:25
19-Oct-10	172	Lead Paint Inspection	2.12	Negative	0.12	Exterior	B	Down Spout Gutter	Metal	White	Intact	16:43:37
19-Oct-10	173	Lead Paint Inspection	2.12	Positive	1.02	Calibrate						16:48:57
19-Oct-10	174	Lead Paint Inspection	3.8	Positive	1.04	Calibrate						16:49:53
19-Oct-10	175	Lead Paint Inspection	5.42	Positive	1.03	Calibrate						16:50:25

Seminole Armory
600 East Strothers Avenue

LEAD-BASED PAINT INSPECTION

Inspector: Marshall Branscum
Deccember 7, 2010

Reading No	Time	Site	Room	Side	Component	Feature	Color	Condition	Substrate	Results	PbC	PbL	PbK
1	11/13/2010 8:38										1.15	0.2	0
2	11/13/2010 8:43	SEMINOLE ARMORY	CALIBRATE							Null	0.9	0.9	0.3
3	11/13/2010 9:19	SEMINOLE ARMORY	CALIBRATE							Null	0.9	0.9	0.9
4	11/13/2010 9:21	SEMINOLE ARMORY	CALIBRATE							Negative	0.9	0.9	0.9
5	11/13/2010 9:23	SEMINOLE ARMORY	CALIBRATE							Null	1	1	0.4
6	11/13/2010 9:24	SEMINOLE ARMORY	CALIBRATE							Null	0.9	0.9	0.4
7	11/13/2010 9:26	SEMINOLE ARMORY	CALIBRATE							Null	1	1	0.6
8	11/13/2010 9:29	SEMINOLE ARMORY	CALIBRATE							Null	1	1	0.7
9	11/13/2010 9:29	SEMINOLE ARMORY	CALIBRATE							Null	0.8	0.8	0.7
10	11/13/2010 9:30	SEMINOLE ARMORY	CALIBRATE							Null	0.9	0.9	0.22
11	11/13/2010 9:31	SEMINOLE ARMORY	CALIBRATE							Positive	1.1	1.1	0.8
12	11/13/2010 9:32	SEMINOLE ARMORY	CALIBRATE							Null	1	1	0.6
13	11/13/2010 9:34	SEMINOLE ARMORY	CALIBRATE							Negative	0.9	0.9	0.7
14	11/13/2010 10:08	SEMINOLE ARMORY	BUILDING 1	B	Window	Sill	Brown	Fair	Concrete	Negative	0.01	0	0.19
15	11/13/2010 10:09	SEMINOLE ARMORY	BUILDING 1	B	Window	Sill	Brown	Fair	Concrete	Null	0.01	0	-0.1
16	11/13/2010 10:09	SEMINOLE ARMORY	BUILDING 1	B	Window	Sill	Brown	Fair	Concrete	Negative	0.01	0	0.11
17	11/13/2010 10:10	SEMINOLE ARMORY	BUILDING 1	B	Window	Sill	Brown	Fair	Concrete	Negative	-0.2	0	-0.2
18	11/13/2010 10:11	SEMINOLE ARMORY	BUILDING 1	B	Window	Sill	Brown	Fair	Concrete	Negative	0.01	0	0.13
19	11/13/2010 10:12	SEMINOLE ARMORY	BUILDING 1	B	Window	Header	Brown	Fair	Metal	Negative	0.4	0.4	0.21
20	11/13/2010 10:12	SEMINOLE ARMORY	BUILDING 1	B	Window	Header	Brown	Fair	Metal	Negative	0.4	0.4	0.5
21	11/13/2010 10:18	SEMINOLE ARMORY	BUILDING 1	C	Wall	Edge Protector	Brown/White	Fair	Metal	Negative	0.5	0.5	0.12
22	11/13/2010 10:28	SEMINOLE ARMORY	BUILDING 1 ROOM 13	A	Wall	Interior	White	Intact	Brick	Negative	0	0	-0.6
23	11/13/2010 10:30	SEMINOLE ARMORY	BUILDING 1 ROOM 2	B	Door	Frame	Yellow	Intact	Wood	Positive	2.5	2.5	2.7
24	11/13/2010 10:32	SEMINOLE ARMORY	BUILDING 1 ROOM 4	B	Door	Frame	Brown	Intact	Wood	Null	3.1	3.1	1.7
25	11/13/2010 10:33	SEMINOLE ARMORY	BUILDING 1 ROOM 4	B	Door	Frame	Brown	Intact	Wood	Positive	4.1	4.1	3
26	11/13/2010 10:39	SEMINOLE ARMORY	BUILDING 2 ROOM 1	A	Wall	Interior	Gray	Intact	Concrete	Positive	3	3	5.7
27	11/13/2010 10:50	SEMINOLE ARMORY	BUILDING 1 ROOM 14	A	Ceiling	Wood Decking	Gray	Intact	Wood	Positive	2.8	2.8	2.7
28	11/13/2010 13:48	CALIBRATE								Positive	1.1	1.1	0.6
29	11/13/2010 13:49	CALIBRATE								Negative	0.9	0.9	0.5
30	11/13/2010 13:50	CALIBRATE								Negative	0.9	0.9	0.9

APPENDIX E

Performance Characteristic Sheet

EFFECTIVE DATE: December 1, 2006 **EDITION NO.: 1**

MANUFACTURER AND MODEL:

Make: *Innov-X Systems, Inc.*
Models: *LBP4000 with software version 1.4 and higher*
Source: *X-ray tube*

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Inspection mode, variable reading time

XRF CALIBRATION CHECK LIMITS:

1.0 to 1.1 mg/cm^2 (inclusive)

SUBSTRATE CORRECTION:

Not applicable

INCONCLUSIVE RANGE OR THRESHOLD:

INSPECTION MODE READING DESCRIPTION	SUBSTRATE	INCONCLUSIVE RANGE (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick	0.6 to 1.1
	Concrete	0.6 to 1.1
	Drywall	0.6 to 1.1
	Metal	0.6 to 1.1
	Plaster	0.6 to 1.1
	Wood	0.6 to 1.1

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 on 146 test locations, with two separate instruments, in December 2005.

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.

XRF CALIBRATION CHECK:

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 the average (rounded to 1 decimal place) of three readings is outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Chapter 7 of the HUD Guidelines provides guidance on correcting XRF results for substrate bias. Supplemental guidance for using the paint film nearest 1.0 mg/cm^2 for substrate correction is provided:

XRF results are corrected for substrate bias by subtracting from each XRF result a correction value determined separately in each house for single-family housing or in each development for multifamily housing, for each substrate. The correction value is an average of XRF readings taken over the NIST SRM paint film nearest to 1.0 mg/cm^2 at test locations that have been scraped bare of their paint covering. Compute the correction values as follows:

Using the same XRF instrument, take three readings on a bare substrate area covered with the NIST SRM paint film nearest 1 mg/cm^2. Repeat this procedure by taking three more readings on a second bare substrate area of the same substrate covered with the NIST SRM.

Compute the correction value for each substrate type where XRF readings indicate substrate correction is needed by computing the average of all six readings as shown below.

For each substrate type (the 1.02 mg/cm^2 NIST SRM is shown in this example; use the actual lead loading of the NIST SRM used for substrate correction):

Correction value = (1st + 2nd + 3rd + 4th + 5th + 6th *Reading*) / 6 - 1.02 mg/cm^2

Repeat this procedure for each substrate requiring substrate correction in the house or housing development.

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.

Conduct XRF re-testing 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 and multi-family housing, a result is defined as 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 the 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 readings.

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

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 variable-time inspection paint test mode, the instrument continues to read until it has determined whether the result is positive or negative (with respect to the 1.0 mg/cm^2 Federal standard), with 95% confidence. The following table provides testing time information for this testing mode.

Testing Times Using Variable Reading Time Inspection 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	2.1	2.3	5.4	2.2	5.4	2.2
Metal	2.6	3.2	5.3	2.7	5.1	5.1
Brick, Concrete, Plaster	3.1	4.0	5.7	3.2	4.0	5.9

CLASSIFICATION OF RESULTS:

When an inconclusive range is specified on the *Performance Characteristic Sheet*, XRF results are classified as positive if they are greater than the upper boundary of the inconclusive range, negative if they are less than the lower boundary of the inconclusive range, or inconclusive if in between. The inconclusive range includes both its upper and lower bounds. If the instrument reads "> x mg/cm^2", the value "x" should be used for classification purposes, ignoring the ">". For example, a reading reported as ">1.0 mg/cm^2" is classified as 1.0 mg/cm^2, or inconclusive. When the inconclusive range reported in this PCS is used to classify the readings obtained in the EPA/HUD evaluation, the following False Positive, False Negative and Inconclusive rates are obtained:

FALSE POSITIVE RATE: 2.5% (2/80)

FALSE NEGATIVE RATE: 1.9% (4/212)

INCONCLUSIVE RATE: 16.4% (48/212)

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. XRF Performance Characteristic Sheets were originally developed by the MRI under a grant from the U. S. Environmental Protection Agency and the U.S. Department of Housing and Urban Development. 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*.

Performance Characteristic Sheet

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

MANUFACTURER AND MODEL:

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

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

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

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

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

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive)

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

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

SUBSTRATE CORRECTION:

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

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

INCONCLUSIVE RANGE OR THRESHOLD:

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

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

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

OPERATING PARAMETERS:

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

SUBSTRATE CORRECTION VALUE COMPUTATION:

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

EVALUATING THE QUALITY OF XRF TESTING:

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

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

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

Compute the Retest Tolerance Limit by the following steps:

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

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

Square the average for each testing combination.

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

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

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

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

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

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results

Find the absolute difference of the two averages.

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

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

TESTING TIMES:

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

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

CLASSIFICATION RESULTS:

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

DOCUMENTATION:

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

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

APPENDIX F

Department of Environmental Quality

This is to Certify That

ENERCON SVC INC

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

FIRM

Certification #: OKFIRM11152

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

Issued on: 4/1/2010 **Expires on: 3/31/2011**

Division Director
Air Quality Division

DEQ OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

JUSTIN SCOTT

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

INSPECTOR

Certification #: OKINSR13414

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

Issued on: 4/1/2010 Expires on: 3/31/2011

Division Director
Air Quality Division

DEQ OKLAHOMA

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

MARSHALL BRANSCUM

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

INSPECTOR

Certification #: OKINSR13415

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

Issued on: **4/1/2010** Expires on: **3/31/2011**

Division Director
Air Quality Division

DEQ

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

EMMETT MUENKER

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

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR11260

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

Issued on: **4/1/2010** Expires on: **3/31/2011**

Division Director
Air Quality Division

DEQ
OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Randall L. Ward
Environmental Programs Manager
Air Quality Division

SCOPES OF WORK

Seminole Armory Lead and Asbestos Abatement

Addendum #1 – Summary of Changes

Seminole Armory Additions –

1. Four downspout guards located on building #2 shall be wet scraped and encapsulated with lead-based paint encapsulant.

2. Two exterior overhead door frames and door guards located on building #2 shall be wet scraped and encapsulated with DEQ approved lead-based paint encapsulant.

3. Two overhead door frames and door guards located on building#1 shall be wet scraped and encapsulated with DEQ approved lead based paint encapsulant. One is an exterior overhead door and one is interior.

4. One exterior overhead door area located on building #1 that has been enclosed shall have remaining exposed door frame, door guard, and door lintel wet scraped and encapsulated with DEQ approved lead-based paint encapsulant.

5. All pipes that have asbestos containing pipe wrap removed shall be reinsulated.

6. The wood double doors located on the South side of the building, East of the overhead door, shall have doors and door frame removed and replaced. The door measurements are – 5' X 7'

Seminole Armory Corrections –

1. The total amount of asbestos containing pipe insulation to be removed is approximately 270 Linear Feet. Contractor to field verify. Corrected Asbestos Survey Report pages are attached (Attachment 1).

2. All windows with asbestos containing caulk will not just have caulk removed. Instead, windows and caulk shall be removed, disposed appropriately, and replaced. Corrected pages are attached (Attachment 2).

   Scope of Work and Specifications for replacement windows are attached (Attachment 3).

ATTACHMENT 1

Asbestos Survey Report Corrected Pages

ENERCON

Excellence—Every project. Every day.

ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY
600 EAST STROTHERS AVENUE
SEMINOLE, OKLAHOMA

Enercon Project Number – ENMISC2111

January 27, 2011

Prepared for:

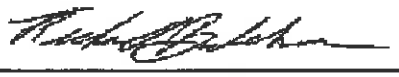
Oklahoma Department of Environmental Quality
Land Protection Division
PO Box 1677
Oklahoma City, Oklahoma 73101-1677
Attention: Mr. Dustin Davidson

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

Inspected By:

Emmett W. Muenker
AHERA Asbestos Management Planner OK-MP130435

Reviewed By:



Richard D. Belcher
AHERA Asbestos Inspector OK-159310

Table of Contents

ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY
600 EAST STROTHERS AVENUE
SEMINOLE, OKLAHOMA

Executive Summary

An asbestos survey of the National Guard Armory, 600 East Strothers Avenue, Seminole, Oklahoma was conducted on October 19, 2010. The armory consisted of a main building (Building 1) with 19 rooms and a secondary building (Building 2) with 2 rooms. During the survey, a total of 25 bulk samples were collected from 10 homogeneous areas. A summary of the asbestos containing building materials (ACBMs) is provided below.

Summary of Asbestos Containing Building Materials in the Armory

MATERIAL CATEGORY	MATERIAL DESCRIPTION	TOTAL APPROXIMATE AMOUNT
FRIABLE	Line and Fitting Insulation	270 LF
CATEGORY I NON-FRIABLE	Gray Floor Tiles and Black Adhesive	450 SF
CATEGORY II NON-FRIABLE	Cream Caulk (Building 1 High-bay windows in Drill Room only) Gray Caulk (Building 2)	676 LF (Building 1) 616 LF (Building 2)

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

Recommended actions for planned renovation:

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

Recommended actions prior to planned demolition:

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

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

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

ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY
600 EAST STROTHERS AVENUE
SEMINOLE, OKLAHOMA

1.0 INTRODUCTION

An asbestos survey of the National Guard Armory, 600 East Strothers Avenue, Seminole, Oklahoma was conducted on October 19, 2010. The armory consisted of a main building (Building 1) with 19 rooms and a secondary building (Building 2) with 2 rooms. During the survey, a total of 25 bulk samples were collected from 10 homogeneous areas. The inspection was performed by Emmett W. Muenker, an AHERA Asbestos Inspector/Management Planner OK-MP130435. Appendix A contains a copy of his Inspector/Management Planner 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.

3.0 SURVEY RESULTS

A total of twenty-five (25) bulk samples were collected in ten (10) homogeneous areas during the survey. Appendix B contains site layouts with sample and asbestos locations. Appendix C contains the laboratory reports of analyses/chains of custody.

A summary of asbestos containing building materials, including categorization and quantities, is presented in Table 1. Table 2 provides a summary of the bulk material samples & laboratory analytical results for the National Guard Armory.

Table 1
Summary of Asbestos Containing Building Materials

MATERIAL CATEGORY	MATERIAL DESCRIPTION	TOTAL APPROXIMATE AMOUNT
FRIABLE	Line and Fitting Insulation	270 LF
CATEGORY I NON-FRIABLE	Gray Floor Tiles and Black Adhesive	450 SF
CATEGORY II NON-FRIABLE	Cream Caulk (Drill Room High Bay Windows Only) Gray Caulk	676 LF (Building 1) 616 LF (Building 2)

SF=Square Feet; LF=Linear Feet

Table 2
Bulk Material Samples & Laboratory Analytical Results

SAMPLE ID	DESCRIPTION& LOCATION	APPROX. AMOUNT	ASBESTOS TYPE/ PERCENT
SEM-01-01,01A,02,02A,03	**Pipe Insulation-Room 19 and Rooms15-18**	**270 LF**	**5%-20% Chrysotile**
SEM-02-01, 02	White Floor Tile and Yellow Mastic, Room 8	NQ	None Detected
SEM-03-01, 02	White Floor Tile and Yellow Mastic, Room 15	NQ	None Detected
SEM-04-01, 02	**Gray Floor Tile and Black Mastic, Rooms 10-11 and 13**	**450 SF**	**5%-8% Chrysotile**
SEM-05-01,02	2' x 4' White Ceiling Tile, Rooms 2 and 3	NQ	None Detected
SEM-06-01,02,03	White 2' x 2' Ceiling Tile, Rooms 10, 12, and 17	NQ	None Detected
SEM-07-01,02	White 2' x 4' Ceiling Tile, Rooms 14 and 15	NQ	None Detected
SEM-08-01,02	White Joint Compound, Rooms 13 and 17	NQ	None Detected
SEM-09-01,02,03	White Texture, Room 9	NQ	None Detected
SEM-10-01,02	**Cream Caulk, High Bay Windows-Room 19 Only**	**676 LF**	**3%-4% Chrysotile**
SE2-01-01,02	**Gray Caulk, Windows in Building 2**	**616 LF**	**3% Chrysotile**

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

4.0 CONCLUSIONS & RECOMMENDATIONS

The asbestos-containing building materials found in the National Guard Armory consisted of both friable and non-friable materials.

Friable Asbestos-containing Materials:

- Piping Insulation (Lines, Risers, and Fittings): Friable insulation was present on piping systems in Rooms 15-19 in Building 1. The friable fitting insulation was observed to be in good condition. The locations of these materials are shown on the Building 1 Layout in Appendix B.

Non-friable Asbestos-containing Materials:

- Floor Tiles and Mastic: There were 1'x1' gray floor tiles with black mastic that contained asbestos in Rooms 10, 11 and 13 in Building 1. There was a double layer of floor tiles located beneath carpeting in these rooms. The location of these materials is shown on the Building 1 Layout in Appendix B.

- Window Caulk/Glazing: There were twenty-six 23" x 45" 4-pane high-bay windows with asbestos-containing caulk/glazing located in the drill room in Building 1with a total of approximately 676 linear feet of caulk/glazing. This material was in generally good condition, with less than 10% random deterioration. There were seven 64" x 45" 24-pane windows located in Building 2 with similar materials present totaling approximately 616 linear feet. The caulk/glazing was in similar condition in Building 2. The location of these windows is shown on Building 1 and Building 2 Layouts in Appendix B.

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

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

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

3. Continued operation without abatement of 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.

Recommendations for Non-friable Asbestos-containing Materials: There was a mixture of floor tiles and mastic in Building 1, including those that contain asbestos and those that do not. In addition, there were windows in Building 1 and Building 2 with caulk/glazing that contained asbestos. These materials containing asbestos are not regulated unless they are disturbed in a

manner that renders them friable; however, removal must be done by workers who are properly trained to remove them. The following actions are recommended for addressing non-friable materials:

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

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

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

ATTACHMENT 2

Statement of Work Corrected Pages

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 lead-based paint abatement has been appropriately performed.

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

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

ASBESTOS ABATEMENT INSTRUCTIONS

- Non-friable and/or non-regulated Asbestos Containing Material (ACM) shall be removed as described in the attached Specifications for Removal of Non-Friable Asbestos (**Attachment 2**). Below is a list of non-friable and/or non-regulated ACM that shall be removed from the building:
    - Remove 450 SF of grey floor tile and black adhesive mastic located in Room 10, 11, and 13.
    - ~~Remove 676 LF of cream caulk from windows located in Room 19 of Building 1.~~
    - ~~Remove 616 LF of grey caulk from windows located in Building 2.~~
    - ~~Any glass that is broken or missing prior to abatement or becomes broken during abatement shall be replaced.~~
    - All windows containing asbestos caulking shall have the windows and caulking appropriately removed. Once removed and properly disposed, new windows shall be installed. See Addendum #1 for details.

- Friable ACM shall be removed as described in the attached Asbestos Abatement Project Design (**Attachment 2**).

- For more details see the attached Seminole 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.

ATTACHMENT 3

Window Scope of Work Including Approximate Measurements and Specifications

Seminole Armory Window Measurements And Scope of Work

- Window measurements are listed as approximate Width X Height; Contractor to field verify.
- All window bars shall be removed and properly disposed.
- Caulking shall be removed from outside edges of window and properly disposed prior to window removal.
- All removed windows shall be properly disposed.
- Windows installed must meet all attached specifications.
- Window installation and oversight of window removal shall be performed by a third party professional window installation company.
    - Window installer shall have no less than five (5) years installation experience.
    - Window installer shall have experience with removal of steel casement windows
- All interior and exterior window sills shall be HEPA vacuumed and wet washed after windows have been removed and replaced.
- Windows will be replaced with General Aluminum Series # 2700 / 2800 Picture Windows (Specifications Attached) or equivalent.
    - All windows will be replaced with non-opening windows
    - All windows shall have Low E glazing
    - All windows shall have Bronze Finish on frame with powder baked on enamel
- Submit Product Data and Shop Drawings.
- Product Substitution: Substitutions include products differing from those required by this specification.
    1. Submit two (2) copies of each request for product substitution. Identify product to be replaced and provide complete documentation showing compliance of proposed substitution with applicable requirements. Include a full comparison with the specified product, and a list of changes to other Work required to accommodate the substitution.
    2. Submit requests for product substitution in accordance with the time allotted to do so by the Scope of Work included within the Bid Solicitation.
    3. State of Oklahoma, Department of Environmental Quality will review the proposed substitution and notify bidder of its acceptance or rejection within the time allotted to do so by the Scope of Work included within the Bid Solicitation.

Below are the window locations, amount of windows, and approximate measurements.

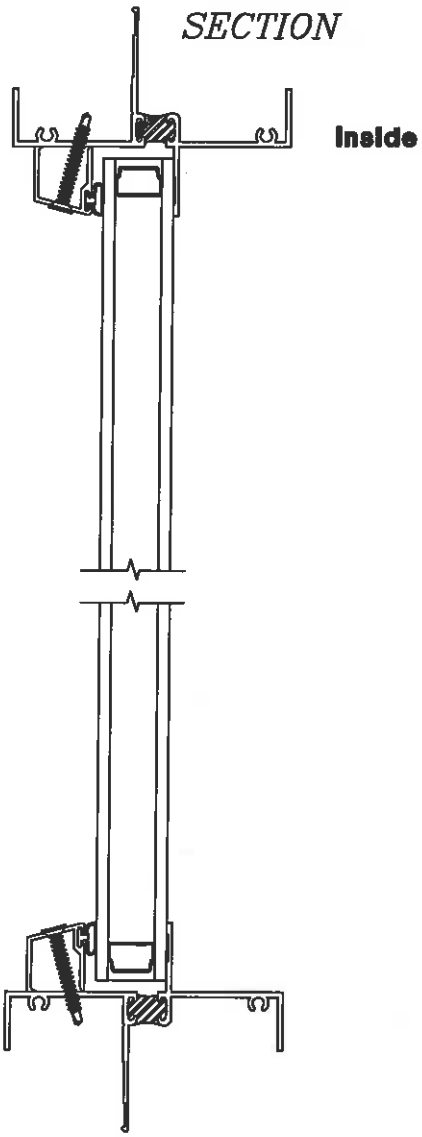
- All 26 windows located above the Drill Floor in Building 1 shall be removed and replaced. Windows measurements are approximately 4' X 3'

- All 7 windows located in Building 2 shall be removed and replaced. Windows measurements are approximately 4' X 6'

GENERAL ALUMINUM
Company of Texas, LP

SERIES # 2700/2800 PICTURE WINDOW

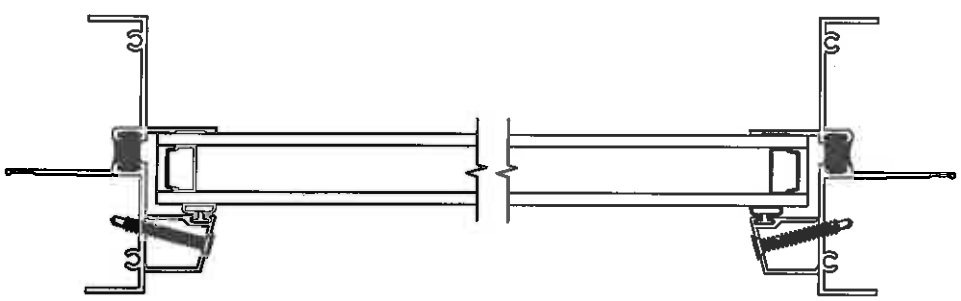
VERTICAL SECTION



SPECIFICATIONS

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

HORIZONTAL SECTION



DCS Construction & Properties

2401 N Lincoln Blvd, Suite 106, OKC 73105
P.O. Box 53448
Oklahoma City, OK 73152-3448
Phone: 405-522-4079 **Fax:** 405-521-3789

DATE: 10/17/2011

TRANSMITTAL
No. CO01

PROJECT: DCS# 11355
Seminole Armory

REF: Basin Environmental & Safety

TO: DEQ

FAX:

ATTN: Karen Rumsey

PHONE:

WE ARE SENDING:		SUBMITTED FOR:		ACTION TAKEN:	
☐	Application for Payment	☐	Approval	☒	Approved as Submitted
☒	Change Order	☐	Your Use	☐	Approved as Noted
				☐	Returned After Loan
				☐	Resubmit
				☐	Submit
		SENT VIA:		☐	Returned
		☒	Attached	☐	Returned for Corrections
☐	Other:	☐	Separate Cover Via:	☐	Due Date:

Remarks: DCS/CAP has approved Abatement Systems Inc.'s Change Order and is forwarding it to the DEQ for their records.

AMOUNT$: $ 4,262.50

Notes:

CC: DCS/CAP FILES, UA, Contractor

Signed:
Rebekah Richardson, Project Manager

Purchase Order

CHANGE ORDER — Dispatch via Print

Purchase Order	Date	Revision	Page
2929014728	08/29/2011	1 - 10/18/2011	1

Payment Terms	Freight Terms	Ship Via
0 Days	Free on board at Destination	Common

Buyer	Phone	Currency
S Killingsworth (580)	405/522-0047	USD

Dept of Environmental Quality
OK DEPT OF ENVIRONMENTAL QUALITY
SHIPPING & RECEIVING
707 N ROBINSON
OKLAHOMA CITY OK 73102

Ship To: OK DEPT OF ENVIRONMENTAL QUALITY
SHIPPING & RECEIVING
707 N ROBINSON
OKLAHOMA CITY OK 73102

Vendor: 0000273003
BASIN ENVIRON & SAFETY TECHNOLOGIES
325 N PORTLAND AVE
OKLAHOMA CITY OK 73107-6107

Bill To: OK DEPT OF ENVIRONMENTAL QUALITY
ADMINISTRATIVE SERVICES
PO BOX 1677
OKLAHOMA CITY OK 73101-1677

Tax Exempt? N **Tax Exempt ID:**

Line-Sch	Item Id	Description	Quantity	UOM	PO Price	Extended Amt	Due Date
1- 1	1000017734	CONSTR:CAP-Over Statutory Amt, Public Bid, Construction Contract	1.0000	JA	108,690.5000	108,690.50	10/18/2011

BIDDING FOR LEAD AND ASBESTOS ABATEMENT FOR THE SEMINOLE ARMORY
AS PER SCOPE OF WORK

ENV REMEDIATION SERVICES:Task XXV Per Diem Unit Cost Rate~Environmental Remediation Services.
Furnish All Labor, Materials & Equipment Necessary Task XXV. Per diem unit cost rate.

Total PO Amount 108,690.50

COMMENTS:

FY 2011

PROJECT: SITE CLEANUP ASSISTANCE PROGRAM-SEMINOLE ARMORY LEAD AND ASBESTOS ABATEMENT BIDDING

JUSTIFICATION: UNDER THE SITE CLEANUP ASSISTANCE PROGRAM THE DEQ WILL HIRE A LICENSED PROFESSIONAL TO ABATE ASBESTOS, ABATE LEAD-BASED PAINT AND REMEDIATE LEAD DUST IN THE SEMINOLE ARMORY.

(FOR AGENCY USE ONLY)

CONTACT: KAREN RUMSEY/ASD/(405)702-1168
MARY JOHNSON/LPD/(405)702-5100
DUSTIN DAVIDSON/LPD/(405)702-5100

DEQ IS AN EQUAL OPPORTUNITY EMPLOYER.

FUNDING: 493

REQUISITION #2920003087 - PLEASE RETURN PO TO MARY JOHNSON

JUNE 8, 2011

DCS#11355
REBEKAH RICHARDSON-DCS/CAP PROJECT MANAGER
405-522-0050

10/18/2011 - CO#1 - Summary of work stated 270 feet of TS1. Actual footage is 380 feet. Change based on removing 110 additional feet of TS1 CONTRACT SUM INCREASED $4,262.50. CONTRACT TIME REMAINS UNCHANGED -SK

Authorized Signature

June 2011

Seminole Armory Lead & Asbestos Remediation - DCS# 11355

RECEIVED
SEP 23 2011
Department of Central Services
Construction & Properties

RECEIVED
OCT 10 2011
Department of Central Services
Construction & Properties

State of Oklahoma
Department of Central Services
Construction and Properties

Change Order

IMPORTANT NOTE: THE WORK DESCRIBED HEREIN IS NOT AUTHORIZED UNTIL THIS CHANGE ORDER IS COMPLETED AND SIGNED BY ALL ENTITIES LISTED BELOW. DO NOT PROCEED WITH WORK UNTIL THE CHANGE ORDER IS COMPLETED AND SIGNED BY EACH PARTY.

This form is required and shall be prepared by the Contractor. All costs must be broken down.

DATE: 09|21|11 P. O. NUMBER: 2929014728 DCS/CAP PROJECT NUMBER: 11355

FROM PROPOSAL REQUEST NUMBER(S): 292011 CONTRACT NUMBER:

PROJECT NAME: SEMINOLE ARMORY LEAD & ASBESTOS REMED. DCS/CAP PROJ. MANAGER: REBEKAH RICHARDSON

CONTRACTOR: BASIN ENVIRONMENTAL & SAFETY TECHNOLOGIES CHANGE ORDER NUMBER: 1

BRIEF DESCRIPTION OF CHANGE:

SUMMARY OF WORK STATED 270 FEET OF TSI. ACTUAL FOOTAGE IS 380 FEET. CHANGE BASED ON REMOVING 110 ADDITIONAL FEET OF TSI.

BRIEF DESCRIPTION OF TIME DELAY:

Not valid until signed by the Contractor, Consultant and Authorized CAP Representative.

The original ☒ Contract Sum ☐ Guaranteed Maximum Price was . . . . . $ 104,428.00

Net change by previously authorized Change Orders . . . . . $ —

The ☒ Contract Sum ☐ Guaranteed Maximum Price prior to this Change Order was . . . . . $ 104,428.00

The ☒ Contract Sum ☐ Guaranteed Maximum Price will be ☒ increased ☐ decreased ☐ unchanged by this Change Order in the amount of . . . . . $ 4,242.50

The new ☐ Contract Sum ☐ Guaranteed Maximum Price including this Change Order will be . . . . . $ 108,670.50

The Contract Time will be ☐ increased ☐ decreased ☒ unchanged by . . . . . ____ Calendar Days

The date of Substantial Completion as of the date of this Change Order therefore is . . . . . N/C Date

APPROVALS:

BASIN ENVIRONMENTAL — Contractor Name — Signature — 09|21|11 Date

N/A — Consultant Name — Signature — Date

DEQ — Using Agency — Wendy Carpenter — Signature — 10-4-11 Date

GL Unit:	Acct:	Sub-Acct:	Fund Type:	Class Fund:	Dept:	Bud Ref:

Mike Jones — Authorized CAP Representative — Signature — 10-13-11 Date

Rebekah Richardson — DCS Project Manager — Signature — 10-10-11

STATEMENT OF WORK
For
Remediation of Lead and Asbestos Contamination at the Seminole 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 Seminole, Oklahoma. This statement of work (SOW) describes the abatement of lead-based paint located on surfaces throughout the building, remediation of lead contaminated dust, and removal and proper disposal of asbestos containing material. This work must be performed to provide for safe re-use of the facility with unrestricted use such as storage areas, classrooms, or office space. A mandatory site visit and walk through will be held to give a better understanding of the site. A floor plan map of the Seminole Armory is attached for review (**Attachment 1**).

The building is located at 600 East Strothers Avenue, Seminole, Oklahoma 74868. The building **does** 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. Coordination of work areas shall be scheduled with DEQ.
    d. Disposal of Removed Materials: All materials removed by the Contractor under this contract shall be disposed of in accordance with State and Federal regulations. DEQ will sign as generator, if necessary.

CONTRACTOR SHALL:

- Attend mandatory pre-bid meeting and site walk through;
- Posses a current lead-based paint firm license and have a certified lead-based paint supervisor in order to perform lead-based paint abatement;
- Posses a current Oklahoma Department of Labor (ODOL) Asbestos Abatement Contractor License in order to perform asbestos abatement;
- Follow all appropriate OSHA requirements;
- Follow OSHA Lead in Construction Interim Final Standard (29 CFR 1926.62) for lead-based paint abatement, 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 lead-based paint abatement has been appropriately performed.
3. Third – All floors of the entire building shall be cleaned.
4. Fourth – Enercon Services Inc. shall be contacted to perform third party confirmation sampling to confirm all floors have been appropriately remediated.

ASBESTOS ABATEMENT INSTRUCTIONS

- Non-friable and/or non-regulated Asbestos Containing Material (ACM) shall be removed as described in the attached Specifications for Removal of Non-Friable Asbestos (**Attachment 2**). Below is a list of non-friable and/or non-regulated ACM that shall be removed from the building:
  - Remove 450 SF of grey floor tile and black adhesive mastic located in Room 10, 11, and 13.
  - Remove 676 LF of cream caulk from windows located in Room 19 of Building 1.
  - Remove 616 LF of grey caulk from windows located in Building 2.
  - Any glass that is broken or missing prior to abatement or becomes broken during abatement shall be replaced.
- Friable ACM shall be removed as described in the attached Asbestos Abatement Project Design (**Attachment 2**).
- For more details see the attached Seminole 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**);
  - Building 2, Room 1, Side A Wall
  - All Drill Room Metal Door Lintels
  - White Overhead Door in Room 17
- The pass through windows in Room 2, 4, and 10 shall have all wood removed, wrapped in 6 mil poly sheeting and properly disposed;
- Deteriorated paint removed from building surface will be properly disposed.

2. Friction and Impact Surfaces

A. Doors and Frames

- A Door-Scope of Work with map, door measurements, and specific details on abatement requirements for each door is attached (**Attachment 6**);
- Door frames will be replaced with Steelcraft F16 and F14 – Series Flush Frames (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.

LEAD DUST REMEDIATION INSTRUCTIONS

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

1. Lead Dust Remediation (See Attachment 5)

- Building 1 and Building 2 shall have lead dust remediation performed.
- Surfaces above the floors such as walls, shelves, etc. may have accumulated dust that has settled. This accumulation shall be removed prior to the cleaning of the floors. This shall be done to prevent recontamination of the floors after they are cleaned.
- Floors of the entire building shall require lead dust remediation;
    - Remove dust from all equipment, shelving, trash, etc, and remove these items from room before remediation begins;
    - Remove dust from all carpet, remove carpet from rooms, and dispose of all carpet as non-hazardous waste before lead dust remediation of floor begins;
    - Dispose any materials, determined by the DEQ to be trash, as non-hazardous waste;
    - HEPA vacuum and wet wash floors of entire building;
        - Lead levels on the floor are high in many areas of the building and lead contaminated dust may be ground into the pores and cracks of the concrete. It may be necessary to clean floors several times or use alternate cleaning methods after HEPA vacuuming and wet washing to remove the lead dust from the concrete and get the lead levels down to 40 micrograms per square foot (ug/SF).
    - Contact Enercon Services to perform post remediation wipe sampling to confirm that room floors with lead contamination have been appropriately remediated to 40 micrograms per square foot (ug/SF). See Section C (Confirmation and Clearance Sampling) for additional information;
    - Areas above 40 ug/SF shall be re-cleaned and re-tested until results are at or below 40 ug/SF;
    - Lead dust and appropriate cleaning materials shall be disposed as appropriate.
    - Wash Water Disposal
        - All wash water from the building shall be filtered through a 1 micron filter and stored on site in containers;
        - The wash water will be sampled for total lead and total phosphorus; Total lead shall be run by ICP and total phosphorus shall be run by EPA Method 365.3;

- Sample results shall be submitted to DEQ to determine if wash water can be disposed at the local Waste Water Treatment Facility;
- Wash water shall be disposed appropriately.

2. Disposal of Materials

Hazardous Waste

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

Other

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

3. Confirmation and Clearance Sampling

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

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

- <u>The third-party sampling shall not be included in the contractors base bid;</u>
- All post remediation sampling will be performed after all initial abatement, remediation, and cleaning is complete.

5. FINAL REPORT

- Write final report and submit to DEQ;

- Final report shall include:
  - A detailed summary of work including any warranties and data;
  - Sample results;
  - copy of post remediation sampling report;
  - waste manifests; and
  - photo documentation of work;
    - Photo documentation of work will have color digital photos with captions describing photo;
    - Photos shall 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

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

ATTACHMENT 1

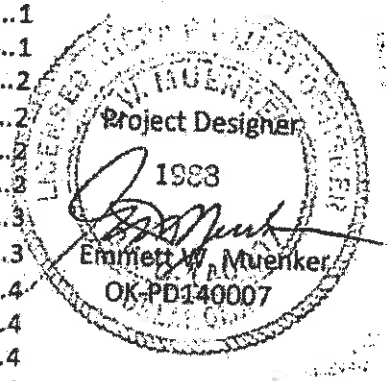
Floor Plan Map

SPECIFICATION FOR

REMOVAL OF NON-FRIABLE ASBESTOS

Table of Contents

Approvals



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. Approximately 450 square feet of asbestos floor tiles and adhesive in the Seminole Armory are to be removed. Paragraph 3.6 applies to areas where asbestos-containing floor tiles and/or asbestos-containing adhesive are present. The location the floor tiles and adhesive are indicated on Figure 1. There are double layers of floor tiles beneath carpeting in Rooms 11, 11 and 13.

B. Paragraph 3.7, Asbestos-Cement (Transite) Removal, this Section, does not apply to this facility.

C. Approximately 676 linear feet of window caulk/glazing in Building 1 and 616 linear feet in Building 2, or portions thereof, may be removed using the procedures stated in Paragraph 3.8, Asbestos-Containing Caulk/Glazing, when authorized by the contract documents.

1.2 SEQUENCE OF WORK

A. The work shall be conducted in a single phase. The Contractor shall remove the floor tiles and adhesive as shown on Figure 1 – Vinyl-Asbestos Tile Locations. 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.

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 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.

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.

3.7 ASBESTOS-CEMENT (TRANSITE) MATERIAL REMOVAL

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 ground along the exterior the building and on the floor inside the drill room in the area where the roofing panels are to be removed to catch any breakage that may occur during removal of the panels. The drop cloths are to be moved as necessary to cover the surfaces beneath the active removal area during removal of the panels.

C. The Contractor shall use boom lifts or other similar equipment to access the roof panels for removal. The material is to be wetted prior to removal, removed from the structural members intact, lowered to the ground and placed in a poly-lined dumpster for transport to the disposal landfill.

D. Care is to be taken during removal to prevent breakage of the panels during removal and handling, as the panels are to be removed 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 roof.

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.
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 2 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.

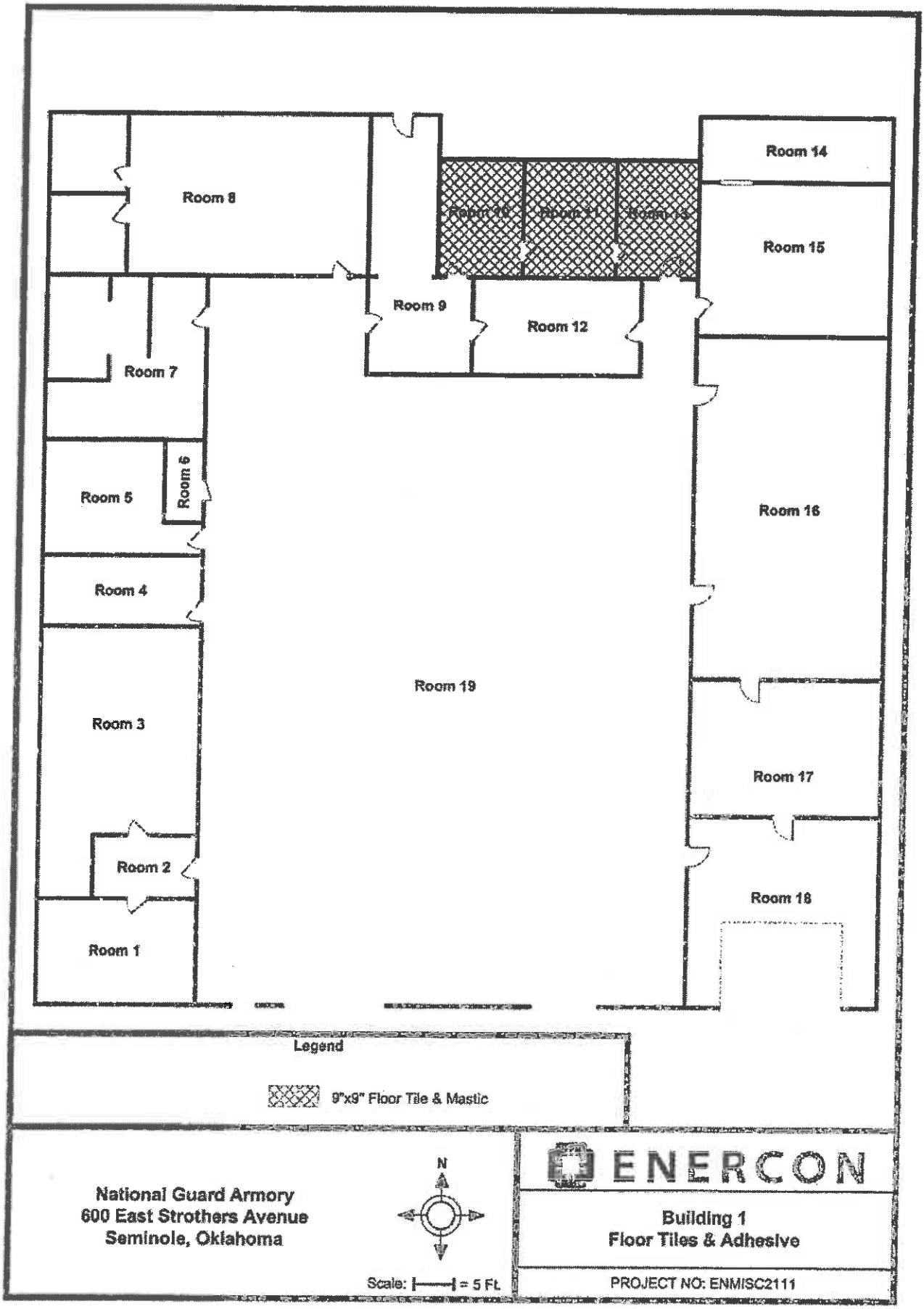
3.11 CLEARANCE TESTING

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 3.7 -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(S) – NON-FRIABLE MATERIAL LOCATIONS - SEE FOLLOWING PAGE(S)


Room 8
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Room 15
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Room 12
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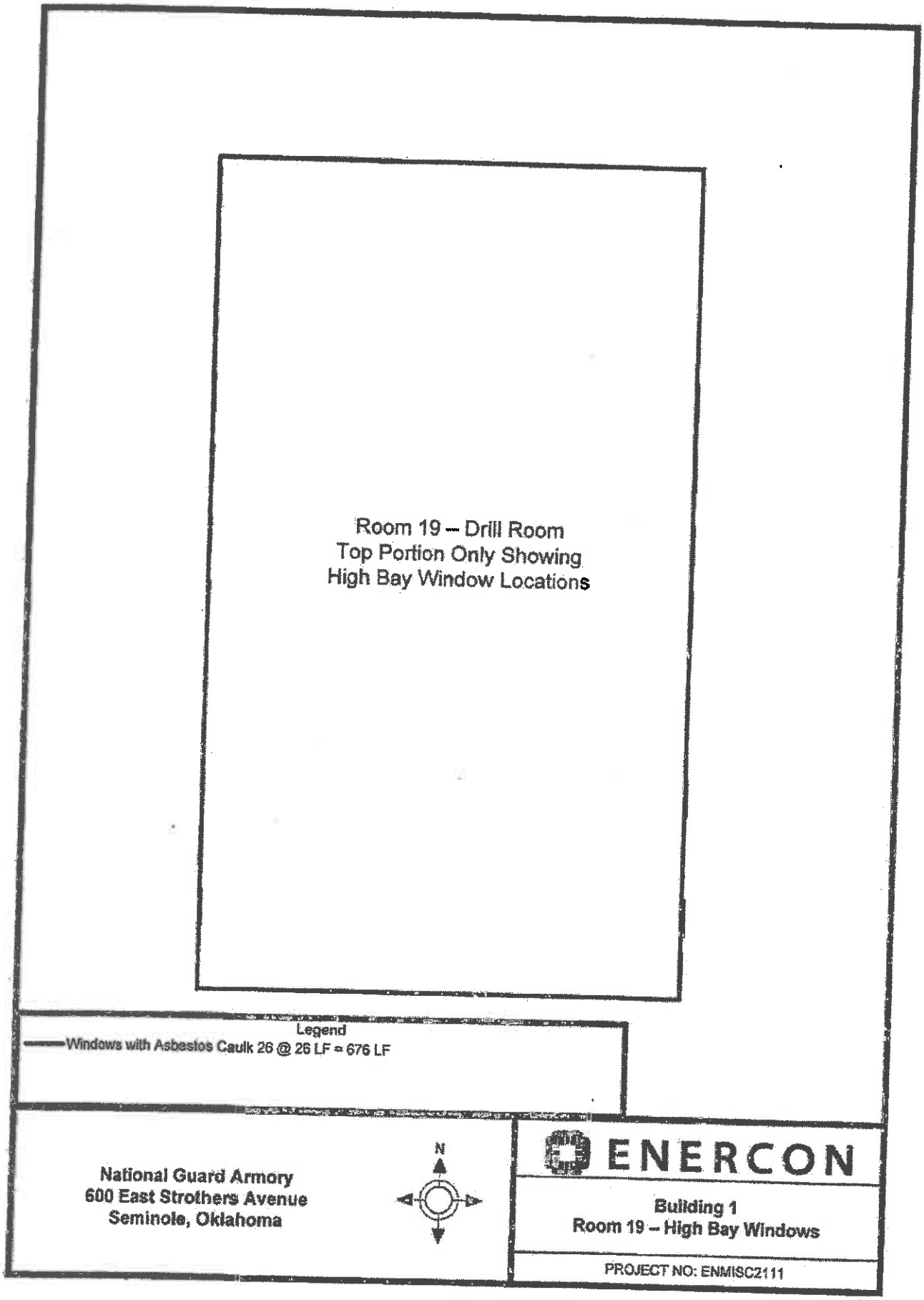
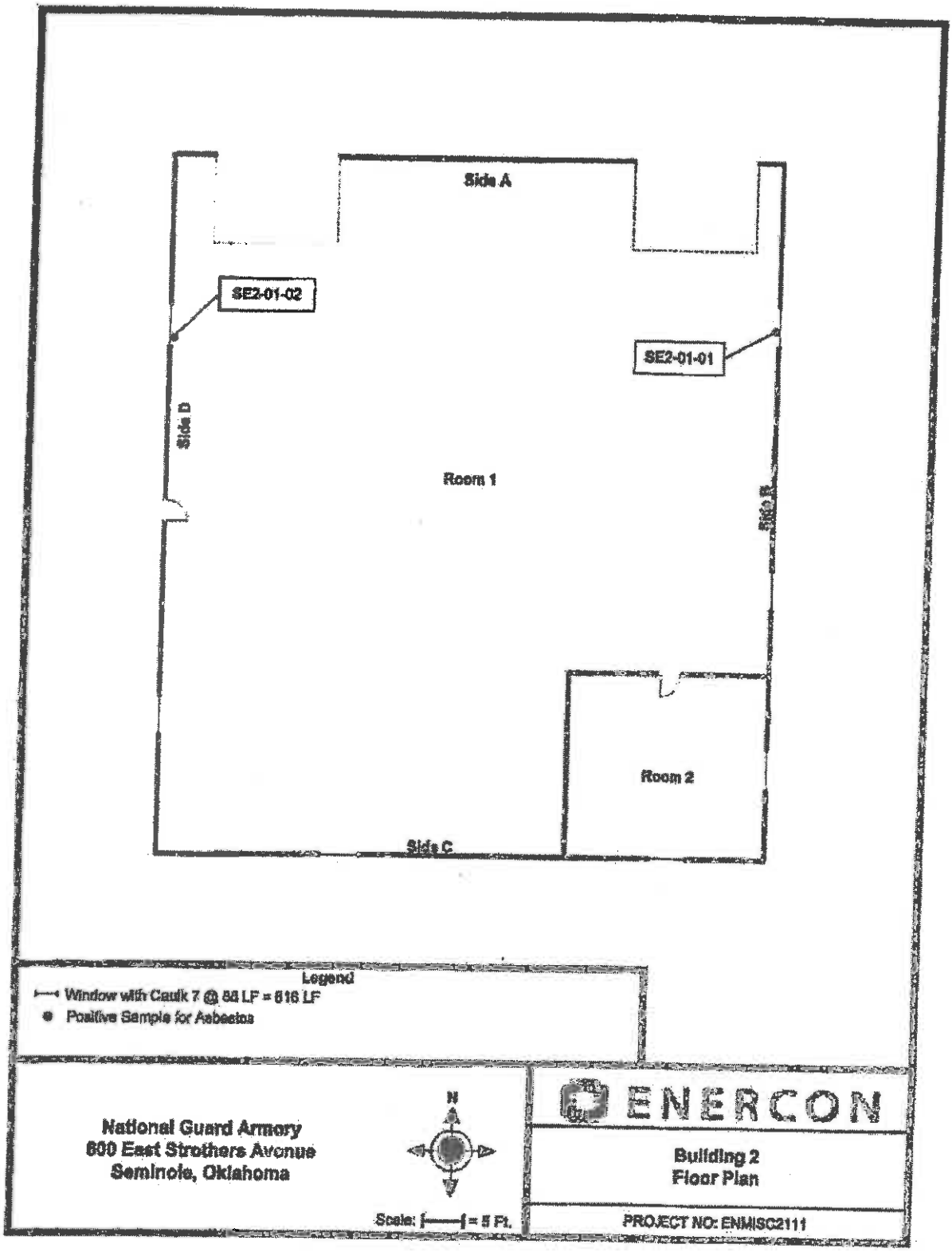
Room 6
Room 5
Room 16
Room 4
Room 19
Room 3
Room 17
Room 2
Room 18
Room 1
Legend
9"x9" Floor Tile & Mastic
N
National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma
Scale: = 5 Ft.
ENERCON
Building 1
Floor Tiles & Adhesive
PROJECT NO: ENMISC2111


Room 19 – Drill Room
Top Portion Only Showing
High Bay Window Locations
Legend
Windows with Asbestos Caulk 26 @ 26 LF = 676 LF
National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma
N
ENERCON
Building 1
Room 19 – High Bay Windows
PROJECT NO: ENMISC2111


Side A
SE2-01-02
SE2-01-01
Side D
Room 1
Side B
Room 2
Side C
Legend
Window with Caulk 7 @ 88 LF = 616 LF
Positive Sample for Asbestos
National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma
N
Scale: |——| = 5 Ft.
ENERCON
Building 2
Floor Plan
PROJECT NO: ENMISC2111

ASBESTOS ABATEMENT PROJECT DESIGN
PIPING ABATEMENT – GLOVE-BAG
SEMINOLE ARMORY
SEMINOLE, 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 in the Seminole Armory. Protocols to be used are to protect abatement workers from exposure to airborne asbestos fibers during the work being performed.

B. **PROJECT INFORMATION:**

1. Project Name: Glove-bag Asbestos Abatement, Seminole Armory
2. Description of Work/Occupancy: The work addressed herein involves abatement of line and fitting insulation on piping in the Seminole Armory. The facility is being transferred to the City of Seminole and the asbestos is to be removed prior to transfer of ownership.
3. Project Type: Renovation.
4. Abatement Contractor: To be determined by bid.
5. Industrial Hygiene/Air Monitoring Firm: Enercon Services, Inc.
6. Analytical Laboratory: Enercon Services, Inc., AIHA PAT Laboratory 151368.

C. **REGULATORY COMPLIANCE:** 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:** The work in the Seminole Armory is to be done under in a single phase. The work is to be scheduled by the abatement contractor in coordination with Enercon Services and the Department of Environmental Quality. The work is planned for 10-hour work shifts on weekdays during normal work hours.

E. **EGRESS AND FIRE PROTECTION:** 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:**

1. Description: The material to be abated is line and fitting insulation on piping.
2. Amount, Location and Type of Asbestos-Containing Materials (ACM): There is approximately 270 linear feet of piping insulation to be abated. The piping insulation contains from 5-20% Chrysotile. The laboratory report is attached.

No contaminated soils are to be abated under this Project Design.

G. **ASBESTOS ABATEMENT METHODS:**

The line and fitting insulation will be removed within critical barriers using glove-bag procedures and an attached decon Poly drop cloths will be placed on the floor beneath the piping during installation of glove-bags. Bagged waste may be stored temporarily on a drop cloth inside the work area awaiting loadout. At the end of the work shift or when sufficient waste has accumulated for loadout, the waste will be removed from the work area through the loadout and loaded into a poly-lined disposal trailer/van.

H. **ASBESTOS AIR MONITORING/RESPIRATORY PROTECTION:** Full-body protective clothing and full-face APR with HEPA-cartridges will be worn during installation of glove-bags and during abatement. Full-body protective clothing and half-face APR may be worn during handling and load-out of the double-bagged waste. Setup of decon may be done unprotected. The abatement contractor may use a decon trailer or a site-erected decon at his discretion. Personal air samples will be collected on a minimum of two workers or 25%, whichever is greater, during work requiring respiratory protection. One area air monitor will be placed inside the work area while abatement is in progress. One area monitor will be set outside the clean room of the decon during decontamination and one will be placed near the loadout van/trailer during load-out. 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.

I. **LABORATORY CERTIFICATIONS:** The laboratory to be used for analysis of personal and area asbestos air samples is Enercon Services, Inc., AIHA PAT Laboratory 151368. 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:** Critical barriers and a drop cloth beneath the piping during glove-bagging will be used. Rolling scaffolding or ladders will be used to as necessary to access the piping. Workers will be briefed by the supervisor regarding relevant safety issues associated with the work at the beginning of each work shift. Asbestos barrier tape will be used as necessary to demarcate the regulated area. All electrical circuits within arm's reach of the glove-bags will be shut off and locked out/tagged out. Power for the decon shower, any temporary work lighting, HEPA-vacuums, and AFD for the decon will be supplied through a GFCI-board or pigtails.

K. **DECONTAMINATION SYSTEM:** An attached worker decontamination facility or decon trailer will be used. The location of the decon will be at or near the south entrance. The remote decon will have an AFD connected to provide air flow through the decon for decontamination. The AFD will be exhausted outside the building and the exhaust will be monitored when the decon is being used. 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 to be followed.

N. **DAMAGE PROTECTION:** The contractor will endeavor to protect the building from any damage during abatement activities. Where piping is located above ceiling tiles, the contractor is to remove the ceiling tiles intact and work through the grid, protecting the grid from damage.

O. **VARIANCES REQUESTED:** None.

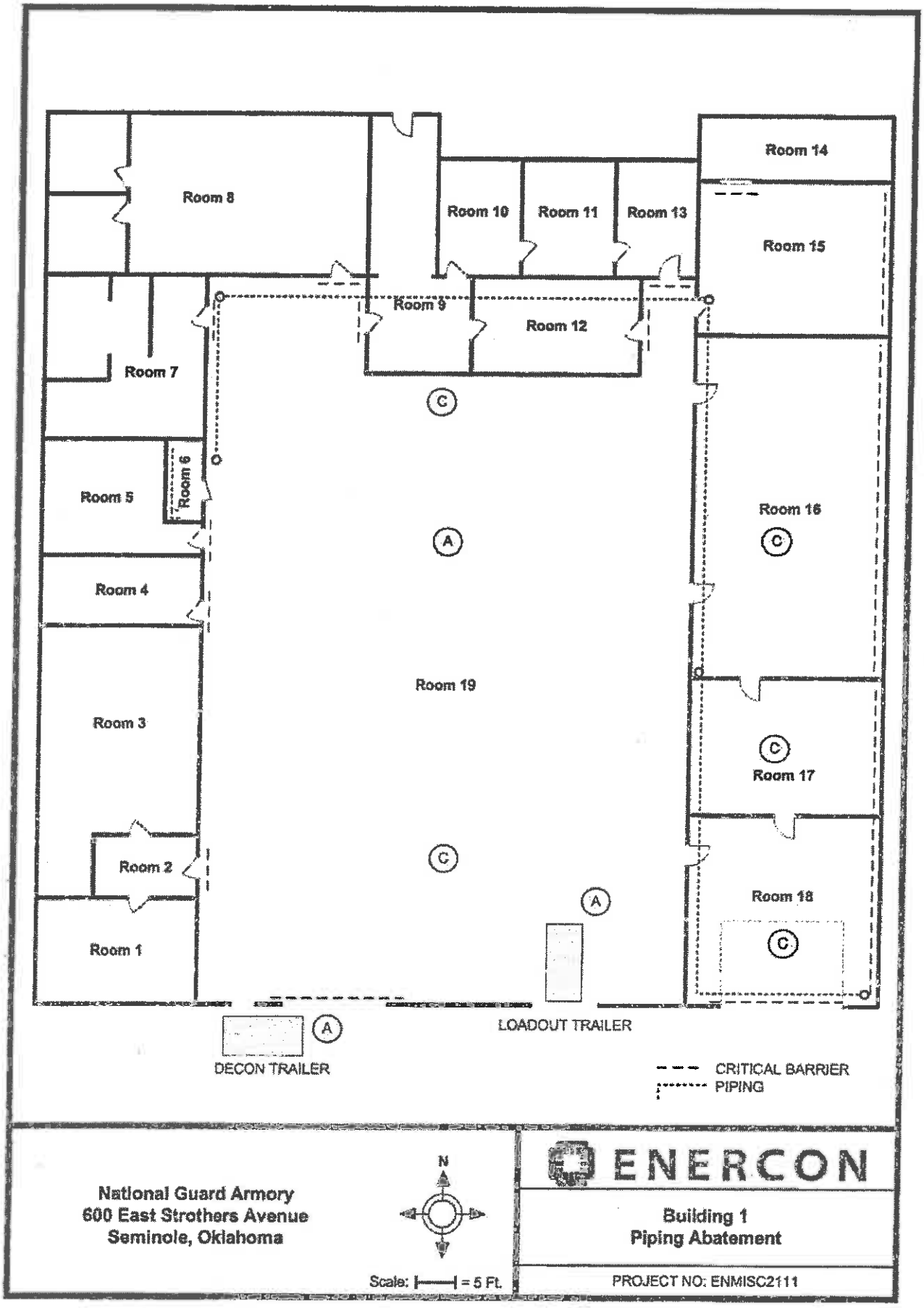
P. **INSPECTIONS:** ODOL is expected to conduct routine prep, in-progress, visual and final inspections for this project.

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

01/06/2011

Bill Muenker
Asbestos Project Designer, OKPD-140007

Date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Room 14
Room 15
Room 9
Room 12
Room 7
Room 5
Room 6
Room 16
Room 4
Room 19
Room 3
Room 17
Room 2
Room 18
Room 1
LOADOUT TRAILER
DECON TRAILER
CRITICAL BARRIER
PIPING
National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma
N
Scale: = 5 Ft.
ENERCON
Building 1
Piping Abatement
PROJECT NO: ENMISC2111

2093 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 188438
Account Number: A845
Date Received: 10/20/2010
Received By: Sherrie Leftwich
Date Analyzed: 10/28/2010
Analyzed By: Stacey Holder
Methodology: EPA/600/R-93/116

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

Project: Seminole Armory
Project Location: Seminole, OK
Project Number: ASB-SEM

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
001	SEM-01-01	Layered	Brown Pipe Insulation	Asbestos Not Present	Cellulose 35	Inert
001a		Layered	Black Backing	Asbestos Present Chrysotile 20	Cellulose <1	Tar
002	SEM-01-02	Layered	Brown Pipe Insulation	Asbestos Not Present	Cellulose 35	Inert
002a		Layered	White Insulation	Asbestos Present Chrysotile 5	Cellulose 10	Inert
003	SEM-01-03	Homogeneous	White/Brown Pipe Insulation	Asbestos Present Chrysotile 10	Cellulose 10	Inert
004	SEM-02-01	Layered	White Floor Tile	Asbestos Not Present	Cellulose <1	Vinyl CaCO3
004a		Layered	Yellow Mastic	Asbestos Not Present	Cellulose 2	Glue

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

Project Design Review Form

Approved: X

Disapproved: _____

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

Project Name: Seminole Armory
Project No: 11-6500 **Date:** 01/07/2011
Project Designer: Bill Muenker

	ITEM	ACCEPTED	REJECTED	COMMENTS
1.	A statement that DOL Abatement of Friable Materials Rules apply.	X		Project to be performed abiding by OAC 380:50 Oklahoma Rules for Abatement of Friable Asbestos
2.	Sequencing and phasing of work.	X		One Phase- Glovebagging
3.	Identification of means of egress and a fire protection plan and a diagram for emergency escape routes, and fire extinguisher placements.	X		Workers briefed on emergency egress procedures. One 10 lb ABC fire extinguisher placed inside work area and one placed outside decon.
4.	The quantity , type, percentage with bulk analysis unless presumed and a diagramad location of asbestos materials to be abated.	X		Approximately 270 LF of pipe insulation containing 5-20% chrysotile.
5.	Abatement methods, and techniques, and numbers of containments, glove bags or mini-containments.	X		Glovebagging procedures
6.	Details of pursonal and area air monitoring samples.	X		Personnel monitors= 25% of personnel with a min. of (2), work area, outside decon clean room, loadout. Neg air discharge.
7.	Numbers and locations of Clean Test samples and type of analysis to be employed.	X		(5) PCM clearance samples achieving 1200 L each.
8.	Numbers, capacities, a diagram to identify locations, and discharge points, if any, of negative air machines.	X		One neg air placed at dirty side of decon and vented externally.
9.	Details of project containment(s), glove bag or mini-containments, including drawings. Details shall include all applicable subchapters, including but not limited to scaffolding and live electric isolation.	X		Criticals, drop cloths, glovebags, electrical within arms reach of glovebags or below will be shut off and locked out/tagged out. Attached decon and load out.
10.	Details of decontamination system(s).	X		Attached three-stage decon constructed according to OAC 380:50-7,15-8, and 15-12.
11.	The extent to which asbestos-contaminated soils, if any, must be removed, and the sampling methods of determining the efficacy of such removal.	N/A		
12.	Special materials or methods required to protect objects in the work area should be detailed, (plywood over carpeting or hardwood floors to prevent damage from scaffolds and/or falling materials.	X		Contractor to protect building from any damage during abatement activities.
13.	Any variances from the Abatement of Friable Asbestos Materials Rules.	N/A		

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

REVIEWED BY: _____ DATE: 1/7/11

REVIEWED BY: _____ DATE: 1/7/11

ATTACHMENT 3

Health & Safety Aspects to Consider

Health & Safety Aspects to Consider

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

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

Health and Medical Aspects

Health Effects

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

Medical Surveillance for occupational Exposure to Lead

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

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

Personal Protective Equipment

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

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

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

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

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

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

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

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

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

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

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

Education, Maintenance, Cleaning and Conversion

Worker Education

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

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

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

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

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

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

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

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

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

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

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

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

REFERENCES

Section 1 Required Publications

There are no entries in this section

Section II Related Publications

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

AR 11-34
The Respiratory Protection Program

AR 40-5
Preventive Medicine

DODI 6055.5
Industrial Hygiene and Occupational Health

DOD 6055.5-M
Occupational Medical Surveillance Manual

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

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

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

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

NGR 420-10
Construction and Facilities Management Office Operations

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

ATTACHMENT 4

DEQ Approved Lead-Based Paint Encapsulants List

Lead-Based Paint Encapsulants approved by DEQ

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

ATTACHMENT 5

Survey and Assessment for Lead in Paint and Settled Dust
For
Seminole Armory

ATTACHMENT 6

Door Scope of Work Including Measurements and Specifications

Seminole Armory Door Measurements
And
Scope of Work

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

1. Remove and replace door and door frame. Door Measurements – 32" X 80"
2. Remove and replace door and door frame. Door Measurements – 3' X 7'
3. Remove and replace door and door frame. Door Measurements – 3' X 7'
4. Remove and replace door and door frame. Door Measurements – 3' X 7'
5. Remove and replace door and door frame. Door Measurements – 3' X 7'
6. Remove and replace door and door frame. Door Measurements – 3' X 7'
7. Remove and replace door and door frame. Door Measurements – 32" X 80"
8. Remove and replace door and door frame. Door Measurements – 32" X 80"
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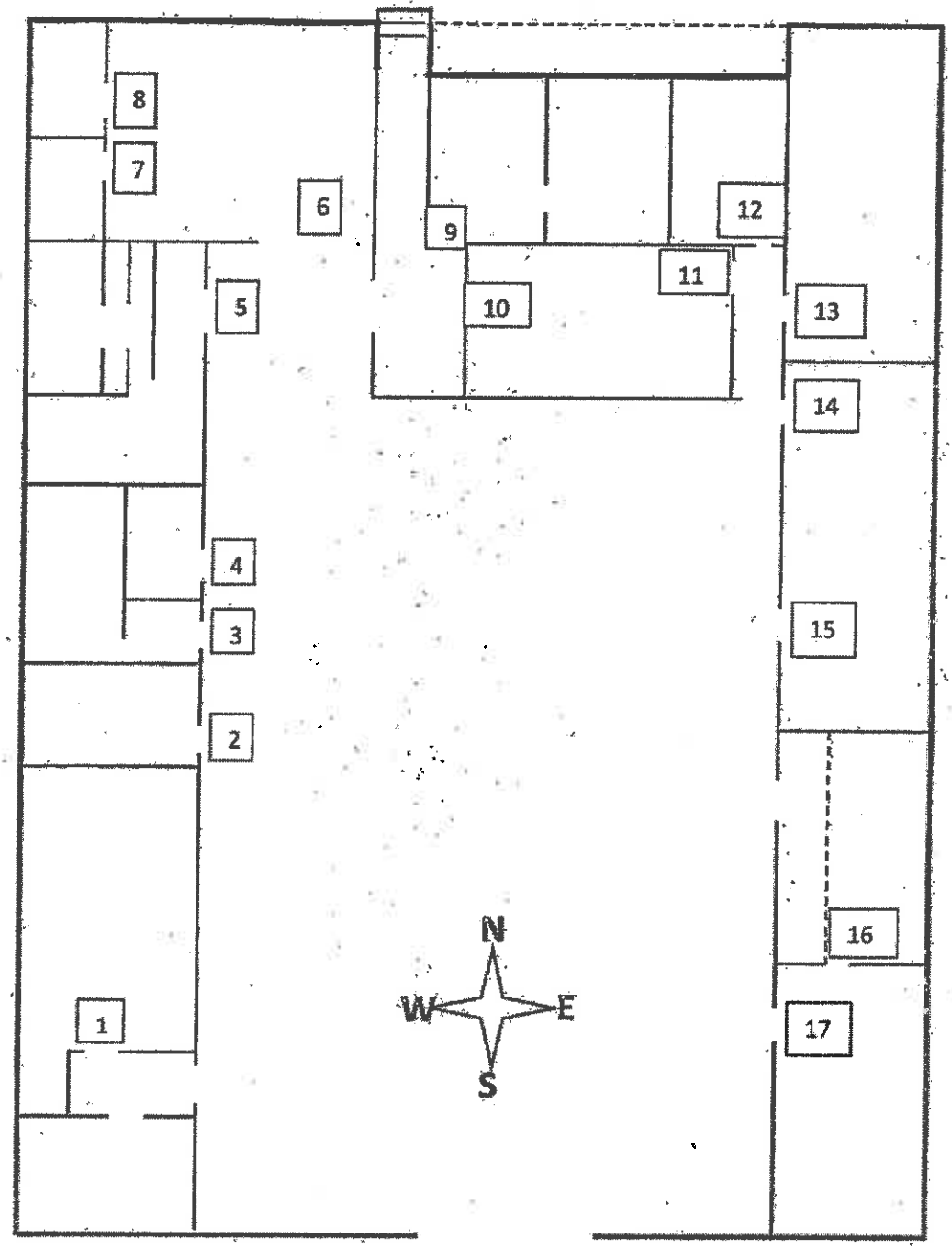
10. Remove and replace door and door frame. Door Measurements – 3' X 80"
11. Remove and replace door and door frame. Door Measurements – 3' X 80"
12. Remove and replace door and door frame. Door Measurements – 3' X 7'
13. Remove and replace door and door frame. Door Measurements – 3' X 7'
14. Remove and replace door and door frame. Door Measurements – 3' X 7'
15. Remove and replace door and door frame. Door Measurements – 3' X 7'
16. Remove and replace door and door frame. Door Measurements – 3' X 80"
17. Remove and replace door and door frame. Door Measurements – 3' X 7'

Seminole 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.

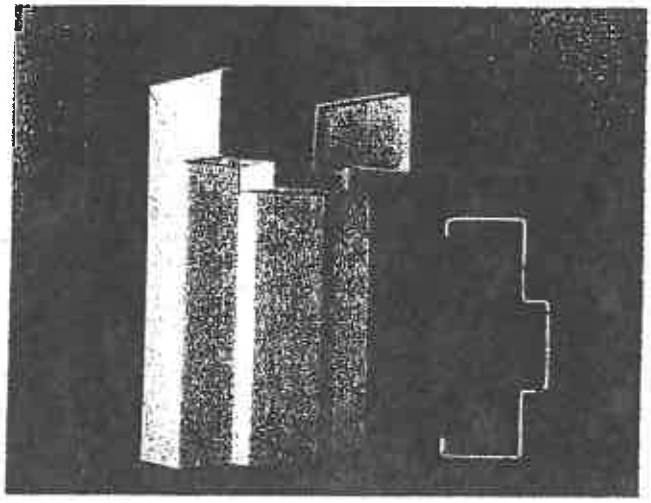
F. Thresholds: Place double band of sealant under and along all sides of all exterior thresholds.

END OF SECTION 07920

STEELCRAFT®

F16 AND F14-SERIES FLUSH FRAMES

HD X-HD



FEATURES AND BENEFITS:

Steelcraft F-Series Flush Frames offer the following unique features, which enhance long term functionality and durability:

1. **Die-mitered corner connections** (head/jamb) Standard corners insure attractive, tight and closed miters.
2. **Patented universal hinge preparations** allow for easy field conversion from standard weight (.134) hinges to heavy weight (.180) hinges.
3. **Adjustable base anchors** allow for installation adjustment when the floor is not level.
4. **Rubber silencers** are factory installed.
5. **Factory applied baked on rust inhibiting primer** in accordance with ANSI A250.10.

ABOUT THE PRODUCT:

The F16 and F14-Series 3-Sided Flush Frames are designed for heavy and extra-heavy duty applications in both commercial and institutional buildings. They can be installed in both interior and exterior locations, and in virtually all types of buildings and wall constructions. These frames are to be installed as part of the wall framing sequence. They can be specified and/or supplied as either KD (knock-down) for field assembly prior to installation, or SUA (set-up and welded) for installation as a pre-welded unit.

APPLICATIONS:

The F-Series Frames are typically used in the following types of wall constructions:

Wall Construction	Application	Typical Wall Anchors
Masonry	wrap or butted	Wire masonry
Existing masonry	butted	Bolted through soffit
Wood stud	wrap	Lock-in wood stud anchor
Steel stud	wrap	Lock-in steel stud anchor

SPECIFICATION COMPLIANCE:

1. Overall frame construction for the Steelcraft F16 and F14-Series Flush Frames 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 F-Series Frames 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). Refer to the "Fire Rated" section of the Steelcraft Spec Manual for particular listings.

Steel Thickness[1]	Opening	Usage Frequency[1]	Applications
14 gage (1.7mm)	Interior & Exterior	Extra-heavy to Maximum duty	• 16 & 14 gage steel doors
16 gage (1.3mm)	Interior & Exterior	Heavy to Extra-heavy duty	• 20, 18 & 16 gage steel doors • Commercial grade wood doors
Steel Type	**Opening**	**Applications[1]**	
CRS	Mainly Interior	• Typical building conditions	
Galvannealed[2]	Mainly Exterior	• Used in locations with high humidity and/or weather exposure	

MATERIAL:

F-Series Frames are supplied from either 14 gage (1.7mm) or 16 gage (1.3mm) steel. Depending on environmental and usage conditions, the steel can be either cold rolled steel (CRS) or galvannealed. All frames are supplied with a factory applied baked on primer for ultimate field paint adhesion.

[1] Usage frequency is based on ANSI A250.8-1998
[2] Reinforcements for galvannealed frames are also galvannealed

Details are subject to change without prior notice.

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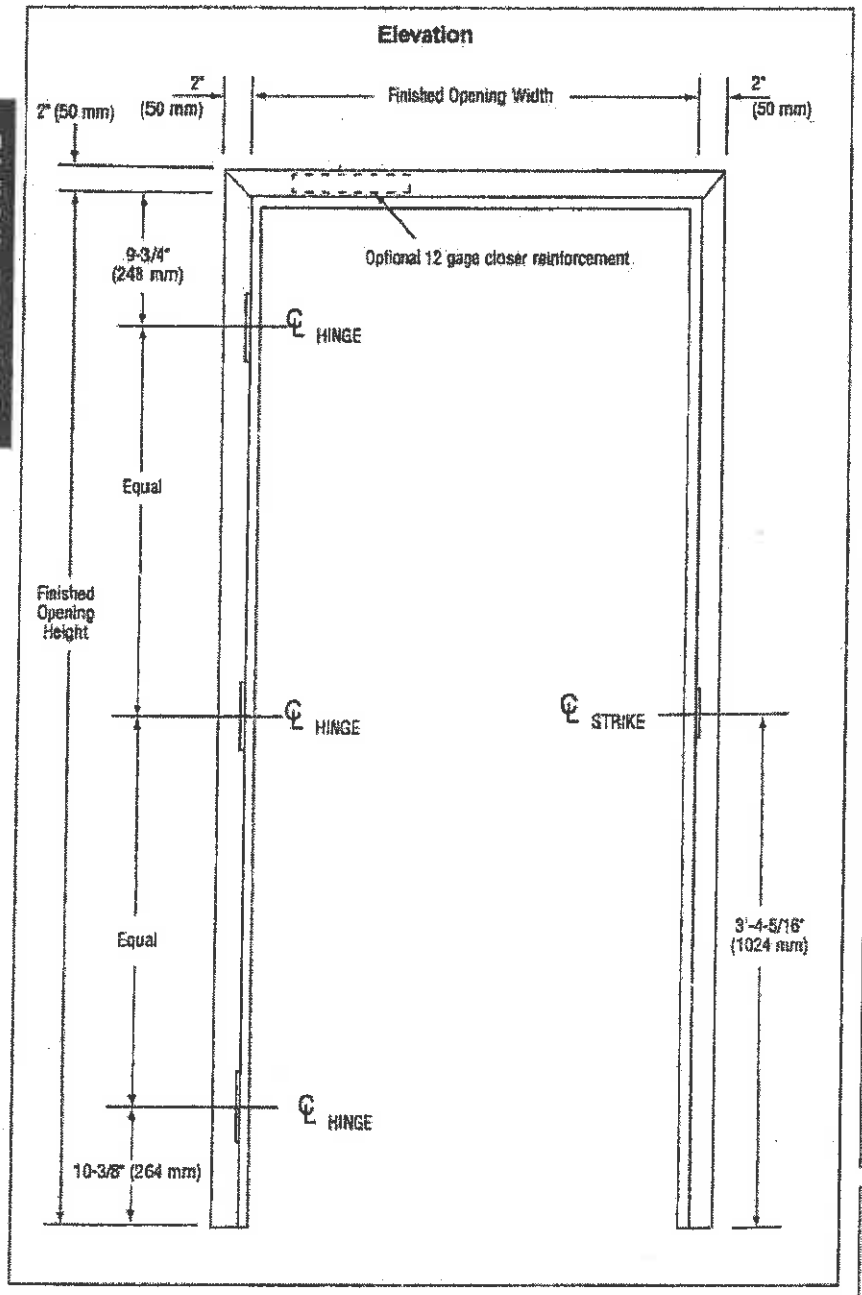
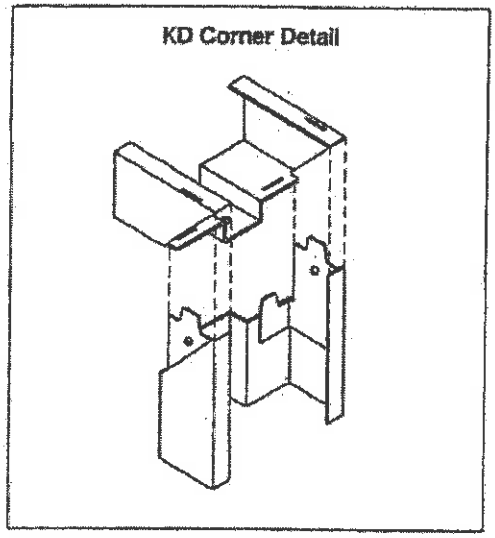
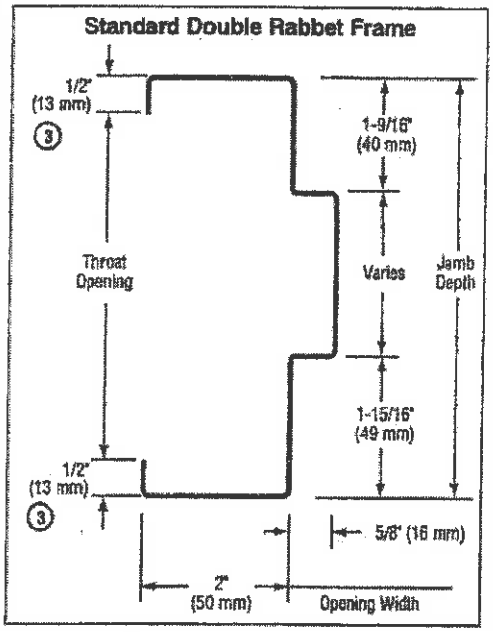
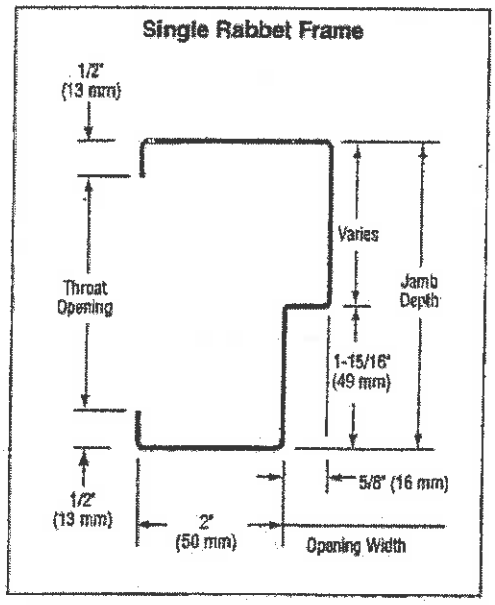




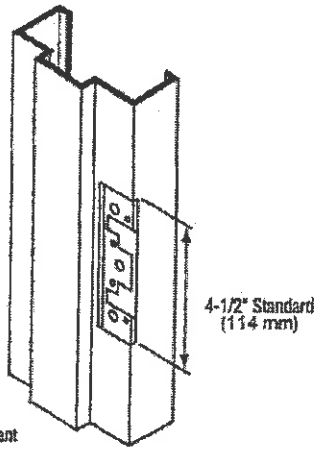




CONSTRUCTION NOTES:

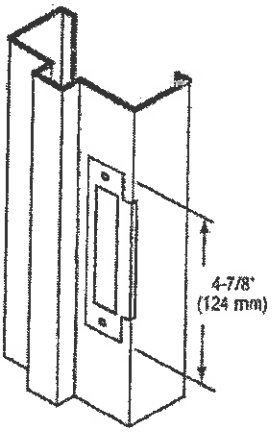
1. **Door opening size maximum:**
   Single door opening size 5'0" x 11'0" (1524mm x 3353mm)
   Double door opening size 10'0" x 11'0" (3048mm x 3353mm)
2. **Jamb depths (profile) availability:**
   Single rabbet:
   minimum = 3" (76mm)
   maximum = 12¾" (324mm)
   Double rabbet:
   minimum = 4⅜" (121mm)
   maximum = 14¾" (375mm)
3. **Standard profile dimensions (variations available):**
   Face = 2" (50mm)
   Stop = ⅝" (16mm)
   Returns = ½" (13mm) all frames except 5¾" (146mm) which is 7/16" (11mm)
4. **Standard die-mitered corners:**
   Four (4) concealed tabs interlocking head and jambs

Universal Mortise Hinge Prep

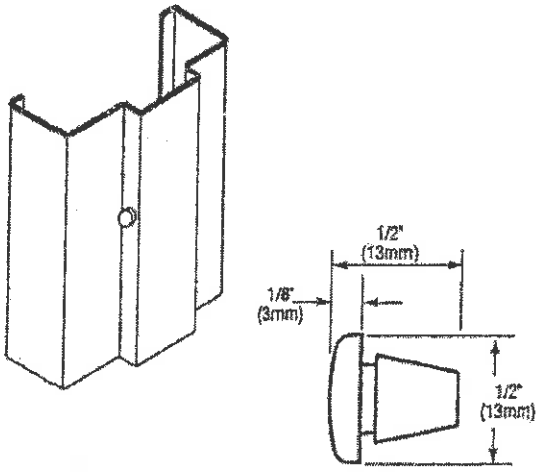


7 Gage Hinge Reinforcement

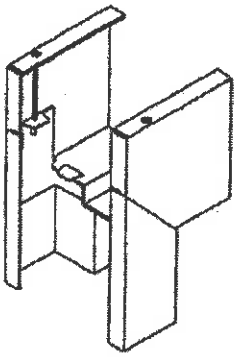
4⅞" Strike Prep



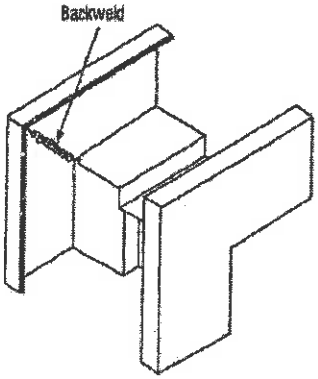
Rubber Silencer



Optional 4" (102mm) Head Detail



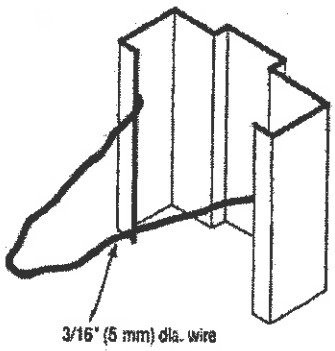
Welded Corner



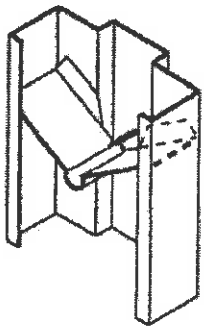
GENERAL NOTES:

1. **Frame profile** – variations in jamb depths available in ⅛" (3mm) increments:
   Single rabbet – typically for walls less than 3¾" (95mm) thick (2" min.[50mm])
   Double rabbet – typically for walls 3¾" (95mm) thick and over
2. **Corner connections:**
   - **KD (knock-down)** – Factory die-mitered
     Double rabbet frames – 4 tabs per miter
     Single rabbet frames – 3 tabs per miter
   - **Corner Connections – SUA (set-up and welded)** Available when specified, and in accordance with ANSI A250.8-1998.
3. **4" (102mm) heads** – die mitered for use with 2" (50mm) face double rabbet jambs. Available when specified for KD or SUA applications.
4. **Standard hardware preparations:**
   Standard mortised and reinforced with mortar guards for:
   - **Universal hinge preps** – 4½" (114mm) patented preparation which allows easy and quick conversion from standard to heavy weight hinges.
   - **Strikes** – 4⅞" (124mm) conforming to ANSI A115.1 and ANSI A115.2.
5. **Rubber silencers:** All frames are supplied with factory installed silencers to cushion the closing of the door and to eliminate the field problems related to installing the silencers after the frames are installed and grouted. Three (3) silencers per strike jamb and two (2) per double door head.

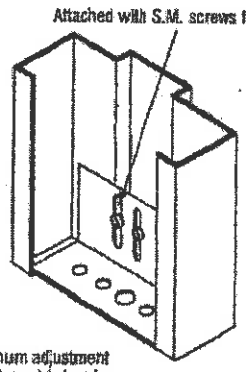
Wire Masonry Anchor



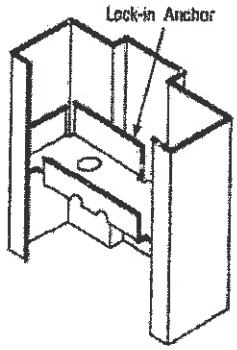
Existing Wall Anchor



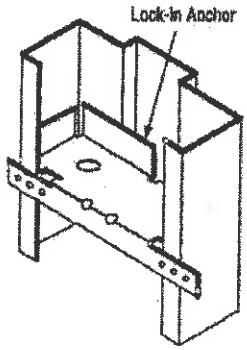
Adjustable Base Anchor



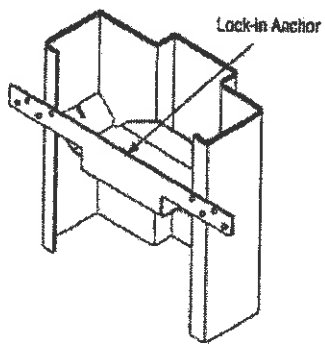
Anchor for Stud Partitions



Anchor for Wood Stud Partition



Universal Stud Anchor

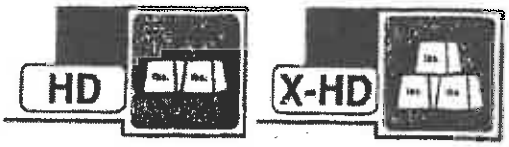


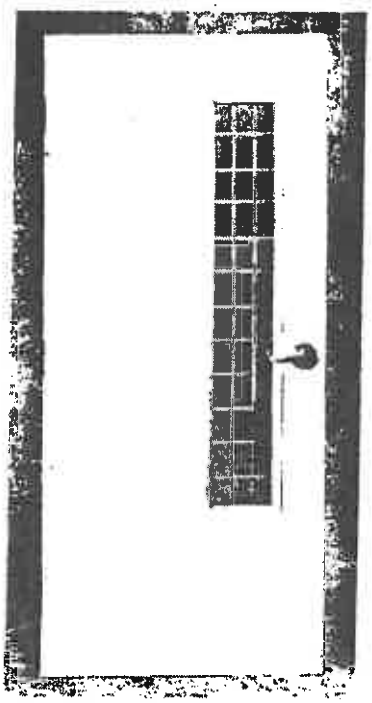
ANCHORING AND INSTALLATION NOTES:

1. **F16 and F14-Series Commercial and Institutional Frames** are supplied standard with masonry wire or lock-in jamb anchors and adjustable base anchors. Anchors are designed for maximum wall/frame engagement and installation flexibility.
2. **Anchoring applications:**
   - **Masonry wall** – Masonry wire anchors (3/16" [5mm] dia.) provide maximum engagements in mortar joints, and allow for full internal grouting during installation. Adjustable base anchors are attached directly to the floor and adjusted. The wall is built around the anchored frame. (Refer to installation sheet #INS-2004.)
   - **Existing masonry walls (EMA)** – Specifically designed (18 Ga. steel) jamb anchors are used to add support for bolting the frame into the rough opening of an existing wall. An existing wall anchor is used as the base anchor in this application. (Refer to installation sheet #INS-2014.)
   - **Wood stud walls** – Lock-in (18 Ga. steel) jamb anchors are designed to be attached to the wood stud rough opening. After the frame is anchored, the wallboard is installed and finished. (Refer to installation sheet #INS-2005.)
   - **Steel stud walls** – Lock-in (18 Ga. steel) jamb anchors are designed to be attached to the webbing of the closed steel studs which are built around the frame. Adjustable base anchors are attached directly to the floor and adjusted. After frame is anchored, the wallboard is installed and finished. (Refer to installation sheets #INS-2006 and 2007.)
3. **Special frame anchorage:** Frame anchorage details shown on this sheet are applicable to double rabbet frames with 2" (50mm) faces. Anchorage details and availability of lock-in anchors will vary with the following frame profile changes:
   - **Single rabbet** – all details will vary.
   - **Double rabbet** – over 8¾" (222mm) jamb depth
4. **Installation caution notice:** When temperature conditions necessitate an additive to be used in the plaster or mortar to prevent freezing, the contractor installing the frames shall coat the inside of the frames in the field with a non-corrosive bituminous material.
5. Installation shall conform to the published Steelcraft installations instructions, SDI 105 *Recommended Installation Instructions for Steel Frames*, and ANSI/DHI A115-IG *Installation Guide for Doors and Hardware.*
6. All fire rated frames must be installed in accordance with NFPA Pamphlet 80 and the *Authority Having Jurisdiction.*

STEELCRAFT®

L18 AND L16-SERIES HONEYCOMB DOORS





FEATURES AND BENEFITS:

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

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

ABOUT THE PRODUCT:

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

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

SPECIFICATION COMPLIANCE:

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

FIRE RATINGS:

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

Steel Thickness	Opening	Usage Frequency[1]	Frame Applications
16 gage (1.3mm)	Interior & Exterior	Extra-heavy duty	• 16 & 14 gage steel frames
18 gage (1mm)	Interior & Exterior	Heavy duty	• 16 gage steel frames
Steel Type	**Opening**	**Building Applications**	
Non Galvannealed[3]	Mainly Interior	• Typical building conditions	
Galvannealed[2]	Mainly Exterior	• Used in locations with high humidity and/or weather exposure	

MATERIAL:

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

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

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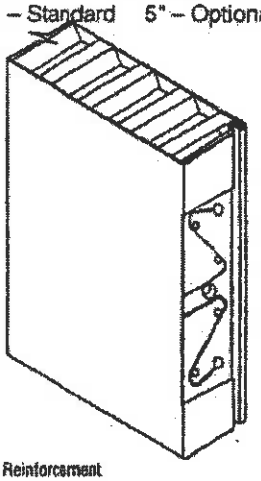
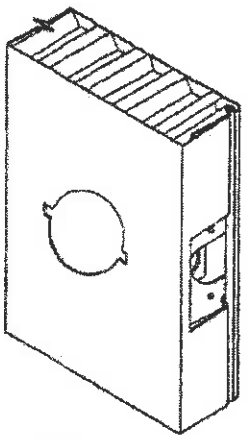
Details are subject to change without prior notice.

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



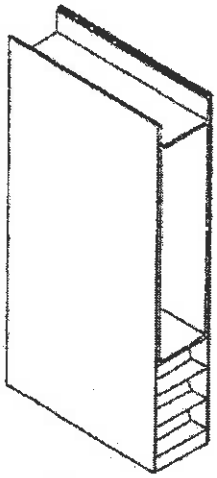
7 Gage Hinge Reinforcement

Lock Prep

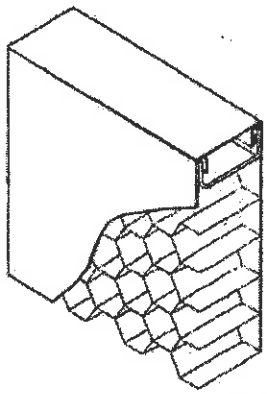


161 Cylindrical Lock shown

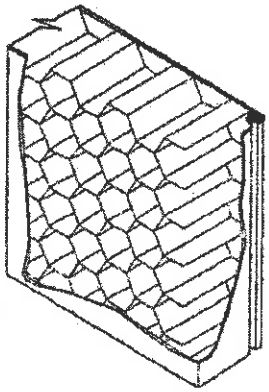
Optional 14 Gage Closer Reinforcement



Optional Snap-in Top Cap

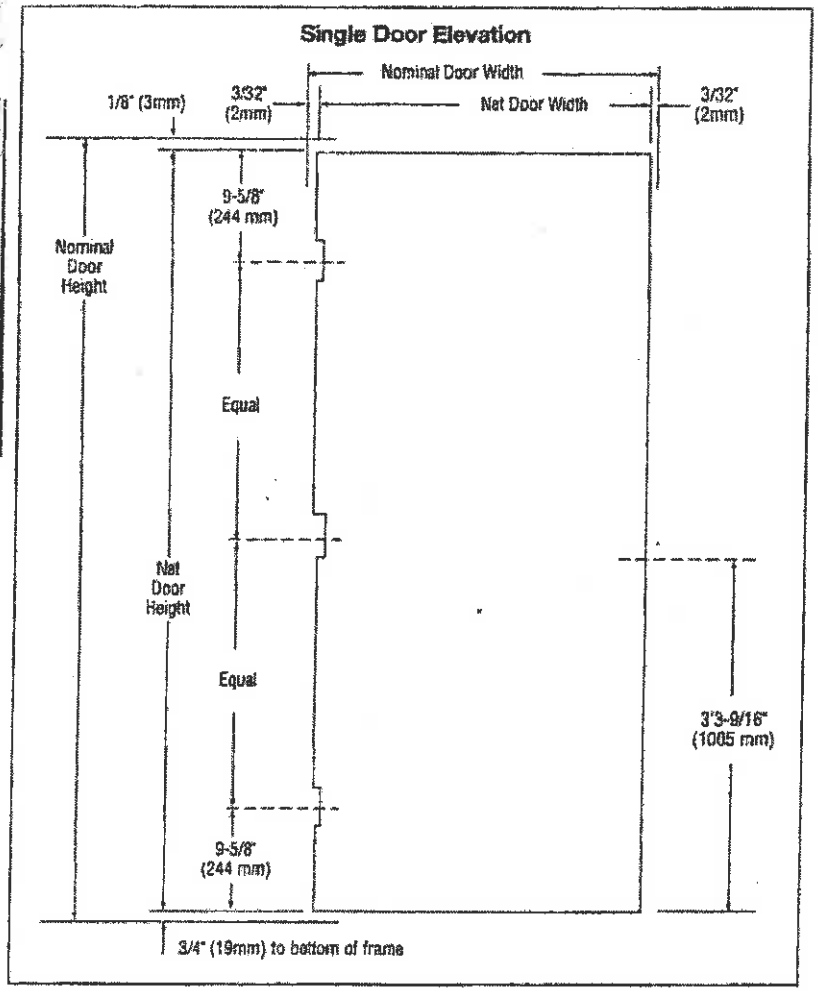


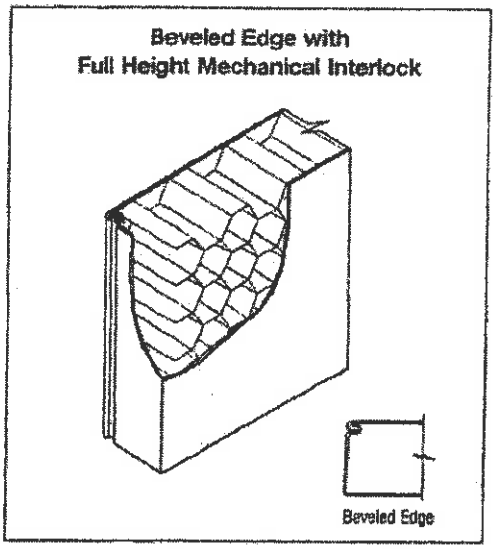
Rigid Honeycomb Core

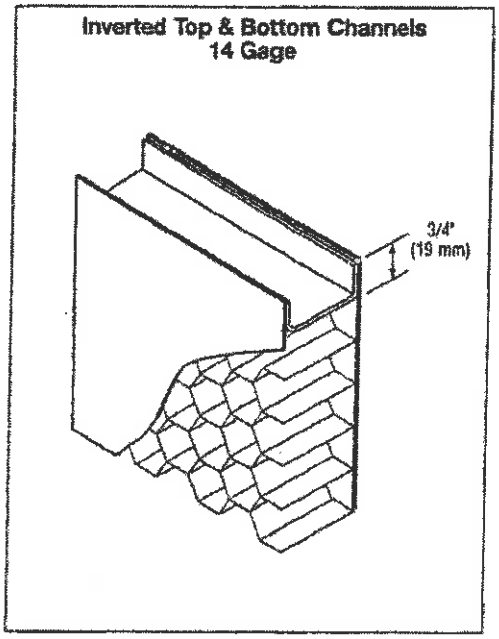


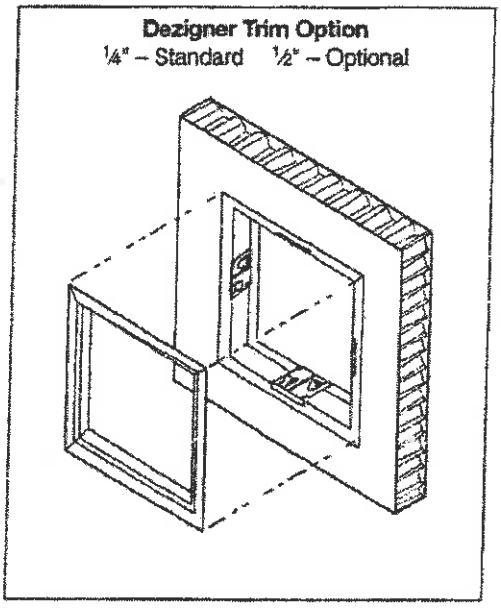
GENERAL NOTES:

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









CONSTRUCTION NOTES:

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

INSTALLATION:

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

DOOR EDGE APPLICATIONS:

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

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

CONVERSION CHART

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

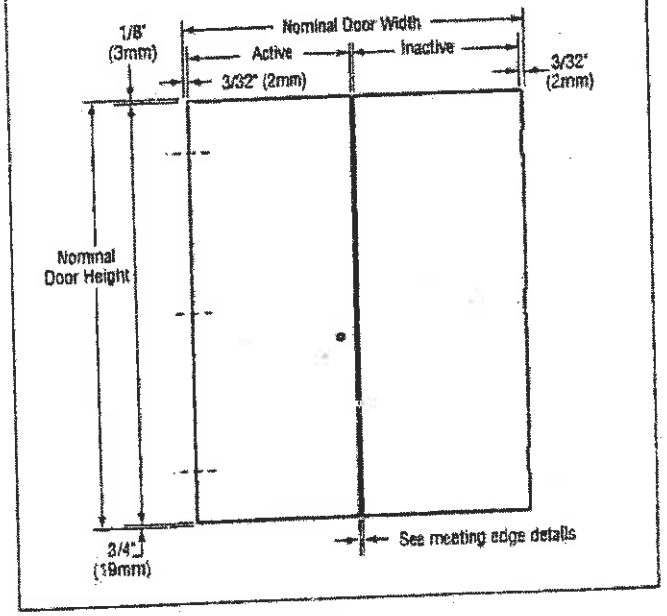
Series	Level	Model	Description	Edge Construction
L18	2	1	Full Flush	Full height, visible mechanical interlocked edge
LF18	2	2	Seamless	L-Series with epoxy filled edge seams
LW18	2	2	Seamless	L-Series with welded edge seams
L16	3	1	Full Flush	Full height, visible mechanical interlocked edge
LF16	3	2	Seamless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

DOUBLE DOOR APPLICATIONS:

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

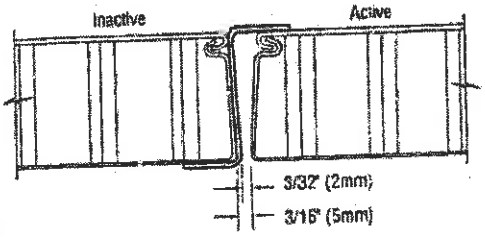
- **Standard operating clearances** *(installed in frame)*:
  - Head = 1/8" (3mm) to bottom of head or transom panel
  - Hinge side = 3/32" (2mm) to rabbet on jamb
  - Meeting edges = 3/32" (2mm) with or without astragal. For openings without an astragal, a wide inactive leaf is used.
  - Bottom = 3/4" (19mm) to bottom of frame
- **Meeting edges:**
  - 14 Gage astragal is furnished loose for installation in the field by others.
  - Overlapping astragal kits are available to convert an active leaf to an inactive leaf.
  - When an astragal is not used, the width of the inactive leaf is increased 3/32" (2mm).
- **Hardware preparations:** the inactive leaf can be prepared for hardware as specified.

Double Door Elevation

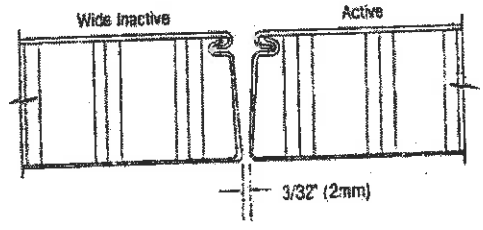


MEETING EDGE DETAILS:

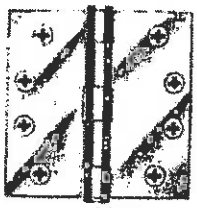
Typical Astragal 14 Gage



Pairs without Astragal



Five Knuckle



Plain Bearing - Standard Weight

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

1191 Brass with Stainless Steel pin - ANSI A2133

Stainless Steel with Stainless Steel pin - ANSI A5133

1279 Steel with Steel pin - ANSI A8133

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

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

Five Knuckle

Plain Bearing - Standard Weight - Wide Throw

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

1191 Wide Throw

Brass with Stainless Steel pin - ANSI A2133

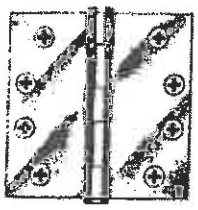
Stainless Steel with Stainless Steel pin - ANSI A5133

1279 Wide Throw

Steel with Steel pin - ANSI A8133

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

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



Concealed Bearing - Standard Weight

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

CB1191 Stainless Steel with Stainless Steel pin - ANSI A5112

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

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

Saddle Thresholds

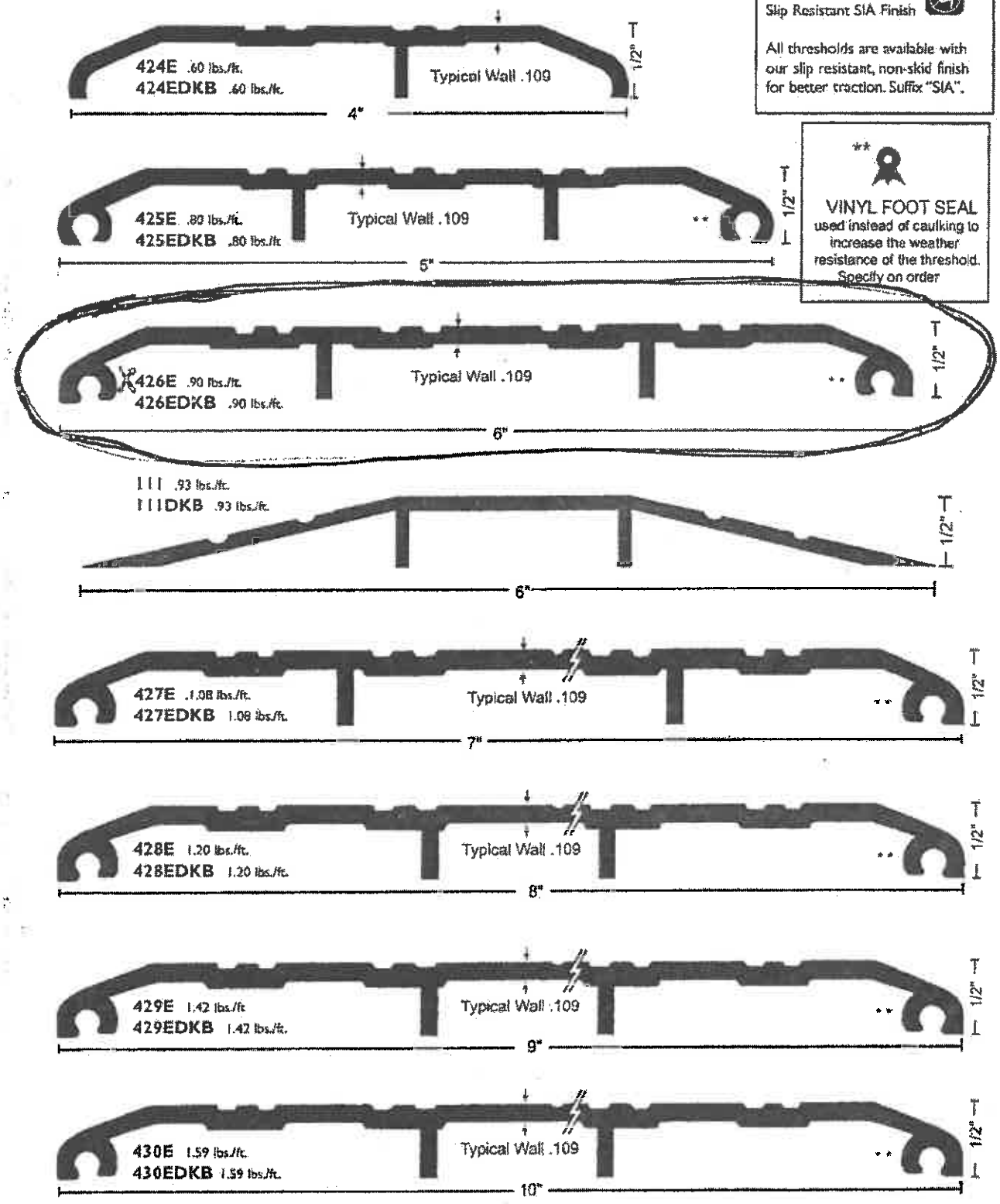
All thresholds this page

MATERIALS & FINISHES

- Aluminum mill finish
- DKB - Aluminum dark bronze finish

Slip Resistant SIA Finish

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



**

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

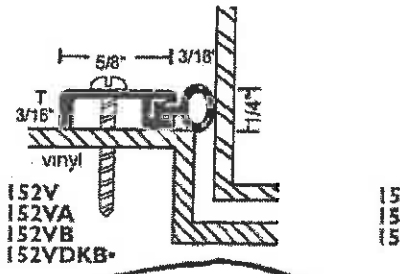
Vinyl Seals

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

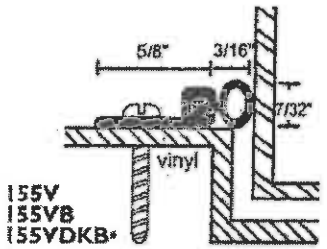
#6 x 3/4" Stainless Steel Sheet Metal Screws furnished
Screw holes slotted for adjustment

All vinyl seals this section

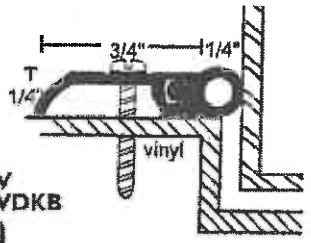
A - clear
B - gold
DKB - dark bronze
no suffix - mill
Vinyl is gray
(exception: •vinyl is black)



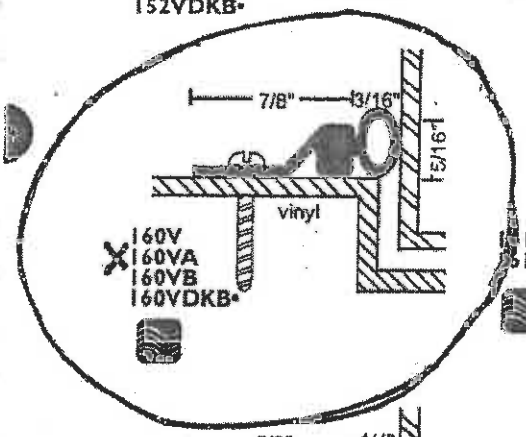
152V
152VA
152VB
152VDKB•



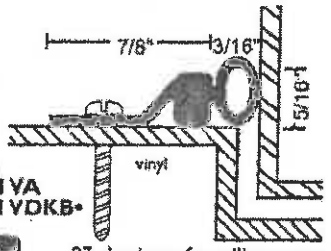
155V
155VB
155VDKB•



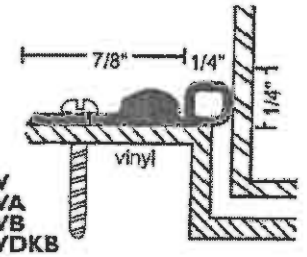
156V
156VDKB



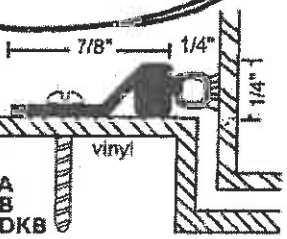
160V
160VA
160VB
160VDKB•



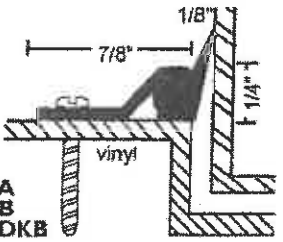
161VA
161VDKB•
.07 aluminum for military specs



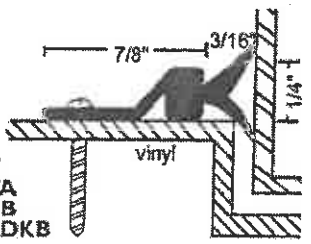
162V
162VA
162VB
162VDKB



164V
164VA
164VB
164VDKB

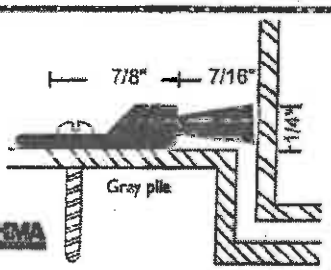


188V
188VA
188VB
188VDKB

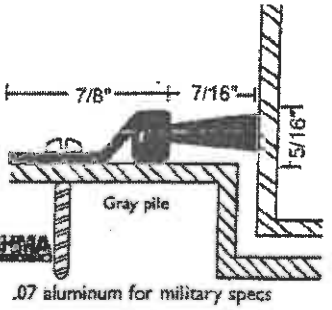


190V
190VA
190VB
190VDKB

Pile Seals



185P
185PA
185PB
185PDKB



161PA
161PDKB
.07 aluminum for military specs

Specifications

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

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

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

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

Lock Chassis:
Zinc plated for corrosion resistance.

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

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

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

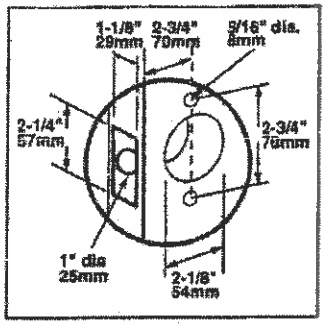
Cylinder & Keys:
6-pin Everest C123 keyway standard with two patented nickel silver keys per lock.

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

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

Door Preparation

Lever Designs



Certifications

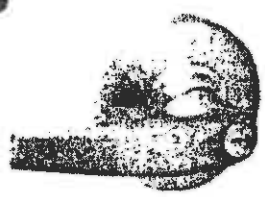
ANSI
Meets or exceeds A156.2 Series 4000, Grade 1 strength and operational requirements. Meets A117.1 Accessibility Code.

Federal
Meets FF-H-106C Series 161.

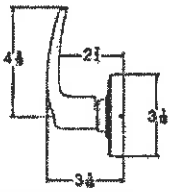
California State Reference Code
(Formerly Title 19, California State Fire Marshal Standard)
All levers with returns comply; levers return to within ½" of door face.

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

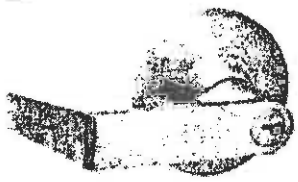
Lever Designs & Finishes



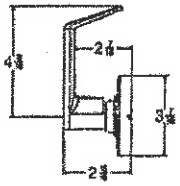
ATHENS
Symbol: ATH
Material: Pressure cast zinc lever; wrought brass rose
Finishes:
605, 606, 612, 613, 619, 625, 626



606



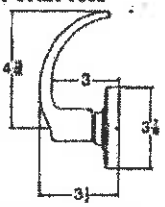
RHODES
Symbol: RHO (06)
Material: Pressure cast zinc lever; wrought brass rose
Finishes:
605, 606, 612, 613, 619, 625, 626



612

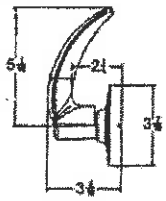
Lever Designs & Finishes

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



626

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



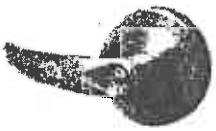
619

605
Bright Brass

606
Satin Brass

612
Satin Bronze

613
Oil Rubbed Bronze



619
Satin Nickel

625
Bright Chromium Plated

626
Satin Chromium Plated

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

TACTILE WARNING (KNURLING)
Change symbol designation as follows:
8AT for Athens
8RO for Rhodes
8SP for Sparta

Only outside lever is knurled unless otherwise specified.

Not available with Omega trim

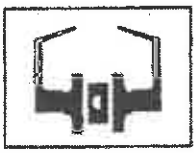
Finishes
605 Bright Brass
606 Satin Brass
612 Satin Bronze
613 Oil Rubbed Bronze
619 Satin Nickel
625 Bright Chromium Plated
626 Satin Chromium Plated

Functions

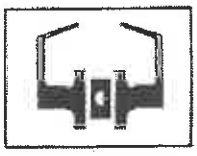
Non-Keyed Locks

SCHLAGE ANSI

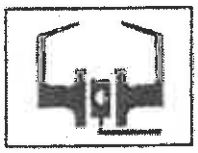
ND10S F75 — **Passage Latch**
Both levers always unlocked.



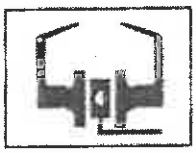
ND12D F89 — **Exit Lock**
Outside lever always fixed. Inside lever always unlocked.



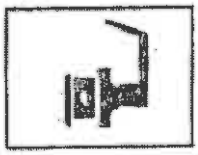
ND12DEL — **Electrically Locked (Fail Safe)**
Outside lever continuously locked electrically. Unlocked by switch or power failure. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit.



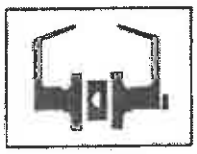
ND12DEU — **Electrically Unlocked (Fail Secure)**
Outside lever continuously locked until unlocked by electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit.



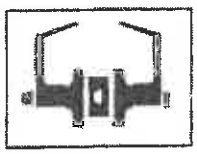
ND25D — **Exit Lock**
Blank plate outside. Inside lever always unlocked.



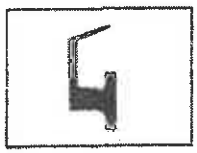
ND40S F76 — **Bath/Bedroom Privacy Lock**
Push-button locking. Can be opened from outside with small screwdriver. Turning inside lever or closing door releases button.



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



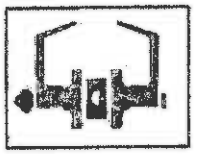
ND170 — **Single Dummy Trim**
Dummy trim for one side of door. Used for door pull or as matching inactive trim.



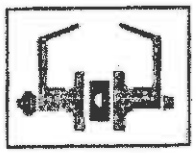
Keyed Locks

SCHLAGE ANSI

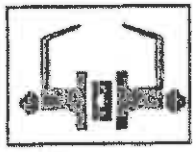
ND50PD F82 — **Entrance/Office Lock***
Push-button locking. Push-button locks outside lever until unlocked with key or by turning inside lever.



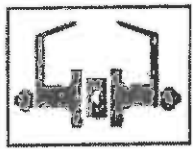
ND53PD F109 — **Entrance Lock***
Turn/push-button locking; pushing and turning button locks outside lever, requiring use of key until button is manually unlocked. Push-button locking; pushing button locks outside lever until unlocked by key or by turning inside lever.



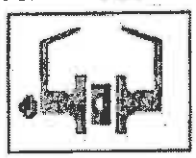
ND60PD F88 — **Vestibule/Classroom Security Lock***
Latch retracted by key from outside when outside lever is locked by key in inside lever. Inside lever is always unlocked.



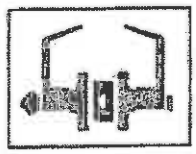
ND66PD F91 — **Store Lock*†**
Key in either lever locks or unlocks both levers.



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



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



* *Available functions for small format interchangeable core.*

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

Specifications

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

Door Thickness:
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.

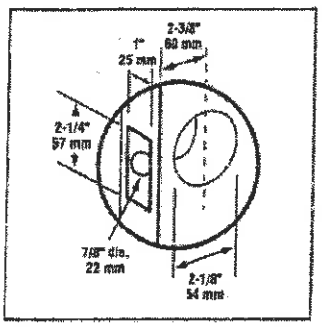
Strike:
T-strike 1⅛" x 2¾" (29 mm x 70 mm) x 1⅛" (29 mm) lip to center with box standard. Optional strikes, lip lengths and ANSI strike box available. See page 7.

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

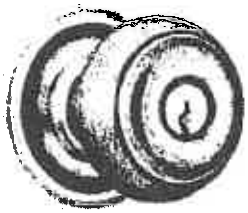
ANSI
Meets or exceeds A156.2 Series 4000, Grade 2 strength and operational requirements.

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.

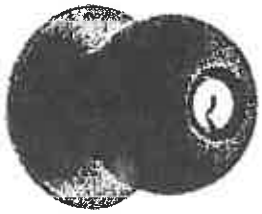
Designs & Finishes



609

GEORGIAN

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



613

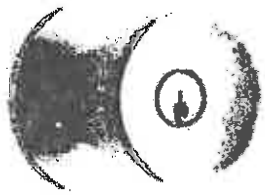
ORBIT

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

605

PLYMOUTH

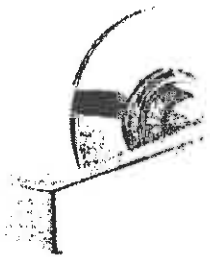
Symbol: PLY
Material: Wrought brass, bronze, or stainless steel
Finishes: 605, 606, 609, 610, 611, 612, 613, 616, 625, 626, 629, 630



626

TULIP

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



605

LEVON

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

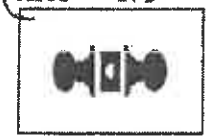
8 Keyed functions available with full size interchangeable core option for Orbit design.

Functions

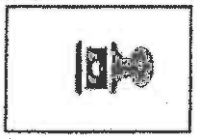
ANSI A156.2 Series 4000 Grade 2

Non-Keyed Functions

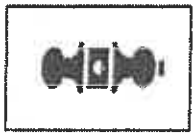
SCHLAGE ANSI
A10S F75 — **Passage Latch**
Both knobs always unlocked.



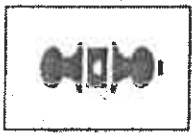
A25D — **Exit Lock**
Blank plate outside. Inside knob always unlocked. Specify door thickness, 1⅜" or 1¾".



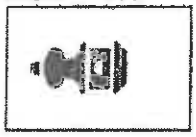
A30D F77 — **Patio Lock**
Push-button locking. Turning inside knob or closing door releases button, preventing lock-out.



A40S F76 — **Bath/Bedroom Privacy Lock**
Push-button locking. Can be opened from outside with small screwdriver. Turning inside knob or closing door releases button.



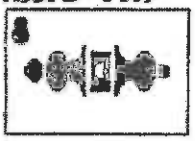
A43D F79 — **Communicating Lock**
Turn-button in outer knob locks and unlocks knob and inside thumbturn.



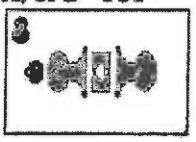
A170 — **Single Dummy Trim**
Dummy trim for one side of door. Used for door pull or as matching inactive trim.

Keyed Functions

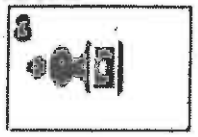
SCHLAGE ANSI
A53PD F109 — **Entrance Lock**
Turn/push-button locking: pushing and turning button locks outside knob requiring use of key until button is manually unlocked. Push-button locking: pushing button locks outside knob until unlocked by key or by turning inside knob.



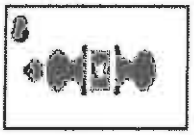
A70PD F84 — **Classroom Lock**
Outside knob locked and unlocked by key. Inside knob always unlocked.



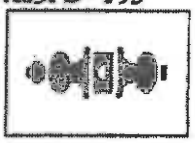
A79PD — **Communicating Lock**
Locked or unlocked by key from outside. Blank plate inside.



A80PD F86 — **Storeroom Lock**
Outside knob fixed. Entrance by key only. Inside knob always unlocked.



A85PD F93 — **Hotel/Motel Lock**
Outside knob fixed. Entrance by key only. Push-button in inside knob activates visual occupancy indicator, allowing only emergency masterkey to operate. Rotation of inside spanner-button provides lock-out feature by keeping indicator thrown.



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

FINAL ABATEMENT REPORTS

LEAD & ASBESTOS ABATEMENT REPORT

FOR

SEMINOLE ARMORY

SEMINOLE COUNTY, OKLAHOMA

Prepared for

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

DCS Project No. 11355
Site Contact: Dustin Davidson
Field Team Lead: Rick Williams

Prepared by

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

September 6, 2012

EXECUTIVE SUMMARY

This is the final report describing the Seminole Armory Lead & Asbestos Remediation performed for the Oklahoma Department of Environmental Quality (ODEQ) at the Seminole Armory located in Seminole County, Oklahoma. Basin Environmental and Safety Technologies (Basin) was contracted by the Land Protection Division of the Oklahoma Department of Environmental Quality (ODEQ) to conduct lead dust remediation activities at the former National Guard Armory in Seminole, Oklahoma. This work was performed to provide for unrestricted, safe re-use of the storage areas, classrooms and offices at this facility. Abatement activities included extensive High Efficiency Particulate Air (HEPA) vacuuming, wet wiping, wet mopping, and encapsulation of leaded dust located within the armory. All abatement activities were followed by extensive post-abatement clearance dust sampling and analysis. Abatement and clearance activities took place from September 13 to November 8, 2011. All remediation processes were performed under the guidance of the ODEQ and in accordance with the Occupational Safety and Health Administration's (OSHA), 29 CFR 1926.62, "Lead in Construction Interim Final Standard" and the National Guard Bureau's "Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges."

Included in this closure report is a detailed summary of work, a copy of the post-remediation confirmation sampling, asbestos air monitoring clearance sampling, site photos. All post remediation confirmation clearance sampling was performed by Enercon Services, Inc. All post-sealant wipe sample results indicated and confirmed to meet the Environmental Protection Agency (EPA) and Department of Housing and Urban Development (HUD) standards for lead dust.

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

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

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

TABLE OF CONTENTS

Section **Page**

ATTACHMENTS

1. INTRODUCTION

Basin Environmental and Safety Technologies (Basin) was contracted by ODEQ to provide lead asbestos abatement on approximately 380 linear feet of Thermo Systems Insulation (TSI), impacted dust, lead based paint and window & door replacement services at the Seminole Armory located at 600 East Strothers Avenue Seminole, Seminole County, Oklahoma. The abatement activity was initiated by ODEQ as part of the Site Cleanup Assistance Program (SCAP) and the Armory Cleanup Program. The EPA and ODEQ target clearance levels for lead in dust and the ODEQ clearance levels for IFRs were utilized for this project (See Attachment A for all analytical results). The clearance level for leaded dust on floors is 40 micrograms per square foot (ug/ft^2). The clearance level for lead dust on floors, walls and ceilings in the IFR post-abatement is 200 ug/ft^2, post-lockdown treatment clearance levels for the IFR are 40 ug/ft^2. (See Attachment B for hazardous waste manifests).

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

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

Lead dust abatement was accomplished with extensive HEPA vacuuming and Swiffer mopping.

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

- Poly sheeting was used as critical barriers on floors and entry ways to minimize cross contamination.
- Booties were worn by all personnel and changed entering and exiting clean areas.

- Project areas were delineated as dirty or clean dependant upon the processes and hazards present.

- Media collected from the IFR, HEPA Vacuums and appropriate cleaning materials was double bagged in 6 mil poly drum liners, labeled and placed in the stationed roll off box awaiting profile and disposal in an approved hazardous waste landfill.

1.1 REPORT FORMAT

This report has been organized as follows:

- Section 1 – Introduction
- Section 2 – Site Background
- Section 3 – Abatement Activities & Variance
- Section 4 – Confirmation and Clearance Sampling

2. SITE BACKGROUND

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

2.1 SITE LOCATION AND DESCRIPTION

The Seminole Armory site is located at 600 East Strothers, Seminole, Seminole County, Oklahoma, The armory is a brick and concrete constructed single story building with a concrete slab foundation and asphalt composite flat roof and metal dome roof. Several types of rooms are present within the building including offices, restrooms, & meeting rooms. The flooring of the facility is concrete. The facility was not being ventilated at the time of the abatement activity (See Attachment C for facility photos and Attachment E for a floor plan).

2.2 BACKGROUND INFORMATION

This project is part of the ODEQ's SCAP & Armory Cleanup Program. This program remediates abandoned hazardous waste sites and closed armories throughout the state of Oklahoma.

3. ABATEMENT ACTIVITIES

On September 13, 2011, Basin mobilized to the armory with a Lead Abatement Supervisor, Asbestos Abatement Supervisor and three (3) abatement personnel. Each employee was trained, made familiar with the statement of work and Environmental, Health, & Safety (EH&S) aspects of the project with emphasis on engineering controls, administrative controls, and personal protective equipment (PPE) to minimize employee exposure and cross-contamination. Basin workers began work in level C PPE, installing critical barriers and splash guards in prep for friable and non friable asbestos abatement. Workers then began manually removing carpet, floor tile and mastic in rooms 10, 11, and 12. A closed top roll off box from Basin Environmental was staged outside of the building on the south side near the bay door entry to the drill floor. It was then lined with re-enforced poly preparing it for waste. Workers then finished prepping for the Department of Labor (DOL), regulated friable asbestos installing drop clothes, prepping with asbestos glove bags. Some of the drop down ceiling grids and panels had to be removed to access the asbestos piping. Basin hired a State of Oklahoma licensed electrician to verify all electrical had been de-energized in the building. DOL was contacted to conduct the required prep inspection and Enercon was called to conduct third party personal and area air monitoring. Friable asbestos was removed in accordance with (IAW) the Project Design and disposed in the lined closed box roll off. Asbestos abatement was completed at this armory September 24 2011. Workers began wet scraping and locking down with DEQ approved elastomeric encapsulant all non-impact, non friction surfaces with LBP. All the interior doors and frames were removed (IAW) the DEQ scope of work. They were replaced by a third party installer meeting the vendor criteria for DCS and the ODEQ. Extensive HEPA vacuuming and swiffer mopping was conducted on floors of the entire building from November 1 to November 8, 2011 until demobilization.

4. CONFIRMATION AND CLEARANCE SAMPLING

The Oklahoma Department of Environmental Quality contracted Enercon Services Inc. as a third-party partner for clearance sampling. The results from these sampling events can be found in (Attachment A).

ATTACHMENT A

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 201458
Date Received: 11/07/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 11/8/2011

AIHA ID: 101352

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

Acct. No.: A845

Project: Seminole Armory
Location: Seminole, OK
Project No.: ENMISC2111

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	SE-02-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
002	SE-03-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
003	SE-03-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
004	SE-04-01	Wipe	Lead	29.1	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
005	SE-05-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
006	SE-06-01	Wipe	Lead	20.7	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
007	SE-07-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
008	SE-07-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
009	SE-07-03	Wipe	Lead	18.1	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
010	SE-08-01	Wipe	Lead	29.3	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
011	SE-08-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
012	SE-08-03	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
013	SE-08-04	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
014	SE-09-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
015	SE-10-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
016	SE-11-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
017	SE-12-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)

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

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

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

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

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

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

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 201458
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Date Sampled:
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Analyst: RS
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AIHA ID: 101352

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

Acct. No.: A845

Project: Seminole Armory
Location: Seminole, OK
Project No.: ENMISC2111

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	SE-13-01	Wipe	Lead	47.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
019	SE-14-01	Wipe	Lead	54.7	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
020	SE-15-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
021	SE-15-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
022	SE-16-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
023	SE-16-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
024	SE-17-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
025	SE-18-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
026	SE-18-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
027	SE-19-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
028	SE-19-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
029	SE-19-03	Wipe	Lead	17.8	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
030	SE-19-04	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
031	SE-19-05	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
032	SE-19-06	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
034	SE2-01-02	Wipe	Lead	39.5	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
035	SE2-01-02	Wipe	Lead	211	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)

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

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

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6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Acct. No.: A845

Project: Seminole Armory
Location: Seminole, OK
Project No.: ENMISC2111

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
036	SE2-02-01	Wipe	Lead	234	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)

Authorized Signature: Rebecca Sparks

Rebecca Sparks, Analyst

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

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

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

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

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

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

Lead Chain-of-Custody

QUANTEM LABORATORIES

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 922-1650 (405) 755-7272 Fax: (405) 755-2058
www.quantem.com

This Box for Lab Use Only
Lab No. 201458
Accept / Reject

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

Project Location: Seminole, OK Project Number: ENMISC2111

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

Sample Matrix Codes:
- A - Soil
- B - Paint Chips
- C - Surface / Dust Wipes
- D - Built 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	Sampled By
Marshall Branscum	11-7-2011 0852	S. Patrick	11/7/11 9:00	MLB

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

Lead Chain-of-Custody

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. 201458
Accept / Reject

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

Project Location: Seminole, OK Project Number:

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Units Requested: Wt %	Units Requested: mg / kg	Units Requested: mg / l	Units Requested: ug / sq. ft.	Units Requested: ug / cu. M.	Units Requested: mg / cm²
16.	SE-11-01		144in²	C	X					X		
17.	-12-01											
18.	-13-01											
19.	-14-01											
20.	-15-01											
21.	-15-02											
22.	-16-01											
23.	-16-02											
24.	-17-01											
25.	-18-01											
26.	-18-02											
27.	-19-01											
28.	-19-02											
29.	-19-03											
30.	-19-04											

Sample Matrix Codes

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

LEGAL DOCUMENT
Please Print Legibly

TURNAROUND TIME

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

CONTACT INFORMATION

Name: Marshall Branscum
Phone: 722-7293
Report Results VIA (CHOOSE ONE):

- [ ] FAX:
- [X] QuanTEM WebSite
- [ ] E-Mail:

Relinquished By	Date/Time	Received By	Date/Time	Sampled By:
Marshall K. Branscum 11-7-2011/0857	11/7	S Pefford 11/7/11 9:00	11-4	MLB

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

Lead Chain-of-Custody

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 Block for Lab Use Only
Lab No. 201458
Accept Reject

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

Project Location: Seminole, OK Project Number:

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt. %	mg / kg	mg / l	µg / sq. ft.	µg / cu. ft.	mg / cm²
31.	SE-19-05		14"x12"	C	X					X		
32.	SE-19-06											
*33.	SE2-01-01											
34.	SE2-01-02											
35.	SE2-01-03											
36.	SE2-02-01											

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

LEGAL DOCUMENT
Please Print Legibly

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

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

Relinquished By	Date/Time	Received By	Date/Time	# of Containers	Sampled By:
M. M. Branscum	11-7-2011/0857	S Ruffin	11/7/11 9:00	14	MLB

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

* SE2-01-01 not received
ML

Revision: May 2008

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 201845
Date Received: 11/18/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 11/21/2011

AIHA ID: 101352

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

Acct. No.: A845

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

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	SE1-01-01-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/21/11 11:30	W EPA 7420 (1)

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 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

Lead Chain-of-Custody

QUANTEM LABORATORIES

2633 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 922-1689 (405) 755-7272 Fax: (405) 755-2058
www.quantem.com

Page 1 of 1

This Box for Lab Use Only
Lab No. 201845
Accept / Reject

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

Project Location: Seminole, 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
SE1-01-01-R1	Room 1 Floor	144in²	C	X					X		

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

LEGAL DOCUMENT
Please Print Legibly

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

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

Relinquished By	Date/Time	Received By	Date/Time	Date Sampled	Sampled By:
Marshall Branscum	11-18-2011/0530	Shiftwid	11/18/11 8:00	11-17	MLB

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

Revision: May 2009

ATTACHMENT B

Oklahoma City Landfill
7600 SW 15th Street
Oklahoma City, OK 73128
PH: 405.745.3002
FX: 405.745.3611

WASTE CONNECTIONS INC.
Connect with the Future

FOR OFFICE USE ONLY
APPROVAL NUMBER:
EXPIRATION DATE:
APPROVED BY:

SPECIAL WASTE APPLICATION

Information utilized for completion of this form must originate from an authorized representative of the generator of the waste material.
The information on this form must be **COMPLETELY FILLED OUT, TYPE WRITTEN,** and the form must be **SIGNED BY AUTHORIZED REPRESENTATIVE.**

PROFILE INFORMATION

1. ☒ Initial ☐ Recertification, list prior approval number(s): ☐ Amendment, Details:

2. Have there been any changes to the composition of, or process generating this waste stream that would alter the characteristics of the waste stream?
☐ YES ☐ NO (Updated analysis may be required even if no change to process or composition.)

A. GENERATOR INFORMATION

1. Generator Name: Oklahoma Department of Environmental Quality
2. Address: 700 N. Robinson
City: Oklahoma City | County: Oklahoma
State: Oklahoma | Zip: 73101
3. Site Location (if different): Seminole Armory, Seminole, Oklahoma
4. Contact Name: Dustin Davidson
5. Phone Number: (405) 702-5115 | 6. Fax Number:
7. Email Address:
8. State Facility ID # (if applicable):
9. OCC No. (if applicable):

B. CUSTOMER/BILLING INFORMATION

1. Billing Name: Basin Environmental
2. Address: 325 N. Portland
City: Oklahoma City | County: Oklahoma
State: Ok | Zip: 73107
3. Contact Name: Theresa Moyers
4. Phone Number: (405) 232-5737 | 5. Fax Number: (405) 232-5736
6. Email Address: theresa.moyers@basinenvironmental.com
7. Is there a service agreement on file? ☒ YES ☐ NO
8. Agent / Consultant:
9. Letter of Authorization: ☐ YES ☒ NO

C. TRANSPORTER/SHIPPING INFORMATION

1. Name: Basin Environmental
2. Street Address: 325 N Portland
City: Oklahoma City | State: ok | Zip: 73107
3. Phone Number: (405) 232-5737 | 4. Fax Number: (405) 232-5736
5. Contact Name: Theresa Moyers
6. EPA or State Transporter ID #: OKR000023085
7. Designated Landfill(s): Oklahoma City
8. Packaging: ☒ Bulk Solids ☐ Bulk Liquids ☐ Drums ☐ Roll-Off ☐ Dump Truck ☐ Tank Truck ☐ Vacuum Box ☐ Bagged
9. Estimated Volume: 25 ☐ Tons ☒ Cubic Yards ☐ Drums ☐ Gallons ☐ Other: _____
10. Shipping Frequency: _____ per: ☒ One Time Project ☐ Month ☐ Quarter ☐ Year ☐ Other: _____

D. WASTE STREAM INFORMATION

1. Common Name of Material or Waste Stream:
Construction debris containing Asbestos
2. Detailed Description of Process or How Generated (Attach additional sheet if needed):
Remediation of Seminole Armory
3. Physical State at 70°F: ☒ Solid ☐ Semi-Solid ☐ Sludge ☐ Liquid ☐ Powder ☐ Other _____
4. Free Liquids: ☒ NO ☐ YES % Liquids:
5. Color: Brown | 6. pH Range: no
7. Odor: ☒ None ☐ Mild ☐ Significant Describe:
8. Flash Point: >140 ☒ °F ☐ °C
9. Reactive: ☒ NO ☐ YES with:
10. Copy of NHIW Provided/Date (if applicable):
11-4-11

E. NON-HAZARDOUS DETERMINATION

1. Attached Document(s) (check all that apply): ☒ Not Applicable ☐ Process Knowledge ☐ MSDS ☒ Certified Analytical Report ☐ Exempt Waste
2. If Process Knowledge, provide details:
3. If analytical data is attached, is the data derived from testing a representative sample in accordance with 40 CFR 261 and/or other applicable laws?
☐ YES ☒ NO Type of Sample: ☐ Composite ☐ Grab Analysis Provided:
4. If Exempt Waste, check applicable item below: ☐ UST Corrective Action – 40 CFR 261.4(b)(10) ☐ PCB Bulk Product Waste – 40 CFR 761.62
☐ Oil & Gas E&P Waste – 40 CFR 261.4(b)(5) ☐ RCRA-Empty Containers – 40 CFR 261.7 ☐ Other (provide reference):

G. GENERATOR CERTIFICATION STATEMENT:

I hereby certify that all information contained herein is true and correct, and the material described is properly identified, classified, packaged, labeled, and prepared as indicated. I certify this waste is not hazardous or dangerous as defined by the U.S. EPA, or the state or province of origin. I certify this waste does not contain any regulated radioactive materials, that all known and suspected hazards have been disclosed, and that the waste is not a regulated hazardous waste by government or local authority, and does not contain PCB's regulated by TSCA or any other regulatory authority. I certify that all samples used for this analysis are representative of the materials described herein. I understand that all wastes may undergo inspection upon arrival at the designated facility and may be refused if the delivered material does not conform to the description herein. Notification will be provided immediately if there is a change in the composition of, or process generating this waste stream, prior to offering the waste for shipment or management.

Dustin Davidson by Theresa Moyers
AUTHORIZED REPRESENTATIVE NAME/TITLE

COMPANY NAME

AUTHORIZED REPRESENTATIVE SIGNATURE

11-4-11
DATE COMPLETED

OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY

NHIW CERTIFICATION

Please read instructions prior to completing this form.

Generator Name: Oklahoma Department of Environmental Quality

Mailing Address: P.O. Box 53448 **City:** Oklahoma City **State:** OK **Zip:** 73152

Point of Generation

Address: 600 E. Strothers **City:** Seminole **State:** Ok **Zip:** 74868

Generator Contact: Dustin Davidson **Title:** Project Manager **Telephone:** 405-702-5115

DETAILED WASTE DESCRIPTION

Waste Name: Construction Debris Containing Asbestos

If waste was generated out-of-state, is it classified as hazardous in the state of origin? [] Yes [X] No [ ] NA- Okla. waste

Approximate amount of waste to be disposed: 25 Yards

Disposal frequency:

Physical characteristics:

25

[] Tons [] Pounds
[X] Cubic yards [] Drums
[] Other: gallons

[X] One-time [] Weekly
[] Monthly [] On-going

[X] Solid [] Liquid
[] Sludge [] Combination

Method used to determine waste is non-hazardous: [] Analysis [X] Generator knowledge

Process generating waste (be specific and use additional sheets if necessary):

Remediation of Seminole Armory.

DESIGNATED RECEIVING LANDFILL

Name: Waste Connections - OKC **Permit #:**

GENERATOR CERTIFICATION

I understand this form must be signed by the original waste generator or other persons authorized by 27A O.S. §2-10-501(H).

To the best of my knowledge, I certify:

- **The information contained herein is accurate, complete, and representative of the waste to be disposed;**
- **The waste identified above is not a characteristically hazardous waste as identified by 40 CFR 261, Subpart C, is not a listed hazardous waste as identified by 40 CFR 261, Subpart D or contaminated with a listed hazardous waste, and is not otherwise identified as a hazardous waste by the Department of Environmental Quality; and**
- **This waste will be managed in accordance with all applicable statutes and rules of the Department of Environmental Quality.**

Dustin Davidson by Theresa Moyers

Generator Signature

11-4-11

Printed name **Title** **Date**

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

WASTE CONNECTIONS INC.
Connect with the Future

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

No. 1153

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

a. Generator Name:

b. Generating Location:

c. Address

d. Address:

e. Phone No.:

f. Phone No.:

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

g. Owner's Name:

h. Owner's Phone No.:

i. WC WASTE CODE

Containers

j. Description of Waste:

k. Quantity | Units | No. | TYPE

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

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

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

Generator Authorized Agent Name | Signature | Shipment Date

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

TRANSPORTER I

a. Name: Basin Environmental

b. Address: 325 N. Portland
Oklahoma City, OK 73107

c. Driver Name/Title:

d. Phone No.: 405-232-5737 (PRINT/TYPE) e. Truck No.:

f. Vehicle License No./State:
Acknowledgment of Receipt of Materials.

g. Driver Signature | Shipment Date

TRANSPORTER II

h. Name:

i. Address:

j. Driver Name/Title: (PRINT/TYPE)

k. Phone No. l. Truck No.:

m. Vehicle License No./State:
Acknowledgment of Receipt of Materials:

n. Driver Signature | Shipment Date

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

a. Site Name: Oklahoma City Landfill

b. Physical Address: 7600 SW 15th Street
Oklahoma City, OK 73128

c. Phone No.: 405-745-3002

d. Mailing Address: Oklahoma City Landfill
7600 SW 15th Street
Oklahoma City, OK 73128

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

f. Name of Authorized Agent | Signature | Receipt Date

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

a. Shippers's* Name

b. Shippers's* Phone No.:

c. Shippers's* Address:

d. Shippers's* Special Handling Instructions and additional information:

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

e. Shippers's* Name & Title:

b. Shipper's* Phone No.:

Date

f. Name and Address of Responsible Agency:

g. ☐ Friable; ☐ Non-friable; ☐ Both ____ % friable ____ % nonfriable

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

WC1000 (Rev. 1/01)

White - Destination Retain Green - Return to Generator Canary - Return to Operator Pink - Transporter Retain Goldenrod - Generator Retain

ATTACHMENT C

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:

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	Td. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
-	10	10/26/11 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
-	11	10/26/11 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
484	12	10/26/11 -	5:30 PM 8:10 PM	- -	Final Air - Room 7	A		7.85	7.85	7.85	2.0	100	160	1224.0	2.548	BDL	0.003	0.000	0.003
485	13	10/26/11 -	5:30 PM 8:10 PM	- -	Final Air - Room 19	A		8.04	8.04	8.04	0.5	100	160	1286.4	0.637	BDL	0.003	0.000	0.003
486	14	10/26/11 -	5:30 PM 8:10 PM	- -	Final Air - Room 16	A		8.70	8.70	8.70	4.0	100	160	1392.0	5.096	BDL	0.002	0.001	0.002
487	15	10/26/11 -	5:30 PM 8:10 PM	- -	Final Air - Room 17	A		8.40	8.40	1.50	3.0	100	160	240.0	3.822	BDL	0.014	0.004	0.014
3	16	10/26/11 -	5:30 PM 8:10 PM	- -	Final Air - Room 18	A		8.40	8.40	8.40	4.0	100	160	1344.0	5.096	BDL	0.003	0.001	0.003

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

ANALYST PARTICIPATING IN LAB AIHA-151368

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

Rotometer Number: 107

Calibration Date: 10/1/11

NIOSH 7400 METHOD 7/1/2010 REV 1

AM Technician: Don Vail
Location: 600 E Strothers Ave.Seminole, Ok.
Contractor: Basin Environmental
Project Number:

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:

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	Tot. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
-	1	10/26/11 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
-	2	10/26/11 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
290	3	10/26/11 -	12:00 PM 5:30 PM	- -	Nick Niccum FF 279742 Glove Bag	P	<0.01	1.50	1.50	1.50	3.0	100	330	495.0	3.822	BDL	0.007	0.002	0.007
103	4	10/26/11 -	12:00 PM 5:30 PM	- -	Daniel Cavner FF 400138 Glove Bag	P	<0.01	1.50	1.50	1.50	1.5	100	330	495.0	1.911	BDL	0.007	0.001	0.007
134	5	10/26/11 -	12:00 PM 5:30 PM	- -	INSIDE AREA Glove Bag	A		1.50	1.50	1.50	2.0	100	330	495.0	2.548	BDL	0.007	0.001	0.007
147	6	10/26/11 -	12:00 PM 5:30 PM	- -	Area : Outside Clean Room Glove Bag	A		1.50	1.50	1.50	0.5	100	330	495.0	0.637	BDL	0.007	0.000	0.007
227	7	10/26/11 -	12:00 PM 5:30 PM	- -	Area : Neg Air Exhaust Glove Bag	A		1.50	1.50	1.50	0.5	100	330	495.0	0.637	BDL	0.007	0.000	0.007
229	8	10/26/11 -	12:00 PM 5:30 PM	- -	Area : Decon Neg Air Glove Bag	A		1.50	1.50	1.50	0.5	100	330	495.0	0.637	BDL	0.007	0.000	0.007
393	9	10/26/11 -	12:00 PM 5:30 PM	- -	Loadout Glove Bag	A		1.50	1.50	1.50	0.5	100	330	495.0	0.637	BDL	0.007	0.000	0.007

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

ANALYST PARTICIPATING IN LAB AIHA-151368
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter
NIOSH 7400 METHOD 7/1/2010 REV 1
Rotometer Number: 107
Calibration Date: 10/1/11

AM Technician: Don Vail
Location: 600 E Strothers Ave.Seminole, Ok.
Contractor: Basin Environmental
Project Number:

ices, Inc.
an, Suite 400
, OK 73116
2-7693
7694
com

ENERCON
Excellence—Every project. Every day.

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	Tit. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
				Cass. Dia = 25 mm			PF = 10			Field of View = 0.00785					Pg. 1		OF 1	
1	10/26/11 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
2	10/26/11 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	NA	NA
3	10/26/11 -	12:00 PM 5:30 PM	- -	Nick Nicum FF 279742 Glove Bag	P	<0.01	1.50	1.50	1.50	3.0	100	330	495.0	3.822	BDL	0.007	0.002	0.007
4	10/26/11 -	12:00 PM 5:30 PM	- -	Daniel Cawrar FF 400138 Glove Bag	P	<0.01	1.50	1.50	1.50	1.5	100	330	495.0	1.911	BDL	0.007	0.001	0.007
5	10/26/11 -	12:00 PM 5:30 PM	- -	INSIDE AREA Glove Bag	A		1.50	1.50	1.50	2.0	100	330	495.0	2.548	BDL	0.007	0.001	0.007
6	10/26/11 -	12:00 PM 5:30 PM	- -	Area : Outside Clean Room Glove Bag	A		1.50	1.50	1.50	0.5	100	330	495.0	0.637	BDL	0.007	0.000	0.007
7	10/26/11 -	12:00 PM 5:30 PM	- -	Area : Neg Air Exhaust Glove Bag	A		1.50	1.50	1.50	0.5	100	330	495.0	0.637	BDL	0.007	0.000	0.007
8	10/26/11 -	12:00 PM 5:30 PM	- -	Area : Decon Neg Air Glove Bag	A		1.50	1.50	1.50	0.5	100	330	495.0	0.637	BDL	0.007	0.000	0.007
9	10/26/11 -	12:00 PM 5:30 PM	- -	Loadout Glove Bag	A		1.50	1.50	1.50	0.5	100	330	495.0	0.637	BDL	0.007	0.000	0.007

y that the above samples were collected and analyzed
with applicable standards and regulations.

ANALYST PARTICIPATING IN LAB AIHA-151368
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter
Rotometer Number: 107
Calibration Date: 10/1/11

NIOSH 7400 METHOD 7/1/2010 REV 1

n: Dan Vail
600 E Strothers Ave.Seminole, Ok.
Basin Environmental

er:

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

ENERC
Excellence—Every proje

Project:

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

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	Tot. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LC
-	10	10/26/11 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	Nı
-	11	10/26/11 -	- -	- -	BLANK	B		0	0	0.00	0.0	100	0	0.0	0.000	NA	NA	Nı
484	12	10/26/11 -	5:30 PM 8:10 PM	- -	Final Air - Room 7	A		7.65	7.65	7.65	2.0	100	160	1224.0	2.548	BDL	0.003	0.0
485	13	10/26/11 -	5:30 PM 8:10 PM	- -	Final Air - Room 19	A		8.04	8.04	8.04	0.5	100	160	1286.4	0.637	BDL	0.003	0.0
486	14	10/26/11 -	5:30 PM 8:10 PM	- -	Final Air - Room 18	A		8.70	8.70	8.70	4.0	100	160	1392.0	5.096	BDL	0.002	0.0
487	15	10/26/11 -	5:30 PM 8:10 PM	- -	Final Air - Room 17	A		8.40	8.40	1.50	3.0	100	160	240.0	3.822	BDL	0.014	0.0
3	16	10/26/11 -	5:30 PM 8:10 PM	- -	Final Air - Room 18	A		8.40	8.40	8.40	4.0	100	160	1344.0	5.096	BDL	0.003	0.0

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

ANALYST PARTICIPATING IN LAB AIHA-151368 NIOSH 7400 METHOD
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter
Rotometer Number: 107
Calibration Date: 10/1/11

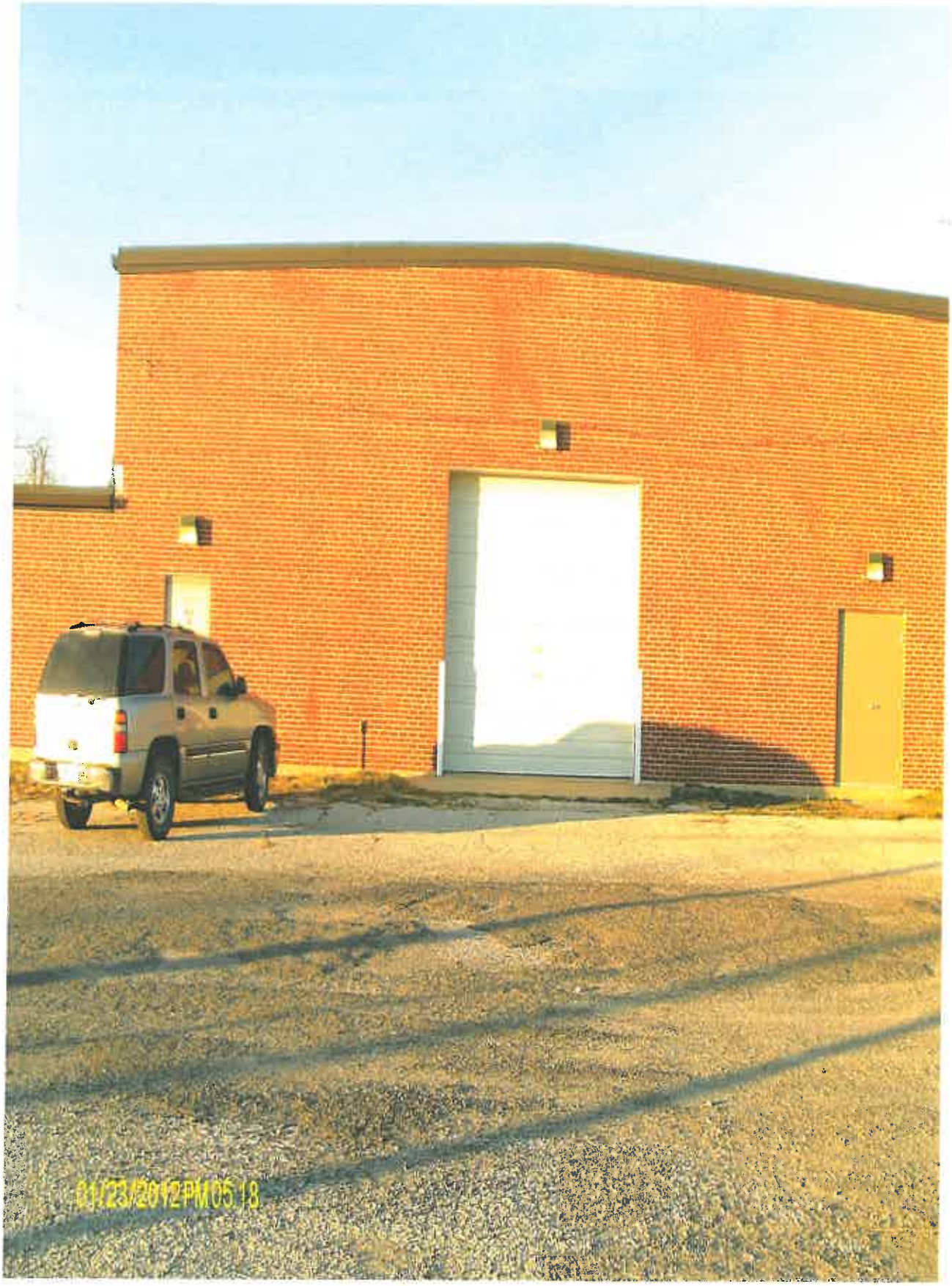
AM Technician: Don Vail
Location: 600 E Strothers Ave.Seminole, Ok.
Contractor: Basin Environmental
Project Number:

TRANSMISSION VERIFICATION REPORT

TIME : 10/27/2011 06:35
NAME : SEM BEST WESTERN
FAX : 4053823129
TEL : 4053823139
SER.# : L8J825389

DATE,TIME	10/27 06:34
FAX NO./NAME	14052325736
DURATION	00:01:00
PAGE(S)	03
RESULT	OK
MODE	STANDARD ECM

ATTACHMENT D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01/23/2012 PM 05:31

01/23/2012 PM 05:02

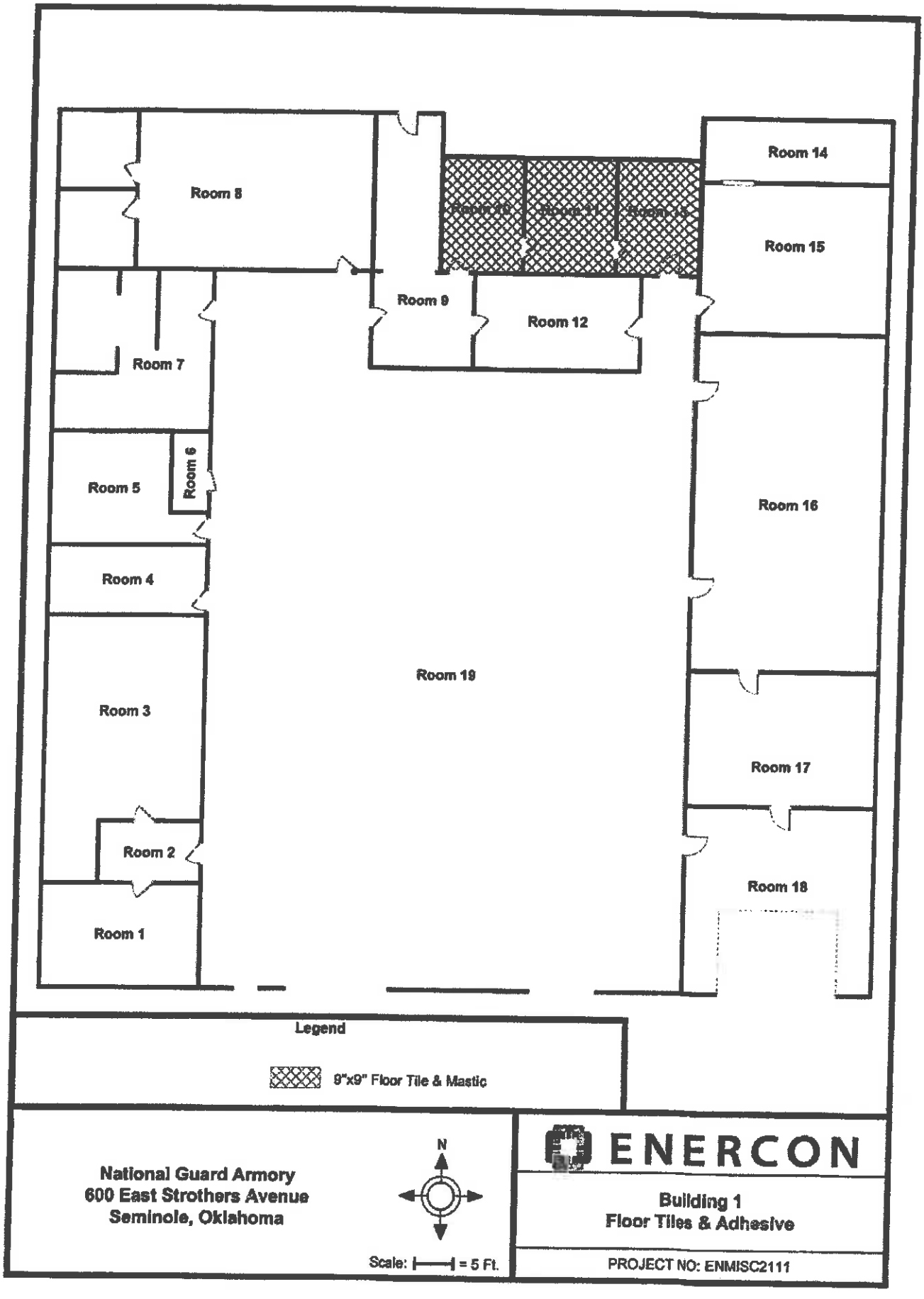

01/23/2012PM06:02

01/23/2012PM06:02


01/23/2012 PM 06:02


01/23/2012PM05:30

ATTACHMENT E


Room 8
Room 14
Room 15
Room 9
Room 12
Room 7
Room 6
Room 5
Room 16
Room 4
Room 19
Room 3
Room 17
Room 2
Room 18
Room 1
Legend
9"x9" Floor Tile & Mastic
National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma
N
Scale: = 5 Ft.
ENERCON
Building 1
Floor Tiles & Adhesive
PROJECT NO: ENMISC2111

CONFIRMATION SAMPLING

ARMORY LEAD CONFIRMATION SAMPLING
SEMINOLE ARMORY
600 EAST STROTHERS AVENUE
SEMINOLE, OKLAHOMA 74848

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

April 25, 2012

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

Prepared by:

Marshall L. Branscum
Lead-Based Paint Inspector
OKINSR-13415

Reviewed by:

Emmett W. Muenker, M.E.
Lead-Based Paint Inspector/Risk Assessor
OKRASR-11260

TABLE OF CONTENTS

APPENDICES

1.0 PURPOSE AND SCOPE

This clearance sampling was requested by the Oklahoma Department of Environmental Quality, Land Protection Division, in order to confirm that lead remediation at the Seminole Armory, 600 East Strothers Avenue, Seminole, Oklahoma, had been satisfactorily completed. Enercon was contracted to conduct confirmation wipe samples following remediation using the sampling protocols described in the Scope of Work provided in Appendix A.

2.0 BACKGROUND

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

3.0 CONFIRMATION PROCEDURES

Confirmation of the adequacy of remediation is done by collecting wipe samples on the floors and/or walls of the armory on a room by room basis using the sampling criteria set forth in the Scope of Work (Appendix A). All wipe samples are collected by an Oklahoma-licensed LBP Inspector or Risk Assessor who is employed by an Oklahoma-licensed Lead-Based Paint Firm. Copies of these licenses are provided in Appendix B. The procedure involves using a layout or sketch of the armory to mark all sample locations and using a 12" by 12" template and lead wipes to collect the samples. For rooms longer than 50 feet, the room was divided into two halves, with each half using a 3x3 grid for sampling. For other areas of the armory, single wipe samples were collected within ten feet of the doorway for smaller rooms and larger rooms were sampled using a 3x3 grid. The samples were collected from the floor in areas where lead-based paint remediation had been completed. Following remediation, confirmation wipe samples were collected. If any sample within a 3x3 grid in an office or drill room exceeded 40 $\mu g/ft^2$, the entire 3x3 gridded area was re-cleaned and re-tested. The Inspector marked the grid intersections and wipe sample locations with duct tape in preparation for sampling. Procedures for individual wipe samples as outlined for EPA/HUD dust wipe sampling were used for this project.

4.0 CONFIRMATION SAMPLING

4.1 Results of Initial Confirmation Sampling in Buildings 1 and 2

On November 4, 2011, initial confirmation wipe samples were collected from the floors in Buildings 1 and 2. A total of 32 samples were collected in Building 1, with two samples exceeding the 40 $\mu g/ft^2$ threshold. The door to Room 1 in Building 1 was locked at the time of the sampling; therefore, Room 1 was not sampled during the initial sampling round. A total of three samples were collected in Building 2, with two exceeding the 40 $\mu g/ft^2$ threshold. Appendix C contains floor plan layouts showing the rooms that exceeded the threshold during the initial round of sampling along with the laboratory report and chain of custody.

4.2 Results of Confirmation Re-Sampling Round 1 in Buildings 1 and 2

The rooms/areas that failed the initial clearance confirmation testing in Buildings 1 and 2 were re-cleaned and then re-sampled on November 10, 2011. A total of three samples were collected in Building 1, with the sample collected in Room 1 exceeding the 40 $\mu g/ft^2$ threshold. (Room 1 was locked at the time of the initial sampling.) A total of four samples were collected in Building 2, with none exceeding the 40 $\mu g/ft^2$ threshold. Floor plan layouts showing the location of the wipe samples along with the laboratory report and chain of custody are provided in Appendix D.

4.3 Results of Confirmation Re-Sampling Round 2 in Building 1 Room 1

On November 18, 2011, following additional cleaning in Room 1, a confirmation wipe sample was collected. This sample was below the 40 $\mu g/ft^2$ threshold. A floor plan layout showing the location of the wipe sample as well as the laboratory report and chain of custody are found in Appendix E.

5.0 CONCLUSIONS

Based upon the foregoing confirmation sampling, it is our conclusion that the lead dust hazard associated with the floors in Buildings 1 and 2 of the Seminole Armory has been effectively mitigated.

APPENDIX A

SCOPE OF WORK
For
Armory Lead Confirmation Sampling

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

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

APPENDIX B

Department of Environmental Quality

This is to Certify That

ENERCON SVC INC

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

FIRM

Certification #: OKFIRM11152

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

Issued on: 4/1/2012 Expires on: 3/31/2013

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

MARSHALL BRANSCUM

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

INSPECTOR

Certification #: OKINSR13415

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

Issued on: **4/1/2012** Expires on: **3/31/2013**

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

EMMETT MUENKER

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

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR11260

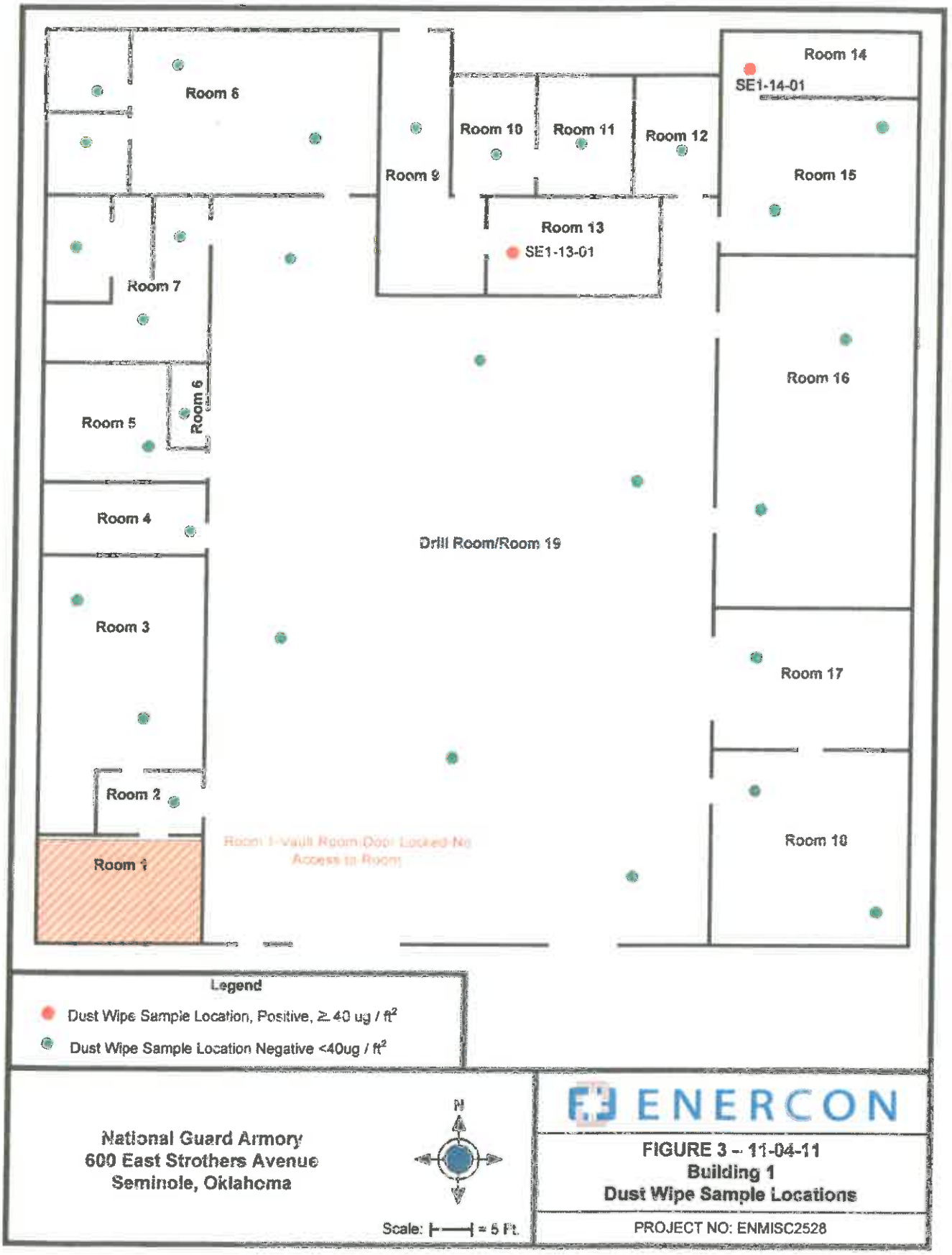
This certificate is valid from the date of issuance and expires as prescribed by law

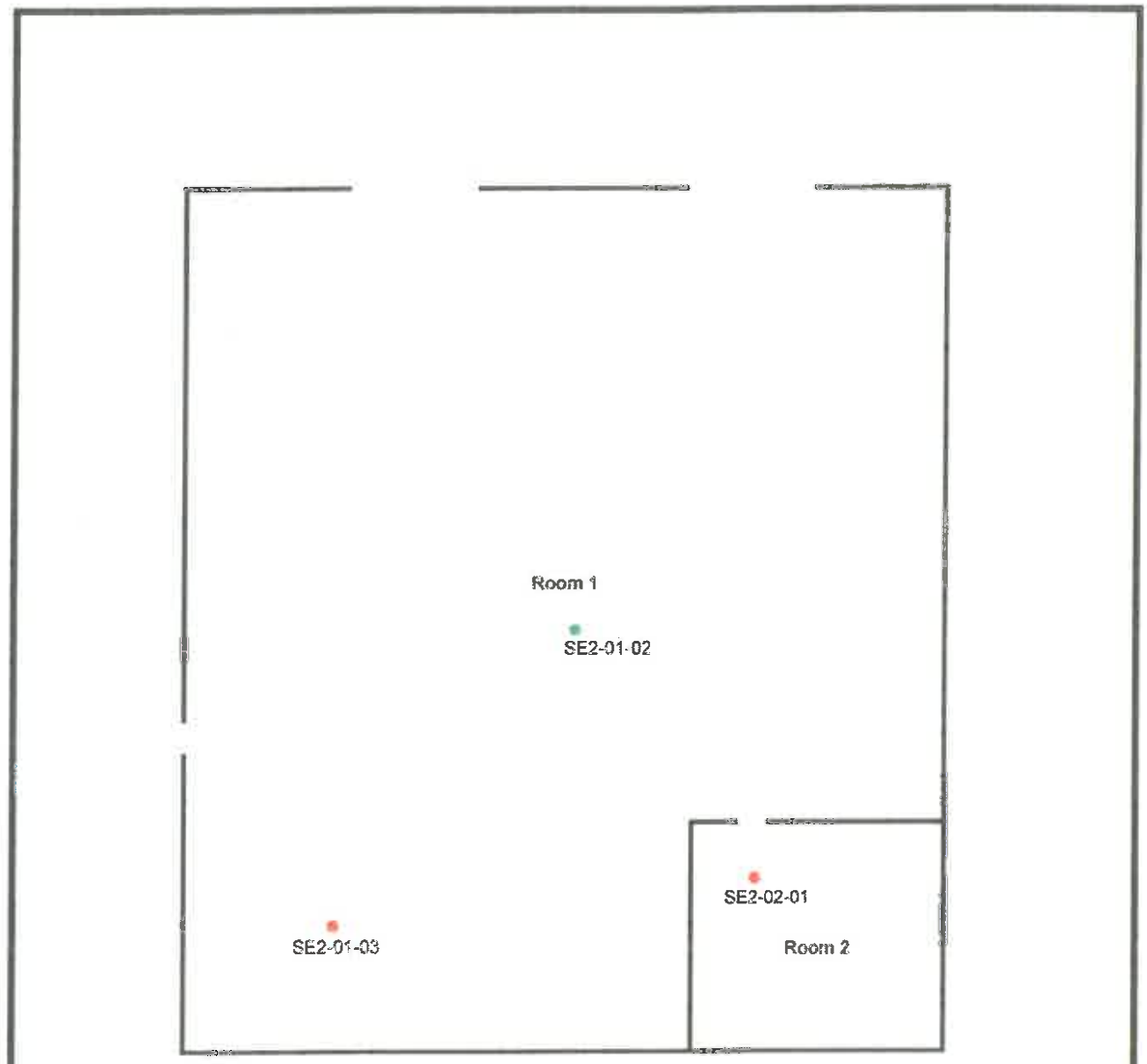
Issued on: **4/1/2012** Expires on: **3/31/2013**

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

APPENDIX C


Room 6
Room 9
Room 10
Room 11
Room 12
Room 14
SE1-14-01
Room 15
Room 13
SE1-13-01
Room 7
Room 16
Room 6
Room 5
Room 4
Drill Room/Room 19
Room 3
Room 17
Room 2
Room 18
Room 1
Room 1 Vault Room Door Locked No Access to Room
Legend
Dust Wipe Sample Location, Positive, ≥ 40 ug / ft²
Dust Wipe Sample Location Negative <40ug / ft²
National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma
N
Scale: ⊢—⊣ = 5 Ft.
ENERCON
FIGURE 3 – 11-04-11
Building 1
Dust Wipe Sample Locations
PROJECT NO: ENMISC2528



Legend

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

National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma

N

Scale: |——| = 5 Ft.

ENERCON

FIGURE 4 – 11-04-11
Building 2
Dust Wipe Sample Locations

PROJECT NO: ENMISC2528

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 201458
Date Received: 11/07/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 11/8/2011

AIHA ID: 101352

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

Acct. No.: A845

Project: Seminole Armory
Location: Seminole, OK
Project No.: ENMISC2111

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	SE-02-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
002	SE-03-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
003	SE-03-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
004	SE-04-01	Wipe	Lead	29.1	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
005	SE-05-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
006	SE-06-01	Wipe	Lead	20.7	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
007	SE-07-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
008	SE-07-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
009	SE-07-03	Wipe	Lead	18.1	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
010	SE-08-01	Wipe	Lead	29.3	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
011	SE-08-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
012	SE-08-03	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
013	SE-08-04	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
014	SE-09-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
015	SE-10-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
016	SE-11-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
017	SE-12-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)

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

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

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

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

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

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 201458
Date Received: 11/07/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 11/8/2011

AIHA ID: 101352

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

Acct. No.: A845

Project: Seminole Armory
Location: Seminole, OK
Project No.: ENMISC2111

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	SE-13-01	Wipe	Lead	47.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
019	SE-14-01	Wipe	Lead	54.7	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
020	SE-15-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
021	SE-15-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
022	SE-16-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
023	SE-16-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
024	SE-17-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
025	SE-18-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
026	SE-18-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
027	SE-19-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
028	SE-19-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
029	SE-19-03	Wipe	Lead	17.8	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
030	SE-19-04	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
031	SE-19-05	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
032	SE-19-06	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
034	SE2-01-02	Wipe	Lead	39.5	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)
035	SE2-01-03	Wipe	Lead	211	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)

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

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

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

EPA Method 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: 201458
Date Received: 11/07/11
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Date of Report: 11/8/2011

AIHA ID: 101352

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

Acct. No.: A845

Project: Seminole Armory
Location: Seminole, OK
Project No.: ENMISC2111

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
036	SE2-02-01	Wipe	Lead	234	16	ug/sq. Ft.	11/07/11 15:30	W EPA 7420 (1)

Authorized Signature: Rebecca Sparks

Rebecca Sparks, Analyst

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

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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: 9345
Test: Lead
Date: 11/7/2011
Matrix: Wipe
Lab Number: 201458
Approved By: Rebecca Sparks
Date Approved: 11/7/2011

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.7	5.5
FCV	4.5	4.7	5.5
ICV	0.8	1.1	1.2
RLVS	0.256	0.346	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	5.427	4.976	91.7	5.022	92.5	0.9
MS-W1	0.000	5.481	5.293	96.6	5.022	91.6	5.3
MS-W2	0.000	5.449	5.197	95.4	5.245	96.3	0.9

Authorized Signature: Rebecca Sparks
Rebecca Sparks, Analyst

QUANTEM LABORATORIES

Lead Chain-of-Custody

2038 Heritage Park Drive, Oklahoma City, OK 73120-7502
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Company Name: Enercon Services, Inc Acct.#: _____ Project Name: Seminole Armory

Project Location: Seminole, OK Project Number: E&M15C211

	Sample Number	Sample Description	Volume of Area	Container Matrix	Analysis	Units Requested	Sample Matrix Codes
1.	SE-02-01		Wipe	C	Pb	µg/ft²	
2.	-03-01						A - Soil
3.	-03-02						B - Paint Chips
4.	-04-01						C - Surface / Dust Wipes
5.	-05-01						D - Bulk Miscellaneous
6.	-06-01						E - Air Cassette
7.	-07-01						F - Other (SPECIFY)
8.	-07-02						
9.	-07-03						
10.	-08-01						
11.	-08-02						
12.	-08-03						
13.	-08-04						
14.	-09-01						
15.	-10-01						

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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	Lab Received By	Date/Time
Marshall Branscum	11-7-2011 0952	S. Pfefferle	11/7/11 9:00	11-4	MLB

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Account Project

Company Name: Ereron
Acct.#:
Project Name: Seminole Armory
Project Location: Seminole, OK
Project Number:

	Sample Number	Sample Description	Volume or Area	Sample Matrix	Analysis	Units Requested	Sample Matrix Codes
16.	S6-11-01		144in²	X	X	X	A - Soil
17.	-12-01						B - Paint Chips
18.	-13-01						C - Surface / Dust Wipes
19.	-14-01						D - Bulk Miscellaneous
20.	-15-01						E - Air Cassette
21.	-15-02						F - Other (SPECIFY)
22.	-16-01						
23.	-16-02						
24.	-17-01						
25.	-18-01						
26.	-18-02						
27.	-19-01						
28.	-19-02						
29.	-19-03						
30.	-19-04						

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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] QuanTEK WebSite
- [ ] E-Mail:

Relinquished By	Date/Time	Received By	Date/Time	Samples By:
Marshall Branscum	11-7-2011/0857	S Pefferick	11/7/11 9:00	MLB

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Accept Reject

Company Name: Enercon Acct.#: _____ Project Name: Seminole Armory

Project Location: Seminole, OK Project Number: _____

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analytes	Units Requested	Sample Matrix Codes
31.	SE-19-05		144/92	C	X	X	A - Soil
32.	SE-19-06						B - Paint Chips
*33.	SE2-01-01						C - Surface / Dust Wipes
34.	SE2-01-02						D - Soil: Miscellaneous
35.	SE2-01-03						E - Air Cassette
36.	SE2-02-01		↓	↓	↓	↓	F - Other (SPECIFY)

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TURNAROUND TIME

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- [ ] 3-Day
- [ ] 5-day

CONTACT INFORMATION

Name: Marshall Barnes
Phone: 722-7693
Report Results VIA (CHOOSE ONE):

- [ ] FAX
- [X] QuanTEM WebSite
- [ ] E-Mail:

Relinquished By:	Date/Time	Received By:	Date/Time	Samples Received By:
M. M. Barnes	11-7-2011/0857	S Rafferty	11/7/11 9:00	MLS

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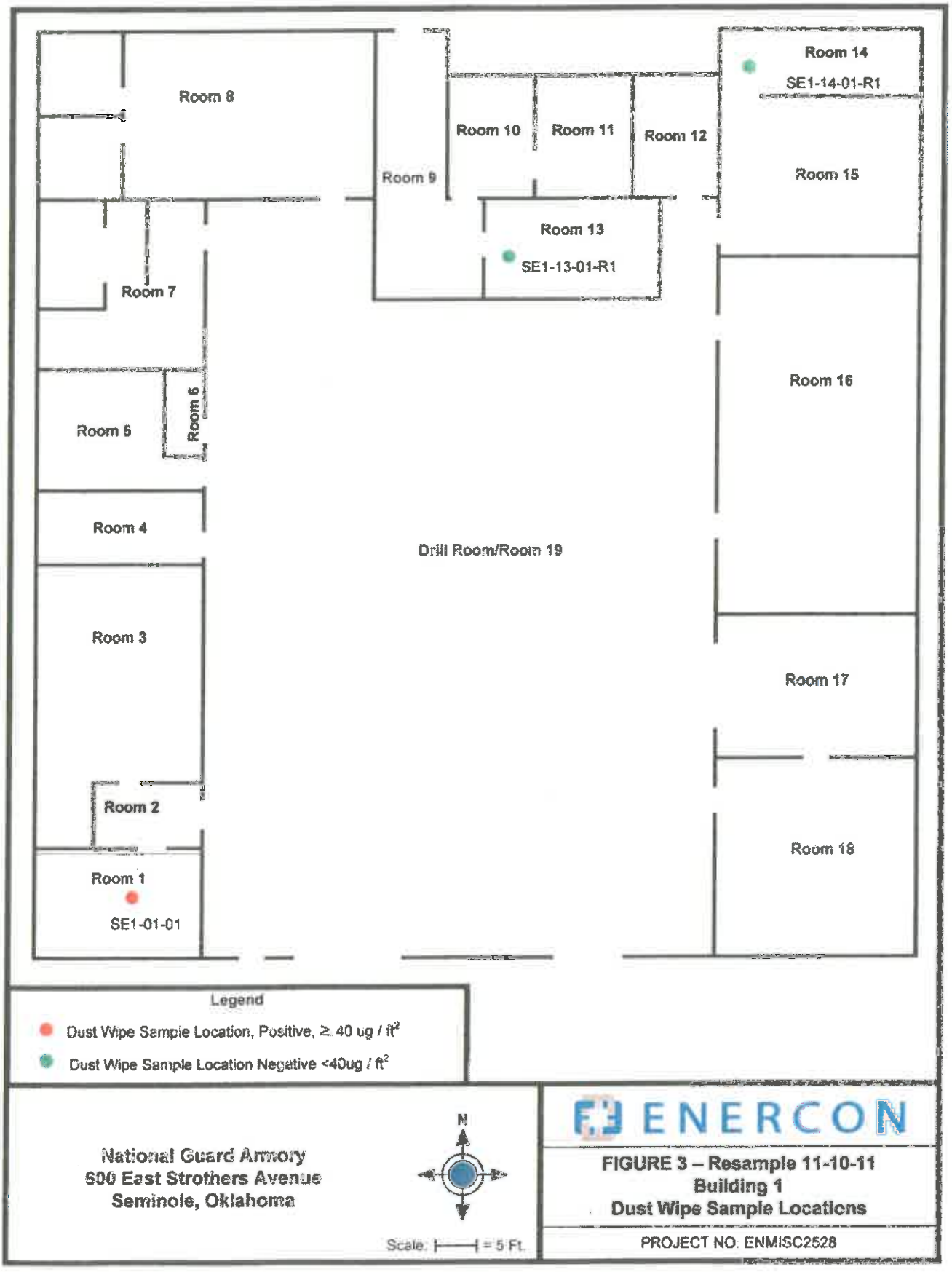
* SE2-01-01 not received
SNL

Revision: May 2008

APPENDIX D



National Guard Armory
600 East Strothers Avenue
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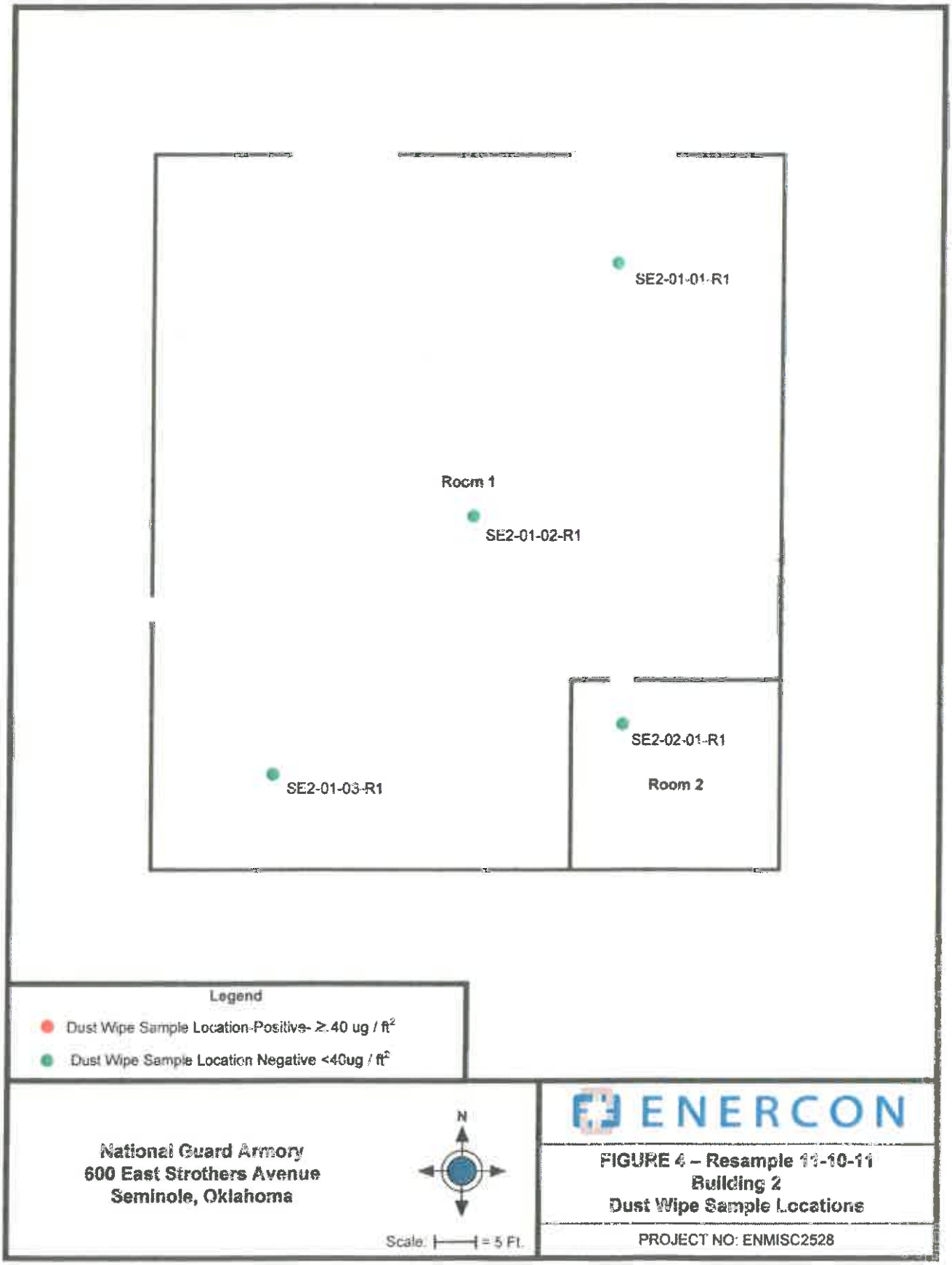
FIGURE 3 – Resample 11-10-11
Building 1
Dust Wipe Sample Locations

PROJECT NO. ENMISC2528



National Guard Armory
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Seminole, Oklahoma

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FIGURE 4 – Resample 11-10-11
Building 2
Dust Wipe Sample Locations

PROJECT NO: ENMISC2528

QUANTEM® LABORATORIES

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Environmental Chemistry Analysis Report

QuanTEM Set ID: 201653
Date Received: 11/11/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 11/11/2011

AIHA ID: 101352

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

Acct. No.: A845

Project: Seminole Armory-Re-Sample 1
Location: Seminole, OK
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	SE1-13-01-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/11/11 14:15	W EPA 7420 (1)
002	SE1-14-01-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/11/11 14:15	W EPA 7420 (1)
003	SE2-01-01-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/11/11 14:15	W EPA 7420 (1)
004	SE2-01-02-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/11/11 14:15	W EPA 7420 (1)
005	SE2-01-03-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/11/11 14:15	W EPA 7420 (1)
006	SE2-02-01-R1	Wipe	Lead	21.3	16	ug/sq. Ft.	11/11/11 14:15	W EPA 7420 (1)
007	SE1-01-01	Wipe	Lead	43.6	16	ug/sq. Ft.	11/11/11 14:15	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: 9358
Test: Lead
Date: 11/11/2011
Matrix: Wipe
Lab Number: 201653
Approved By: Rebecca Sparks
Date Approved: 11/11/2011

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	1.2	1.2
RLVS	0.256	0.342	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	5.438	5.166	95.0	5.331	98.0	3.1

Authorized Signature: Rebecca Sparks

Rebecca Sparks, Analyst

QUANTEM LABORATORIES

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Company Name: Enercor Services, Inc. Acct.#: Project Name: Seminole Armory - Re-Sample 1

Project Location: Seminole, OK Project Number:

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt. %	mg / kg	mg / l	ug / sq. in.	ug / sq. M.	mg / cm²
1.	SE1-B-01-R1		144 in²	C	X					X		
2.	SE1-14-01-R1											
3.	SE2-01-01-R1											
4.	SE2-01-02-R1											
5.	SE2-01-03-R1											
6.	SE2-02-01-R1											
7.	SE1-01-01											

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

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- [ ] 5-day

CONTACT INFORMATION
Name: Marshall Branscum
Phone: 722-2693
Report Results VIA (CHOOSE ONE):
- [ ] FAX:
- [X] QuanTEM WebSite
- [ ] E-Mail:

Relinquished By	Date/Time	Received By	Date/Time	Sampled By:
Marshall Branscum	11-11-2011 / 0907	RBN	11/11/11 9:08	MLB

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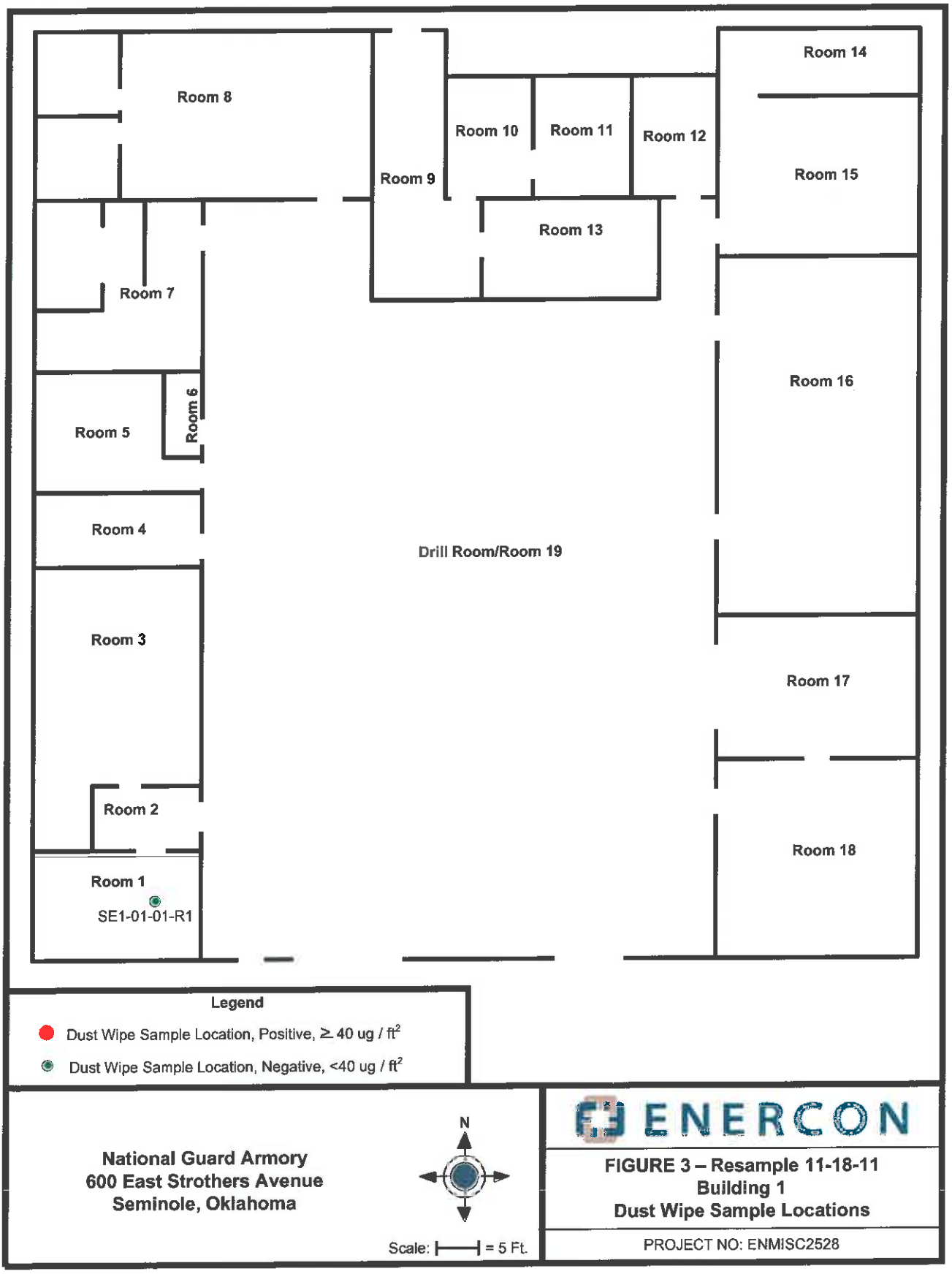
APPENDIX E



National Guard Armory
600 East Strothers Avenue
Seminole, Oklahoma

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FIGURE 3 – Resample 11-18-11
Building 1
Dust Wipe Sample Locations

PROJECT NO: ENMISC2528

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 201845
Date Received: 11/18/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 11/21/2011

AIHA ID: 101352

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

Acct. No.: A845

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

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	SE1-01-01-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	11/21/11 11:30	W EPA 7420 (1)

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 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: 9382
Test: Lead
Date: 11/21/2011
Matrix: Wipe
Lab Number: 201845
Approved By: Benton Miller
Date Approved: 11/21/2011

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.6	5.5
FCV	4.5	4.9	5.5
ICV	0.8	1.2	1.2
RLVS	0.256	0.294	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W1	0.000	5.525	5.002	90.5	5.060	91.6	1.2

Authorized Signature: _____

Benton Miller, Analyst

Lead Chain-of-Custody

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Accept / Reject

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

Project Location: Seminole, OK Project Number:

Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: µg/ft²	Sample Matrix Codes
SE1-01-01-R1	Room 1 Floor	144in²	C	X	X	A - Soil
						B - Paint Chips
						C - Surface / Dust Wipes
						D - Bulk Miscellaneous
						E - Air Cassette
						F - Other (SPECIFY)

Units Requested: mg/cm² | µg/cm² | µg/sq. in. | µg/sq. ft. | mg/l | mg/kg | Wt. % | ppm

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- [ ] 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	11-18-2011/0530	Shiftwid	11/18/11 8:00	11-17	MLB

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